

This item is held in Loughborough University's Institutional Repository (<https://dspace.lboro.ac.uk/>) and was harvested from the British Library's EThOS service (<http://www.ethos.bl.uk/>). It is made available under the following Creative Commons Licence conditions.



For the full text of this licence, please go to:
<http://creativecommons.org/licenses/by-nc-nd/2.5/>

**KNOWLEDGE CONVERSION PROCESSES AND LEADERSHIP:
AN EXPLORATORY STUDY OF TAIWANESE MANAGERS**

By

YEN-HAO CHEN

A Doctoral Thesis

**Submitted in fulfillment of the requirement
for the award of**

**The Degree of Doctor of Philosophy of the
Loughborough University**

Vol II

June, 2007

© by Yen-Hao Chen, 2007

APPENDIX A

SECTION A: PERSONAL INFORMATION

SEX: ☐ Male ☐ Female

AGE: ☐ 21 ~ 30 ☐ 31 ~ 40 ☐ 41 ~ 50

☐ Above 50

EXPERIENCE: ☐ Less than 3 years ☐ 3 ~ 5 years ☐ 6 ~ 8 years

☐ Above 8 years

Please read the following scenario carefully and then answer the questions relevant to the scenario.

SCENARIO ONE

A major problem at the Osaka-based company in developing an automatic home bread-making machine in the late 1980s centered on how to mechanise the dough-kneading process, which is essentially a kind of knowledge possessed by master bakers. Dough kneaded by a master baker and by a machine were x-rayed and compared, but no meaningful insights were obtained. Lisa, head of software development, knew that the area's best bread came from the Osaka International Hotel. To capture the knowledge of kneading skill, she and several engineers volunteered to apprentice themselves to the hotel's head baker. Making the same delicious bread as the head baker's was not easy. No one could explain why. One day, however, she noticed that the baker was not only stretching but also "twisting" the dough, which turned out to be the secret for making tasty bread. Thus she gained the head baker's knowledge through observation, imitation, and practice.

Two different forms of knowledge can be described using the words "tacit" and "explicit". Tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual's action and experience. Explicit knowledge can be expressed in words and numbers, can be easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles. Knowledge conversion processes involve changing knowledge from one form to another, giving four possible combinations:

- Socialisation process (tacit knowledge → tacit knowledge)
- Externalisation process (tacit knowledge → explicit knowledge)
- Combination process (explicit knowledge → explicit knowledge)
- Internalisation process (explicit knowledge → tacit knowledge)

SECTION B: MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that leads to excellent knowledge conversion for the tacit-tacit conversion process.

Note: The descriptions of “tacit” and “explicit” knowledge and the scenario (pp. 63-64) are drawn from Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

SECTION A: PERSONAL INFORMATION

SEX: ☐ Male ☐ Female

AGE: ☐ 21 ~ 30 ☐ 31 ~ 40 ☐ 41 ~ 50

☐ Above 50

EXPERIENCE: ☐ Less than 3 years ☐ 3 ~ 5 years ☐ 6 ~ 8 years

☐ Above 8 years

Please read the following scenario carefully and then answer the questions relevant to the scenario.

SCENARIO TWO

One of the most difficult problems faced by the development team was producing at low cost a disposable cartridge. Without a disposable cartridge, maintenance staff would have to be stationed all over the country, since the copier was intended for family or personal use.

If the usage frequency were high, maintenance costs could be negligible. But that was not the case with a personal copier. The fact that a large number of customers would be using the machine only occasionally meant that the new product had to have high reliability and no or minimum maintenance.

A maintenance study showed that more than 90 percent of the problems came from the drums or its surrounding parts. Aimed at cutting maintenance costs while maintaining the highest reliability, the team developed the concept of a disposable cartridge system in which the drum or the heart of the copier is replaced after a certain amount of usage.

The next problem was whether the drum could be produced at a cost low enough to be consistent with the targeted low selling price of the copier. A task force assigned to solve this cost problem had many heated discussions about the production of conventional photosensitive drum cylinders with a base material of aluminum-drawn tube at a low cost. One day, leader of the task force sent out for some cans of beverage. Once the beverage was consumed, he asked, "How much does it cost to manufacture this can?" The team then explored the possibility of applying the process of manufacturing the beverage can to manufacturing the drum cylinder, using the same material. By clarifying similarities and differences, they discovered a process technology to manufacture the aluminum drum at a low cost, thus giving rise to the disposable drum.

Two different forms of knowledge can be described using the words "tacit" and "explicit". Tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual's action and experience. Explicit knowledge can be expressed in words and numbers, can be easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles. Knowledge conversion processes involve changing knowledge from one form to another, giving four possible combinations:

- Socialisation process (tacit knowledge → tacit knowledge)
- Externalisation process (tacit knowledge → explicit knowledge)

- Combination process (explicit knowledge → explicit knowledge)
- Internalisation process (explicit knowledge → tacit knowledge)

SECTION B: MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that leads to excellent knowledge conversion for the tacit-explicit conversion process.

Note: The descriptions of “tacit” and “explicit” knowledge and the scenario (pp. 65-66) are drawn from Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

SECTION A: PERSONAL INFORMATION

SEX: ☐ Male ☐ Female

AGE: ☐ 21 ~ 30 ☐ 31 ~ 40 ☐ 41 ~ 50

☐ Above 50

EXPERIENCE: ☐ Less than 3 years ☐ 3 ~ 5 years ☐ 6 ~ 8 years

☐ Above 8 years

Please read the following scenario carefully and then answer the questions relevant to the scenario.

SCENARIO THREE

At Kraft General Foods, a manufacturer of dairy and processed foods, data from the POS (point-of-sales) systems of retailers is utilised not only to find out what does and does not sell well but also to create new “ways to sell”, that is, new sales systems and methods. The company has developed an information-intensive marketing programme called “micro-merchandising”, which provides supermarkets with timely and precise recommendations on the optimal merchandise mix and with sales promotions based on the analysis of data from its micro-merchandising system.

Utilising Kraft’s individual method of data analysis, including its unique classification of stores and shoppers into six categories, the system is capable of pinpointing who shops where and how. Kraft successfully manages its product sales through supermarkets by controlling four elements of the “category management” methodology – consumer and category dynamics, space management, merchandising management, and pricing management.

Two different forms of knowledge can be described using the words “tacit” and “explicit”. Tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual’s action and experience. Explicit knowledge can be expressed in words and numbers, can be easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles. Knowledge conversion processes involve changing knowledge from one form to another, giving four possible combinations:

- Socialisation process (tacit knowledge → tacit knowledge)
- Externalisation process (tacit knowledge → explicit knowledge)
- Combination process (explicit knowledge → explicit knowledge)
- Internalisation process (explicit knowledge → tacit knowledge)

SECTION B: MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that leads to excellent knowledge conversion for the explicit-explicit conversion process.

Note: The descriptions of “tacit” and “explicit” knowledge and the scenario (p. 68) are drawn from Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

SECTION A: PERSONAL INFORMATION

SEX: ☐ Male ☐ Female

AGE: ☐ 21 ~ 30 ☐ 31 ~ 40 ☐ 41 ~ 50

☐ Above 50

EXPERIENCE: ☐ Less than 3 years ☐ 3 ~ 5 years ☐ 6 ~ 8 years

☐ Above 8 years

Please read the following scenario carefully and then answer the questions relevant to the scenario.

SCENARIO FOUR

At Rogers, a companywide policy was launched in 1993 to reduce yearly working time to 1,800 hours. Called MIT'93 for "Mind and Management Innovation Toward 1993", the policy's objective was not to reduce costs but to innovate the mindset and management by reducing working hours and increasing individual creativity.

Many departments were puzzled about how to implement the policy, which was clearly documented. The MIT'93 promotion officer advised each department to experiment with the policy for one month by working 150 hours. Through such a bodily experience, employees got to know what working 1,800 hours a year would be like.

Given the one-month experience, a clear, written policy of reducing working time to 1,800 hours was accepted by the employees.

Two different forms of knowledge can be described using the words "tacit" and "explicit". Tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual's action and experience. Explicit knowledge can be expressed in words and numbers, can be easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles. Knowledge conversion processes involve changing knowledge from one form to another, giving four possible combinations:

- Socialisation process (tacit knowledge → tacit knowledge)
- Externalisation process (tacit knowledge → explicit knowledge)
- Combination process (explicit knowledge → explicit knowledge)
- Internalisation process (explicit knowledge → tacit knowledge)

SECTION B: MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that leads to excellent knowledge conversion for the explicit-tacit conversion process.

Note: The descriptions of “tacit” and “explicit” knowledge and the scenario (p. 70) are drawn from Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX B

單元一：個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

請仔細閱讀以下情境，然後回答相關問題。

情境一

一九八零年代末期，一家營業地區以大阪為主的全自動家用麵包機公司所面臨的主要問題，就是如何將揉捏麵糰的程序機械化，這揉捏麵糰的知識基本上是麵包師父所具備的。他們於是將麵包師父與機器所揉捏的麵糰拿來用X-光做比較，但是，並沒有獲得一些有意義的結果。軟體開發部門的主管麗莎知道，當地最好的麵包是來自於大阪國際飯店。

為了獲取揉捏技巧的知識，她和幾位工程師自願去當飯店麵包師父的學徒。要像麵包師父一樣能做出可口的麵包是一件不容易的事情。沒有人能解釋為什麼。但是有一天，她注意到師父不只是拉展麵糰，而且還扭轉麵糰，這就是能做出美味麵包的秘訣。因此，透過觀察、模仿、與練習，她得到了麵包師父所具備的知識。

隱性知識與顯性知識可以稱為兩種不同的知識型態。隱性知識是高度個人化、不易形式化的，並且深植於個人的行為與經驗裡。顯性知識則可以用文字與數字來表達，可以容易地溝通，並且可以用資料、科學公式、程序、或普遍性原理的形式加以分享。於是，知識轉換過程就牽涉到知識從一種型態變化到另一種型態，如此便構成了四種可能的組合：

- 社會化過程：由隱性知識轉換為另一種隱性知識。
- 外在化過程：由隱性知識轉換為顯性知識。
- 組合化過程：由顯性知識轉換為另一種顯性知識。
- 內在化過程：由顯性知識轉換為隱性知識。

單元二：多元領導特性問卷

注意事項：

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對隱性知識轉換為另一種隱性知識有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要做答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對隱性知識轉換為另一種隱性知識有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 一再檢視重要的假定，以質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於我的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人榮譽感，好讓他們能與我交往.....	0	1	2	3	4
11. 用特殊的措辭討論誰要對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱誠地談論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出我是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個體，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明要在問題變得積重難返後，我才採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對我尊敬的方式.....	0	1	2	3	4
22. 集中我全部的注意力在處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的錯誤.....	0	1	2	3	4
25. 展現出權力與自信感.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把我的注意力指向錯誤，以符合標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對隱性知識轉換為另一種隱性知識有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到個體擁有與其他人不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人能從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期理想時表示滿意.....	0	1	2	3	4
36. 對目標將會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上有效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做比他們預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上有效率.....	0	1	2	3	4
41. 和其他人用一種令人滿意的方法共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上有效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：隱性知識、顯性知識、與情境的描述均摘錄於 Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

單元一：個人資料

性別：

☐ 男性

☐ 女性

年齡：

☐ 21 ~ 30 歲

☐ 31 ~ 40 歲

☐ 41 ~ 50 歲

☐ 50 歲以上

工作經驗：

☐ 低於 3 年

☐ 3 ~ 5 年

☐ 6 ~ 8 年

☐ 8 年以上

請仔細閱讀以下情境，然後回答相關問題。

情境二

開發團隊所面臨最困難的問題，就是如何製造出低成本、拋棄式的墨水匣。如果沒有拋棄式墨水匣，維修人員就必須派駐在全國各地，因為影印機是針對家庭或個人用戶使用。如果使用頻率偏高，維修成本就變得微不足道。但是，這種情況並不會發生在個人影印機上。實際情況是，大部分顧客只會偶而使用這種機器，這就表示，新產品必須有高度的可靠性，並且要達成盡量無須維修的要求。維修報告指出，超過百分之九十的問題都來自於鼓式滾筒與其週邊的零件。在降低維修成本，並同時維持高度可靠性的目標上，團隊開發出一套拋棄式墨水匣的概念，其中，鼓式滾筒或其他重要零件都能在使用一段時間後進行更換。

接下來的問題即是，如何能夠用最低的價格生產鼓式滾筒，以維持影印機的低價策略。開發團隊指派一個特別小組來解決這個成本問題。關於用低成本鋁製滾筒做為底部材料，去製作傳統光感應鼓式滾筒的問題，小組已經進行過很多熱烈的討論。有一天，特別小組的組長送來一些罐裝飲料。當大家在喝這些飲料時，組長就問到：「製造這個罐子要花多少錢？」。於是，大家就用相同的材料，嚐試將製造罐子的程序應用到生產鼓式滾筒的可能性。藉由相同點與相異點的釐清，他們發現一套能夠用低成本製造鋁質鼓式滾筒的加工技術，如此一來，就使得鼓式滾筒能夠任意的更換。

隱性知識與顯性知識可以稱為兩種不同的知識型態。隱性知識是高度個人化、不易形式化的，並且深植於個人的行為與經驗裡。顯性知識則可以用文字與數字來表達，可以容易地溝通，並且可以用資料、科學公式、程序、或普遍性原理的形式加以分享。於是，知識轉換過程就牽涉到知識從一種型態變化到另一種型態，如此便構成了四種可能的組合：

- 社會化模式：由隱性知識轉換為另一種隱性知識。
- 外在化模式：由隱性知識轉換為顯性知識。
- 組合化模式：由顯性知識轉換為另一種顯性知識。
- 內在化模式：由顯性知識轉換為隱性知識。

單元二：多元領導特性問卷

注意事項：

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對隱性知識轉換為顯性知識有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要做答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對隱性知識轉換為顯性知識有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 一再檢視重要的假定，以質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於我的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人榮譽感，好讓他們能與我交往.....	0	1	2	3	4
11. 用特殊的措辭討論誰要對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱誠地談論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出我是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個體，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明要在問題變得積重難返後，我才採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對我尊敬的方式.....	0	1	2	3	4
22. 集中我全部的注意力在處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的錯誤.....	0	1	2	3	4
25. 展現出權力與自信感.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把我的注意力指向錯誤，以符合標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對隱性知識轉換為顯性知識有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到個體擁有與其他人不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人能從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期理想時表示滿意.....	0	1	2	3	4
36. 對目標將會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上有效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做比他們預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上有效率.....	0	1	2	3	4
41. 和其他人用一種令人滿意的方法共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上有效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：隱性知識、顯性知識、與情境的描述均摘錄於 Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

單元一：個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

請仔細閱讀以下情境，然後回答相關問題。

情境三

在以食品加工為主的克氏食品公司裡，零售商點銷售(POS)系統資料的使用不僅可以查到商品賣得好不好，更可以創造出新的「銷售方式」，那就是新的銷售系統與方法。這家公司因此開發出一套資訊銷售軟體，稱為「微型商品規劃」，它能對量販店提供及時、正確、理想的商品組合建議，並從量販店微型商品規劃系統的資料分析裡，提供業務上的促銷。

克氏的個別資料分析方法包含了用獨特的分類方式，將店家與顧客分成六類，在使用時，系統能指出何人在何時消費，如何消費。藉由掌控「分類管理」方法的四項要素－即顧客與種類連動、空間管理、商品規劃管理、與價格管理，克氏成功地透過量販店來管理它的產品銷售。

隱性知識與顯性知識可以稱為兩種不同的知識型態。隱性知識是高度個人化、不易形式化的，並且深植於個人的行為與經驗裡。顯性知識則可以用文字與數字來表達，可以容易地溝通，並且可以用資料、科學公式、程序、或普遍性原理的形式加以分享。於是，知識轉換過程就牽涉到知識從一種型態變化到另一種型態，如此便構成了四種可能的組合：

- 社會化模式：由隱性知識轉換為另一種隱性知識。
- 外在化模式：由隱性知識轉換為顯性知識。
- 組合化模式：由顯性知識轉換為另一種顯性知識。
- 內在化模式：由顯性知識轉換為隱性知識。

單元二：多元領導特性問卷

注意事項：

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對顯性知識轉換為另一種顯性知識有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要做答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對顯性知識轉換為另一種顯性知識有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 一再檢視重要的假定，以質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於我的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人榮譽感，好讓他們能與我交往.....	0	1	2	3	4
11. 用特殊的措辭討論誰要對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱誠地談論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出我是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個體，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明要在問題變得積重難返後，我才採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對我尊敬的方式.....	0	1	2	3	4
22. 集中我全部的注意力在處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的錯誤.....	0	1	2	3	4
25. 展現出權力與自信感.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把我的注意力指向錯誤，以符合標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對顯性知識轉換為另一種顯性知識有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到個體擁有與其他人不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人能從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期理想時表示滿意.....	0	1	2	3	4
36. 對目標將會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上有效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做比他們預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上有效率.....	0	1	2	3	4
41. 和其他人用一種令人滿意的方法共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上有效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：隱性知識、顯性知識、與情境的描述均摘錄於 Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

單元一：個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

請仔細閱讀以下情境，然後回答相關問題。

情境四

羅氏企業於一九九三年實行一項政策，內容是將公司內每位員工的年工作時數減少至一千八百個小時。這項稱之為「面對九三－心智與管理創新」政策的目的是不是要減低成本，而是要經由降低工作時數與增加個人創造力，來改革員工的心態與管理技巧。

許多部門同仁對於如何執行這項清楚明示的政策還是莫衷一是。於是，政策的推行主管建議每個部門試驗每個月一百五十個小時的工作時數。透過親身的體驗，同仁就能夠理解何謂一年工作一千八百個小時。

經過一個月的體驗，同仁逐漸能接受這項清楚、明確的一千八百個工作時數的政策。

隱性知識與顯性知識可以稱為兩種不同的知識型態。隱性知識是高度個人化、不易形式化的，並且深植於個人的行為與經驗裡。顯性知識則可以用文字與數字來表達，可以容易地溝通，並且可以用資料、科學公式、程序、或普遍性原理的形式加以分享。於是，知識轉換過程就牽涉到知識從一種型態變化到另一種型態，如此便構成了四種可能的組合：

- 社會化模式：由隱性知識轉換為另一種隱性知識。
- 外在化模式：由隱性知識轉換為顯性知識。
- 組合化模式：由顯性知識轉換為另一種顯性知識。
- 內在化模式：由顯性知識轉換為隱性知識。

單元二：多元領導特性問卷

注意事項：

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對顯性知識轉換為隱性知識有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要作答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對顯性知識轉換為隱性知識有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 一再檢視重要的假定，以質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於我的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人榮譽感，好讓他們能與我交往.....	0	1	2	3	4
11. 用特殊的措辭討論誰要對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱誠地談論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出我是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個體，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明要在問題變得積重難返後，我才採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對我尊敬的方式.....	0	1	2	3	4
22. 集中我全部的注意力在處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的錯誤.....	0	1	2	3	4
25. 展現出權力與自信感.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把我的注意力指向錯誤，以符合標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對顯性知識轉換為隱性知識有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到個體擁有與其他人不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人能從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期理想時表示滿意.....	0	1	2	3	4
36. 對目標將會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上有效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做比他們預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上有效率.....	0	1	2	3	4
41. 和其他人用一種令人滿意的方法共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上有效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：隱性知識、顯性知識、與情境的描述均摘錄於 Nonaka, I. and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX C

SECTION A

● PERSONAL INFORMAIION

SEX:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
AGE:	<input type="checkbox"/> 21 ~ 30	<input type="checkbox"/> 31 ~ 40	<input type="checkbox"/> 41 ~ 50
	<input type="checkbox"/> Above 50		
EXPERIENCE:	<input type="checkbox"/> Less than 3 years	<input type="checkbox"/> 3 ~ 5 years	<input type="checkbox"/> 6 ~ 8 years
	<input type="checkbox"/> Above 8 years		

SECTION B

● DESCRIPTION

Socialisation is a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills. In this case, tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual's action and experience. An individual can acquire tacit knowledge directly from others without using language. For instance, apprentices work with their masters and learn craftsmanship not through language but through observation, imitation, and practice. In the business setting, on-the-job training uses basically the same principle. The key to acquiring tacit knowledge is experience. Without some form of shared experience, it is extremely difficult for one person to project her- or himself into another individual's thinking process. The mere transfer of information will often make little sense, if it is abstracted from associated emotions and specific contexts in which shared experiences are embedded.

SECTION C

● MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that is essential to the “Description” in the Section B.

Note: The “Description” in the Section B is drawn from Nonaka, I. and Takeuchi, H. (1995, pp. 62-63). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

SECTION A

● PERSONAL INFORMAIION

SEX:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
AGE:	<input type="checkbox"/> 21 ~ 30	<input type="checkbox"/> 31 ~ 40	<input type="checkbox"/> 41 ~ 50
	<input type="checkbox"/> Above 50		
EXPERIENCE:	<input type="checkbox"/> Less than 3 years	<input type="checkbox"/> 3 ~ 5 years	<input type="checkbox"/> 6 ~ 8 years
	<input type="checkbox"/> Above 8 years		

SECTION B

● DESCRIPTION

Combination is a process of systemizing concepts into a knowledge system. This mode of knowledge conversion involves combining different bodies of explicit knowledge. Individuals exchange and combine knowledge through such media as documents, meetings, telephone conversations, or computerized communication networks. Reconfiguration of existing information through sorting, adding, combining, and categorising of explicit knowledge (as conducted in computer databases) can lead to new knowledge. Creative uses of computerized communication networks and large-scale databases facilitate this mode of knowledge conversion.

SECTION C

● MULTIFACTOR LEADERSHIP QUESTIONNAIRE

Using the questions below, please indicate the kind of leadership that is essential to the “Description” in the Section B.

Note: The “Description” in the Section B is drawn from Nonaka, I. and Takeuchi, H. (1995, pp. 67-68). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX D

單元一

● 個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

單元二

● 狀態描述

社會化是一種分享經驗的過程，藉此，以創造出諸如共同心智模式與工藝技術的隱性知識。在這裡，隱性知識所指的是一種高度個人化、不易形式化的知識，並且深植於個人的行為與經驗裡。一般人可以不需要透過言語，就能夠從其他人身上直接獲取隱性知識。舉例來說，學徒並不是透過言語去學得師父的技術，而是經由觀察、模仿、與練習。在商業環境裡，在職訓練基本上就屬於這類過程。獲取隱性知識的關鍵就在於經驗。如果沒有某些形式的共同經驗，對有些人來說，他們就非常難以讓自己身處於其他人的思考模式裡。如果單單只是資料轉換，那通常是沒有什麼意義的。但是，如果所獲取的共同經驗是來自於相關的情緒或特殊的背景，那結果便有所不同了。

單元三

● 多元領導特性問卷

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對單元二裡的「狀態描述」有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要作答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對上述「狀態描述」有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 反覆檢視重要的假定，並質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於自己的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人自尊心，好讓他們能與自己為伍.....	0	1	2	3	4
11. 用明確的措辭討論誰必須對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱烈地討論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出自己是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個人，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明在問題變得積重難返後，才會採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對自己尊敬的方式.....	0	1	2	3	4
22. 集中自己全部的注意力去處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的失誤.....	0	1	2	3	4
25. 展現出權力與自信.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把自己的注意力放在失敗上，以符合所設定的標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對上述『狀態描述』有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到每個人都有不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期目標時表示滿意.....	0	1	2	3	4
36. 對目標會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上展現效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做出比他們自己預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上展現效率.....	0	1	2	3	4
41. 用一種令人滿意的方法和其他人共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上展現效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：『狀態描述』摘錄於 Nonaka, I. and Takeuchi, H. (1995, pp. 62-63). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

單元一

● 個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21~30 歲	<input type="checkbox"/> 31~40 歲	<input type="checkbox"/> 41~50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3~5 年	<input type="checkbox"/> 6~8 年
	<input type="checkbox"/> 8 年以上		

單元二

● 狀態描述

組合化是一種將概念分類為知識系統的過程。這種模式的知識轉換牽涉到將不同部分的顯性知識組合起來。在這裡，顯性知識所指的是一種可以用文字與數字來表達、可以容易地溝通、可以用資料、科學公式、程序、或普遍性原理的形式來加以分享的知識。一般人會透過諸如像文件、會議、電話交談、或電腦通訊網路等媒介將知識做交換與組合。藉由對顯性知識的整理、補充、結合、與分類，既有的資訊便可以再生，如此一來，就能夠像電腦資料庫一樣產生出新的知識。有創意的去運用電腦通訊網路與大規模資料庫可以促使這種知識轉換模式的產生。

單元三

● 多元領導特性問卷

- 一、 此份問卷共有四十五道題目，分別描述不同情況。請圈選出何種程度的情況會對單元二裡的『狀態描述』有正面的幫助。
- 二、 如果你認為題目不恰當，或是不確定、不知道答案，請留空白，不要做答。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對上述『狀態描述』有正面的幫助，理想的領導者應該

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 反覆檢視重要的假定，並質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於自己的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人自尊心，好讓他們能與自己為伍.....	0	1	2	3	4
11. 用明確的措辭討論誰必須對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱烈地討論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出自己是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個人，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明在問題變得積重難返後，才會採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對自己尊敬的方式.....	0	1	2	3	4
22. 集中自己全部的注意力去處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的失誤.....	0	1	2	3	4
25. 展現出權力與自信.....	0	1	2	3	4
26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把自己的注意力放在失敗上，以符合所設定的標準.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

為了對上述「狀態描述」有正面的幫助，理想的領導者應該

28. 避免做出決策.....	0	1	2	3	4
29. 考量到每個人都有不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期目標時表示滿意.....	0	1	2	3	4
36. 對目標會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上展現效率.....	0	1	2	3	4
38. 使用令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做出比他們自己預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上展現效率.....	0	1	2	3	4
41. 用一種令人滿意的方法和其他人共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上展現效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：「狀態描述」摘錄於 Nonaka, I. and Takeuchi, H. (1995, pp. 67-68). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX E

SECTION A

● PERSONAL INFORMAION

SEX:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
AGE:	<input type="checkbox"/> 21 ~ 30	<input type="checkbox"/> 31 ~ 40	<input type="checkbox"/> 41 ~ 50
	<input type="checkbox"/> Above 50		
EXPERIENCE:	<input type="checkbox"/> Less than 3 years	<input type="checkbox"/> 3 ~ 5 years	<input type="checkbox"/> 6 ~ 8 years
	<input type="checkbox"/> Above 8 years		

SECTION B

● DESCRIPTION

Socialisation is a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills. In this case, mental model consists of beliefs so ingrained that we take them for granted. Though this knowledge cannot be articulated very easily, it shapes the way we perceive the world around us. For technical skills, they encompass the kind of informal and hard-to-pin-down skills or crafts captured in the term “know-how”. For example, a master craftsman develops a wealth of expertise “at his fingertips” after years of experience. But the craftsman is often unable to articulate the principles behind what is known. In brief, tacit knowledge is highly personal and hard to formalise and is deeply rooted in an individual’s action and experience, making it difficult to communicate or to share with others.

An individual can acquire tacit knowledge directly from others without using language. For instance, apprentices work with their masters and learn craftsmanship not through language but through observation, imitation, and practice. In the business setting, on-the-job training uses basically the same principle. The key to acquiring tacit knowledge is experience. Without some form of shared experience, it is extremely difficult for one person to project her- or himself into another individual’s thinking process. Therefore, socialisation emphasises frequent interaction among people. In most cases, knowledge operators like front-line employees, line workers and skilled craftspeople accumulate and generate rich tacit knowledge, because they are engaged in the operational side of the business.

SECTION C

● MULTIFACTOR LEADERSHIP QUESTIONNAIRE

It is clear from our discussion that you frequently find yourself in the situation of managing tacit knowledge through socialisation. That is, you seem to have personal experience of knowledge management as described in Section B. You seem to spend some of your time providing leadership for knowledge operators. The following questionnaire is designed to summarise your approach to leadership in such situations. Please complete the questionnaire as though you are facing a situation involving tacit knowledge and socialisation. In other words, please complete the questionnaire as though you are leading knowledge operators.

Note: The "Description" in the Section B is drawn from Nonaka, I. and Takeuchi, H. (1995, pp. 62-63). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

SECTION A

● PERSONAL INFORMATION

SEX:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
AGE:	<input type="checkbox"/> 21 ~ 30	<input type="checkbox"/> 31 ~ 40	<input type="checkbox"/> 41 ~ 50
	<input type="checkbox"/> Above 50		
EXPERIENCE:	<input type="checkbox"/> Less than 3 years	<input type="checkbox"/> 3 ~ 5 years	<input type="checkbox"/> 6 ~ 8 years
	<input type="checkbox"/> Above 8 years		

SECTION B

● DESCRIPTION

Combination is a process of systemizing concepts into a knowledge system. This mode of knowledge conversion involves combining different bodies of explicit knowledge. In this case, explicit knowledge can be expressed in words and numbers and easily communicated and shared in the form of hard data, scientific formulae, codified procedures, or universal principles. Explicit knowledge can easily be "processed" by a computer, transmitted electronically, or stored in databases. Individuals exchange and combine explicit knowledge through concrete forms of oral and visual presentation such as documents, manuals, and computer databases.

Reconfiguration of existing information through sorting, adding, combining, and categorising of explicit knowledge (as conducted in computer databases) can lead to new knowledge. Creative uses of computerized communication networks and large-scale databases facilitate this mode of knowledge conversion. In most cases, knowledge specialists like R&D engineers, design engineers, software engineers, sales engineers, and strategic planners accumulate, generate, and update explicit knowledge. They mobilise well structured explicit knowledge in the form of technical, scientific, and other quantifiable data, the kind that can be transmitted and stored in a computer.

SECTION C

● MULTIFACTOR LEADERSHIP QUESTIONNAIRE

It is clear from our discussion that you frequently find yourself in the situation of managing explicit knowledge through combination. That is, you seem to have personal experience of knowledge management as described in Section B. You seem to spend some of your time providing leadership for knowledge specialists. The following questionnaire is designed to summarise your approach to leadership in such situations. Please complete the questionnaire as though you are facing a situation involving explicit knowledge and combination. In other words, please complete the questionnaire as though you are leading knowledge specialists.

Note: The “Description” in the Section B is drawn from Nonaka, I. and Takeuchi, H. (1995, pp. 67-68). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX F

單元一

● 個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

單元二

● 狀態描述

社會化是一種分享經驗的過程，藉此，以創造出諸如共同心智模式與工藝技巧的隱性知識。在這裡，心智模式包含了一些根深蒂固、理所當然的想法。雖然我們很難將這類知識清楚地呈現出來，它卻主宰著我們對於週遭環境的認知。關於工藝技巧，這是指那些非正規性、難以言明的竅門。舉例來說，工匠師父可以從他多年的巧手裡發展出相當豐富的工藝技能，但是，他通常無法將背後所牽扯的道理說清楚。簡單來說，隱性知識所指的是一種高度個人化、不易形式化的知識，並且深植於個人的行為與經驗裡，因此，這種知識很難藉由言語的溝通與分享來做傳導。

一般人可以不需要透過言語，就能夠從其他人身上直接獲取隱性知識。舉例來說，學徒並不是透過言語去學得師父的技術，而是經由觀察、模仿、與練習。在商業環境裡，在職訓練基本上就屬於這類過程。獲取隱性知識的關鍵就在於經驗。如果沒有某些形式的共同經驗，對有些人來說，他們就非常難以讓自己身處於其他人的思考模式裡。因此，社會化強調的是人與人之間頻繁的接觸。在大部分的情況裡，諸如像前線員工、生產線作業員、熟練的工匠等的知識操作者都會累積並創造出豐富的隱性知識，這最主要是因為他們都從事操作面的事務。

單元三

● 多元領導特性問卷

從我們剛才的討論裡，你應該清楚地找出自己在社會化過程中管理隱性知識的定位。也就是說，你似乎在單元二所描述的知識管理中擁有個人經驗，你似乎有花一些時間針對知識操作者展現你的領導才能。以下的問卷是設計來概述你針對此種狀態下，所展現出來的領導特質。填寫問卷時，想像你正在面對一個牽扯到社會化與隱性知識的情況。換句話說，填寫問卷時，想像你正在帶領著知識操作者。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

我應該：

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 反覆檢視重要的假定，並質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於自己的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人自尊心，好讓他們能與自己為伍.....	0	1	2	3	4
11. 用明確的措辭討論誰必須對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱烈地討論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出自己是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個人，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明在問題變得積重難返後，才會採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對自己尊敬的方式.....	0	1	2	3	4
22. 集中自己全部的注意力去處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的失誤.....	0	1	2	3	4
25. 展現出權力與自信.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

我應該：

26. 言明一個未來的強勢願景.....	0	1	2	3	4
27. 把自己的注意力放在失敗上，以符合所設定的標準.....	0	1	2	3	4
28. 避免做出決策.....	0	1	2	3	4
29. 考量到每個人都有不同的需求、能力、與志向.....	0	1	2	3	4
30. 讓其他人從許多不同的角度看問題.....	0	1	2	3	4
31. 幫助其他人發展他們的實力.....	0	1	2	3	4
32. 建議如何完成任務的新方法.....	0	1	2	3	4
33. 延宕對急迫問題的回應.....	0	1	2	3	4
34. 強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35. 對其他人在達成預期目標時表示滿意.....	0	1	2	3	4
36. 對目標會被達成表示信心.....	0	1	2	3	4
37. 在滿足其他人關於工作的需求上展現效率.....	0	1	2	3	4
38. 採取令人滿意的領導方式.....	0	1	2	3	4
39. 讓其他人做出比他們自己預期更多的事情.....	0	1	2	3	4
40. 在代表其他人面對更高權威上展現效率.....	0	1	2	3	4
41. 用一種令人滿意的方法和其他人共事.....	0	1	2	3	4
42. 提高其他人追求成功的渴望.....	0	1	2	3	4
43. 在滿足組織要求上展現效率.....	0	1	2	3	4
44. 增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45. 領導一個有效率的團隊.....	0	1	2	3	4

註解：「狀態描述」摘錄於 Nonaka, I. and Takeuchi, H. (1995, pp. 62-63). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

單元一

● 個人資料

性別：	<input type="checkbox"/> 男性	<input type="checkbox"/> 女性	
年齡：	<input type="checkbox"/> 21 ~ 30 歲	<input type="checkbox"/> 31 ~ 40 歲	<input type="checkbox"/> 41 ~ 50 歲
	<input type="checkbox"/> 50 歲以上		
工作經驗：	<input type="checkbox"/> 低於 3 年	<input type="checkbox"/> 3 ~ 5 年	<input type="checkbox"/> 6 ~ 8 年
	<input type="checkbox"/> 8 年以上		

單元二

● 狀態描述

組合化是一種將概念分類為知識系統的過程。這種模式的知識轉換牽涉到將不同部分的顯性知識組合起來。在這裡，顯性知識所指的是一種可以用文字與數字來表達、可以容易地溝通、可以用資料、科學公式、程序、或普遍性原理的形式來加以分享的知識。顯性知識能夠容易地被電腦拿來「處理」、做電子傳輸、或者是儲存在資料庫裡。一般人會透過諸如像文件、手冊、或電腦資料庫等有形的聽覺與視覺形式將顯性知識做交換與組合。

藉由對顯性知識的整理、補充、結合、與分類，既有的資訊便可以再生，如此一來，就能夠像電腦資料庫一樣產生出新的知識。有創意的去運用電腦通訊網路與大規模資料庫可以促使這種知識轉換模式的產生。在大部分的情況裡，諸如像研發工程師、設計工程師、軟體工程師、銷售工程師、策略規劃師等的知識專業者都會累積、創造、並更新顯性知識。他們會將結構完整的顯性知識以技術的、科學的、以及其他可量化的資料形式加以流通，而那是一種可以透過電腦來做傳輸與儲存的一種資料形式。

單元三

● 多元領導特性問卷

從我們剛才的討論裡，你應該清楚地找出自己在組合化過程中管理顯性知識的定位。也就是說，你似乎在單元二所描述的知識管理中擁有個人經驗，你似乎有花一些時間針對知識專業者展現你的領導才能。以下的問卷是設計來概述你針對此種狀態下，所展現出來的領導特質。填寫問卷時，想像你正在面對一個牽扯到組合化與顯性知識的情況。換句話說，填寫問卷時，想像你正在帶領著知識專業者。

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

我應該：

1. 提供其他人協助以換取他們的努力.....	0	1	2	3	4
2. 反覆檢視重要的假定，並質問它們是否恰當.....	0	1	2	3	4
3. 在問題惡化之前不做干涉.....	0	1	2	3	4
4. 把注意力集中在迥異於標準的不規則、錯誤、例外、與異常上.....	0	1	2	3	4
5. 在重要議題發生時避免介入.....	0	1	2	3	4
6. 談論關於自己的重要價值觀與理念.....	0	1	2	3	4
7. 在必要的時候缺席.....	0	1	2	3	4
8. 在解決問題時尋求不同的觀點.....	0	1	2	3	4
9. 樂觀地談論關於未來.....	0	1	2	3	4
10. 賦予其他人自尊心，好讓他們能與自己為伍.....	0	1	2	3	4
11. 用明確的措辭討論誰必須對績效目標的達成負起責任.....	0	1	2	3	4
12. 等到事情出錯後才採取行動.....	0	1	2	3	4
13. 熱烈地討論關於需要完成的事情.....	0	1	2	3	4
14. 詳述擁有強烈意圖的重要性.....	0	1	2	3	4
15. 花時間在教導與訓練上.....	0	1	2	3	4
16. 清楚表明當績效目標達成時，可以期望得到什麼.....	0	1	2	3	4
17. 展現出自己是一位「沒出紕漏，就無需處理」的堅定信仰者.....	0	1	2	3	4
18. 為了團隊的好處超越自我的利益.....	0	1	2	3	4
19. 把其他人看作是個人，而非只是團隊中的成員.....	0	1	2	3	4
20. 表明在問題變得積重難返後，才會採取行動.....	0	1	2	3	4
21. 表現出讓其他人建立起對自己尊敬的方式.....	0	1	2	3	4
22. 集中自己全部的注意力去處理錯誤、抱怨、與挫敗.....	0	1	2	3	4
23. 考量到決策在道德與倫理上的後果.....	0	1	2	3	4
24. 持續追蹤所有的失誤.....	0	1	2	3	4
25. 展現出權力與自信.....	0	1	2	3	4

完全不用	偶而一次	有時候	常常	儘可能每次
0	1	2	3	4

我應該：

26.	言明一個未來的強勢願景.....	0	1	2	3	4
27.	把自己的注意力放在失敗上，以符合所設定的標準.....	0	1	2	3	4
28.	避免做出決策.....	0	1	2	3	4
29.	考量到每個人都有不同的需求、能力、與志向.....	0	1	2	3	4
30.	讓其他人從許多不同的角度看問題.....	0	1	2	3	4
31.	幫助其他人發展他們的實力.....	0	1	2	3	4
32.	建議如何完成任務的新方法.....	0	1	2	3	4
33.	延宕對急迫問題的回應.....	0	1	2	3	4
34.	強調擁有一個集體使命感的重要性.....	0	1	2	3	4
35.	對其他人在達成預期目標時表示滿意.....	0	1	2	3	4
36.	對目標會被達成表示信心.....	0	1	2	3	4
37.	在滿足其他人關於工作的需求上展現效率.....	0	1	2	3	4
38.	採取令人滿意的領導方式.....	0	1	2	3	4
39.	讓其他人做出比他們自己預期更多的事情.....	0	1	2	3	4
40.	在代表其他人面對更高權威上展現效率.....	0	1	2	3	4
41.	用一種令人滿意的方法和其他人共事.....	0	1	2	3	4
42.	提高其他人追求成功的渴望.....	0	1	2	3	4
43.	在滿足組織要求上展現效率.....	0	1	2	3	4
44.	增加其他人嚐試更困難的事物的意願.....	0	1	2	3	4
45.	領導一個有效率的團隊.....	0	1	2	3	4

註解：「狀態描述」摘錄於 Nonaka, I. and Takeuchi, H. (1995, pp. 67-68). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.

APPENDIX G

INTERVIEW TRANSCRIPT – Socialisation 001

Note: “A” represents interviewer and “B” represents respondent.

A: You must be heard of knowledge management or knowledge economy recently.

B: *Yes, I hear of it, but not yet collect any information about it.*

A: In fact, you do not have to take knowledge management very seriously or think that it is about requiring an information system or something. As it says here about tacit knowledge, it is like personal experience or something that is hard to fathom. You only can feel it. Unlike some figures or forms, those are public information. Those are explicit stuffs that everyone can read and deal with. Here, however, we discuss something tacit. For instance, it indicates personal experience. How does personal experience convert? Here, it says that it is through some shared experience. That is to say, for instance, it is like apprenticeship in early times. Apprenticeship is about apprentices learn things from masters. In this case, apprentices usually stand next to their masters and watch. In the beginning, it is very hard for apprentices to catch the knack of strength used by the masters, but after years of observing and practicing, apprentices will be able to catch it. It means that a kind of invisible knowledge is gradually converted from masters to apprentices. This is the case happened to not only between masters and apprentices, but also between supervisors and subordinates and between colleagues. Everyone influences each other unobtrusively and imperceptibly. This generally belongs to such process by which tacit knowledge is invisibly transferred into another person. Actually, knowledge management is about to manage such process. In an organisation, everyone's knowledge has to get communicated and circulated otherwise everyone's knowledge will become listless and passive. So, I today want to understand how do you look at this thing as a manager? How do you make such process happen with your leadership style or means? What kind of role you should play? How should you lead your people to make their knowledge circulated invisibly and imperceptibly?

B: *In fact, it implicates various kinds. For instance, is it in production technology, in management or in general?*

A: In general. Actually, it covers a wide range of area. I just want to know as a manager or leader what should be your leadership style. Or, do you have to use any specific or substantial means to let this stuff ...

B: *What I am doing right now is about the stuff of production or manufacturing. Such thing is quite simple. For instance, to communicate knowledge, just write a SOP, assign someone experienced to write it down. It is written down roughly. Then, we make it become more detailed through discussion and illustration. Afterwards, whilst doing teaching, it must be old people leading new people. In fact, SOP has a sample. If you want to get more detailed in some places, you have to do practical operation and illustration. For those practice learners, they have to adjust the SOP and make it suitable for*

them. Then, after one month, for instance, we will let learners reveal what they have learned from it. We will try to understand their abilities. If they are really good, that would be great. If they are not clear about certain things, we will want them to study harder. We make them familiar with something through this way. After getting familiar with it, we will let them operate machines. We regard our department as a team. Each team has a leader who guides people to do things.

A: You just mentioned that in fact you attempt to create as much as SOP. It is about assigning experienced employees to make their production stuff become SOP. In my opinion, this is probably a process of changing tacit stuff to explicit.

B: *Yes, that's right.*

A: Yet, you also said that it is impossible for something to get written in detail. So, they have to be operated by the experienced on-site. This is an invisible part that has been mentioned. Instead of writing it down clearly to you, I show you by operating it. You just stand next to me to watch or even to practice by yourself. So, what you just said involves in two kind of knowledge conversion. To you as a manager, you surely believe that such process is crucial otherwise how new people learn things and how old people impart things. It must be through such process. I am interested in your leadership style that, for instance, would you adopt some substantial means as setting rewarding rules to urge your people to do such thing? Alternatively, you would use some soft means to let your people do such thing of knowledge communication voluntarily. Or, you think that you would, for instance, give them some money as an exchange means when they accomplish this thing. Or, you think that you would create visions for them, making them more voluntary to do such thing. I attempt to understand your leadership style on this. To make such thing take place, what would you do? How do you lead these people to make them heading to this direction? You probably believe that such communication or interchange by everyone is good to department, organisation and company. If so, what kind of role should you play as a manager? How do you encourage or guide them to do this thing? Would you offer them some prizes, saying that those who do the most get the most? Or, you want them to have the recognition that it is also good to them since they can grow. So, what is your opinion about it? Regardless of whether you are doing it right now since every company has its own culture and way of doing things, what is your personal attitude towards this?

B: *I think we will tell you directly and clearly about the application of this thing. After that, we find someone who is senior and has experience in management to help us with this thing. They usually accept this assignment, but they probably have different ways of doing things. We may give them guidelines, indicating the format or degree we request. Through regular, say every three or six months, discussion and guidance, we can expect improvement in the production technology.*

A: You mean that you would let those experienced or senior staffs have such recognition that their work is good not only to themselves, but also to the smoothness of the work and the impartation of the whole experience. So, you would let them have such ...

B: *That's right. To improve something on production, ... You say production, it is about producing things on time. If you have large output, you relatively will have more prizes. If you build up such*

connection, it is much possible for them to have that kind of ...

A: Incentive.

B: *That's right. That's right. Otherwise, no matter old people or new people, their desire may not be so high. I would also build up this kind of thing for newcomers.*

A: So, you mean that besides letting them know that such way of doing can bring positive meaning to their work and performance, as you said that you would not eliminate the possibility of offering something essential and encouraged ...

B: *Money, promotion. This kind of stuff will also be provided since it equals to your performance. The easiest way to evaluate your performance is if your performance is good, you would be ...*

A: So, from your point of view as a manager, on the one hand, you think that it is important to let them have such recognition, on the other hand, you also believe that to a certain extent using real interests as a means is also ...

B: *I will also provide this kind of thing to ...*

A: You can say that it is a bit like a kind of exchange behaviour.

B: *You are right.*

A: I think that this must be a kind of measures sometimes used by managers.

B: *Also, another reason is if someone leaves, your department does not have to shut down for one month since these things are well established. Also for newcomers, it would be easier for them to get into the situation. This is the element that needs to be considered by managers. From a company's point of view, your management would not get any trouble. Otherwise, it would be a big trouble. So, if having discussion through SOP, everyone can grow. That is you can grow through discussion. If you do the same thing everyday, you will get bored. If everyone can have a discussion, can grow technically or even can get trained, they would think that the company really take care of them. That would be better.*

A: This is something I am researching about. So, I can say that in the long run employees must at least feel that their companies really take care of them, pay attention to them and let them grow. On the other hand, the use of short-term measures should not be got rid of, for instance, basing on quarterly performance to pay prizes. This should not be eliminated.

B: *That's right. You have to give them some pressure, some incentive. There must have such arrangement. This can remind them that they have to grow and they can get good remuneration. Otherwise, if those who accomplish the assignment are not differentiated from those who do not, it may bring negative impact on everyone's working attitudes.*

A: So, to the situation of influencing each other invisibly, which may happen to production line, it seems to you that you would not use much compelled means to ...

B: *In fact, we set up timetables for them. If we give them one month, we will review them every week in this month. If they do not accomplish the job, they must feel shamed.*

A: So, you said that for such thing you would set up a timetable. For instance, you review them every month. After reviewing, you will know whether they have learned something or not.

B: *Or, even give them more time. Let them report what they have learned in this period. Everyone can review them. If their performance is not good at all, I will give them appropriate warning or tell them about it on annual performance appraisal.*

A: So, you mean that about this kind of thing referring to tacit stuff circulated in production line, though it is invisible you will still create regular occasions for them to show what have been learned or enhanced. For you as a manager or senior staff, when you listen to their reports, you immediately can understand whether they have learned something or not. People say that it is hard to measure invisible stuff changing to another invisible stuff. However, according to what you said, though it is invisible, you will still try to understand whether they have learned something through some Q&A.

B: *There is another issue. You also need to choose someone who can take over your job. You have to do some training. Through such report, you can also train them. When you become a manager, you must report regularly. You can impart the experience of reporting to them. For instance, you can ask them to do this or to do that. I think this request can also be seen as the impartation of experience. Some people may not be familiar with this skill even if they are knowledgeable. No one can understand what they are reporting. So, we will tell them how to perform to make it clearer. By the way, we also can see who is worthy of further investment. We will use this way to ...*

A: If so, it is also a kind of experience impartation. As you mentioned about report, though some people may have lots of things to report, they cannot make them organised so that no one can understand them. Perhaps, they do not catch certain essentials. As a senior employee or manager, you probably will tell or guide them. This stuff is something like this kind of process. This is transference. Therefore, I intend to understand that in order to prompt, stimulate or encourage your people to have such knowledge activation situation, what can you do? It should not be the case that you hide your own experience, I hide my own experience and everyone hides their own experience. If so, the experience cannot be discharged. So, I want to realise that in this process of imparting experience, what is the role of a manager? Do they have to offer short-term, direct and real incentive? Alternatively, as you mentioned that you will do much about training or education stuff. For instance, through some events or activities, let them realise that they are expected to do so. I just intend to know the role of manager in such occasion.

B: *I think you just need some time to do observation. Assign something to them and see how they do it. Then, you do some appraisal and evaluation. I think it always needs some time to do comparison.*

A: Perhaps, it is because this is invisible. You cannot expect immediate report after practicing. They still need to absorb. So, you are right that especially to this thing, it needs some time to do observation and then to do examination. For instance, what have been learned after one month? Perhaps, your attitude would be like this. Nevertheless, you also think that this thing can become standard for future performance appraisal.

B: *I think it still needs some time.*

A: I think that this kind of thing may be difficult to you. It is normally written on the book that knowledge management is about installing ERP or something like that. I think it has to be considered

broadly. You can say that your daily work to a certain extent belongs to knowledge management. Just like doing presentation. You know the presenter knows lots of stuff, but his way of presenting does not feel right. So, when you give him some tricks, he probably knows how to do it better. To a certain extent, you impart your experience to him, but you may not know it. Also, he may not know that he has been imparted. This is the flow of knowledge. This is what I am studying.

B: *People say that interaction makes communication. If you just watch, not interact, what you absorb will be restricted.*

A: That's right.

B: *Operation. In production technology, it would be better to do so.*

A: No matter interaction involves in talking, observation, practice or imitation, it is good for impartation. It is just that this thing is unseen so that it is hard to measure, for instance, what have you learned today. I am interested in the role of manager in this process.

B: *That is you have to do something to guide them or you have to guide them to do something. Set up some rules and make some requests. It means that you have to push them. You let them know that if they do this, they will get benefits or better rewards. It has to be done like this. Like this kind of impartation, you have to give them opportunities and let them have chances to express. If you do that, everyone can then interact. Some people have full of idea, but if you do not ask, they will not tell. Especially for production line, if you do that, productivity may increase.*

A: They know everything since they are operating machines everyday. But, if you do not ask, they will not talk.

B: *I think it has to be open. They should have opportunities to express their own opinions. It cannot be oppressed or autocratic.*

A: If so, you also said that you will let them know if they do it, they will have interests hereafter, probably personal promotion. This is also a kind of stimulation.

B: *You talk about improvement. If things are improved very well, perhaps I can fight for their prizes. If you perform well and make profit for the company, I can fight for anything for you. If, however, things always go wrong, you may need to get punished. This will be revealed as time goes by.*

A: So, as a manager, you just do your best to guide them and let them know that no matter short-term or long-term this is good to them. You at most do such kind of thing.

B: *It seems to me that I will use training and education to strengthen such stuff. I will use this manner to accomplish the company's target.*

A: Alright. I see.

INTERVIEW TRANSCRIPT – Socialisation 002

Note: "A" represents interviewer and "B" represents respondent.

A: What I am doing is about knowledge management. My research direction does not refer to system

establishment or ERP installation. It has nothing to do with so-called tangible stuff. Rather, it is something like this. Essentially, we divide knowledge into two kinds as tacit and explicit. By and large, there are these two kinds. In the tacit part, it is like experience or something that is hard to get quantified. Unlike figures or reports, they are visible to us. We can organise, categorise or add them to become another kind of knowledge. However, what we are discussing now is about intangible or invisible stuff which is much difficult to be quantified. For instance, it mentions the relationship between masters and apprentices. Like sculpturing or kneading something, there is no way to express the strength by words. Perhaps, apprentices have to stand next to their masters and watch as well as practice. After a while, such knowledge is absorbed by another party. This situation may take place in an ordinary commercial society. Like production line, though it has various SOPs, to new or even old people they still have to rely on certain degree of observation or imitation to learn things.

This is the process of converting tacit knowledge. In addition to production line, people influence each other or, for instance, imitate supervisors' negotiation skills in the office. Probably, supervisors are communicating such message unconsciously. So today, we talk about this process of tacit knowledge conversion. I attempt to understand that for you as a manager, how do you look at this invisible stuff conversion? In order to prompt such behaviour or pattern whatever in production line or in the office, what should be your angle and role? I today would like to realise your role as a manager. What would you do? What is your manner to stimulate or prompt such situation?

B: *I have not thought so much about this.*

A: *You are right. For you, you probably are doing this all the time. You just do not know that it has to do with so-called knowledge management.*

B: *I give you two examples for your reference. One of which is about the operation experience of on-line OP, operators. I think such knowledge communication is much like a kind of knack or trick while doing things.*

A: *That's right.*

B: *It is hard to be taught.*

A: *That's right.*

B: *It is hard to be spoken.*

A: *That's right.*

B: *You cannot write it down. For some old OPs, when you talk to them, they probably know what you mean very fast since they have had that kind of experience. They can make use of relevant stuff. For new OPs, it is hard to explain to them since linguistic interpretation can only have certain level of effect. If we go further, it requires their backgrounds and knowledge to comprehend it. We hope that there will have a systematic way to teach them, but it is too difficult. Usually, it requires the accumulation of both time and experience. This part is about the working knack of OP, operator. The other part is much relevant to what I am doing now. We face clients directly. When new products are in, we communicate technical problems, specifications and time to finish them with the clients. In fact, it is like doing project management. As a whole, you actually can have a systematic way to approach*

project management. Yet, when you look at it more closely, you may find that to the same project engineer A and engineer B have different approaches. In consequence, the result or even the feeling of the client will be different. Especially when it involves in people's feeling, it is difficult for someone to get it by instant teaching. No matter what kind of method is used, some people just do not get it. For instance, about the way of writing a letter, some people's wording regarding to project delay can easily be accepted by the client, but some are not.

A: Different feeling.

B: *That's right. This is a trick. We hope that new engineers can get it as soon as possible. As our department now is a small department, usually our way of doing is through training. That is to say, if a certain person has problems about the project, we can discuss them face to face every week or even everyday. This is different from OPs. As the amount of OPs is large, its way of impartation is different from what have been mentioned in the office. In fact, I have not thought about how to make new engineers much easier to understand. I just tell them my thought constantly everyday. Basically, they are at the stage of practicing. When you talk to them about this, some engineers can catch the spirit from what you say, but some cannot. Then, when you tell them to do the same thing tomorrow, for instance, replying a letter, similar mistakes may happen to those who do not catch the spirit. They just do not catch something. I think this is part of tacit knowledge. I have not completely thought about this problem yet. But, I think that the way of doing has to be one-to-one.*

A: So, according to what you just said, it means that you would have intervention action whilst this situation happens. If so, does it mean that you are holding a passive position? That is to say, on the one hand, you certainly hope that employees are able to deal with such problem as smooth as possible since it is not only good to the company, but also good to personal growth; on the other hand, you think that even it may be the problem to newcomers, it is not a serious problem. If so, it seems to you that you are in the position of being passive. For instance, if something happens, you then talk to them or guide them. Rather, you actively create an environment in which they can feel your requests. Are you the one who is standing behind it? Or, are you the one who will intervene in it actively? Or, some managers may provide them with some so-called real incentives or rewards such as money as a kind of measuring standard.

B: *It is much passive in this aspect. Monitoring behind it. Actually, we have some training programmes for newcomers. Some programmes can be conducted in the class room, but some have to be done in a site. We will arrange it. Regarding to certain experience impartation or knowledge comprehension, as I mentioned that we roughly will raise few important items and want them to pay attention to them. Actually, it is impossible to tell all the details. Besides, everyone has different comprehension and feeling about it. So, in this part, I usually step backward to monitor and to follow up. If I see some problems which are going to happen or have already happened, I will make some suggestions or even warnings. With regard to rewards, we relatively do not have such stuff.*

A: You mean that to a certain extent you will list as much as points for attention at the beginning. The function of doing this is to provide them with a direction. As to different problems resulted from

different people's comprehension, you think that your position should be on the role of counselling or assisting.

B: *That's right. Stay behind them to provide them ... with basic equipment. Not too much. They originally should be equipped with many capabilities. The work in our department is about technique service. Communication and language are two important things in technique service. As we almost deal with clients from America, they must be capable of listening, speaking, reading and writing in English. That is the ability they must possess before they come. In the communication part, as we are not experts in this area, we can only advise them. In addition, the way of communication by engineers may be different from the way of communication by salesmen. We as engineers are quite direct. Our suggestions are based on the evidence we have. Therefore, in the aspect of communication, we want engineers to know that they only have to express clearly with evidence to the client. Not everybody can do that. Everyone is different from each other in logical thinking so that not everyone can express what happened clearly and logically. Some people can do that. They can put everything in order. Nevertheless, some just cannot make things clearer and clearer. Further, they use English to express things, so it even becomes much more difficult for them. To this case, there is nothing we can do ... as we do not give them logic or communication lessons. We just do not have such thing.*

A: So, you mean that your attitude to this aspect is you will not actively interfere with this stuff. Of course, it does not mean that you totally stay away from it. You just will not intervene actively.

B: *Stay behind and monitor it.*

A: Like this kind of thing, as you said that it probably implicates personal comprehension and feeling. You certainly cannot expect someone to do exactly what you want. Everyone is different. If so, you mean that as a manager you will play the role of someone who stands behind it.

B: *As there is not just one way of doing things. My suggestion to them is based on my opinion of dealing with this particular thing. But, in reality my opinion may not be right. Their own ways probably can approach the same result. In this case, we just use our experience to see whether something may go wrong in the future. We only can give them some guidelines, regarding to the way we deal with particular situations. Yet, everyone is different in the skill of handling things.*

A: We just talked about the situation of tacit converting to tacit or as you said as knack or trick. I think you get the whole point that this kind of knack or trick really depends on different people. This is the part that we have been talking about. Regardless of this tacit part, there is another part which is about something explicit. As I mentioned at the beginning such as numbers, they are much easier to be communicated or measured. So, there is a situation where explicit knowledge is converted to another explicit knowledge. It is like data changing to reports at last through adding or calculating. It is also an explicit stuff. So, in some information departments ... I think not only in information departments, but also in finance departments or general departments, this is the work conducted by probably every staff day after day and it may involve in enormous information. The same question is, for you as a manager how do you manage this thing, this so-called the situation of explicit conversion? How do you make sure that the work is conducted accurately and efficiently? What is your attitude? How do you manage

this situation?

B: *We examine the result of the conversion through review mechanisms. As you said that it is about explicit to explicit, human being, however, is still a medium for it. In addition, another medium may be computers. But, computers are run by programmes designed by human being. Let's talk about human being in the first place. Under the circumstances of changing explicit knowledge to another explicit knowledge, everyone will be a bit different in judging the data unless it implicates mathematical or scientific formulas. If it has to do with mathematical or scientific formulas, the result will be much more accurate. If it is about the judgement of some information such as the trend of share price, different people will have different perspectives even with the same data. The problem we face is mostly dependent on the data obtained from the experiment. Normally, there are certain design criteria or principles involved in the experiment. We will also evaluate them through some review mechanisms. So, there should be no problem in this conversion process. Nevertheless, if the data are not based on some design principles, everyone will have different interpretations about the result of the conversion process.*

A: Even with the same information?!

B: *As it is through human being. If you get human being in, it will have something tacit. As the processor is influenced by background knowledge, preference, judgement and mood, through such medium knowledge will be twisted. Whilst computers process the data, they also depend on certain rule. If this rule is recognised by everyone, the result will also be recognised by everyone. In this case, there will have fewer problems. For instance, we had some clients who will come to our production line to collect massive data before mass production. The data were judged differently by different people's experience. But, nowadays there are many statistics software packages. The result from these packages is accepted by everyone since its rule is well recognised. As a result, you will have an objective judgement since everyone knows where the data come from. Basically, we use internal review mechanisms to examine this thing. There are some lessons teaching them how to process the data. It is much objective. That is to say, if there are some methods which can teach them how to judge explicit to explicit, it will be much okay.*

A: If so, it means that to that explicit part and to this tacit part, you actually will have different measures. According to what you just said, explicit part relies on establishing much routine review. Having had review means that you will build up a set of measurement criteria. There must have standard before you review anything. So, if it is about explicit part, as a manager you will be planning in advance and intervening actively. As they are all explicit, to you as a manager, you can be much easier to judge them. You probably are much easier to judge the process between the input and the output. So, your attitude is more likely to build up the criteria which are accepted by everyone, and then use the criteria to review things.

B: *With regard to fixed amount of data, usually it is much easier to obtain some tools to help you to deal with them. You will also be easy to set up some standards to make judgement. This is about quantitative data. As to qualitative data, it is much more difficult. About qualitative data, we still can*

have some categories in the end. Though it cannot be judged by numbers such as 99 or 99.5, at least it can have categories of high and low, good and bad or top, middle and bottom. So, usually if it comes out a number, no matter quantitatively or qualitatively, you will be easy to make some judgement through some methods and criteria. This is probably much ...

A: If so, does it mean that this kind of situation does not apply to what we discussed in the beginning? As you said that that kind of stuff is tacit and everyone has different interpretations about it or everyone recognises knack differently. Simply speaking, do you think that as a manager your role and attitude towards tacit stuff and explicit stuff is different? Would you manage these two situations differently?

B: *If having tools, we basically will let tools help them. Or, give them the tool in advance and let them do it. Of course, there is not always a tool whilst every explicit knowledge converting to another explicit knowledge. For instance, when there is no standard to measure, new engineers and experienced engineers will have different interpretations. Or, when the responsibility is different, people will interpret differently even with the same data. It is much easier to have a tool for this explicit converting to explicit. But, it is not 100% for sure. Sometimes, it implicates something like the viewpoint of tacit knowledge. Or, it depends on different people. It may have certain percentage like 80% and having 20% left.*

A: So, at least it means that the possibility of using tool in this case will be higher than in that case.

B: *That's right.*

A: Much easier to manage such situation.

B: *Yes, you are right.*

A: So, you mean that for this visible and explicit stuff, if possible, use as much as tools to manage it or build up a set of so-called standard to review this thing. If so, would you provide some real rewards or something like that as an exchange condition? That is to say, if you intend to make sure that the process of converting explicit knowledge to another explicit knowledge is okay, would you as a manager provide some so-called substantial incentives to encourage them to do that efficiently? Frankly speaking, would you use the stuff like reward or performance as your tool?

B: *We originally have such kind of thing. In this conversion process, with the same tool, some are doing well but some are not. The difference will be shown on performance appraisal every year or every six months. We have rewards for this case. It also applies to tacit part. Yet, for explicit part, it is much easier to see the effect.*

A: How do you use this kind of tool in the tacit part?

B: *Sometimes, it is hard to quantify or to express tacit stuff. So, this thing cannot be directly reflected on rewarding. If you use reward to judge it, people may think that you are good or bad to particular person. As for machine, you even may not be able to judge its right or wrong directly.*

A: So, you mean that as being tacit, it is hard to judge whether it is right or wrong. Therefore, if you put tools into this process, people may think that you counter or benefit particular person.

B: *That's right. If so, that would be bad. However, in production line, things will be much simpler.*

Those who are senior and know some tricks can do things quicker and better, but those who are junior and do not know certain knack cannot. Under these circumstances, the result will be different so that the prize will be different. That will be easier. Nevertheless, things are not easy in our department. Take customer complaint as an example, it is difficult to measure who is good at handling it since every customer is different. Handling this customer well does not always mean that you can handle that customer well. Besides, it is not always our engineers' faults. Some clients are really hard to be dealt with. So, if things involved can easily be judged, you can use rewards. For instance, it is easy to judge which operator is doing good or bad since they almost have the same condition. But for things like dealing with customer complaint, it is not easy to judge whether the problem goes to the company, the engineer or the client. So, for the reward ...

A: So you mean that whatever tacit or explicit part, the major issue is about the identification of an objective fact.

B: Yes.

A: If everyone recognises that certain thing is much more objective and can be measured, it means that to a certain extent you can put those rewards and punishments into it.

B: That's right. Like processing data, it will be much objective if five different persons recognise that staff A is doing better. However, if you face a client, it will be hard to draw a clear line.

A: So, if something has no clear line, you as a manager will stand at a much passive position to look at this thing.

B: That's right. There are many ways of doing for the same thing. My way of doing is not necessarily right.

A: My whole research area is something about this. For tacit kind of conversion and explicit kind of conversion, they are different in terms of character after all. Regardless of conversion, if you look at tacit knowledge and explicit knowledge respectively, they are essentially different. For you, you probably are too busy to think about which is tacit and which is explicit. You mix them up.

B: Oh, yes.

A: So, this is our job. I therefore attempt to understand your attitudes to these two parts of tacit and explicit. What is your attitude? How do you manage these two different situations? This is what I am interested in. I want to know what people from the industry think. In my opinion, everybody talks about knowledge management narrowly. Mostly, they think that it is about installation of SAP, ERP or something like that ... I think that once you realise the character of knowledge, you actually can manage it very well. So, my research is about to broadly realise how you manage this thing as you may contact different kinds of conversion everyday.

B: This is very interesting. Normally, we do not consider this thing since we may think whatever the conversion or occurrence of tacit knowledge and explicit knowledge it is all about the same thing, the same problem. We only deal with this problem rather than analyse this problem. But, at last when doing judgement, we will naturally discriminate between those which can be judged objectively and those which can only be categorised roughly.

A: In industrial circles, you probably are more interested in tacit converting to explicit.

B: *Yes. In fact, it is extremely important.*

A: No matter what and where have been learned, everyone has their own experience. It is their own stuff. Of course, from the company's point of view, you certainly hope that everyone can reveal their own knowledge and share it with the others. Therefore, you probably are more interested in tacit to explicit, making everyone's knowledge become public goods.

B: *In fact, this company has a similar thing called BKM, Best Known Method, which is particularly introduced to engineering departments. It is about how to specify and communicate a manufacturing process or know-how. We have high turnover of staff. So, we hope that everyone can specify what have been learned in the company, which may only occupy 70% of their whole knowledge. Of course, it involves in few factors. Are they willing to tell? If they are willing to tell, you then have to consider their way and ability of expressing things. At best, we can only expect 70% or 80% of the stuff being released. However, this 70% or 80% cannot be totally absorbed by receivers. For the rest of 20%, 30% or more, they are tacit stuffs that may be acquired and understood by junior engineers hanging around senior engineers for a while. Explicit knowledge can be absorbed very fast especially to which have formulas. It may only take one week or so to understand. Nevertheless, for apprenticeship in old times, it probably has to take three or five years since it is about catching the essence. That would be much different.*

A: Now, you may see less apprenticeship.

B: *That's right.*

A: But, that kind of working pattern is still existent.

B: *That right. We still have this kind of thing in the company. Senior engineers have to lead junior engineers. It is like masters leading apprentices. Here, in this company, senior staffs tell you something that is not revealed in the SOP which is impossible to tell you all the details. They tell you something that you need to care about, which is no way to be written.*

A: So, I am interested in how do you manage these two different situations as tacit to tacit and explicit to explicit? Would your means be different?

B: *It will be different unconsciously.*

A: I think that it should be different since they have different characters. So, I assume that your management means should also be different. I just want to explore how do you look at this thing? How do you manage this thing?

B: *I think it is different because it involves in judging some things. Before making judgement, you must have some information. If the information has different forms or comes from different sources, you will judge, determine or conclude it differently. If things are much specific and quantified, your judgement will be much instinctive and objective. On the other hand, if things are much ambiguous, your judgement and the way of handling them will be different naturally. Most of the time, we do not consider this kind of thing so carefully.*

A: As you are so busy, you basically have no time to think about what kind of leadership should be

used to deal with this particular case. For you, perhaps, you simply do not have time to this analysis.

B: *We have so many judgements to make everyday. If we add this, that will be too much for us.*

A: I just give you some space to think about it. This stuff is quite interesting actually. I merely hope that you do not look at knowledge management as something big like implementing system ...

B: *Implementing system is the easiest thing to do.*

A: Of course, system is the easiest part. The problem, however, goes to as you said that the tacit part. I think that is the most interesting part.

B: *How to make people more willing to teach and learn well? Like company culture, it is a tacit thing.*

A: That's right.

B: *How to feel it? I think it is like spreading or diffusing something slowly. It may take ten years to do so.*

A: That's true.

INTERVIEW TRANSCRIPT – Socialisation 003

Note: "A" represents interviewer and "B" represents respondent.

B: *It involves in many techniques. This kind of technique is not the point. No matter which kind of method, as long as it can be wrote down, I think it is not the point. The problem actually goes to the concept. If the concept can be wrote down, it in fact cannot be called as concept. I give you an example. We are doing one thing. Right now, we have some problems. According to our normal logical thinking, we will go to check what happened and why, won't we? Now, we turn it over. I want my engineers and team leaders to answer me why they are doing alright. Why? There is a point over here. It is easy to manage explicit stuff. There are some devices that you have to use. We hope to use more active attitude. Talking about our idea about management, we do not hope that we spend 90% of our time in wasting the internal energy since you may not find where the problem is. So, I turn it over and use another way of doing. In other words, I regard everyone as my problem. If a certain problem happens to me, I will go to find other potential risks. All potential risks have to be found. Also, I am not doing prevention for this time. I also intend to solve the problem that may happen next time. This is what we are prompting in our group. I want to train all my technicians, administrators and newcomers having such concept. Okay. If it is about tacit stuff, it is useless to write the goal on the paper. The point is my reviewing method. Basically, it is quite elementary. For instance, if someone is graduated with bachelor or master degree, they must have some common sense. It is easy to train them skills. I can give you some books and teach you. That will be fine. How about the problem of concept? Managers have to lead what kind of problem has to be found and what kind of solution has to be needed. If so, their people will satisfy them spontaneously. So, the problem is about the style of leader, rather than what have been done.*

A: So, it seems to me that your way of doing things is different from the others.

B: *It is not different from the others. I give you an example. If I change the way of reviewing, do my subordinates also have to change? Their explicit stuff such as documents and reports will not be changed, but their starting point will. If their starting point is changed and then attitudes are changed, the entire performance will be totally different. With different manner, you will get different responses.*

A: *If so, you mean that as a manager, you will strongly intervene in such thing, to intervene in such control or manage, won't you?*

B: *Basically, I do not care about what kind of thing learned from the book they use. I think that they can get it by themselves. It is a tiny piece of thing to teach them this kind of stuff. However, regarding to so-called concept which involves in a basic problem of attitude, this is the most important issue from my point of view. I give you an example. Compared with those who have the attitudes that the problem is not always theirs and those who believe that they should take responsibility for the problem, you can imagine that these two parties' consequences will be totally different. One is passive and the other is active. If so, what should I do with my output and result?*

A: *So, as a manager, you will directly intervene in their concepts.*

B: *Usually, I intervene in the concept itself. I do not care how they do it unless they need help. For instance, if your condition today is not good and you need other people's help, just let me know. I will get someone or other departments to help you. Or, if my team leaders are unable to handle their operators, I will go to help them. Otherwise, I will do my best not to get involved, but I will step in their concepts. I only step in their concepts. For the rest of it, I will do my best not to get involved unless they need help.*

A: *If so, it seems that to this kind of conversion you will not provide some substantial incentives, will you?*

B: *Substantial incentives. In fact, I think ... How should I say ...*

A: *Providing some substantial incentives to make them willing to make some efforts ...*

B: *I think they should be able to do that. Sometimes, I provide them with some rewards. But, my rule is simple. If all working stations are performed well, everyone will get rewarded. However, if one of which is failed, no one get rewarded.*

A: *So, I can say that you will also introduce the concept of rewarding to this ...*

B: *Yes, I will. Yet, basically, this kind of thing cannot be applied very often. Otherwise, you may have a situation that someone does this thing because they need certain prize. What if they do not need the prize, what are you going to do? So, I think that this is something they have to accomplish. This is the goal for the whole group. They have already got paid for doing this. If they do something extra, they will get something extra; if not, that will be their faults. I think that is something they have to do. If you work overtime, the company will pay you double so that you have to do something additional. You have to give them this concept otherwise your payment will never end.*

A: *So, you think that the means of providing substantial rewards cannot be used often, don't you?*

B: *That's right. It cannot be used often.*

A: *If so, to this kind of situation, what should you do to enhance their incentive, to let them do it*

continuously?

B: *So, what I mean is where my target is. Where is the lowest standard I have to achieve? This is your basic requirement. You have to achieve it. If not, that is your problem. This is a concept. You cannot say that you want a burst of applause since you score 300 points. 300 points are your basic requirements. If you do not get them, that is your problem. If you have some problems and you intend to review them, I can support you. If you plan to score 500 points but still need some resources, I will support you. This idea applies to the real situation in the company. If you are required to have 300K output, you have to take it for granted. There is no way you can ask for rewards. Otherwise, what do I pay you for? If I pay extra 1,000 dollars to them whenever they achieve the target, do you think that they still have incentive to do so after, for instance, four months? Assuming that you do not keep doing this, they may quit.*

A: OK. If so, it seems that it is not a long-term way of doing. On the other hand, you still believe that this is a basic requirement that has to be filled. In this case, what would you do? How to make sure that the whole process can be going well or smoothly?

B: *I give you an example. If the output cannot be made by a certain team, I will not condemn the operator at the lowest level, instead I will condemn the team leader. Furthermore, I will blame the team leader in front of his team members, rather than in my office. I want everybody hearing it. After that, I will bring the leader to my office and tell him why I am doing this. I will let him know that the reason of yelling at you in front of your people is to make you have the power to do what you want to do. I have to kill the chicken to frighten the monkey. I have to help him to get rid of the obstacle. I have to let him have enough power and resources to do things.*

A: Therefore, to this kind of situation, what is your attitude? As a manager, your attitude should be ...

B: *As you talk about apprentices and masters. I think that if the same apprentice is led by two different masters, you will have different results. Though these two masters are at the same level in terms of technical ability, their innovative abilities and ways of doing things must be different. In consequence, the results will be different. It has something to do with masters, not apprentices. So, the whole direction of a team has something to do with the team leader, not with the team members.*

A: So, I attempt to know your role as a manager in this kind of process.

B: *I think it should be a ... concept. A concept-leading manager.*

A: Concept-leading manager ...

B: *You today are not leading primary school pupils. You are leading grown-up people. Even, they are forty or fifty years old. What would you do? Your standing point should be thinking as an engineer, where my existing value is. As a manager, where is my existing value? Actually, it is your operators, not you who produce things. You do not repair machines, do you? You have plenty of meetings to attend. Do you really repair machines? I don't think so. So, where is your existing value? Finding a direction for a certain team is a much important thing to do. As a manager, you have to group your people together and make them heading to the same direction. This is the major thing that has to be done by managers. This is where their existing value resides. So, I think that as this is where your*

existing value resides, the most important thing for you is to change the concept of your people, let them follow the direction. If my whole team is to be at one, there will be no problem of doing anything. If some people head to east but some head to west, they would rather stay still than move.

A: So, you mean that to this kind of situation, you will start with introducing the most basic concept to let them change thoroughly.

B: *I think it is hard to change their conceptions. About skills, it only takes time to learn. About production, do you think that I am better than those operators? I don't think so. Do you think that the director can be better than those operators? I don't think so. So, the point is what will the direction of the group be leading to? If you have already had a target, how would you carry through it? It is the problem of your means. The means may not be learned by reading books. Why? It is because the condition is different. Is the condition in Taiwan the same as in China? Perhaps, you have to use another one. You have to keep on trying. As long as my target is certain, I can try as much as I can.*

A: So, to this situation you are very clear that you will intervene in the most fundamental part.

B: *I only intervene in their conceptions. About how to do it, I will give this question to them. They have to figure it out. This is the problem which involves in their specialities. This is their work, not mine unless they have some problems. If they have problems, I will give them the best support, let them have the strongest power to do what they should do.*

A: Alright. I understand.

INTERVIEW TRANSCRIPT – Socialisation 004

Note: "A" represents interviewer and "B" represents respondent.

A: My research is about knowledge management. I think you must hear of knowledge management. We basically divide knowledge into two kinds as tacit and explicit. What we are going to discuss is about the tacit part. It can be regarded as personal experience or something which is hard to express. It can be shared through common experience so that it is passed on. It can be imparted through influencing unobtrusively and imperceptibly or as it says here that through apprenticeship. Apprentices stand next to their masters and watch. After a period of time, masters' experience is learned by apprentices spontaneously and it becomes apprentices' own experience. What I intend to understand is how do you manage this kind of situation as a manager? How do you control this thing? What kind of means would you use? What is your leadership style? What kind of tool you would use to manage this thing? This is very tacit stuff. It is actually existent wherever in the office or in production line. Even if you make it become SOP, it cannot be so complete. It is mainly through observation, learning or even imitation to communicate this kind of knowledge. So, as a manager, how do you manage this process?

B: *In my own experience, I probably will set a good example with my own conduct. I will be much setting a good example with my own conduct. We still explain to them the formal guidelines. For your*

own technique of doing things, you have to get it by yourself. That is to say, I can only give you guidelines. You have to comprehend the rest by yourself. As you said that some stuff cannot be quantified by language. For instance, someone watches what you are doing. They use eyes rather than mouths to communicate knowledge. For me, I will set a good example with my own conduct. Even for tiny things, I will do it by myself. So, the whole team will follow your step. About how to guide them or measure what they have done, in the beginning I must be showing them, after that I watch them doing it. In this case, it involves in tricks or a knack. Some people may not be able to get my knack in the first time. If so, I can show them again.

A: So, you mean that first you would like to become an example to other people, to become a target for someone to learn.

B: *It is not necessarily to be an example. It is just that they can follow my pattern in the beginning. Of course, everyone has different experience of doing things. Once they are familiar with my way of doing, they can use their own ways. It becomes their own culture, their own style. As it says here that it becomes their tacit working style. In fact, things are miscellaneous. As a manager, you better have certain understanding about them in advance so that you will be able to guide or teach your people. This is my own experience.*

A: To this kind of case or conversion situation, would you try to establish a set of standard to measure it?

B: *Do you mean getting quantified?*

A: You may say so. Or, would you try to establish a set of standard to measure whether this thing is proceeding or being doing?

B: *Whether following such pattern? I myself have not set up any rule. As to something to be quantified, as we are doing information processing, it can be quantified. To quantify mistake rates. Many things can be quantified. As to what have been discussed as tacit stuff, there is no way to get quantified. I haven't thought about it carefully. But, in our talk you probably know how much knowledge you can learn from me. Yes, that's right.*

A: Therefore as you haven't thought about whether this thing can be quantified or even you think that this tacit stuff cannot get quantified, does it mean that you will not build up or adopt certain reward systems or something like that to be your management tool?

B: *Not sure. Though it is not quantified, I can ... For instance, if I deliver a message to, for instance, four of your subordinates, they must interpret the message differently and have different thought. I will go to find out which one really understands the meaning of my message. If I can get certain subordinates who always have the same thinking pattern as me, I will start to rely on them since they are much able to catch my ideas. Then, I will gradually teach them more things. At last, how to evaluate their performance? I think that the more they can catch, the more they can learn so that the more they can do. Finally, you can get some quantitative numbers. For instance, what they have done may be twice as much as the other people.*

A: So, it depends on different managers ... As a manager, you recognise that some of your people

have such potential. But other managers may not have such thought. So, you mean that different managers may have different opinions about this thing.

***B:** This is much subjective. I think it is much subjective. As to those quantified numbers, I think they are more objective. For instance, if staff A can handle forty cases but staff B can only take care twenty cases in an hour, it is obviously that staff A is more capable than staff B. As to catching other people's experience, you probably only need deal with certain amount. I think they complement each other. It is true that everyone is different in comprehension and reaction. I think it is quite subjective. If you are evaluated by another manager, you probably can get higher scores. It is possible. So, this thing is hard to judge.*

***A:** So, basically to this situation you will above all set a good example with your own conduct, meaning that you will jump into it and become an object for other people to learn from.*

***B:** I don't really mean that. The reason of jumping into it first is I want to realise the problem of doing this thing. I intend to know the potential problem which may be faced by other people. I will go trying first. I will try to solve the likely problem and build up my own way of solving it. Afterwards, if someone has the same problem, I will know how to help them. When I jump into it, I certainly cannot solve all of the problems. For some problems, I may not be able to catch them right away. Other people may have different problems. I can learn from them. Perhaps, my people see some problems that have not seen by me. It is mutual. I will not be saying that since I am here for quite a long time so I know better and much than my people. I can also learn from their experience.*

***A:** So, it means that you will regard this situation as a mutual learning condition.*

***B:** Yes, you are right.*

***A:** You will not be thinking that since you are their manager ...*

***B:** That's right. Sometimes I may not see some bugs when I process some data. Though I see ten problems and the others only see five problems, their five problems may not entirely be included in my ten problems. It is possible that two out of their five are not seen by me. I should have seen all the problems.*

***A:** We just talked about tacit side and its likely conversion. Another kind of knowledge is explicit, which you may be quite familiar with. It is like numbers, data or forms. Through processing by computers or even human being, so-called raw data can be converted into a report, or another form of ...*

***B:** Analysis.*

***A:** That's right. You can also call it as a kind of knowledge, can't you? This is another pattern which is different from what we just discussed. In this case, explicit knowledge can change to another kind of explicit knowledge through analysing, editing and categorising. They all can be seen by everyone. The same question is as a manager, what is your management pattern to this thing? Is it different from that thing? That is to say, is your attitude to this explicit stuff different from that tacit stuff? Or, there is no difference.*

***B:** I think there will be a bit different. For this kind of thing, it is much written on the paper. You talk*

about data. I receive data from my clients. Of course, data from different clients will be different so we have to analyse which data are usable and which are not. We still can have some guidelines for this. This can much be expressed and seen by everyone. About what we discussed as tacit stuff, that cannot much be seen. Sometimes, you really have to comprehend it. I think this is really regarding to something called a trick or knack. Yet, for explicit stuff, it becomes very clear. For instance, if I tell everyone that I just want certain kind of form, they should be so clear about it. But for that kind, you have to do a lot of thinking. And, I think it has to depend on people's experience and logic. Sometimes, you may not be able to catch the exactly meaning of what other people say. But for this kind, it is very clear. For instance, everyone is clear about what should be filled in columns A, B and C.

A: OK. As you said, you mean that since the processing and conversion of explicit information involve in some characters such as some information is massive and it needs to be dealt with timely and accurately, you therefore think that for this thing it requires some kind of mechanism to ...

B: SOP.

A: Okay. Given SOP to control this thing, you think that information should be quite clear in this case. If so, whether you have this kind of stuff in reality or not, would you introduce something like reward systems into it? In your opinion, do you think that to a certain extent managers should provide some rewards to encourage employees to accomplish this thing quickly? It is like a bit of exchange feeling. Do you think that it is necessary to do such kind of intervention in order to manage this process and let employees accomplish it as soon as possible?

B: *Probably ten years ago, we had this kind of thing. Nowadays, I think that everyone's working recognition is much mature. You do not need to push them too much. Once stuff or information comes in, they can catch them right away and convert them. We are weekly based. On every Friday, we will check how many cases have been dealt with. We will do such control. I think this is much humanity management. We will not use a hard pattern. You say we do not have management, in fact, we really have management. We will check the report on every Monday. Why you only dealt with two cases out of ten? Do you have any problem? We basically will do such check.*

A: So, you mean that even if you do such checking, you may not implement the system of performance appraisal right away. Instead, you will look at the problem from much humanity's point of view.

B: *That's right. As to performance, we still will appraise it, perhaps twice a year. If someone falls behind the schedule every week, this is very obvious. If we can do recording weekly, it will be very clear. If someone is quite busy in certain week so that their routine work is affected, we still can tolerate it. Actually, we are now trying to get things more organised. We set up deadlines for every case. If someone cannot finish certain case before the deadline, they have to tell us how many additional days they need. I think this can become a base for performance appraisal. This is a pattern. It can then be quantified.*

A: So, it means that you still have a control and performance appraisal mechanism. As to whether you are going to provide some substantial rewards, it is not necessarily to do so.

B: *We do not have this special ... Like sales departments, their rewards are based on their performance. We as a supporting unit do not have such thing. Only by the end of every year, we will do some appraisal which may affect the adjustment of salary next year. About special prizes, as far as I know this company do not have such kind of thing. We only have yearly-based performance that may bring some influence on salary adjustment.*

A: So, there is no immediate effect. Rather, it has to accumulate certain amount of time.

B: *Long-term. That's right. A year.*

A: You then will do some appraisal and adjustments.

B: *That's right.*

A: My research attempts to understand that since both tacit conversion and explicit conversion have different characters, I am more interested in as a manager how do you look at these two processes? How do you manage these two processes? Would you manage them differently? Or, it is the same. This is where I am interested in and where I want to ask you.

B: *Of course, explicit can easily be mentioned and managed. It does not need too much explanation. It can easily be recognised. As to management of tacit stuff, it really involves more in ... a kind of ambiguous feeling. Really, the feeling between people is also very important. In managing a team, you cannot expect that everyone has the same way of thinking as you. That is impossible. It is just that as a manager how you can manage these people and lead them to a final result. In this process, some people may have this way of doing but others may have that way of doing. They are totally different but they have the same result. Some people may only spend ten minutes to do one thing, but some have to spend thirty minutes to do the same thing. We have to know why. From tacit point of view, it becomes explicit, quantified. Getting quantified means that things become explicit. As a manager, we have to start with this point to get things quantified as much as we can. This is about to get fairness. Otherwise, how can you persuade people that A is stronger than B. For the same thing, A only has to spend ten minutes to do it but B has to spend twenty minutes. This is something quantified. I think no matter tacit or explicit, at last you need something quantified so that you are able to persuade people. Of course, some people would like to see and learn your experience. But some people still do their own way. They think that they still can get the work done. If they think that their ways of doing are much smoother, that is fine. In previous times, if managers have ten or twenty years of experience, they will be asking their subordinates to follow them. But for me, I think that I will give my people space, rather than ask them to follow my way. But, you still need to make some requests. You still want them to achieve your target. I think for these two kinds, the variation is in their processes. The final target will be the same. No matter what kind of knowledge management you are doing, you just want the result reaching your target.*

A: They may have some variations during the process. So, I just want to know how you look at these different processes. Would you have different management means due to different processes?

B: *I think yes. In fact, people have to be managed dynamically. Like you, you come from a family which has its own values and patterns of life. It is totally different from mine unless our backgrounds*

are very similar. So, you cannot impose your viewpoints on other people. I think this is a principle. That is to say, you have to respect other people. You cannot say that your ideas are ideas but other people's ideas are not ideas. So, how do persuade other people to accept your ideas? It has to do with a manager's ability. If you have ability, you will be able to persuade other people. This is my experience.

A: So, from what I heard, it seems to me that you do not agree to use those substantial stuffs as your incentives to prompt other people do this kind of thing or that kind of thing.

B: Yes, that's right. I think I will not put interests in the first priority. I think you have to use your true heart to do everything. As I accept your interview today, I did not think that you have to give me some money otherwise I will not do this interview. I think I will not do this kind of thing. This is not my style.

A: Alright, I see.

INTERVIEW TRANSCRIPT – Socialisation 005

Note: "A" represents interviewer and "B" represents respondent.

A: Having read this thing, can you roughly understand what it is talking about? Roughly have an idea?

B: Yes.

A: I intend to understand that for you as a manager how do you lead this thing? What is your leadership character? How do you manage this thing? As it says here that the working contents of knowledge operators like front-line employees and line workers are generally relevant to this. Under these circumstances, how do you manage these people? How to you lead these people? What is your style of leading people?

B: Everyone's knowledge level is different. It is hard to say anything about it. If you talk about front-line employees, they are totally different. You can assign someone or low-level leaders to teach them how to assemble or operate machines. It only takes about three or five days. If it is a complicated machine, it takes one month at most. It should be pretty fast when you do assembling or something like that. However, if you deal with office workers or clerks, it will be hard to say. Every office worker's style, conception and loyalty to the company are different. Hence if you attempt to lead them, you better win their hearts first. For the youngsters in modern times, it is hard to say. Most of them nowadays think that the work has to have three conditions. First, the salary must be high; second, the loading must be less; and the company must be close to home. They are almost like this. So how to train a newcomer or lead the whole crew of the department? Sometimes, it is a real difficult question to answer. If you want to lead these people, you certainly have to concern about them. It would be better if you can also concern about their families and their living habits. Youngsters in modern times are quite different from those in old times. In old times, they were totally dedicated to their work. But now they are not so. In the present climate, you have to understand them. You have to care about them.

Sometimes, you even need to pacify their emotions. If you want to lead the employees in a company, you have to consider what they really want. I think mostly the first wants is still money. For the second one, they want positions. What is the position in this company? Can they get promoted? If you think about their wants seriously, I think there is nothing wrong with them. About money, I think it is the most practical thing in the world. Though there are many things money cannot buy, for nearly most of things you can use money to buy them. It is true. For a company, it must have certain level in morality. But sometimes it is not so sure. Last week, we invited a consultant to give a lesson to us. She said to us that our products, prices and environment have to follow the current reality otherwise we must be eliminated through competition. She said it in front of all the employees, managers and boss. If you do not follow the bad example of others, you cannot survive. After twenty-two or twenty-four years of working experience, I realise that if you do not follow the bad example of others, you really cannot survive. If you do not do this, you will be seriously excluded. Perhaps, this is the reality of the society. What you have done may not be seen by others or by your boss. As a result, you may not be promoted or get increased in salary. So the way of doing should be to manifest what you have done to the top management. You have to give up the old way of doing things silently. In this modern society, if you are ploughing and weeding silently, you will not be successful. I heard someone saying that working hard does not guarantee the success. It applies to career as well as society. It is so practical. Take Formosa Plastic Corporation [the largest plastic company in Taiwan] as an example, if your ability is not so good, you will not be able to work there or even get into that company. This is the reality. If you do not work hard, you will be eliminated through competition. Though working hard does not guarantee the success, if you do not work hard, you will be absolutely getting no chance to succeed.

A: According to what you just said, do you mean that as a manager you will use a more practical angle to manage these people? For instance, you talked about money and promotion. Would you use these to let your people strive for the target? Would you consider this way?

B: *In these twenty years or so, I have never referred to targets. In fact, my opinion is ... Of course, everyone has different opinions. For me, I have been affected by elders that we have to be conscientious about our work. We have to work hardly and silently. Do not care for too many things. One day, we will be known and promoted by our bosses. This is what I have been taught. So I led other people this way. I, however, would pay attention to seeing whether someone was really working hard and they really did not care for so many things. If they really did not care for many things, I would raise their salaries if I could. If they cared for everything, contrarily I would be hesitated to raise their salaries. Now, I realise that it is not the best way to lead everybody. Someone may be performing very well in front of you, but one day you may find that they are not really so. It happens to me. So, it means that some people are really crafty. But some people may not be so. They just do what they think they should do. It is not easy to lead every employee. You have to lead their hearts. At least, you have to care about them. However, if your position is getting higher and higher, it is almost impossible to take care of everyone. So to an enterprise I think that there should have a hierarchy. Different layers take charge of different responsibilities. It must be truly implemented. Certainly,*

everyone has different thoughts. Say a boss has a general manager, the general manager has two deputy general managers. Can you guarantee that the general manager and the two deputy general managers will have the same ways of thinking and doing as the boss? Don't they work for their own interests? It is very difficult to say. On the surface, they may be doing well. But who knows? You certainly will not be able to understand everything so deep. I think ideal is ideal, reality is reality.

A: So, to this situation you think that if you want to lead them, you first have to lead their hearts.

B: *That's right. If you want to lead them, you first have to lead their hearts. For some people, you have to pay much attention to them. For some people, you have to keep on explaining to them until they totally understand what they are asked to do. For some people, you really have to condemn them. For some people, they only need your care. Everyone has self-respect. But where should it be put? Someone puts it on either fame or gain, but someone puts it on neither fame nor gain. There are many different people in the world. Some people think that they do it for substantial interests. Some people do it for fame. Some people do not want anything. They just want to hear "Well done" from you. You cannot say that there is no such person in the world. So, how do you lead these people? You cannot use the same heart or manners to treat them. I think it definitely cannot work. People say teaching students in accordance with their aptitude. I could not understand it. Nevertheless, when I get older and older, I can understand its meaning. So, you say you want to use the same principles and moods to teach them. It really cannot work. Everyone's thinking, manner and comprehension are actually different from others.*

A: You talked about teaching students in accordance with their aptitude. It means that everyone has different needs. So according to what you just said, as a manager you will satisfy everyone's needs. If someone does it for gain, you will give them more prizes. But someone may only need your care or support. So, your way of doing will be depending on different people, won't you?

B: *That's right.*

A: If so, you think whatever from your personal personality or from your twenty years of experience which one is more effective? To lead these people, do you think the way of leading their hearts will be effective? Or, you think that providing them with substantial rewards such as money and positions will be effective. Which one you think will be more effective?

B: *In my opinion about leading people, if they only care about fame and gain, that will be easy to deal with. It will be easy to deal with. If you give more money to those who want gain, they probably will be more dedicating to their work. You just give them more money. Don't you think it is like making a deal? However, if someone does not work for fame and gain, that will be so difficult for me to lead them. That will be so difficult.*

A: So you mean that for those who work for money, you just give them money. That will be easy.

B: *Yes, that will be easy.*

A: So you think that to that kind of people it will be easy to deal with.

B: *Yes, easy to deal with.*

A: Also as you said that it is like making a deal.

B: *That's right. It can be regarded as a kind of deal. To salesmen, don't you have to plan for their performance standard? If they reach the performance, they will get normal pay. If they have additional performance, they will get extra pay. That is easy to deal with. One day, when they approach certain performance level, they want fame. At that time, you have to promote them if you can. However, I find that many salesmen do not like to lead people. Once they lead subordinates, they will find it hard to concentrate on their business. And once their sales are down, it will be hard for them to gain more. I know that many super salesmen do not want to lead people since they are not capable of managing them.*

A: *Those who reach the top work alone.*

B: *That's right. They are not able to lead people.*

A: *They can only deal with foreign affairs, not domestic affairs.*

B: *That's right. So at last they prefer not to become managers. Leading people is really great wisdom. It is very difficult. I have learned this kind of thing for ten years or so. Sometimes, it is not like what you think. You see. All men have two legs. They can walk away anytime. So it is hard to grasp how they change. It is very, very hard to satisfy their needs. They change all the time in terms of mentality and taste. You have no idea about when they will change. Even they have no idea about whether they will change.*

A: *So for those who want fame and gain, it will be easy for you to deal with.*

B: *That's right. It will be easy for me to deal with. I think generally 50% of the people want gain, 40% of the people want fame and the rest of 10% want neither gain nor fame. It is difficult to lead those who want neither gain nor fame even if they are the minority. However, if you want to run a company, you cannot ignore those 10%. When the company is in dreadful conditions, those are the people who really dedicate to it. Those who care only about fame and gain maybe have already gone. They only care about deals. However, without them you can hardly run a business since at the beginning you need those who want either/both fame or/and gain to exploit the territory. But the one really supports you are those who do not want fame and gain.*

A: *Okay. Given that, we split the employee into two groups, one is more like those who in the sales department and the other is like those line workers in production line. According to your opinion and judgement in these twenty years, do you think that salesmen are those who are keen on gain? If so, would you use gains to push? On the other hand, do you think that front-line employees or line workers are those who do not keen on either fame or gain? How to you lead them? That is to say, how do you lead these two groups of people? Are they led differently?*

B: *It must be different. Generally speaking, leading line workers will be much easier than leading salesmen. It will be much easier to lead line workers. I think it also applies to high-tech industries. The easiest analysis can be done by splitting them into direct staff and indirect staff. Direct staff refers to those who work in production line. On the other hand, indirect staff is about those who work in the office. For those who work in the office, they contact many things and compare with many things so they learn and absorb many things. In consequence, you have to pay much attention to them. For*

direct staff, however, they do settled and routine things everyday. They may not need college degrees to do this job. Do you know what they are thinking? They only think about getting their jobs done as soon as possible. They only think about assembling the machine as fast as they can. If they are doing extremely well, perhaps the company will provide them additional prizes. Strictly speaking, you can say that they also work for gains but their gains are quite small. For instance, if they can do 10% extra work, they will get 1% extra increase in salary. This 1% is the prize. So they have to work together as a team. You are right that salesmen also work together. But they also work alone. For many salesmen, nearly 80% of them, they work alone. In production line, however, they have to work together to get a job done. As to direct staff, do they have requests? Yes, they do, but their requests are much simpler. It is easy for you to deal with them. They only care about whether they can get new uniforms if they get dirty or whether they can get tool kit when they need it. These do cause any problem to production line. Nevertheless, the situation is different to indirect staff. As indirect staffs have more power and authority than direct staffs, they can have many ways to do things. I do not say that indirect staffs are not good. If they do not work together, the company still cannot be run. But you have to pay much attention to indirect staff, rather than direct staff. For direct staff, they are quite routine. But for indirect staff, they have to be quite flexible. No matter which kind of people you are leading, you have to coordinate them. If you don't, you are not able to lead them since they do not accept your opinions. So how to lead and associate people is really big wisdom. You really have no idea about what people are thinking. So you have to lead them in accordance with their aptitude. Also, you have to encourage and praise them. Human being really lives on encouragement and praise. If you do not praise them, you will be terrifying to be a manager.

A: Understand. In fact, simply speaking, my research area is about to know whether you are different in leading, for instance, those who in production line and those who in sales departments.

B: *It is certainly different.*

A: Does it mean that ... Of course, the characters of salesman and line worker are different. Even among salesmen, everyone has different needs, and so do line workers. So as a manager, can you generalise how to lead salesmen? Do you have another way for those who in production line? What I attempt to understand is how do you manage these different groups of people? What is your means? For instance, you said that for salesmen you will be giving prizes. How about for those who are in production line?

B: *In production line, we regard front-line employees as direct staffs. For salesmen, they can also be considered as direct staffs since they are front-line employees of the sales department. But these two kinds of people have to be led differently. For direct staff in production line, they only care about output required, time needed and environment faced. These are their concerns. They only care about how their efficiency can be increased and if being increased whether they can get rewards. This is what they want and this is what you have to give them. If you can satisfy them with these requests, they will be so happy to do the job. So if you really want to do comparison, indeed it is much easier to lead line workers in production lines since their requests will not be out of your imagination. They are*

much simpler. But for salesmen, they will be having much more requests. Relatively, they are not easy to be led. Besides, they can have much space to elaborate since they mostly stay outside. So they have to rely on their own. But for those who are in production line, you just have to give them some rules to follow. You have to give them quota of work for the day. If they cannot make it, you have to evaluate them. For salesmen, you cannot treat them like this. Instead, you have to give them space. You have to let them develop themselves. I think the way of leading these two groups is absolutely different. Absolutely different.

A: Alright, I understand.

INTERVIEW TRANSCRIPT – Socialisation 006

Note: “A” represents interviewer and “B” represents respondent.

A: Can you roughly understand what it is talking about?

B: *Not easy.*

A: Not easy!? So you mean that you have no idea about this kind of thing.

B: *I think it involves in something psychological. It is to understand the tacit meaning behind knowledge. I know what you mean by this. By my level, I still need some time to think about what this is all about. This may be difficult for other people to understand what you are going to ask.*

A: Okay. What I am going to discuss with you is in your opinion what kind of leadership character is good to this? It says here that certain knowledge is tacit. And, tacit knowledge can be converted. For instance, it says that it is through common shared experience. What we say about tacit knowledge conversion in fact has something to do with everyone’s “trick” or “knack”. People who are involved in such conversion are as it says here front-line employees, line workers and skilled craftspeople. To a certain extent, what they are doing is to communicate their experience or something which is not easy to be observed. Under these circumstances, what kind of leadership character you think can manage this thing efficiently?

B: *Do you mean how do managers lead those who have knack, tacit knowledge?*

A: That’s right, to help the generation of this knowledge conversion. Given that, the entire knowledge communication can then be activated. So as a manager, how do you do this? What is your leadership style? What are you going to do?

B: *I would say that if you are a more authoritative leader, you will not get such knowledge. I think that authoritative leadership is not able to get such knowledge. Those who have knack or tacit knowledge and are under authoritative leadership may think that if they release their knack, they will lose their bargain power. They do not trust authoritative leaders. However, for leaders who are decent, can stand by their subordinates and regard their subordinates as their family, or you can say for those who are more democratic leaders, it seems that they are also not easy to get their subordinates’ tacit knowledge.*

A: How come?

B: *So you have to depend on different situations. If you are decent or so-called democratic to them, they will bully you or pretend to be ignorant of something in order to gloss it over. Do you think that they will tell you the truth? They still will hide something. Again, they think that if they tell you everything, they will lose their bargain power. So I think that you have to be something between authoritative and democratic. You have to let them know that you as a manager can be trusted. On the one hand, you have to have appropriate degree of authority to let them follow you. On the other hand, you have to have appropriate rewards so that they can be willing to tell you their knack. There were many cases like this in Taiwan. I have managed dyeing factories in which those great masters were like this. In that time, I had a MBA degree and I was their manager. They did not tell me anything. I also learned nothing from them. When I asked them how to do certain things, they just pretended to be ignorant of something in order to gloss it over. They never told me the secret of how they got things down brilliantly. They really hid something. So I worked with them. I jumped into it. Then, I slowly dug something out.*

A: So you mean that there is no so-called absolute leadership character.

B: *You cannot get it with authoritative one. You also cannot get it with democratic one.*

A: It seems to you that for those line workers, the management should be ...

B: *For line management, it is about arousing feelings. What I am saying is ... For someone who is more familiar with the skill, he/she becomes a leader. He/she becomes the leader of a small team. These people must be specialised in certain area such as dyeing or programming. For someone like me starting from the basic level, there is no problem of knack for me since I know every single knack. So those who will ask this question must be someone at the top. They have no idea about what kind of knack involved. So they rely on the subordinates' doing. This is about management. Why do managers have to know everything? In fact, they do not have to know everything. They only care about things can be done. However, if relevant documents can be established, that would be great. We have tried to do this, but it was very difficult. If that were you, are you willing to tell your entire knack? If you do, you probably lose everything. So you must be not willing to do so.*

A: But the problem is from the company or manager's point of view, they certainly hope that this thing can be revealed. That's right. They have to find a way to ...

B: *So you have to use something technological to threaten as well as bribe them. About threatening and bribing them, I take dyeing as an example. I think that dyeing is the most difficult part in Taiwan's textile industry. It involves in the judgement of colours. If you ask the master about how to dye something red, the master will tell how. But the colour you get will be less beautiful than that of the master. It means that something has not been released and still resides in the master's mind. So what I am going to do? I use computers to do dyeing. After I key in some data about particular colour, the computer can do some analysis and give suggestion. I can do the analysis again and again until I get satisfied with the colour. I can get the optimum colour by using computers. I can use this scientific way to establish the database. It only needs some time to do it. You know what I mean, don't you? So*

machines can overcome the problem of knack. If so, they can be more willing to release their knowledge and will not regard it as a secret. Recently, I have given some lessons about the problem of originality. In fact, originality is not as difficult as we imagine. You talk about knack. I dare to say that knack does not mean anything. You today consider it this way, but I may use another method to defeat it. It is very easy to use other ways. It is very easy. I give you an example. Innovation in business even has the existence of knack. However, when it is revealed, it becomes so easy. Over the last hundred years, the most famous business innovation has been the invention of traveller's cheque. How did the traveller's cheque invent? In about 1850, a chairman of American Express travelled Europe. At the time he travelled, American Express had established fifty years. As he did not bring enough cash, he used his company's letter of credit to exchange some cash. However, he was refused everywhere. He could not get any cash. After he went back to American, he thought that everyone might have the same problem as he had. So he wanted his people to figure out this kind of problem. Finally, they issued a kind of cheque credited by American Express. As American Express was well respected, more and more store and shops accepted this kind of cheque. So where is the point of this innovation? In the past, people had to recruit people and buy materials in order to produce goods. So when the goods were produced but had not yet been sold out, they had already owed a lot of money. Before making money, they had to owe a lot of money. However, the invention of traveller's cheque changes the procedure of doing business. It is so brilliant, isn't it? Customers have to go to American Express to buy traveller's cheques. Besides, they also have to pay commissions to the bank. What is the advantage of the customer? The advantage is if they get the cheque lost, they can claim it. So does American Express have any risk? It does not have any risk. It only compensates the face value. But before that, the customer has already paid for the face value as well as the commission. American Express does not have to pay interests to the customer. So who really makes a profit from the cheque? American Express. What is the point of this example? The point is the idea of traveller's cheque is so simple. In fact, whatever production or service units, innovation has to be stimulated. You have to use training and education to make them believe that the technique or trick possessed by them cannot last forever. It must be released appropriately. Someone may get it some day.

A: So you mean that you will much use a kind of management technique or tool rather than leadership style to control this thing since you just mentioned the use of computer to analyse the colour. You personally will prefer this way, won't you?

B: *We will use this method intentionally. For instance, we may invite an expert in computer dyeing to ... The purpose of this doing is to let them know that they are not possible to hold the technique forever. I have led so many people like this. I had a subordinate before. He dyed jean fabrics beautifully and without being oxidised. I had no idea of what he added. We assigned a staff as his apprentice. But the apprentice had failed in learning anything secret from him. So what could I do? We did something emotional. We asked him to supervise particular products since they were ordered by some important customers. The product was made up of gauze, which involved in many technical issues. For instance, in the process of gauzing, certain of thick liquid had to be used. It therefore had*

to do with its thickness, temperature and stickiness. These were tricky things. He had never revealed how he did it.

A: What did you do? I am much interested in what did you do as a manager.

B: *I persuaded him morally. But he still pretended to be ignorant of something in order to gloss it over. When I wanted him to write it down, he said that he could not write since he had not been well educated. It involved in his experience value. He might really have no idea of saying it.*

A: That's right. As it says here that it perhaps is experience. For him, he might feel hard to describe it.

B: *He himself did not know how to say. In general, for those who have certain tricks, their knowledge or backgrounds are not so rich. So he really had no idea of saying it.*

A: He probably had ten or twenty years of experience.

B: *So we have to use education and training to let them release their stuff as early as possible. Otherwise, after a while, the tacit knowledge possessed by them may become valueless.*

A: So you also mean that so-called tacit knowledge has timeliness.

B: *Also, its efficacy will be decreasing by time.*

A: So if it has timeliness and its efficacy is decreasing by time, it means that from the company or your point of view, you hope that tacit knowledge can be caught at certain time point.

B: *That's right. That's why I persuade them morally. In fact, it involves in sincerity within the company. Where does sincerity within the company come from? Why people have to be sincere with you? Can you treat them autocratic, making them either tell the secret or get fired? They probably say that they really do not how to do it. That is the tricky part. So do you dare to fire them?*

A: If not saying get fired, you probably can use another method. For instance, you provide them with prizes rather than get them fired. Do you think that it can work?

B: *What I was saying is about autocratic leadership. Will autocratic leaders be like this? Generally speaking, autocratic leaders will not be like this. They think that they are factory directors, they are bosses. They just want things done. They think that they have already paid the salary to the employee. They do not want to give them something additional. On the other hand, democratic leaders only see the result. They give their people plenty of space. However, they still cannot get something tacit from the employee since the employee may decide not to release anything. This is democratic leadership. Autocratic leadership, however, gives no space of negotiation. Autocratic leaders think that the employee just has to release everything since they pay them to do that. They think that the employee has no right to hide something. That's why I said that it has to be something in between. You have to have rewards, something like stock option. Also ...*

A: So it has to be a method of applying the carrot and stick judiciously. It seems that there is no absolute method.

B: *Applying both carrot and stick is one of the methods. If you strictly divide the method into three kinds as stick (autocratic), carrot (democratic) and both carrot and stick, I think that only using both carrot and stick can get what you want to get. Both autocratic and democratic must not be able to get it. Democratic one is really good actually. With this style, the leader may or may not get what they*

want. But with autocratic one, the leader definitely cannot get what they want.

A: That's why you prefer to use both carrot and stick. So do you believe that this kind of method is especially to this situation? Or do you think that this is your way of getting along with people no matter in which kind of situation?

B: *This is my way of getting along with people. But I do not dare to say that my way is the best way. At least, I think that this is a long-term way to get along with your people. If you are too democratic, they will think that the company may collapse. As the leader is too democratic, the employee may take away all of the confidential stuff. This is a weak thing.*

A: Too open.

B: *This is the case in Taiwan. So in the long run, I still like the way of having middle-of-the-road policy. We were taught that we have to get adventured and keep forging ahead. Foreign people do this kind of thing. They like adventure. So many foreigners learned how to fly when they were very young or something like this. They have such spirit. So they invent many things. However, we Taiwanese or even Chinese adopt middle-of-the-road policy. We follow the step of other people. So people say that Britain does invention, then America turns invention into innovation, afterwards Japan turns innovation into production and finally Taiwan turns production into imitation.*

A: Understand. So you believe in middle-of-the-road policy. If so, do you think that for certain kind of people you have to be more autocratic or democratic? For instance, sales people or engineers. Or you think that no matter to which kind of people, middle-of-the-road policy is always the reasonable one.

B: *You certainly can make some categories. For instance, for people who are involved in technical jobs, you probably need to give them more space, more independence.*

A: Like IT staff?

B: *That's right. Someone told me a story. A company car driver drives his boss to somewhere. The boss always complains about the speed and the skill of the driver. Suddenly, the driver pulls up the car and says that the car is broken down and he needs to repair it. The driver wants his boss to take a taxi. You know what. The driver can lie about the car. So for this kind of technical staffs, you have to fully trust them. But for those management staffs like general staffs and line staffs, strictly speaking they have to be evaluated by performance and numbers. For these people, to a certain extent, you have to be much autocratic since they involve in no tricks. So you can be autocratic. In fact, you cannot say being autocratic, you just let them follow the rule set by the company. In this case, the management style has to be hierarchical. It is managed layer by layer. This is the system with clear rules. Nowadays in Taiwan, leading pattern also has to depend on different ages.*

A: That's right.

B: *For those who are forty or fifty years old, especially fifty years old, they are really industrious, aren't they? They are really hardworking and sincere. For people who are forty years old, they are very embarrassed since they are between the industrious generation and the open generation. On the one hand, their achievements are not as good as those who are fifty; on the other hand, they are being caught up by those who are thirty. Besides, for those who are newcomers in the society and are about*

twenty years old, they are absolutely different. People say that they are like strawberries, meaning that they are too fragile to touch. So with different ages, you still have to have different management patterns. If you ask me what kind of management pattern should be used, it is really hard to say. It depends on not only functions such as management function or technique function but also ages. Do you know what the most popular management for those who are twenty years old is? Horoscope. With different horoscopes, you have to use different management means. So this is so complicated.

A: It means that all kinds of factors are mixed up. So it should be ...

B: Are you asking that whether there should be a good leadership pattern which is universal to every kind of situation? I think it is not easy.

A: As a whole, I intend to understand that to this situation how the leader can lead. For instance, for those who have much tricks or those who are involved in the conversion of existing knowledge through computers as IT staff, how does a manager manage these different groups of people?

B: That's why we usually mention so-called management. We usually talk about management. So what is management doing? Management is about managing input, managing process and managing output. This is the easiest interpretation. Regarding to input and output, we say that this is a system, a close-type system as everything is confined within certain limits. So what kind of input has to be managed? You have to manage personnel. You also have to manage materials. No matter which kind of industry, it must have materials coming in. As we are in the retailer industry, what are our materials? For instance, our materials are televisions and computers. They are outputs in other industries, but here they are inputs. After they are arrived, we put them on the shelf, price them and then start to sell them. Why do people always say that they want to establish SOPs? SOP is a trial of making tacit knowledge revealed and saved. Then, it becomes the bible of running a company. Given the SOP, the company can be operated systematically. If something goes wrong, SOP can be used to check whether there is any problem with QC, training, material or even finance. So what is leadership? How to establish so-called tacit knowledge? How to make it rooted? How to make it effective? See. The range is so huge. So I think that everything has to be open since they are affected by environments and by SOPs.

A: So it is hard to say whether specific leadership style is more effective or what. Alright, I understand. In fact, management can get involved in knowledge conversion process. I am just interested in how do you manage the conversion process. How do you make one kind of knowledge changing to another kind smoothly? I just attempt to explore the knowledge conversion process from the angle of leadership ... Okay, that's it. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Socialisation 007

Note: "A" represents interviewer and "B" represents respondent.

- No tacit knowledge in production line.

- Tacit to explicit is the only value for enterprises.
- Have to give them environment to create.
- Rewarding, respect and open environment.
- Staff in production line has to be as fool as possible.
- The importance of team.
- Prizes are also important.
- It must have standard for performance measurement.

INTERVIEW TRANSCRIPT – Socialisation 008

Note: “A” represents interviewer and “B” represents respondent.

A: Can you roughly understand what this Description is talking about?

B: *Roughly, yes.*

A: What I want to ask is in your opinion what kind of leadership is helpful to the occurrence of this thing, conversion or situation? The Description mentions front-line employees and line workers. Their working situations probably involve much in the conveyance of tacit knowledge or this kind of invisible conversion. Something called knack is usually developed in production lines. Through some continuous practices and the accumulation of experience, this invisible stuff is conveyed. Therefore, as a manager or a leader, how do you manage this thing? What is your role?

B: *I think it has to be defined as a type of communication leadership. It should pay much attention to communication. The first character is communication. Secondly, your leadership must have the character of teaching. You probably have to through communication and teaching. In general, teaching is based on a set of SOP. SOP is about building up a set of operation pattern. That's right. I think it is important to do teaching through SOP. SOP itself is about setting basic rules. In the process of conducting, if there is any ... Once having standards, there must have something out of the standards or unreasonable. You then have to do some communication. Through communication, you have to let the other party understand your expectation or standards. You also have to realise what is their problem. I think this is very important.*

A: About communication ... So, you mean that to this situation ...

B: *About the so-called tacit knowledge you mentioned, I think that ... sometimes this kind of thing is mixed up. In the process of communication, teaching or demonstrating, you have to let them understand it, control it. Even if it is tacit, I think it may not be so tacit. I think it should be saying that some knowledge is tacit since it is not so systematic. So, whilst being in a process which is not quite systematic, it turns out to depend on managers or leaders' leadership styles. This kind of leadership style has to do with teaching or communication. It is true that for some employees if you keep your eyes much on them, their situations would get better. It brings help. There is another kind which belongs much to the type of laissez-faire. I think this style of management may not be able to*

accomplish the conveyance of knowledge or achieve something you want.

A: So, you do not think that it has to be laissez-faire.

B: *That's right. I think it is not possible. In business operation, if things are too free ... anarchy could become the final consequence. A lot of problems would appear.*

A: A waste of internal energy.

B: *That's right. In fact, management is about managing public stuff, about managing public stuff through some administrative means to achieve group targets. So, in such process, if you are too laissez-faire or something likes that, it is not a good thing. Usually, the operation of product lines is scrupulous and methodical since it is complicated.*

A: Here, we talk about something tacit. You said that this is a kind of knowledge which is not so systematic. For something systematic, in fact that is another kind. That is something which is more explicit. Like data or forms, those are something more systematic and uniform. Yet, it is not so for this thing. This is something which is much more difficult to describe, write down or speak out.

B: *So, sometimes it needs guidance on the spot, for instance guidance or demonstration on the spot. I think that sometimes tacit and explicit stuff are not clearly distinguishable. It is not so meaningful if you really attempt to distinguish tacit from explicit. Each company has its different markets, its different stages and its different requirements. They have to re-organise what they want from the systematic knowledge after all. Do you understand what I mean? This set of stuff probably is suitable for IBM, not our company. The gap in the middle of it is quite enormous. If you keep ignoring the continuity and trend of the environment you are in, you probably would ... Something looks like being explicit, but in fact it is affected considerably by its tacit element. You probably have different kinds of experience and know-how. Having different markets, company situations, people and circumstances, you have to re-edit your knowledge to cope with particular situations. I think it should be much like this. It becomes much like a kind of setting a good example with your own conduct. You teach them by yourself. Also, this kind of character and style in fact should be much long-term and continuous. With long-term continuity, something would have the power of influence.*

A: So, you said that the characters like communication and teaching are helpful to such thing. From another point of view, however, managers are standing in the position of the company. From a company point of view, it is concerned about so-called targets or operation results at the end of the day. In this case, from your viewpoint as a manager, would you use more specific and substantial management means to make this thing head to your target?

B: *Actually, I think that two aspects should be looked at in this process. About the stuff of tacit knowledge, things you examine like targets or numbers are surface. Or, for instance, people go to work at nine o'clock. That is a formal request or rule. Yet, I think that there is something which is more difficult to grasp. That is attitude. It is a basic concept of human resources that a person's attitude decides the extent to which his or her strength is brought into full play. People's attitudes probably influence their wishes to work. Some may not want to do things. For instance, you ask your people to do action A. Some do it perfectly, but some do not. Why? You have done your work of*

communication and teaching. Apart from their understanding and know-how, the most important thing is their attitudes that involve in the wish to work and identification. That is to say, it is about whether they can identify with the company. Identifying with company consists of identifying with working culture, company's system, company's way of doing and my personal leadership style. So, identification is very important. Also, they have to identify with their working targets and their working content. After identifying with the company, then they have to identify with their working content. Some people may not identify with themselves as receptionists, instead they identify with themselves much as salesmen. But, now if you want them to be receptionists, they would struggle with it. Therefore, people have to be treated individually. After being treated individually and put in the right place, they would enjoy their works at last. This is the stuff emphasised by my personal leadership style. Without such identification, your attitude becomes passive. If so, teaching too much becomes meaningless. They become careless whilst hearing, for instance, knowledge economy. They just do not identify with it. If so, their personalities become marginal. They are marginal in the company. Their participation in the company's events is low. They are passive about the investment in their work. In fact, this kind of employee is not suitable to staying in the company. This is a kind of process. So, how to build up such identification? There are plenty of ways. First, sometimes I feel that I am like a missionary. I keep on emphasising and communication. Second, I hold activities. For instance, we hold a birthday party every month. Like this week, we are going to Kenting National Park for three days. Whatever the means may be, just to form their identification with the company. I think this is still very important. This is not about their know-how; this is about their hearts. You have to control their hearts. This is something that is hard to describe and control.

A: So, you mean that from the standpoint of you as a manager or the company, in fact you look at this stuff from a long-term angle. You think that you should control their ...

B: *Hearts. Identification and attitude are all about hearts. How to write it down? Whilst in meeting, it is true that I can feel who brings his/her heart to the meeting or whose condition is good or bad. If it is about high tide or low tide, that is alright. But, if someone keeps on being this, it is the problem of their hearts. Due to my degree was in sociology and some working experience, I believe that heart is very important. Without heart, it is useless to talk about something else. Yet, how to grasp the feeling of heart? This is the stuff that is not written down. No, it is not true. I think that this stuff is revealed in sociology. Sociology talks about the formation of attitude, identification and subculture. So, culture becomes important. Culture itself is also a kind of tacit knowledge. You say where is culture? Culture is everywhere. I think the stuff of enterprise culture is also everywhere. Its influence in fact is considerable.*

A: OK. It is true that everyone has different backgrounds. In your case, since you have a social science background, so you would look at this thing with invisible means and angles.

B: Yes, that's right.

A: To improve this thing. For instance, through communication or the way of leading heart to look at ...

B: Yes, that's right.

A: Does this kind of leadership style only apply to such situation? Or, if you face another situation or other colleagues, would you have different attitude?

B: No. I think it is consistent. You talk about leader's character. I think it should also involve in leader's know-how and concept. I am a vice president, CEO in this company. I run the company this way. If I go to other companies, I still run them this way. I have already had my style of running business. It is different from the others. You can see that in the operation of a company, there is something called official organisation in which there are presidents, vice presidents, department managers and section managers. In this official organisation, there exists authority implementation. Vice presidents are given orders by presidents and department managers are requested by vice presidents. It is about official organisation and authority implementation. In the area of sociology, however, there is another thing called unofficial organisation. My observation is very direct that employees form their own unofficial organisation. It has its own gossips, rumours, opinions or even interpretations. They circulate in the organisation. Basically, unofficial organisation uses influence, not authority. For instance, you and I are good friends so that I believe what you say to me. Yet, what you say to me are probably gossips or something that is twisted and untrue. I still trust you since you are a friend of mine. Some people are birds of a feather. You may be influenced by my words. It is influence, not authority. There is a problem for this. Official organisation or authority sometimes may not be able to penetrate unofficial organisation or network, penetrate rumours or gossips formed by such interpersonal network. If so, some problems would take place.

A: They probably form protection.

B: Sometimes, you cannot do anything about it so that a state of anti-identification is generated. They do not identify with the company. They do not identify with the way conducted by the company. The waste of internal energy is then created. So, the best situation is that official authority can be implemented. I have heard that some companies do not allow the existence of small group. It is not allowed anyway. Even, their directors would keep the eyes on those who have meals together. Some medium or small-size companies do that. They just keep their eyes on it.

A: The problem is it is hard to get avoided.

B: So, as I said to you, that kind of thing is unofficial. It is like what you say as tacit stuff. So, what should you do? Actually, when talking about identification, sometimes it is hard to identify with work or even enjoy doing it. I always talk to my people that you identify with the company or you leave the company. You have to make your choice. If you do not identify with the company culture and with your working content, you either adjust or leave. It is good to you and to the company. This is something that ... If they decide to stay, you would still face some troubles since your authority yet cannot be implemented. If so, the company has to do something at last. This is my conception of what the influence of unofficial organisation is like. It is not taught by textbooks. How to fight, for instance, gossips is not taught by textbooks. It has to rely on your feeling. At last you still have to fight them. From the position of business operation, if someone is really not suitable, we have to ... Authority still

needs to be implemented. If you are so passive and bad at performance, it is time for you to leave. This is certainly an action that could be used. But, you have to be very careful. If it is implemented directly, unofficial organisation may fight back. For instance, if someone is fired by the company, their colleagues may start to make some troubles. This kind of stuff is so subtle. So, unofficial organisation may involve in something you are interested in as tacit knowledge.

A: So, from your position or perception, you think that this kind of authority has to be directly implemented, if necessary.

B: *Sure.*

A: To those which are irrational and invisible and affect the whole operation and internal unity of the company, you must do something. But in fact, it is inevitable that sub-cultures do form in a company or department.

B: *You are right.*

A: It is a matter of good or bad for the company. If it can be tolerated by the company within certain range, that should be alright.

B: *That's right.*

A: Back to what you said. You mentioned that your leadership style is more consistent whatever in which kind of situation. It means that your style is like this across different situations.

B: *That's right. Leadership style should be ... Everyone's leadership style should be more consistent. It is also applicable to everyone's management means. For instance, no matter which department I manage, I always pay attention to management reports since I have learned finance before. I usually focus on how to make use of them, how to interpret them and how to find something I want from them.*

A: Probably, for some people, they think that they should differentiate their management means since different knowledge conveyance or working content has different characters.

B: *I should say this way. The core is consistent, but the means is surely differentiated. For instance, if you lead a sales department, you have to be more active. At present, I lead Financial Administration Department, Sales Department and Production Department simultaneously. Basically, I am the leader of these three departments. To Sales Department, I pay much attention to their performance. The way of leading them is more active and has particular material since they have their own features. To Production Department, however, I become scrupulous and methodical. For instance, everything has to follow SOP. Everyone has to obey rules. To Financial Administration Department, I care much about financial numbers, capital costs and their capabilities of dealing with numbers. So, they are definitely different. If you lead a R&D department, you have to take their innovation and performance seriously. Though they are not active people, you cannot be scrupulous and methodical to them. So, it looks like that there is difference between them. However, for something I talked about as identification, formation of culture, teaching and communication, I think they are consistent and unchangeable.*

A: So, in depth you mean that the spirit of your leadership remains consistent.

B: *That's right. Only means is different to various circumstances. But, for my people, I would request*

them to identify with their work and company. On the other hand, I would set up targets, performance appraisals and rewarding mechanisms for them. I implement such kind of stuff in any of my departments. They are very clear about this. I start with setting up targets. Then, I appraise the targets each quarter. After appraisals, I issue bonuses or give penalty. Everyone in any of my departments is clear about this.

A: *So, if someone deserves to get bonuses, you certainly would ...*

B: *That's right. It is like being consistent. I always talk to my people to identify with their company and work and to enjoy their work. Besides, I set up targets, performance appraisals and rewarding mechanisms for them. Then, I put all of them together for each employee. The problem, however, is each area has different way of setting its performance and targets. To solve this problem, some tricks are needed. For instance, to sales departments you first should pay much attention to their sales numbers. Second, you should look at their net profits and account receivable. Those are their target elements. Those targets are not suitable for those who in R&D departments. In this kind of department, people are examined by their originality, progress and capability in solving problems. The situation is different in production departments. Production requires accuracy, efficiency, cost down and consistency. Therefore, whilst target is set differently, performance is then appraised differently. For me, the spirit and style of doing things are constant, but sometimes ways of doing things would depend on different departments, different situations and different people.*

A: *So, you mean that your way of thinking is constant, but the way of conducting would be different due to different departments or people.*

B: *A bit. Or, you can say yes.*

A: *Putting aside this kind of stuff, from your experience and what you are in charge of, what is so-called knowledge management? Alternatively, what kind of situation can be considered as knowledge management?*

B: *Knowledge management.*

A: *That's right. Have you thought of any idea of knowledge management? I am working on it right now.*

B: *I myself am not familiar with knowledge management. To me, I would look at it from two aspects. I have led our Sales Department for six months. In every Wednesday morning between nine and ten, we do some reading. We read a book. For instance, we read a book called "How To Discover My Sales Talents" before. Everyone takes turns to read the book during the week. This reading exercise is more participatory, not instructive. For instance, everyone shares what they have learned from the book with the others. Why do we use the means of reading? I think that everyone gains different realisation and understanding from their work. If you talk about knowledge management, this is something broad and various. Instead, we choose this specific exercise to share experience and understanding with other people. To sharers, the process of sharing is an experience of reorganising. In fact, the point is the reorganisation during the process. To listeners, this is the process of absorbing and understanding. This exercise has been conducted for six months. I think that I would carry on it since the response to*

it is very positive. I think that in this process everyone can learn each other and share each other. This is the first aspect. The second aspect is we have a sales meeting every Tuesday. In that sales meeting, we sometimes do sharing in successful cases. Why do you succeed in developing client A? In the process of developing client A, do you face any difficult or urgent problem? How do you overcome it? It is very difficult to say that whether the situation would be experienced by other sales people. At least, this is the process of sharing knowledge. No matter from the viewpoint of practice, theory or experience, everyone can interact with each other through such sharing.

A: So, from your or your company's position, such way of doing means that you to a certain extent would like to create such environment.

B: Yes, that's right. In fact, I also think that this is a kind of creation. No one has ever done it before. I think that this thing needs to be implemented. I think the most difficult part is being implemented, being implemented continuously. I tell my people that for this reading exercise you may gain nothing in a week or a month, but probably do in a quarter or even a year. So, this thing has to be implemented. If being implemented for a while, you would get something. It is much more important. Yet, if it takes place just once, I think the effect on it would be limited. I think the idea of reading exercise or successful case sharing is drawn out from the spirit of knowledge economy. Nevertheless, what I want to emphasise still is implementation, long-term continuity. If you keep holding it, a culture would be formed. As I mentioned about identification and culture, I think they are gradually formed in this process. This way of running things was developed when I led some clubs in the college.

A: You keep emphasising the way of implementation to a certain extent means that you hope in the beginning ...

B: It is about a process of influencing unobtrusively and imperceptibly. When you talk about tacit knowledge, you must experience this process. If you want to experience this process and gain something from it, long-term and continuous implementation is required. Without long-term and continuous implementation, I think it becomes temporary and meaningless.

A: It is like brainwashing. It has to be long to see the effect.

B: That's right. But, it works for some people, not for the others. Some people still do not identify with everything. For instance, they do not identify with the reading exercise. If so, I think that they are not suitable for staying in my department or this company. I think that the most troublesome situation is someone is intelligent, but they do not identify with or accept what you are doing. For me, this is a troublesome situation.

A: So, in your position, your constant emphasis on implementation to a certain extent means that at last something can be achieved ... Implementation actually is from top to bottom, and identification you get at last is from bottom to top.

B: Yes, that's right. You hope that something can get fused during the process of implementation. Why do I use the term implementation? It is much an angle from top to bottom. I think the operation of an enterprise is also from top to bottom. Whilst you operate an enterprise, you have to take plenty of responsibilities and risks. Whatever the difficulties may be, if you can run the business successfully,

you are a winner. However, if you are not able to do it, talking too much excuse would be useless. My concepts are deeply influenced by sociological ideas and structures. My stuff is not only about structure, but about practice. I have been a wide range of leaders so that my management style is gradually developed. This style may be different from the others. I know many leaders whose characters are always variable. If you are a leader, it means that you have follower(s). So, if you are variable, they would have no idea of how to follow you. Today, you say you want go east, but tomorrow, you head to west. This probably is a kind of leadership character, but the follower(s) would get struggled. If you keep on being like this, they would leave you or stay where they are. Finally, you may not be able to lead them.

A: *I think this would be the case if managers do not have any idea of their own characters and values. In other words, if you as a leader do not consider the meaning behind what you are doing, you would not be able to persuade others to have certain identification.*

B: *That's right. But, for some leaders, they do not care much about persuading people to do things. Instead, they care much about implementing authority to make people do things. For instance, they think that they are managers so if they say go east, you have to go east; if they say go west, you have to go west. If so, there would be a problem of disconnection. What I mean by disconnection is though official authority can be practiced, the followers do not identify with it so that they become negative. Sometimes, managers do not think over this point. This is the most worrying situation. Therefore, the best situation is managers on the one hand get their authority implemented and on the other hand get their people identified with it. In this case, everyone can sing in tune. Otherwise, if managers say so much but the followers do so little, that would be meaningless. In fact, I think leadership style itself is the key, crucial but subtle tacit knowledge. Leadership style itself is this kind of thing. It is subtle because it involves in personal experience, environment formation and policy implementation. I think that is why it is subtle. What is leadership? What is management? I think they are the topics that have long been discussed in management field. I think broadly leadership is about to do contingently and management is about to do systematically. Leadership itself is very subtle.*

A: *So, my research wants to realise how to manage no matter tacit knowledge or explicit knowledge from the angle of leadership.*

B: *If you want to lead people, you have to lead their hearts. Basically, leading heart is much tacit. How do you lead their hearts? There are many dimensions of it. About something explicit, authority is explicit. Official organisation is explicit. However, heart and identification are tacit. Of course, they are not purely tacit. They still can be measured or felt by some indices. Some indices, however, may not be numeric. For instance, you probably can judge whether someone is in trouble by their body languages, eyes or feelings.*

A: *Actually, I feel that indeed you belong to a group of people who bring the concept of social values into their leadership style. Perhaps, it has to do with where you come from and what you learn. Generally speaking, leaders or managers come from either engineering or sales departments. Their backgrounds are either in engineering or in business. You are rare in terms of your background in*

sociology.

B: *Despite this background, I have read a lot of books in many areas, such as in business administration. It is hard to say since everyone's background is different after all.*

A: Given that, the way of conducting things is therefore different. OK. I understand.

[The following interview is a chat after the questionnaire is filled in.]

A: About tacit knowledge, would you set up targets for it?

B: *Tacit knowledge?*

A: That's right. We talk about tacit knowledge right now. So, would you set up targets for it?

B: *I think to tacit knowledge there is no such thing of target setting or target achieving. If there is, it should be to explicit stuff and it is for the whole company. How do you set up something for tacit stuff? In practice, we have tried to do a bit of it. For instance, there are some rewards for those who take the Kenting trip this time. The case is those departments which get all their members joined in get rewarded. I believe that enthusiastic participation means identifying with the department and the company. So, you have to have some means to encourage them.*

A: To a certain extent, tacit stuff should be examined by some standards. It is the matter of how the standards are set.

B: *Not easy.*

A: That's right, it is not easy. We still can try to think about something ...

B: *I should say this way. I always pay much attention to numbers or targets. I think they are just about the clues to something I want to trace. In fact, you can use them to trace something tacit in the core.*

A: You are right.

B: *You can say that the target and situation are explicit, but they probably are manipulated by something tacit behind them. It is much difficult to set up some indices for tacit stuff. The only thing I can do is to track down tacit stuff through explicit targets, performances or numbers.*

A: So, you mean that you can use so-called numbers that you can control to manipulate tacit stuff that hide behind the numbers.

B: *That's right. But, you are not able to manipulate it. You can only smell or feel it. In the company, they all know that I am clear about numbers so that I care about numbers. I, however, tell them that though I care about numbers, I care much about the meaning behind the numbers. Interpretation, understanding and judgement towards numbers are tacit. With different feeling of different numbers, you can have different ways of doing and different adjustments. In such different processes, tacit stuff is involved. Sometimes, it is a kind of personal character. Some people say that enterprise culture is also tacit. Sometimes, enterprise culture is the reflection of the leader. Apart from enterprise culture, there are also subcultures. Whilst different departments are led by different managers, there would have different subcultures. This stuff is also tacit. Yet, you still can feel it from some performance or from somewhere else.*

A: So, to sum up, though something is tacit, hard to be caught and hard to be felt, you think that through some explicit systems you as a manager still can ...

B: *Of course. Suppose we are going have a gathering. If only five out of ten members in the department participate in the gathering, it means that there is a problem of unity in that department. In this case, five is an explicit number, but it has tacit meaning behind it.*

A: OK. I see what you mean.

INTERVIEW TRANSCRIPT – Socialisation 009

Note: “A” represents interviewer and “B” represents respondent.

A: My research area is about the relationship between leadership style and the Description you see right now. In the first place, I would like to know that do you roughly have a basic understanding of this Description.

B: *Yes.*

A: So I want to know what kind of leadership character is helpful to what you just saw? As my research is about knowledge management, we generally divide knowledge into two kinds as tacit and explicit. Here, we talk about the tacit part. Apart from explicit knowledge such as figures or something that can be seen or written, tacit one refers to something that is hard to describe or feel. It is like tricks or individual's way of doing things. This is what we define as tacit stuff. Here it says that tacit knowledge can be communicated to another person and becomes that person's tacit knowledge. It is probably through observing and learning each other. That is to say, I observe your way and attitude of doing things. It is hard to describe since it is something that shown by you invisibly. Even in production line, though there are so-called SOPs in production line, revealing what should be done by whom, the problem is everybody has different techniques of doing things. In consequence, some people may comprehend differently and become efficiently, but some may not. That is to say, tacit stuff to a certain extent can be communicated, converted or felt by some people through observation. What I want to know today is as a manager or leader, how do you look at this thing? How do you lead to make this thing happen spontaneously? Once knowledge is communicated each other through learning, observation and imitation, it can bring benefits to the whole company. So my research area is as a manager or leader, how do you look at this thing? How do you manage this thing?

B: *My experience is it has to depend on the people you are leading. In fact, I prefer to recruit someone who has similar views to mine and is suitable for my team at the beginning. That would be fast. As I believe that it is hard to change someone's personality especially for those who have long been graduated from the college and been working for a long time. It is very difficult to affect people unless you choose someone who has same tune with you at the beginning. You talk about leadership. I think that nowadays leadership is quite different from the old times. I think that you cannot say leading, instead you have to say working together. I think this is more likely to have that kind of feeling. Like*

our team, we just work together. We will not discriminate that I am the manager and they are engineers. Even I ask their opinions directly about many things and then I take their opinions as the team's opinions. It has to base on the team.

A: So you mean that for people who are grown up and has long been studying, you think that their characters are fixed before they join the company.

B: *That's right.*

A: It is not possible for you to ...

B: *It is very difficult to influence them.*

A: If so, you mean that at the stage of recruiting people, you will do sifting.

B: *That's right.*

A: By doing this you think that those who have similar views to yours can be gathered. Given that, you probably think that as a leader you will be much easier to lead them.

B: *It is about whether we have the same tune.*

A: You can control it much easier, cannot you?

B: *That's right.*

A: After those people are recruited, you then will not play a leader role to lead them. Rather, you think that it should a learning process for everybody.

B: *I will give them assignments. During the process of accomplishing the assignment, there must have some conflicts between them. Through dealing with the conflict, they can develop the common feeling of working together. After a while, they can have consensus about everything. Everyone will have the same mind.*

A: So from this point of view you mean that it is about sharing common experience. That is to say, everybody jumps into it to do certain kind of thing and gets influenced. So from a manager's point of view, you will also jump into it to do such ...

B: *Yes, that's right.*

A: Alright. From another angle or you can say from the company's point of view after all, you are still a manager. To a certain extent, you have to stand on the company's position to do some control over those who are in production line or ordinary staff. Whatever influencing or learning imperceptibly, you more or less still have to control it from standing on the company's position. Whilst talking about control, it means that certain kind of goal may need to be established. You will make some requests, won't you? If so, what you are going to do to achieve your target or the company's target?

B: *I think communication. You have to communicate the company's target and its meaning clearly with your people. Let them clearly know that this is the target of the company. Even if they are unwilling to go for it, they still have to cooperate. Under these circumstances, you have to make things very clear. If they still cannot accept it, you still have to communicate with them.*

A: So it seems to you that you will do your best to communicate with them by using softer means.

B: *That's right.*

A: In addition to this means of continuous communication, would you use more substantial ways?

What I mean by substantial means is to the conversion of tacit knowledge would you use the concept of target setting, performance or even rewarding as your management or control means? In other words, would you use visible stuff to control it?

B: *No. I would not. I personally would not do that.*

A: That is because ...

B: *I will strive for it privately. I will not use it as a way of communicating things. That's right. I will strive for it. If I can get it, that will be great. If not, things still need to be done. I will fight for it privately but I will not mention it when I communicate with them.*

A: So you will not use such substantial tool or you can say means as an incentive, won't you?

B: *I think that everyone's level has been increased. In fact, many people do not work for that little thing. On the other hand, this thing can easily make people get anesthetised. If you give them ten dollars today, does it mean that you have to give them twenty dollars tomorrow?*

A: So you will keep emphasising the necessity of continuous communication.

B: *I will also strive for substantial stuff but I will do it privately rather than publicly. Once it is certainly obtained, I will then let everybody know.*

A: So you will not make use of the resources unless you get it.

B: *That's right.*

A: In fact, you only make use of existing resources to do communication.

B: *You are right.*

A: You have kept emphasising the importance of continuous communication. You can say that it is your major management means or your leadership character. Having said that, would this leadership character only be applicable to such situation? Alternatively, if you face different situations, would you deal with them by different leadership characters?

B: *Certainly. I will use different means to deal with different situations. However, my attitude is consistent. My attitude of getting consensus is consistent. Yet, the way is contingent.*

A: Alright. Here, we concentrate much on something tacit between supervisors and subordinates or even between colleagues. Their interaction and communication may largely involve in something invisible. However, there is certain kind of knowledge which is much visible. As I mentioned that it refers to information, information processing. It is like what people are doing in IT departments. People in that kind of department have to deal with massive information everyday. The information they are dealing with is mostly visible and can be seen. Perhaps, it is like a company's production data or reports. Through editing, categorising and calculating, it can be turned into other reports. They are also visible data or information that can be seen by everybody. So as a whole they are dealing with converting explicit stuff such as data into another kind of explicit stuff. Under these circumstances, what would be your leadership style? How do you manage these people? Different from what we have discussed about tacit stuff, regarding to invisible influence between colleagues, how do you on the other hand look at this explicit stuff? As a manager, how do you look at these two different things? Would you manage them differently?

B: *Basically, the management means will be the same. That's right. For such kind of explicit stuff, we have to pay much attention to its accuracy, haven't we? Its accuracy. So when they accomplish it, I will check it by myself. If something goes wrong, I will let them know. I will let them know that their supervisor will keep the eyes on what they are doing and their supervisor really cares about what they are doing. Given that, they will be more cautious about doing it. So it turns out that if someone is in charge of something that requires accuracy, I will check it again until they are very stable about doing it. But normally, I will have a look at it again.*

A: So you mean that to this kind of situation where it involves in dealing with massive information as well as requiring speed and accuracy, as a manager you will put your hands much in it.

B: *That's right.*

A: To control that kind of process. If so, the same question is would you use certain substantial means to make sure that they can be doing well and quickly? For instance, a project may have several sub-projects. So would you provide these staffs with prizes after certain sub-project is accomplished? Would you use such real stuff to control this visible thing?

B: *As I am not currently in certain position, I cannot say anything about it. But if I were in that position, I probably will do that. I led production line before. Basically, that was the place in which line workers were the majority. For them, they only worked for money. However, I am now leading engineers. Basically, the largest difference between engineers and line workers is the latter only works for money but the former certainly wants more. If so, I will use something real to control. Before that, we used production prizes or something like that to praise them. We even used punishment. Usually, with different people having different requests, we will treat them differently.*

A: Of course, everyone has different requests. Even among engineers, every engineer is different. But as a whole, these two groups of people are different in terms of character.

B: *That's right. They are absolutely different.*

A: So to people who have to deal with enormous information efficiently and accurately, your opinion is if you have resources and you can make decision, you will not eliminate the possibility of using substantial means to control them.

B: *Yes, that's right.*

A: However, to the other kind of tacit stuff, you will not be thinking that such way of doing is effective, will you?

B: *That's right. For the kind tacit stuff regarding to influencing imperceptibly, such way of doing will not bring any help to it. Rather, it will bring side effect to it.*

A: I see. Another issue I am interested in is can you tell me your opinion about knowledge management? As a manager in industry, you think what knowledge management is.

B: *The difference between information and knowledge is information is just information but knowledge is the processed information. So if information is not processed, it cannot become knowledge. Therefore first, knowledge is the processed information; second, it can be kept for reference and third, it must have a complete system to manage it.*

A: So from the company's position, you think that knowledge management is about ...

B: *First, information must be managed digitally, second, information must be processed and third, information must be opened and kept.*

A: If so, what should be your leadership style in order to achieve the knowledge management state you just mentioned? Regardless of which kind of level you are in, from a manager's point of view, what you think you should do achieve that level?

B: *If I am the one who is in charge of this, of course I will be much compelling. I will be much compelling.*

A: About compelling ...

B: *That is to say, I will request every department to submit certain amount to the system every month. You have to make requests since first Chinese generally do not want their stuff revealed to other people. Second, everyone will be hesitating to do that. So I think that I will force them to do that.*

A: If so, it means that you will do everything to maintain this thing.

B: *That's right.*

A: If that kind of thing is not revealed or written down, there is not way for it to become public property, the public property of a company. Under these circumstances, you think that as a manager you will strongly have your hand in this matter.

B: *That's right.*

A: As I said, compelling intervention means that there must be setting some targets ...

B: *That's right. There must be setting some rules of rewards and punishments. There must have. As it is compelling, there must have these rules.*

A: So you think that knowledge management must have some elements of coercion.

B: *Yes, of course.*

A: Certainly, communication is still evitable. It is just that your finesse has to be ...

B: *That's right. It has to be much harder to request.*

A: Okay, I see. Actually, what I am studying is as we have talked about tacit stuff. It is about the situation of getting influenced unobtrusively and imperceptibly. On the other hand, I also gave another example of something much explicit. It is about processing information or something like that.

Besides, you mentioned your opinion of knowledge management. In fact, from my point of view, your conception of knowledge management refers to converting tacit knowledge into explicit knowledge.

You think that everything in staffs' heads has to be revealed and becomes the property of the company.

This is about tacit to explicit. Perhaps, you have not thought of the tacit or explicit stuff before. You,

however, just revealed that knowledge management has to get involved in sharing or contributing

what have been learned and understood to everybody. Given that, everybody can grow. This is the

process of converting tacit into explicit. So what I intend to realise from you is under these different

knowledge conversions, would you manage them differently? As a manager, how do you look at these

different situations?

B: *Basically, I think that there exists no difference in management attitude. As I said that I will do a*

lot of communication. This is my attitude which is consistent. However, means or method is contingent. Yes, that's right.

A: So perhaps your core conception is consistent ...

B: *Sometimes, you have to see the extent to which you can lead. We just talked about knowledge management. In fact, it involves in leading the whole company. With so many people in the company, it is not possible to communicate with every single employee. It is not possible. Besides, they may not agree with you. If you only consider team level, it will be much easier since every team member may be recruited by team leader so that they are more likely to stay in tune. In addition, they can do communication frequently. So it has to depend on the extent to which you can lead. Basically, communication has to be crucial. Though it is not possible for top management to communicate with every single employee, at least they will communicate with department leaders. It happens to big companies. If the company is really big, it will be requiring systems.*

A: As you said that your attitude is consistent. That is to say, whatever you do, you do communication in the first place. You will let the other party know what is going to happen. However, you also mentioned that it has to depend on different levels in the company.

B: *That's right.*

A: Of course, if you are the one at the top, you are not possible to communicate with every employee. So more precisely, whatever hierarchical or flat organisation, levels really matter.

B: *That's right*

A: Okay, I see.

INTERVIEW TRANSCRIPT – Socialisation 010

Note: "A" represents interviewer and "B" represents respondent.

A: Can you roughly understand what this is talking about?

B: *This is about new operators starting to learn things in the work field. It is like becoming an apprentice to a master.*

A: That's right.

B: *To learn wisdom, techniques or something like experience. You have to rely on yourself rather than your masters. Masters only teach you concepts. You still have to count on yourself to explore, test and operate ... in order to get some experience. You must have something in your mind. Masters only observe you and give you a big direction. You have to explore by yourself. When masters observe you, they will know that whether you really pay attention to it and whether you can make a breakthrough. They finally will decide whether you can be independent or getting upgraded. This is the essence. It does not mean that you have to exactly follow your masters. Masters only give you directions.*

A: Actually, my research is about knowledge management. To us, we divide knowledge into two kinds. One is much visible like figures, forms or production numbers.

B: *They are static and solid.*

A: That's right. They are static and can be identified.

B: *For something invisible, it must rely on your brain to elaborate it.*

A: That is invisible. For instance, workers operate machines in the production department ...

B: *This is about trying experience.*

A: Then, they will possess something called trick or knack.

B: *It means that they may be able to operate machines by their own ways rather than by SOP.*

A: Yes, that's right.

B: *Sometimes, they use their experience values to do things. These values are unable to be learned by other people. They are resulted from experience.*

A: In this case, you just have to rely on your experience. However, some people are rich in experience but some are not as they may just start their careers. For those who are not rich in experience, they have to count on their masters to guide them.

B: *That's right. For those who are newcomers, they have to comply with standards. Though they are at the stage of complying with standards, they still ought to learn hard. If they keep asking why, we as experienced staffs will tell them where should be paid attention to. It is not saying that standards are the only point to follow. A product is made up of many points. So they have to use their hearts to learn, to do and to adjust. We have our own experience. They have to develop theirs. As time goes by, their experience may be better than ours. So they have to have willingness to learn and to ask. However, some people only want to do ordinary things. They only follow standards and are not willing to learn more. There are some people like this.*

A: So for those who are rich in experience, they have to have willingness to teach ...

B: *That's right. There must have someone to ask them if their experience wants to be imparted because their have plenty of tricks and may not know how to reveal them. If there is something wrong with the product, someone must have the ability to judge the problem. They have to ask. If they do not ask what is going on, they will learn nothing from it and they will not grow.*

A: They all involve in experience.

B: *It is about how they deal with the problem.*

A: So for those who are learners, they mostly have to follow their masters to see how they deal with things.

B: *That's right. The point is they have to use their hearts to learn and to ask. If they are assigned to do something but they outsource it, they will stay where they are forever. They will not grow.*

A: If so, you will look at two sides. In one side, you will see whether those who are newcomers are willing to learn. In the other side, you will check whether those who are rich in experience are willing to teach. Of course, these two sides have to work together.

B: *That's right. Like newcomers, we will assign experienced masters to guide them. For instance, we will assign people who have eight or ten years of experience to lead them. They only teach them how to do normal things. If they want to learn something deeper, they have to ask more experienced*

masters. It is not possible for us to stay in the site twenty-four hours a day. We have lots of things to deal with. So they can directly come to ask us. Then, we will teach them. Mainly, we teach them how to make judgement and deal with particular situations. If they really pay attention to it, they will either record it or keep it in mind. I seldom do recording. Instead, I keep things in my mind. Some people have bad memory so they do recording. This is different.

A: If so, what I am going to ask is as a manager in much higher level and you realise the situation between masters and apprentices in production line, how do you manage these people? How do you lead these people so as to make them comply with what you just said to ...

B: I will be able to know what they are doing through examining the report they submit to me. From the details in the report, I can have a basic understanding. If the report is not clearly written, I will tell their supervisors to teach them. The report is only one piece of paper. I can recognise from the detail that whether they really dedicate to it. If the report only refers to the process part rather than the outcome part, it will be wrong as it means that they do not gain anything. If so, I will call them immediately to tell them what to do and what is the direction. However, about whether they really want to pay attention to doing it or remembering it, I really have no idea about it and cannot do anything about it.

A: So you cannot control that part.

B: That's right. I cannot control that part as it involves in different people's conceptions. As you know that in every company some staffs really work hard but some do not. They are really different. So the only thing I can do it to examine their reports. If they are not doing well, I will tell them and teach them how to do it. I think this is it.

A: So it turns out that to that aspect, as a manager at higher level you only check that piece of stuff.

B: Our top management also sees what we have, how things are dealt with and what the future plan is. In our reports, we will explain our plans. If they do not satisfy with them, they will do some amendments. We can learn some experience from them.

A: So in your opinion, you think that piece of paper reflects what have been learned by the staff.

B: That's right. That piece of paper really tells something. It is like teachers can see whether something has been learned by checking students' work. Teachers can see whether students really dedicate to their study. It applies to the company. All you have to do is to count on yourself. It is so simple.

A: As to whether they actually use their hearts to learn things, you cannot do anything about it, can you?

B: We can only encourage them by saying that if they work hard and exert themselves, they can take over our positions when we are retired. I will tell them that if they only want to rely on us and do not intend to learn more and get independent, the department will collapse when we are retired.

A: So in this aspect, you as a manager can only do your best to ...

B: Communicate. To communicate with them to see whether they can have consensus. If someone can learn things up, they probably will get rooted here.

A: According to your way of managing or leading them, do you provide them with some prizes or something like that?

B: Yes, we do. If they discover problems about materials or packaging early in the site, we will give them some gifts. We have some rules about this. Besides production gifts, we also provide them with quality gifts. We will strive for this kind of thing for them. The gifts are like a pack of instant noodles or canned juice. They are not big gifts. They are only small gifts. We will reward them publicly rather than privately. When they are rewarded publicly, they will be in good moods. This is the way to encourage them.

A: That is to say, if they are doing quite well or you sense that they are making progress, you will use this method to ...

B: Sometimes, I will authorise team leader to give gifts if necessary. If the amount is not big, they do not have to report me. If the amount is quite big, I will judge whether they are worthy of this big prize encouragement. This will also affect personal performance. However, if someone really needs to get punished, I will not sympathise them. My principle is I will forgive the same mistake twice but not for the third time. This is the rule that I will let everybody know. If my people get punished by the top management, I myself will request punishment as well since I am responsible for managing my people well. So management actually is not a big deal to me. It is about everyone has to use their hearts to do things and everyone has to have consensus. If you are really in trouble, you have to raise your problems. We then can have a discussion about them. Our factory is so big, having seven or eight teams. We will not do anything unless all of us have consensus. If two or three teams do not agree with something, we will have a discussion again. Without consensus, it will be difficult to carry out something and the result may not be good. We have a union in the factory. If something bad happened to staffs or even staffs' families, the union will console them with some money. Yet, it has to be regulated. We have some budgets in the factory. I will authorise team leaders to exercise small amount of money without reporting to me. I will let them to elaborate it.

A: As this is for something that can be seen whatever reports or outcomes. So for this part, you will provide them with substantial prizes.

B: If what they are doing this month is not better than last month, I will start to keep my eyes on them. I will start to push the team leaders and want them to make an improvement plan for next month. Sometimes, I will check whether the plan is carried out. If you do not do that, they will become slack. So I will check out the plan every week. If they are under big pressure, they will move on. If the plan does not work, they have to re-do the strategy. This is the only way to keep them creating ideas and growing.

A: What you just mentioned is for something which is much visible. How about for something which is much invisible? It is like what we have discussed about masters who have the heart to teach and apprentices who have the heart to learn.

B: I will authorise the team leaders. Let them observe which one is more flexible. If someone is much flexible, they can let them learn more techniques. In this case, they have to assign masters to teach

them. If the master does not teach well, the team leader has the right to change the master. I do not manage the masters. I only manage the team leaders. So I will tell my team leaders that as you have been authorised, you can make the best of your resources. I have already given my power to you. If you still cannot do it, you will never be able to lead these people. People say that before leading people, you have to lead their hearts first. Things are full of difficulties. If everyone can have consensus, difficulties will be solved.

A: Here, it talks about the impartation of experience and influencing each other. So to this situation, you will be much softer ...

B: *I will be much softer. But things have to be done well. Do not ask for fame. No matter which kind of thing, it must be done well. If everything is done well, you certainly will have good performance. However, you better not put fame in the first priority. If you do that, you will under big pressure. Like studying at school, if you study hard, you will get good grades. Don't think that you definitely have to be the first. Like doing QC, we only think about heading to the direction of how to improve our quality. We do not care about fame or something like that.*

A: Here, I focus much on invisible aspect as impartation of experience because it will affects visible stuff. For instance, if the relationship between masters and apprentices is good ...

B: *So managers have to possess the soul of management. Also, there must have consensus. If the members do not work together, internal conflicts will be inevitable. So how to make them work together? Sometimes, you have to encourage, authorise them. As I like to walk about, it can make everybody communicate. Everybody can talk to each other. You can then catch their hearts and explore their hearts. For some people, they just do not like to talk about production stuff. In this case, you have to ask about their families, their children. Some people like to hear this. When they here you asking this, they will be in good mood. Some people like to talk about politics. So you have to talk about politics with them. Everyone's heart is different. You have to catch their hearts and then communicate with them.*

A: This is to much invisible stuff. You said that you have to catch their hearts, lead their hearts. This is to the invisible stuff. However, you also said that to something like business performance or reports, you will be strict.

B: *Yes, it has to be strict. If you are not doing well, you have to do it again. Through the process, you will be gaining some experience. At last, you definitely can learn something. As time goes by, you will be making progress.*

A: Having said that, your opinion is for something invisible it involves in human hearts. On the other hand, for something visible it is about technical stuff.

B: *It is technical, managerial. It has to rely on reports. It is about planning, teaching them how to do. The plan will be carried out by the site team. Once the plan is getting done, there will be a relevant report. I will go to check the report. If they are not doing good, I will want them to do some amendments or adjustments.*

A: So to you, the ways of managing these two sides are different.

B: *They are different. They are different. On the one hand, you have to be strict. On the other hand, you have to be soft. Being soft is to lead their hearts. Being strict is to examine their reports. They cannot be mixed up. If they are mixed up, you will feel difficult to lead them. We also condemn people whilst being strict. When I am in the meeting, I will be very strict. After the meeting, I will be soft.*

A: *As something shown on the report or by numbers is visible ...*

B: *If they are not doing well, you have to condemn them. This is the way to keep them moving on.*

A: *So basically, you think that your management skills will be different.*

B: *Yes. But for some people, it is hard to say since everyone's conception is different. However, in my opinion the principle is to get the work done well. If something goes wrong, it has to be checked and solved. From there, you can learn so many techniques and experience values. If you learn more and more techniques and experience, you will be fast in making judgement. However, you still have to keep good relationship with other people. This is very important.*

A: *One more question I would like to ask is have you heard of something called knowledge management?*

B: *In fact, knowledge management is about giving lessons in technical management, on-site management or something like that. We have a lot of career lessons in our company. There are many. For instance, today we sent two persons to do lecturer training. When they come back, they have to teach other staffs. Usually, we will want them to form a training team. They have to make a plan to teach other people what they have learned. If someone cannot understand what they are talking about, that's fine. The point is to let them have some ideas. I think it is all about training and education.*

A: *So from your past and present experience or from managing these people and departments, you think what can be called as knowledge management? How do you manage the knowledge of these people and these departments?*

B: *For the stuff like knowledge, it is very hard to say. Everyone's management is different. In my opinion, my way is much universal. That is everyone reveals the problem, discusses it and finally generates a common and appropriate consensus. We use this method to communicate knowledge. It is not the case that what I am saying is 100% right. Everyone has to discuss and communicate knowledge, including what have been learned from the lesson. We can also communicate with other factories. We can learn from other factories. In fact, knowledge is very broad.*

A: *So this is what you regarded as knowledge management. Of course, it is very broad.*

B: *My opinion may not be right. But in the aspect of my management, I just want things truly done. Of course, there is some noise. Few people will have some opinions about me. But I think that this is good for most of the people. This is the protection for everybody. If we can run the production line well and can account for the top management, everyone can have a job to do. About salary, I will not consider it too much. Job is job. There is nothing more you can expect. If you change your job quite often, it may not be a good idea. It also means that you have no loyalty to the company. If the company cannot make profits, it means that the employee's benefits will be less. So you sometimes have to bear in mind the interest of the company. Everyone is in the same boat. However, some people*

have different thoughts. They may pay much attention to money. If this company does not pay them enough money, they will change to another company. Anyway, my opinion is life is short so that you better open your mind to anything. Do not care for something whilst getting along with people. So knowledge management is too broad to discuss.

A: According to what you just said, it seems to me that your attitude about this is much softer and easier. You will use this angle to look at this situation, rather than building up an objective for everybody to follow.

B: *That's right. My objective is annually based. It will be given to the team leaders. I only review it monthly. I will hardly say that if something has not been done, I will take measures to do what. The production device may suffer from wear and tear so it may not be its problem. If there is any problem, it has to be solved. In the process of solving the problem, staffs can learn techniques and experience. If they have experience, they can lead their people. Gradually, things will be getting imparted and roots will be getting grounded. So there is nothing to care for and management is not a big issue. You said that knowledge has to get circulating between people. In fact, what has to be learned is so broad ...*

A: So in your opinion about this aspect, you will not limit yourself that you have to do something ...

B: *I still will give them some directions. If you are lack of something, you have to strive for it. But, how? You have to do planning. It is not the case that if you do not achieve the target I set, I will do something to you. I will not do that. That is too compelling and autocratic. Now, time has changed. It is different from our times.*

A: So you will not be strict in management.

B: *If it needs to be strict, I will be strict. If it needs to be soft, I will be soft. If it has to be strict, I still will give them some directions. The direction will be flexible. It has to depend on circumstances. Giving direction is to let them have something to follow. If they scored 98 points last time but 93 points this time, they have to review why they have the gap of 5 points. Does it have something to do with equipments, personnel or raw materials? Or there are other problems. They have to form a team to do review.*

A: Based on what you have mentioned, can I say that you will be stricter with managing visible stuff?

B: *I say that if it needs to be strict, I will be strict. I will give them a direction and flexibility. I only review whether things are down right and well and whether they get feedback. If they do not know how to do it, I will guide them, give them a direction. However, what I am doing may or may not be right. If they think that the problem still cannot be solved, they will form a team to try to solve it. The team members will arrange the time of discussion by themselves. I will not regulate relevant rules. I will give them space to develop.*

A: This part refers to the management of report. As you said that you will do what you have to do.

B: *That's right.*

A: It is quite obvious.

B: *Give them space. But I want to see the result. If you are making progress, I will know that you have really dedicated to it. Then I can account for the top management.*

A: As to the other side which regards to much invisible stuff ...

B: *To invisible stuff, you have to be soft.*

A: I understand. In fact, what I am studying is about something visible as well as something invisible like the impartation of experience between masters and apprentices ...

B: *So if you want to learn techniques from other people, you first need to have some “verbal techniques”. For instance, if you were my master, I will be so polite to you and call you Master Chen all the time. You know what I mean. Verbally, it is also very important.*

A: I simply want to realise that for you as a manager or leader whether your attitudes towards these two things will be different or not. I just want to look at this factor.

B: *Yes, it will be different.*

A: Or you think there is no difference.

B: *I say it will be different. This side is this side. That side is that side. If it needs to be strict, you have to be strict. However, I only authorise the team leaders and condemn the team leaders. I just authorise them.*

A: Alright, I see. Thanks for your time.

INTERVIEW TRANSCRIPT – Socialisation 011

Note: “A” represents interviewer and “B” represents respondent.

A: You can say that this is about the tricks of the trade. To us, we are more academic. We regard this thing as tacit stuff. It is like trick or knack possessed by masters. As time goes by, experience is then generated. Like apprenticeship, apprentices learn this kind of thing through observation and learning. So to you, you probably can understand what this is all about. Today, I would like to ask you how you manage these people as a manager. How do you manage masters? How do you manage apprentices? Under these circumstances, these people’s knowledge can then be imparted after all. It is like getting influenced unobtrusively and imperceptibly. As a leader today, how do you lead these people? How do you create an environment for them to communicate what we called tacit stuff gradually? In this aspect, the important point is a common environment in which the apprentice can learn and imitate his/her master ... Don’t you think so?

B: *I tell you something. Today’s youngsters are very different from those in previous times. Nowadays, there has to be more money, less work and close to home. If you want to teach them, they may not want to learn. In previous times, when you wanted them to work overtime, they would be so delighted. But now, if you want them to work overtime, they probably will quit the job.*

A: They do not want to get extra pay for overtime.

B: *They just do not want to earn it. They prefer to spend rather than to save. It has already been different. So now many of our rules are about documentation. Why are we doing ISO now? That is to say, you have to write what you have been doing down. This is the case now.*

A: If so ...

B: *The situation at present is very different from that in the past.*

A: You said that nowadays youngsters only care about more money, less work and close to home. Despite their requests, they still do what they ought to do whilst they are on duty. They learn something whilst operating machines after all. More or less, they feel something. This is the situation of getting influenced imperceptibly. So if the relationship between masters and apprentices can be well established, it actually is good to the company. Their experience can get imparted.

B: *Nowadays, it seems to me that the conception of apprenticeship has no longer existed. Apprentices just hope to transcend their masters as soon as they can and climb as fast as they can.*

A: However, before achieving that goal, they still have plenty of things to learn ...

B: *So I just told you that we have already made things standardised. Like ISO. You have to write how you do things down.*

A: So you mean that basically this situation has no longer existed.

B: *In fact, it involves in long-term accumulation. Also, it depends on different people. As I say that they must be willing to learn. But now, few people are willing to learn things. They think that if they do something wrong, they will be getting punished. So they choose not to do anything.*

A: So you think that this situation probably has no longer been recognised by the new generation, though you still hope to do this thing.

B: *That's right. We certainly think experience has to be imparted. From my own experience, to be honest, I think that experience must be imparted firsthand. You have to be there to get something imparted. They seldom understand what I am talking about.*

A: Of course, you are right that getting experience documented is a kind of impartation. But in real situation, it is impossible for you to express 100% of your experience by words.

B: *That's right. You know what. In our times, we helped each other. But now, they only do what they have been told. They are reluctant to help other people. They prefer to sit there and wait other people finishing their parts.*

A: Now the situation is really so different.

B: *So different.*

A: It mainly has to do with the new generation.

B: *That's right.*

A: If so, what are you going to do?

B: *I have told you that we have already got everything documented. Everything becomes very clear.*

A: So you will not expect this thing to happen, will you?

B: *Seldom. You cannot say it is impossible to happen. It becomes fewer and fewer. I give you an example. Now secretaries answer the phone by simply saying "Please hang on, I get you someone". In my opinion, they have to answer the phone by saying "I will write it down. After I confirm it with relevant staffs, I will call you back". Sometimes one phone call is transferred to three or four people. They can learn from answering the phone call, but they do not want to.*

A: Alright. I roughly can understand what is going on. Perhaps, this thing has become less and less popular. Regardless of the real situation that not many people are willing to spend time and use their hearts to learn, you yourself still believe that this thing is necessary to exist, don't you?

B: *I think that it is necessary to exist. Of course, it has to exist.*

A: That's right. Something requires much long-term accumulation after all.

B: *That's right.*

A: Masters must be able to develop some techniques and tricks after ten or even twenty years of experience. They must be able to do that, don't they? Regardless of the new generation, you just mentioned that you recognise the existence of this situation.

B: *That's right. I recognise it.*

A: So you think under these circumstances how you manage this kind of situation as a manager or leader. What is your leadership style? How do you manage these people? How do you manage that kind of situation?

B: *I do not manage on-site workers directly. But I know that we will communicate with them sincerely. But the problem still exists ...*

A: So it turns out that the only thing you can do is to talk to them about this thing. Can I say that this is a much passive and destructive way of doing? Would you use more active and constructive methods? For instance, would you provide incentives to ...

B: *Sometimes, we will ask them to tell us their problems. We ask them to explore the problem and tell us about it.*

A: So it seems to you that from a manager's point of view you cannot do many things about it.

B: *Sometimes, I feel powerless to do anything.*

A: Though you feel powerless to this, to your company and the whole organisation this is necessary and important after all.

B: *That's right, it is necessary. I usually say that it is like paying tuition fees for newcomers. I pay the price for them to learn. But they may not appreciate it ... So I sometimes think that I prefer to care much about those who are senior and have tricks. I prefer to pay them more. But this is the decision made by the boss. We cannot decide anything. The boss may have other concerns.*

A: So you mean that this is something that you cannot control.

B: *That's right.*

A: That is because you are a manager at middle level. You still have someone at the top to make decisions. So the resources you own are limited. To this thing, I am more interested in knowing how you look at it. Or, if you think that it is an important stuff, how do you manipulate it?

B: *So I just said that we sometimes will educate them by chance. We just educate them by chance. For instance, if our products are rejected, I will ask them why they are rejected and what the problem might be. I believe that they should know the answer. Also, when they call me to ask whether they can do something or not, I will tell them how to do as they have already known where the problem is so they come to ask me. If you think everything is fine, you will not come to ask me.*

A: So if you simply look at this thing, you will be much ...

B: *Approving.*

A: Approving, that's right. But apart from that, it seems to you that you cannot do further things about it. Can I say so? Or you think how you can affect such relation ...

B: *My attitude is I will do my best to tell you anything I know. This is my responsibility. As I mentioned, they may or may not absorb it. To this part, I cannot do anything about it.*

A: That is to say, the only thing you can do is to create that kind of environment or to induce them, let them know its significance. You just create that invisible environment. As to what they are going to do with it, you probably have no idea.

B: *That's right. As they can tell me how the defect is caused and why it happened, but you know what, the damage may have already been brought out.*

A: Actually, it involves in the working attitude of the new generation. So if this is the case and you want to add this stuff, you probably think that it is not easy to carry out this thing. So as you said that the easiest way is to get everything documented. It can save time. Besides, the document is made up of everyone's experience. There should be no problem with that.

B: *You are right.*

A: In our opinion, what you have been saying is about changing someone's tacit knowledge into explicit one. If it is written down, everyone can see. If this kind of conversion can be made as much as possible, experience can be communicated and passed on. If it turns out to be like this, what are you going to do as a manager? How do you lead to let this situation happen ...

B: *We have control forms. We will check the control form to see whether it is filled in. As I said, whether something happened today has been truly recorded. If the answer is positive, it can become other people's reference when they face the same problem next time.*

A: So to this situation, you as a leader will have a strict control over it. You will be able to use something like form to control it. Can I say so?

B: *We use forms to control.*

A: From your or the company's point of view, this kind of thing is relatively easier to get controlled. But for that kind of thing, it seems to you that it is hard to ...

B: *That is invisible.*

A: If so, can I say that your attitudes or control methods to these two are different?

B: *Yes, you can say that.*

A: As a matter of fact, the thing I mentioned at the beginning is all about tacit stuff. Another situation that you mostly concerned about is tacit changing to explicit. This is another different situation. In fact, these two situations will exist simultaneously in an organisation or enterprise. So what I want to know is in your position as a manager, do you have different attitudes to these two things? Do you have different management ways? The thing I want to understand is so simple.

B: *I think this is a person's responsibility. I think this is the most basic responsibility, telling other people what have been known and learned. The impartation of knowledge.*

A: That's right. This is the most basic responsibility. But some people may not think so. They write things down at will.

B: *That's right. This is their attitude.*

A: But the problem is from your point of view as a manager or the company, you do not want the employee to have such attitude, do you? So how do you control or manage this situation to let such stuff getting better and better?

B: *So you have to review randomly. You have to review the control form randomly.*

A: If this is the case, would you have something like performance appraisal? Would you introduce the concept of performance appraisal to your company?

B: *Of course, we will appraise their performance.*

A: So you will appraise their dedication, won't you?

B: *That's right. We appraise their performance every six months.*

A: To that kind of situation, you cannot use this way, can you?

B: *That's right.*

A: For that kind of think, I think that you can only induce them to do it. The only thing you can do is to persuade and exhort them. As to whether they can achieve particular level or not, you have no control over it.

B: *I think you wrote this Description very well. You have already pointed out the problem.*

A: Actually, this is just a kind of situation. I only want to know how you as a manager look at this thing. How do you manage this invisible ...

B: *As it is invisible, you have no idea of how much they absorb. That's why I told you that we have to make it visible.*

A: That's right. You say making it visible. But the problem is the stuff being made visible may only be an iceberg of someone's ten or even twenty years of experience. They may tell you that they know how to operate rather than how to write.

B: *This situation applies to us as well. So we keep amending what we have done. We keep amending our SOPs.*

A: You are right. I just think that no matter how detailed you amend the visible stuff, tacit stuff still exists, doesn't it? So how to measure or manage tacit stuff? It seems that there is no way to manage it. However, you cannot deny that to a certain extent tacit stuff plays an important role in the company's daily operation. For instance, those masters have been really good at some techniques. So I just want to know how you look at this thing as well as that thing. Would you have different management ways as they are different?

B: *I will also educate them by chance.*

A: So you think that for this kind of thing you will not have hand in this matter unless it is revealed.

B: *It may not be the case that they can fully understand what you want them to do.*

A: That's right. So in this case, your attitude will become much more passive. On the other hand, as you said that knowledge management is all about making things written or documented. I have

interviewed many companies. Most of them talked about the same thing as you. Actually, you are right that if things are kept invisible or tacit, there is definitely no way to manage it.

B: *You are so right.*

A: Okay, I understand. Thank you for your time.

INTERVIEW TRANSCRIPT – Socialisation 012

Note: "A" represents interviewer and "B" represents respondent.

A: You roughly can understand what this is all about, can't you? Can you understand this Description?

B: *Yes.*

A: What I am studying is knowledge management. Here, we talk about tacit knowledge. As it says that through the accumulation of some experience, much tacit or invisible stuff will be generated. How can tacit knowledge communicate to another person and become that person's tacit knowledge? As it says that it is through learning, observation or even imitation. Apprenticeship is a good example. In manufacturing industry, you can see something like this. I am more interested in realising as a manager or leader, how do you look at this thing? How do you manage this thing? How do you interfere in such stuff to make this process happen and to make invisible experience convert or impart? How do you look at this thing?

B: *The manufacturing we belong to is at much lower level. So we still largely rely on apprenticeship. They learn experience through this kind of way. As to whether it can be formalised or become something like SOP, in fact to a certain extent it can be achieved. But if you want to go further in terms of technical stuff, that will be very difficult. I think that will be very difficult. One more thing, they may not be willing to get their stuff revealed. In Taiwan, an ordinary situation is if people want to survive in the society, they may need to retain some of their unique stuff. They know that the kind of stuff is important, but they do not want to reveal it. Though some people come to learn from them, they may only make them understand a certain level. About the core part, they do not release it. How do you make them release it? In fact ... unless the process is transparent and people can learn 100% stuff through it. However, if the core involves in some kind of technique, I think that it will be very difficult, very difficult in Taiwan. People still reserve something.*

A: So you just mentioned that some people are not willing to release the stuff.

B: *That's right.*

A: There are two possibilities. One is they are not willing to write it down. They are not willing to tell other people the details. That is to say, they are not willing to make their tacit stuff changing to explicit. Being explicit means that it has to be written down or spoken out. This is the first possibility. The second possibility is though they are willing to take such action, they may not know how. After dozens of years of experience, they may really be good at certain areas and have developed some tricks or knack. However, they may be good at operating machines rather than writing documents.

They may not know how to put things in words. Under these circumstances, the only way is through apprenticeship. Apprentices learn things from them through imitation and practice. It seems that this is the only way. So to this much invisible situation regarding to being influenced unobtrusively and imperceptibly, as a manager how do you create an environment to let this situation happen, in which someone can teach and someone can learn? Of course, this is something visible, but ...

B: *I think that once they feel that they are psychologically threatened, everything will stop. Do you know what I mean? In the entire communication process, I think that as long as involving the core element relevant to their survival, they will be resisting. I think this is the case for most of the people. Few people will do their best to teach everything they know. I think basically there is no such person. So they to a certain extent will protect themselves. They may not reserve everything. Instead, they only reserve something important to their survival.*

A: From an individual's point of view, there is nothing wrong with it. If I were that person, I probably think that way. This is one side. However, on the side of manager or company, you certainly hope that they can do their best to communicate the stuff. Consider another situation. If the core stuff is possessed by someone who is going to retire soon, what are you going to do? From the company's point of view, they must truly hope that the stuff can be retained generation after generation.

B: *Each company has its own way of handling it. If a unique technique is possessed by a particular person, I think this company will be hard to survive. Basically, in a company it is not allowed that key technologies or key processes are possessed by just one person. They have to be known by some important managers. Though they may not know how to apply them exactly, they must have some ideas about them. I think this is more important. I think that the best situation is everything can be recorded by paper. However in reality, it seems to be impossible. It is not possible. So I think that referring to something really important, managers are better to be informed. They may not know the stuff widely and deeply, but they basically can understand the whole structure of it and how it operates. They basically have to know something at certain level. I think we should use this pattern to control this kind of stuff. You say that you would like to give them a piece of paper and want them to write everything down. I think nobody will do that. Nobody will write everything they know down. Over dozens of years, the situation has been like this in Taiwan.*

A: What you just said is much from a company's point of view. It belongs to the idea of prevention. That is to say, key know-how or techniques have to be known by a group of people, rather than by just one person. This can be seen as a prevention mechanism. Despite the prevention mechanism, as to someone can be so good at particular area, they must be quite unique in some ways. So back to the position of the company, they must hope that they can do some impartation. I just attempt to realise that under these circumstances what you would do as a manager. Would you use some substantial management tools or techniques to let both masters and apprentices to ...

B: *I think what I am going to emphasise is the proportion of the core. It cannot be dug out completely. Normally, 80% of the core can be released to everyone; 10% of it can be obtained by someone who dedicates their efforts to learning, imitating and absorbing; and the rest of 10% will never be set free.*

In fact, as I said that the rest of 10% may become a weapon for someone to survive in a particular place. They will not be releasing it. Even if you use management measures to threaten as well as bribe them, I think they will not be releasing it.

A: It involves in the issue of human nature. It may apply to you and me. I may think that this is the stuff I rely on. For the part that they are willing to release, it means that the company has to send someone to learn from them. In this case, how do you look at it? How do you create such relation through which the target set by the company can be achieved?

B: *About the part of creation, I think it is still ... through the way of education and training. This way can include site training, on-line training and lesson training. Actually, the most important one is the site training through which techniques can be transferred directly. According to our organisational structure, we have units in the site. In each unit, there is one unit leader. We also will assign someone to be a deputy leader in each unit. Apart from assisting unit leaders, another role of deputy leaders is to be the one to get imparted. We have many units and of course our machines are various. However, their manufacturing processes are the same. So if the leader or deputy leader of a particular unit has some problems, he/she can get support from other units. We rely on this pattern. We still rely on this pattern.*

A: So it means that basically you will be designing a kind of small organisation in the site to control this stuff.

B: *I certainly will.*

A: So would you set up some objectives in accordance with this way of doing? Even if it involves in the impartation of invisible experience, from your point of view do you think that it is necessary to do so? Have you set up ... certain objectives for this?

B: *They have their own ... Each unit in the site has its own objective that ought to be achieved. With the same machines, different units will have different output values. The variation relies on as I said that someone must be hiding something. I think they must be retaining something. So in the long run, you will find that some units are producing more but some are producing less.*

A: With the same machines?

B: *That's right. With the same machines in the same time.*

A: This is quite interesting. So you mean that from your long-term observation, you find that some people are really hiding something but some are not. Under these circumstances, what are you going to do as a manager?

B: *Suppose we have this kind of situation. Basically ... For instance, for the unit which has high productivity, we will be requiring the deputy leader to learn the secret of it. If we set up a new unit in the future, this deputy leader can become a leader in that new unit.*

A: So it means that to a certain extent you will be doing some relative comparison, using this way of doing to do some adjustments.

B: *What do you mean by relative comparison?*

A: It cannot be saying relative comparison. It should be saying that it is formed spontaneously. With

the same machines, different units have different outputs. However, there all have deputy leaders in these different units. If so, in your position as a manager, you can use this as an adjustment mechanism. It is a fact that some units have high outputs but some have low outputs. So it means that though it involves in invisible stuff, you still can design some mechanisms between staffs to dig this thing out.

B: *Something like that. Of course, we have to have certain kind of organisation designed for the purpose of impartation.*

A: *At the beginning, we talked about that changing people's knowledge from tacit to explicit is more important to the organisation even though it cannot be done so completely.*

B: *That's right.*

A: *Does it represent your opinion about knowledge management? If not so, what is your opinion about knowledge management from your experience and from what you have contacted?*

B: *I think the stuff of knowledge management is extremely broad. I think knowledge management is important to more popular industries rather than to our kind of industry having low-end manufacturing processes. Those industries require certain conversion of know-how and so on. To us, the low-end manufacturing processes do not engage in so much tacit stuff. We do not engage in so much tacit stuff. About the core stuff we always mentioned, in fact we basically can have control over it. It is roughly known by our managers. It is just that the manager does not know as much as the core owner. So we do not have so many problems in this part. However, what you just mentioned is extremely important to those knowledge economy industries. Like electronics industry and bioscience industry, this stuff is very important to them. It may be necessary to have a set of system to control it.*

A: *As a matter of fact, I realise that ordinary people think of knowledge management as a big company implementing a set of system like MIS. On the other hand, not only in Taiwan but also in most of the countries, this story almost happens to high-tech industries. Instead of looking at it this way, in fact I think that any kind of industry has element of knowledge. As long as having the element of knowledge, there should be no problem of whether the knowledge is high-level or low-level. This kind of industry only needs this kind of knowledge and that kind of industry only needs that kind of knowledge. The only variation, from my point of view, relies on a fact that some industries or companies need much tacit knowledge but some need much explicit knowledge. I think this is the only variation. For instance, to some companies like accounting companies, they have plenty of explicit stuff. However, in other industries like those which involve in craftsmanship in previous times, they make use of tacit stuff considerably. So it means that to different industries it is only the matter of how to control the conversion of knowledge. Today, I am more interested in how you look at these two different situations as on the one hand to the tacit part like the case of apprenticeship or the situation usually happened to production line and on the other hand to the case of tacit changing to explicit or explicit changing to explicit. Would you have different management patterns or methods to them? I am more likely to see from an angle of leadership that whether you will be having different attitudes towards them. Alternatively, you think that there should be no difference between tacit*

knowledge and explicit knowledge in terms of management skill. No matter which kind of knowledge or conversion, you think that your management manner will not be different. Or you think that there should be different. What do you think of this?

***B:** In fact, we have never ever considered them separately. So I think that handling pattern should be about the same.*

***A:** If so, do you mean that there is no such big difference between the situation of apprenticeship and other situations. As you said that you will be much concentrating on education and training or communication. Is that it?*

***B:** Basically, it will be like this. No big difference.*

***A:** If so, I should say that your attitude will not be strongly intervening in such conversion process since the way of communication, education or training you adopt is much softer. However to the employee, though they are educated and trained, they still have the right not to ...*

***B:** I have mentioned something deep before ... I said that we have assigned deputy unit leaders or managers to get experience or tacit stuff imparted by their unit leaders or managers. Also, I particularly mentioned that their supervisors, unit leaders or managers basically know the core part. It is just the matter of different degree for them. So to this part, I do not think that I need to particularly intervene in the operation of the unit. Basically, I just give them a target and see whether they can produce certain amount of output within certain period of time. If they can be working well, there is no point for me to intervene in their management patterns.*

***A:** So do you mean that as long as the target is set up and achieved, there must be something being imparted.*

***B:** Yes, of course. It is just the matter that we do not know the proportion being passed on. That part depends on different situations and different people. Sometimes, you really have no idea of ... what have been put on this. You really don't know.*

***A:** So you mean that from your point of view, you only can do your best ...*

***B:** That's right. We can only do some prevention. We just worry about if someone wants to leave but has not yet imparted the stuff to other people completely. So that is why in this process their managers have to know that part, even if they do not know as many techniques as they do. But they still have to know.*

***A:** As to something tacit ... it seems difficult to define tacit stuff. Besides, different people have different ways of teaching. If so, your meaning is from a manager's point of view, you will be much ... adopting so-called passive management. That is to say, you only concentrate on preventing the occurrence of the worst situation. So ...*

***B:** You cannot say that to prevent the worst situation ... The pattern we are adopting is about trying to keep the damage at the minimum level. In addition to this situation, basically we still hope that things can be imparted within the organisation.*

***A:** So it means that you still will be designing little systems for it.*

***B:** Of course.*

A: It is just that the system is loose or tight. As to how much tacit stuff can be imparted actually, it seems to you that it is hard to have some control over it.

B: *You are right. You really have no idea of what they are thinking about. That's right. You really don't know.*

A: In fact, this is what I am studying. As I said that any kind of industry definitely has element of knowledge. Without it, there will be no way for any company to survive.

B: *Sure.*

A: It is just that each company or industry has its own ways to categorise, convert and make use of the knowledge. I just want to see from the angle of leadership that how you manage this stuff. Or what is the better way to manage it? In fact, it is human being who has knowledge. So managing knowledge should turn out to be managing people at last. That is why I am interested in the role of leadership in this part. Okay. So thanks very much for your help.

INTERVIEW TRANSCRIPT – Socialisation 013

Note: "A" represents interviewer and "B" represents respondent.

A: When you look at this stuff, how far you can understand it? Can you understand what this is talking about?

B: *Could you first tell me that your investigation is for what kind of purpose and will be utilised in what aspect.*

A: As it says here that it is something called tacit knowledge. Tacit knowledge can be seen as experience, regarding to many years' accumulation of those tiny ...

B: *Tricks.*

A: Or you can say knack. For masters who have years of experience, they have such kind of stuff. How does this kind of tacit stuff or experience transfer to another person or to an apprentice? From our understanding, it is probably through observation, learning and imitation. The stuff will be transferring whilst doing something together. For instance, after three or five years apprentices may be able to learn the trick required from their masters. To make it clear, socialisation is about this kind of thing. So tacit knowledge can be communicated, can't it? In your industry, this situation should be existent. So today what do I want to know? I want to know that for you as a section manager or leader, how you manage these people. How do you manage these masters? How do you manage these apprentices? How do you manage this situation of knowledge conversion? From the company or your point of view, you certainly hope that the experience or invisible stuff of masters can be passes on. Over years, they must be developing their own techniques that are only known by them. Of course, in your position, you hope that this stuff can be imparted. It is true that some stuff can be written or spoken. But for something more detailed, they must be hard to get revealed. In this case, you may need to build up a relationship between masters and apprentices, through which masters can impart

knowledge to apprentices. So I attempt to understand how you manage these people and this situation as a manager. That is to say, I am more interested in knowing what your leadership style will be like. What is your leadership style?

B: *Let me ask this way. What is your topic? What is your purpose?*

A: The purpose is about to know what kind of function a leader should elaborate towards knowledge management or this kind of knowledge conversion. This is it. So what do you think of leading these people? Frankly speaking, how do you lead these people?

B: *Our usual way is to get information documented. Make it become more detailed. The old-fashioned way is by memory. Now, we can use photos or computer files to do recording. Memory will slip but photo will not. Like one of our job is about to examine appearance, it has to rely on our feeling. However, your standard may be different from mine. So right now, we use as many as photos and documents to do the examination. It becomes easy to use them to teach newcomers. For old staffs, if they are not sure about something, they can have a look at them again and again. Or, they can be shown to the client so that they will be able to respond quickly. In previous time, we had to wait for two or three days. At the present, we almost use this method. It is faster. Roughly, the way of doing is like this.*

A: In fact, in my understanding getting things written or documented so that people can easily make comparison means that you are transferring people's tacit stuff into explicit one. You get things written, documented or even shot. This is about changing from tacit to explicit. Once being written down or shot, it can be saved or kept. It can become reference to other people. So this is about releasing something tacit in the head. But there is still something that is hard to get transferred like this, isn't it?

B: *Certainly. As an operator who operates machines for seven or eight hours, they must have their own little techniques that may not be recognised by other people. If the operator does not voluntarily raise this issue or it does not cause any serious problem, no one will ever know it and it may be taken away by the operator.*

A: That's right. The trick may only be possessed by the operator.

B: *Right. It will be turning out like this. Frankly speaking, it should be ...*

A: More or less, it becomes like this.

B: *That's right.*

A: To you as a manager or to the company, perhaps the knack is a key stuff, isn't it? If nothing goes wrong today, no one will be in trouble. But if something is really happened, you still need those people's experience to solve it, don't you?

B: *To be honest, it is impossible that without certain people the company cannot run even if those people have been staying in the company for quite a long time. Mostly, companies will do some prevention towards this thing. Without certain people's tricks, we may only be affected by two or three days. After these two or three days, we may find where the problem is. So we will shrink the extent to which the problem affects and will not let it cause considerable influence to the company. In general, you will find that site masters all think that they are the most important persons in the company or*

without them the company will not be able to run.

A: So you mean that in your position you still have to prevent this thing from happening. At least, you must develop someone who can understand 60% or 70% of the master's stuff in case the master takes leave of absence ...

B: *Generally, we assume that operators in the site spend seven or eight hours in operating machines everyday and the site managers should know 70% or 80% of what their operators are doing. That is because they all start from the basic level. After operating for quite a long time, they more or less will develop some tricks by their own. So if the site managers come back to do what the operators are doing, they may have to spend longer time to catch the trick. However, I believe that they can overcome it at last and they will not cause the site to run idly.*

A: So to this part, it seems to me that to a certain extent you will be developing someone who can be ... successors or ...

B: *Substitutes. In general, you should say substitutes. In fact, we have not yet dedicated to developing this kind of system. At present, we mainly rely on unit leaders. For instance, if someone is absent today, unit leaders can substitute as them. Or other units can do it under the unit leaders' supervision. I do not see that this way of doing will cause any problem.*

A: So it can reduce the risk of this stuff.

B: *So when the operation of every unit has been normalised and standardised, it will not be causing great influence even if someone is absent.*

A: I think that although operating procedures or rules are standardised and what people have learned are revealed as much as possible, as we have talked about that some stuff still cannot be ...

B: *As I said that if I were an operator in the site and I decide not to reveal it, nobody will know as long as no problems take place. I personally think that this will bring great influence on the company. But other people may not think so. So it involves in a problem of recognition and appearance. It is really hard to say anything.*

A: Yes, that's right. If nothing goes wrong, everyone goes fine. But if something goes wrong, everyone are in trouble Also, something happening does not always mean that they are bad things. They probably are good things. So having understood this kind of situation, you may hope that this thing will never be happened. If so, you certainly hope that everyone can release and share their knowledge through invisible environments. I bet you do not want something bad happened in the future, do you? Given that, I am much attempting to know that in your position as a manager how you control this stuff. Or how do you induce those who are experienced to do such invisible impartation? What do you do? For instance, would you stimulate them with something substantial? You think what kind of method should be used.

B: *So far, we haven't done this. We haven't considered this method. As our senior staffs are those unit leaders and managers, so in this aspect, we will adopt something like promotion. That is if you are doing good, performing well, you will be getting promoted. Our way of doing is similar to this.*

A: If so, you will not be doing something special to ...

B: *That's right.*

A: The management hand will not be so in to do this or to do that.

B: *That's right. We will not do this. Our way of doing here is quite traditional. Here, the staffs are not so many. But in the headquarters, there are many staffs there. Their way of doing will be much fresh since over there managers are few but have to manage many staffs so that they will be developing more rules. But here, we do not have such kind of situation.*

A: You just mentioned that there are many staffs in the headquarters and relatively there are not so many here. If so, can I say that in order to manage plenty of people you need to have build up some systems to manage them, but for a place in which having relatively less people, you can manage them through interpersonal friendship or something like that? You do not have to set up Rule One should be ... Rule Two should be ...

B: *Nobody will do this kind of thing.*

A: However, what are you going to do if you have many staffs? If a company has many staffs, the managers probably are at middle or top levels. So how can they understand what general staffs are doing about everyday? I do not think that it is possible for the managers to develop friendship with them. Can I say so? That is to say, if there are not many staffs, they will be much familiar with each other and there will not have many rules. So perhaps, the amount of people does matter.

B: *Yes, more or less. The number of your people more or less does matter. Also, if you know more, you can control more, but if you know less, you can control less. It is hard to say.*

A: As this kind of stuff ... it is much invisible stuff or some experience. This is something which is hard to get quantified or caught. On the other hand, there is the other kind of knowledge which is explicit. How do we define explicit knowledge? For instance, they are something like numbers, forms or production figures. They can be identified apparently by everybody. Also, they are an objective fact. So how does explicit stuff change to another explicit stuff? We have been talking about tacit stuff transferring to another party as their tacit stuff. Here, about explicit to explicit, how does it happen? For instance, production figures or information can result in other forms of information through computer or manual processing. They are also explicit, aren't they? The outcome you get is also explicit. It is just appeared by another form. So you ask me what I am going to do today. Simply speaking, we have been talking about two aspects. One refers to tacit side and the other refers to explicit side. The latter involves in processing information. Sometimes, the information may be massive. In fact, in my opinion I think that they both can be seen as so-called knowledge management. It is just that one is tacit and the other is explicit. The characters of these two things are different. One is easy to get dealt with and categorised and the other has to be converted invisibly. So what I want to understand is having known this kind of situation, how do you manage these two stuffs? That is to say, would you have different attitudes towards them? In this side, like apprenticeship, the impartation of their knowledge is much tacit. It can be through observation and imitation rather than through language. In that side, it happens to someone like IT staffs who have to deal with enormous information in the company. These two groups of people may be in different departments. So I want to

realise that if you are a manager who has to manage these two kinds of people, departments or situations, would you have different attitudes? I just intend to know whether there exist differences between them. If the answer is positive, how are they different?

B: *So if you know that this situation is going to happen, you should change tacit to explicit, make it documented. If you do not know this situation, that will be fine. But if you do know, you have to make it become written information or revealed. If the knowledge is already explicit, you have to make it more complete and better or something like that. Or you can leave it there after having a look at it many times.*

A: After you read the information or course materials many times, you will know the detail of it. You will be internalising it. Knowledge is then absorbed.

B: *The information is still kept there.*

A: So you just mentioned many kinds of knowledge conversions. You gave an example that after you read the information several times, you may not need to read it any more. Why is that? The information is absorbed by you. It is converted from explicit to tacit. It is internalised, processed by you. This situation will also take place. So today, your people may be involved in different knowledge conversions. Given that situation, you as a manager probably hope that the process is better to be short and efficient. If so, I am interested in how do you make different situations occur as soon as possible. Would you manage them differently? This is something I want to know. Would you have different attitudes? Would you use different incentives or ways of stimulation? Or you think that there should be no differences between them.

B: *Basically, I will deal with this situation a little bit different. It will be a much normal way of doing.*

A: Do you mean for something tacit?

B: *Basically, it is very difficult for you to find it. If you find this situation, you just do your best to dig it out. So this situation will be much different. But for something explicit, how much can it be absorbed ...*

A: As it is something that has been dug out. But in that side, it is something that has not been dug out. So you think that ...

B: *It should be a bit different.*

A: This is what I am interested in. So as a manager, how do you look at tacit stuff? How do you look at something explicit that has been dug out? How do you manage tacit stuff? And, how do you manage explicit stuff? Would your methods be different?

B: *Frankly speaking, I haven't thought of something like tacit or explicit before. Now, you talk about it so I think about it. Normally, we do things by our instincts.*

A: You probably may not have time to think about it. So today I am interested in knowing how you as a manager manage this stuff. Of course, you will manage something being dug out. You certainly will try to make things documented, categorised, computerised and so on. On the other hand, you also need to manage that kind of thing. It is just that they are not visible or cannot be seen. The experience of the master is also the property of the company after all. So I just want to know how you manage

these.

B: *As I said that I have not thought of this situation before. Normally, I use my instincts to do things. Like this, it should have different ways of doing. About that, it should have much normal ways of doing.*

A: You said that it should have different ways of doing. How?

B: *As I said that this is something in people's mind. It is something like techniques. So you will not use the way of enforcing someone to tell something.*

A: What kind of method would you use?

B: *My way of doing is if I have problems, I will then go to ask them. I will not order them to do something. It will be like asking friends some questions. If so, they probably will tell me something. Of course, I have to know in advance about what kind of stuff you are hiding. Given that, I can therefore ask some particular questions. This is it roughly.*

A: It is this side. How about that side? How about for something that can be seen apparently?

B: *In this case, things are turned around. For instance, if the staffs are doing good, there should be no problems at all. If the client does not satisfy with our service, we will start to check the data to see whether we need to do some improvements.*

A: Apart from it, you mean that to this much explicit stuff, your management hand will be much in, won't it?

B: *Yes, it should be. You can say so. For this kind of stuff, if using data or information to make judgement, it is not likely that different people will have different recognition. It will be much clearer.*

A: This stuff is a much objective fact after all.

B: *Yes, that's right.*

A: Okay, that's it. I understand. Thanks very much.

INTERVIEW TRANSCRIPT – Socialisation 014

Note: "A" represents interviewer and "B" represents respondent.

A: Having read this, can you roughly understand what it is all about?

B: *It talks about non-academic impartation and ...so-called knowledge impartation. You can absorb knowledge from written documents. Also, there are some experience and feeling that cannot be expressed.*

A: You seem to understand this quite well. Let me explain further to you. My research is about knowledge management. In our definition, as it says here that one kind of knowledge is tacit. It is the part that is much invisible. So what is tacit knowledge? It refers to experience or knack that has been accumulated or developed over years. This kind of thing is resulted from people's accumulation of experience. So how do those who have years of tacit experience like masters impart this kind of knowledge to other people? As it says here that it can be through apprenticeship. Through learning,

observation and imitation in a common environment for a while, to a certain extent apprentices can learn things from their masters. It will become apprentices' own tacit stuff. So it talks about this kind of situation. Given this situation, I think that this stuff is extremely important to the company in a sense that knowledge and experience can be passed on through being influenced imperceptibly. So I today would like ask you that as a leader, a manager, how do you manage this thing? What would be your leadership style? How do you look at this thing?

B: *It happened to us previously. In that time, our machine tool was still lack of accuracy. So that you could not get standardised products and every product was unique. As it involved in techniques, it had to do with the master. If the masters did not understand the machine tool quite well, they had to use their experience and feeling to produce a product. Like sculptures, they are not made by the same mental state. So every sculpture must have its own style and manner. Since machine tools were replaced by CNC (computer numerical control) machines, many industrial appliances became digitalised. Digitisation is meant to replace the master's feeling of doing things. It is about building up the concept of numbers. It is to let the master know that the machine they are using is getting more and more accurate. To progress is about not only to hand down the master's craftsmanship, but also to communicate the master's knowledge. They tell us their knowledge and then we use the knowledge to correct and contain their techniques. If so, things can then be progressed. If they only use their hands, feeling and experience to produce products, the accuracy of the product will not be so high. They have to introduce their experience into CNC as a kind of impartation. After that, the establishment of figures, the accuracy of products and relevant management can then be normalised. In previous times, masters were considered as treasure. Today's achievement is based on a fact that they first reveal their feeling and then other people use their feeling to build up a set of system, to do an overall improvement.*

A: So you mean that in previous times they had to use their hands to do things slowly. If other people wanted to learn things from them, they could only through observation to understand them. However, the time is different now. From the leader or company's point of view, gradually things have to get systemised, numerical or written for everybody to understand. Having done that, they can really be kept. Otherwise, if someone gets retired or something, the stuff will be gone.

B: *There is a serious problem that in previous time masters might not be able to reveal everything they knew.*

A: That's right.

B: *It does not mean that they were not willing to say. In fact, they did not know how to say. If no one tries to find out the reason, the stuff will be lost. After that, it might cause problems to the accuracy. The numerical system of CNC has to be based on the master's narration. Having had numerical data, the machine can then be adjusted. And, after the product is produced, we can then evaluate the numerical data to see whether they need amendments. We can amend again and again.*

A: What you said is to see whether their experience or something in their heads can be changed to something numerical, be spoken out or be written down. In my understanding, this is about

transferring something tacit, invisible in the head to explicit stuff. You just write it down. After being written down, everybody can see. However, on the other hand, as you said that it is impossible that ten or twenty years of experience can totally and clearly be revealed. It can only be revealed roughly. They may know how to operate the machine but may not know how to write the manual of operating machine.

B: *Yes, they do not know how to write the manual.*

A: So what does it mean? It means that in fact they must have something tacit.

B: *Uh-huh.*

A: Isn't it? In the company or leader's position, you hope that they can reveal it but they may not be able to do so. They only know how to operate the machine proficiently. Under these circumstances, if the company still wants to reveal the stuff in their heads, it may need to send someone to learn from them.

B: *That's right.*

A: So it still implicates the idea of apprenticeship.

B: *It must have the kind of apprenticeship. There is no doubt about it. No matter how powerful the machine tool is, you still need that system of impartation. It is not possible that everyone will know how to operate the machine tool after they are recruited. Those who know how to operate the machine tool are like masters. If you want to learn how to operate it, you have to experience it, learn it and test it by yourself. Given that, your memory can then be strengthened. If you only want to use what have been learned on textbooks to strengthen your memory, I do not think that it is a good idea. After you truly touch it and do it, your sensation and reaction will become faster. In the time of machine tool, masters used their feeling to sense how far they should go and how accurate they should do. Now, everything is done by CNC and presented by figures. For masters, some are good at craftsmanship rather than knowledge but some are good at knowledge rather than craftsmanship. So there are two types.*

A: So you mean that even if managers now care much about figures or that kind of thing, on the other hand you think that the impartation by apprenticeship is also important.

B: *That's right. Now, it just turns out that knowledge is no longer handed down by craftsmanship ... Now for many machines, you only need to key in some numbers and then they can work. However, you still have to know how the machine be operated. Take AutoCAD as an example. Now, everyone knows what AutoCAD is. But before entering into the world of AutoCAD, we need to have someone to teach them. But now the situation is before entering into the company, the school and society will let them have some ideas of it. So after they enter into the company, they can pick up relevant skills very soon. In order to do that, they have to rely on senior site staffs. Senior site staffs are like their masters. So they will teach them how to operate the machine. They will teach them how to examine wear and tear and to judge the accuracy. The accuracy is determined by measuring. If the market does not request high, we do not have to concentrate on accuracy.*

A: If so, take apprenticeship into consideration, in one side you have masters but in the other side you

have apprentices. So the relationship or atmosphere between them has to be gradually and well created ...

B: *That's right. If their thinking processes are not matched, it is impossible for them to get on well and long. They have to develop their own feeling of doing things. Otherwise, if they are in different worlds, learners will not be able to learn things and teachers will not be able to teach things. So both sides have to have common understanding in terms of operation, emotion and ethics. Given that, it will be appropriate for them to make progress.*

A: So you think that this is necessary.

B: *That's right.*

A: From your point of view as a leader or manager, you therefore think that their relationship has to be harmonious. Given that, you think what kind of role you should play so as to let their relationship ... Or what should you do? As a leader, how do you let these people have that kind of feeling? How do you create that kind of feeling?

B: *This is much abstract. It is about human nature management. It has nothing to do with the impartation of skill. It has to do with human nature management. Regarding to human nature management, first, it must have stability. You must let them have the feeling of stability. After they enter into the company, you must let them have the feeling of stability. Though it is not possible that the company can satisfy everyone's needs, the prerequisite is the company has to provide them with stability. You must let them know that the company is producing this kind of product and requiring this kind of action. Of course, they can have their own opinions about it but they are not able to change the direction of the company. This is to let them have stability. Instead of satisfying with current products, the company will develop more products. In the process of developing more products, the staffs can learn much knowledge that has not been thought before and they can get more challenges. You also have to give them challenges. Basically, you have to give them stability. Things cannot remain unchanged. If things are unchanged, they will become slack.*

A: So the most important thing is stability. I think that stability is not only about providing them with a more complete company system and a clear picture of future development, but more importantly about letting them have no worry about their lives.

B: *Do not let them have the feeling of impatience and impetuosity. Let them feel that if they enter this environment, they will have a target, direction to follow. Do not let them float around and have no idea of where to go. If they do not know where to go, they will be in the situation of floating. So you have to give them stability first and then stimulate their innovation.*

A: If so, do you think that creating such an environment for them and letting them have that kind of feeling are quite enough?

B: *Human being's needs are infinite. Are they really sufficient? Not necessarily. The basic condition is we have to let them know our requests. But their requests are infinite. Of course, if they achieve certain level and the company can no longer cope with them, they may want to make a breakthrough. Under these circumstances, the company cannot force them to stay. Human being's needs are infinite.*

So the basic thing is the company has to provide them with an environment in which they can have the feeling of stability and the future. Under these circumstances of having no worry about their lives, they will be developing private friendship each other. It is interpersonal friendship.

A: It is quite interesting. So stability is very important indeed. Having had such thing or feeling, subsequent things are easily to get developing.

B: *Without the fear of disturbance in the rear, they will be willing to do anything. We never know whether it will always like this. If they want more but the company is unable to offer them more, the company may not be able to keep them. If this is the case, you cannot do anything about it.*

A: Right, if this is the case ...

B: *You really cannot do anything about it unless the company gets restructured in accordance with their ideas. However, is it necessary to do so? It perhaps has to depend on the company's financial strength and product strategy. Good ideas may not necessarily be adoptable by the company.*

A: It needs to operate in coordination after all.

B: *That's right.*

A: Okay. Right now, let's ignore the stuff of apprenticeship. Now, we talk about knowledge in general. No matter whose knowledge might be, they are good stuff to the company, aren't they? So in your opinion, what is knowledge management? To manage knowledge well, you think what you are going to do.

B: *The first thing is digitization. We just talked about that you have to make previous craftsmanship digitised. After being digitised, the subsequent management will generate less misunderstanding. You can totally rely on digits as the standard of your working principles. Everything is managed digitally.*

A: If you change everything into numbers, into something totally invisible, it means that they become much more objective facts. Numbers are numbers. Percentage is percentage. You cannot lie about what have been produced. So you think that it is much important to transfer any kind of knowledge or experience into something good to be managed like numbers.

B: *I think so. We pay much attention to this way of doing. As you will have true norm or standard over there. Can this kind of management be accepted? It has to do with the machine, environment and the whole objective situation. You have to take the environment and machine into consideration first. After that, you then can set up standards. Whilst setting up the standard, the site staffs may complain that the current environment is not ready yet. If they have such consideration, we will need to upgrade conditions like temperature, humidity and wear and tear of the machine. If you request more, you relatively have to have high standard of environment.*

A: As the numbers come out, you can then go to set up objectives. Having set up objectives, you can then calculate how much has been achieved, what percentage has been done. So for you, what is knowledge management? It seems to you that knowledge management is about changing everything into digits. In my opinion, your recognition of knowledge management is about changing tacit into explicit.

B: *Uh-huh.*

A: No matter what methods are used, tacit stuff has to be changed into explicit stuff. Once being transferred to explicit stuff, it can be managed easily. So we have been talking about tacit stuff. Of course, this kind of thing has to be transferred to explicit one as much as possible. However, some stuff has been really hard to do so. So it has to through apprenticeship, a kind of traditional way, to learn things out. If so, you said that stability is extremely important to this case. After being stabilised, they will be willing to do ...

B: *Blend into the environment.*

A: However, in the other side, you said that everything has to be changed to digits. You hope that everyone can spend time on revealing what they have in their heads even if it is very complicated and time-consuming. If so, how do you on the other hand manage these people? How do you manage such kind of stuff? That is to say, frankly speaking, as a manager would you have different management methods towards this stuff and that stuff? My question is simple that would you have different opinions or feeling towards these two things? One is tacit to tacit and the other is tacit to explicit. They have different characters. So how do you look at these two? Would you manage them differently?

B: *Sometimes, I will be much mechanical to this kind. About tacitness, it does not mean having no knowledge. Sometimes, it is presented by narration. Sometimes, it is revealed by craftsmanship. To this kind, the prerequisite is we have to explore it. It is simply in people's heads. It is saved in people's heads or hands. So how are you going to explore it completely? For explorers like us, we have to remember that a mere verbal statement has no binding force. We have to have some experience. We must have some experience of participating in something. That is to say, in my opinion, it is impossible for someone who has no experience at all to guide the impartation of skill. Although they do not have much site experience, at least they have to have relevant knowledge. Then, they can ask for the masters' help. They can ask the masters to share experience with them. I think that it will be an unbelievable thing if a completely empty person thinks that he/she can explore a treasury. You have to have something in advance. Then, you can try to dig it out slowly. Without certain level of foundation, there is no way to set up further targets. You have to understand the base or foundation first and then you can start to ... It is accumulated over years. I think that for those who are involved in this stuff or managers, they do not have to understand everything. But at least, they must have a general idea of what is going on. Having understood something, they then have to explore other things they have not yet known from the master. They have to let the master tell them something they do not know. After that, they can use what they got to build up systems.*

A: If you do not know anything, they probably will not respond to you.

B: *If you do not know anything about the area but want to ask other people to ... So what do you really want? Perhaps, they have no idea of what you really want. So instructors at least have to have some ideas.*

A: So this is the prerequisite. You must have certain degree of understanding before knowing what other people are doing.

B: *You do have to understand it completely, but at least ... For something that cannot be imparted by numbers, you have to have some ideas about it. Then, you have to gradually study whether you can upgrade it and build a system for it. Every master must have his/her own unique craftsmanship. How can you explore it? If you know nothing about it but want to explore it, there is no way you can succeed. So at least, you have to have some ideas. Then, you will be able to explore it gradually.*

A: So you just mentioned that to apprenticeship the easy way to do is to provide them with stability, let them have no fear of disturbance in the rear. So you think that to a certain extent apprenticeship is necessary. On the other hand, however, you must be hoping that they can digitise what they have known.

B: *That's right.*

A: If so, you can manage it much easier. However, for them to change what they have in their heads into digital forms there must have a process involved in it. So how do manage this process? How do you manage it? In that case, you said that you will provide them with a stable environment, let them develop relations naturally. Having had good relations, they will communicate with each other. How about this case? What are you going to do in this case?

B: *About human nature management and letting them have no fear of disturbance in the rear, this is for those who are willing to dedicate to the company. If you want to know what kind of skill they have, as I said that you have to have some ideas about it in advance even if your understanding may not be as clear as the master. Besides, you must be clear about one question. Can I build up a system for it? Can I make it digitised? Can I do systematic management? If it can only be imparted by mouths or by hands ... it will always stay on the feeling stage. If so, how can you make it digitised? Can it be resulted from experiments, machines or machine tools? What are relevant conditions? Perhaps, you may need to have advanced machines or experiments to be your foundations. Then, you use them to digitise what experienced masters say. There must have a prerequisite that you have to bear in mind the limitation of your experiments or machine tools. The prerequisite of management is you do not have to do it in person but you have to know how to do it.*

A: So in this case of turning something into digits, you think that as a manager or leader you have to have a wide range of understanding of the machine, digitisation and the whole system.

B: *That's right. You must have certain understanding of everything.*

A: Having understood them, you then can know whether it is feasible or not.

B: *If you do not have a general idea and some prerequisite conditions, nobody will ... I think this is about the principle of mutual interaction and trust. If you want to make previous feeling manageable, you have to set up some conditions first.*

A: So in accordance with what you said, your attitudes towards this thing and that thing are different. Your ways of doing will also be different.

B: *Yes, that's right.*

A: In this side, you only concentrate on building the whole working environment and company systems and letting them understand that they are in a stable environment. You think that is it.

However, in that side, as it involves in digitisation and something objective, so you will be much keen on realising what they are doing about. You will be much involving in it. So can I say that you manage these two differently?

B: *Indeed, the situation is like this. As technicians or operators, they have their own feeling of operating machines. If you do not try to manage it, you will be always staying on the stage of managing feeling. However, if you try to manage it, you have to do some homework before asking other people to do something for you.*

A: In fact, this is what I am studying. In the beginning, we discussed apprenticeship. Then, you talked about the need to digitise things. To me, they are two kinds of knowledge conversions. Apparently, one is tacit to tacit and the other is tacit to explicit. So today I want to know that for you as a leader would you have different management measures towards these different stuffs. As a manager, how do you look at these different situations? Do you have different management methods? Or you think that there is no difference.

B: *If you are in art, you probably can still rely on masters' feeling. But in industry, you cannot rely on it anymore. Industry is about producing things. It has to do with excellence, accuracy and speed. If you are still keen on masters' feeling or that kind of stuff, you are not going to survive in this area.*

A: Alright, I see your point. Thanks a lot.

INTERVIEW TRANSCRIPT – Socialisation 015

Note: "A" represents interviewer and "B" represents respondent.

B: *When I see this, my first instinctive reaction is you want to investigate the behaviour pattern and reaction capability of technicians in an ordinary company. How to use their body languages and movements to lead their teams?*

A: Let me explain further. Generally, my research is about knowledge management. In our definition, knowledge is either tacit or explicit. Here, this is much tacit part. It is about accumulating experience for some time. You then develop what people say as trick or knack. This is the thing developed by yourself. After probably ten years of experience accumulation, you would have that sort of thing. It is quite personal. Here, we talk about how this kind of knowledge conveys to another person, and then becomes that person's tacit stuff. How to do conveyance? As it says, apprenticeship is a classic way. In this case, masters and apprentices are joined together to learn or to do something, such as operating machines. Of course, they communicate and talk each other. The most important characteristic, however, is apprentices learn how to operate machines from their masters through observation and imitation. Through such kind of medium, apprentices learn something invisible from their experienced masters. Probably by one, two or even five years, apprentices can obtain that kind of knowledge or you can say trick from their masters. So, simply speaking, the conveyance of tacit knowledge is by observing, learning and imitating. Given this fundamental understanding, what I want to know is for

you as a manager or a leader at the top how do you manage such thing? What would be your management means in order to let the relationship between masters and apprentices go well? This is an invisible conversion after all. Even if it is invisible, you probably know that this kind of experience delivery is existent in the company and is positive towards the company. If so, who do you manage these people? How do you manage those who have tacit stuff and the conveyance conducted by them? In order to keep the knowledge conversion process smooth between masters and apprentices, what should be your leadership style? You think how to manage this situation?

B: *I am a bit confused about what you say. It is because the relationship between master and apprentice has become diluted. After twenty years of experience, I realised that Taiwanese are deeply influenced by a concept of better be the head of a chicken than the tail of an ox. If you set up the relation for them in the beginning, apprentices would think that their masters are always right so that they would imitate them spontaneously. Nevertheless, whilst they see their masters insufficient to providing something they want or they think they can be independent, they leave the company. This is the case that you really have to bear in mind when you run an enterprise. In the circumstances of high turnover of staff, the only way for you to survive in this industry is to keep your own stuff. Hence we, enterprises, now focus much on automation and fool-proof devices. In the part of apprenticeship, about who would be the master, who would be the apprentice and what would become in which stage, I think it has to depend on individual accomplishments. You can be a master if you are willing to learn and want to make progress. If you, however, are the one who does things by order, you always become an operator at the lowest level. I myself grow out of nothing. The best thing given by my master is the concept of grasping the principle whatever you learn. So, I always think about and do things from this angle. On the other hand, because I am a female and I am in this casting industry, physically, I cannot afford to do many things. I therefore pay much attention to technical thinking. At last, due to the accumulation of experience and willingness of taking challenges constantly, I become a superior in this company. Now, you talk about apprenticeship and tacit knowledge. I think that if you identify with someone as your masters, you would be much willing to learn from them. For instance, if we think that Morris Chang [He is the head of TSMC, the world's largest dedicated semiconductor foundry, in Taiwan.] is brilliant, you would read his biography and learn his behaviour pattern. You would learn spontaneously. It has nothing to do with tacit stuff. It is about your heart of following. I think that integrity and hard working are primary values in our company. Our business is about gravity manufacturing. It may have dozens of variables in one product. I tell my people all of the variables and want them to adjust them by different circumstances. Sometimes, the variables are affected by weather or by machines' temperatures so that the line staffs have to respond to them by themselves. If they care much about them, they can learn from them and loss caused by them can be reduced. You have to give the line staffs some simple rules and let them try thousands of times to get quality stable. This is the ways of our thinking and doing. Before the 90's, the concept of apprenticeship was very strong, but nowadays it becomes diluted. Especially in times of our chairman about 50's to 70's, masters were very strict. Our chairman always says that in his time people had to bring masters some*

money in order to make them teach. He usually stood next to his master while learning things. If his master was not satisfied with what he did, his master beat him. In about the 90's, when human resources was insufficient and working opportunities were hot, we spent a lot of money on recruiting and developing newcomers. For newcomers without any experience, their salaries were NT\$24,000 which were ten percent higher than other companies. Due to the feature of this industry, the temperature of our working environment is very hot. So, in that time, the incentive to them was if they became independent masters within three years, their salaries would be raised up to NT\$40,000 or even NT\$50,000 which were at the level of managers. This was the target for them. Yet, how to make themselves become masters is not our responsibility, instead it is their responsibility. It totally depends on whether they really want to become masters. For some people, they really can make it; for some people, they just cannot. So, our management now concerns about where we put our newcomers.

A: If so, does it mean that this situation is no longer applicable to your current circumstances? Can I say that?

B: No, I don't think so. We still talk about this kind of thing. But, I think that personal development is based on personal effort. We also give youngsters such idea. For instance, I usually tell my people that though I am a female, I know everything and I am capable of doing everything. I send this message out. If you are willing to learn, we still have this kind of system. In my opinion, I think that this kind of thing can no longer satisfy our current needs. This situation, however, still needs to be existent in an enterprise. You still have to mention it sometimes. I would tell my people that if you attempt to pay more, you would get more. You have to learn by yourself. That's right. Learning is your own business. If one out of your ten people says to you that he/she wants to learn from you, this is the one who can become your cadre in the future. So, the thing you are talking about has to be carried on. It cannot be ditched. It is just that it cannot represent the whole management pattern. It is only a part of the whole management pattern.

A: So, you mean that this thing can no longer be a principal part.

B: You are right.

A: But, it is still necessary for this thing to exist, isn't it?

B: Yes, that's right. But, if you use this as a major tool to manage your employees, it would be useless. You have to tell them that if you do something you can get a better life. There is incentive over there. It has to be direct. Nowadays, people concern about several things when they go to work. The first and important thing is the salary is sufficient or not if I work here. Can the salary pay for my life? Second, do I attempt to accept the pressure and variables in the working environment? Third, is the side of family supportive? These are the three elements that make someone stay in a company. Here, you further have to consider different ages. What do those who between 20 and 30 want? They want growth. People between 30 and 50 want stability. So, our management is differentiated from different ages. But for such thing, it is certainly needed. It is still required. It can be chatted. Or, it can be used whilst you attempt to guide someone's behaviour pattern or give someone a direction.

A: So, when it is still necessary for this thing to exist, it means that ...

B: *There is no ethics in it, but it still has incentive to exist.*

A: What do you mean by no ethics, but still have incentive to exist?

B: *It means that it is rare for apprentices to appreciate their masters for the rest of their life. On the other hand, incentive means that if apprentices want to make lots of money as their masters, they better follow their masters well.*

A: Alright. The present situation becomes like this.

B: *That's right. This is my own opinion in the company. Of course, this opinion cannot be revealed publicly. It is because you want to do some research, so I speak out my real thought. We usually do not talk about it.*

A: If the present situation really becomes like this, it seems that from your point of view as a manager you would hesitate to manage this thing. It seems to me that you would not intervene in such thing. You think that it is hard for you to influence what they think. Can I say so?

B: *Yes, you can say that.*

A: Certainly, it is still necessary for this kind of thing to exist. Even, this pattern still has some functions on transmitting tacit knowledge in the company.

B: *Yes, there must have.*

A: It is just that the situation is different. New generation may have different way from the last generation to look at or recognise such thing.

B: *There is a big gap between them. Big gap.*

A: If so, can I say that as a manager your attitude now becomes a bit negative to this thing?

B: *Yes, you can say that. You really can say that.*

A: Alright. Or, I should say that something that needs to be taken into consideration is different. That's right. People who belong to last generation must be different from people who belong to this generation. So, if you want to conduct this thing, your consideration must also be different.

B: *That's right. It must be different. It must be absolutely different.*

A: If so, how is it different? For instance, for those who in this generation, are rewards or bonuses the only way to attract or stimulate them to do such thing?

B: *I think that companies have to take care of employees' basic requirements. For instance, take this casting industry as an example. How can the company make profits? How can the employee's existing value be created? These are two aspects that need to be considered. We have to compare our status with other competitors. For instance, what is the salary level in other companies? What is the salary level in our company? If the company makes profits, does it need to give the employees additional benefits? You have to consider the whole package. If the employees think that the package is good, they would stay. Second, we have to stimulate the employees' initiative. That is to say, if someone is willing to learn, cooperate with you and do more things which are out of their job descriptions, they are the one that needs to be promoted. Our company started with about ten persons. Right now, we have ninety employees. Many leaders are formed spontaneously, and they are all from the inside. They become leaders because they are willing to do more. If someone is willing to do more, relatively the*

company has to pay them more or do something like that. It is practical, isn't it? If someone who has spent ten years in this company and has been willing to do many things has the same salary as someone who has only spent two years here, the former one would leave. So, we first take the whole environment and social conditions such as price index into consideration when we set up the salary. We then consider the situation of business. Our techniques are not so complicated. Though there is some experience value, once a new product is put on production for six months, it becomes a routine job. So, the technical level is not so high. It is just that these leaders have spent years in the company and the company has been growing. Through their experience, they can absorb your message very fast. This is a real, practical situation. About the ethics, for me it is rare to feel it. But, some people still want to learn more. They still have the heart of following masters.

A: So, whilst you look at this situation, you think that it belongs much to the part of individual consideration. That is to say, it involves in personal behaviour. If so, it seems to you that as a manager you cannot do anything about it. In particular, you are not able to create or form such relation. As you said, this is a personal problem. It means that if someone really has the heart to learn, the relation exists naturally.

B: *Yes, you are right. If apprentices themselves really attempt to have such relation, that ethics would exist. It also involves in time. For instance, it is better to have apprentices at the age of twenty. After ten years of apprenticeship, their capabilities probably are equivalent to their masters but they are still young. In that time, their relation is no longer existent. Sometimes, they are better than their masters. If so, they would get promoted. In this case, their masters may resist them.*

A: For someone who has been apprentice for ten years since twenty, their capabilities must be ...

B: *In this period, their relation with their masters would be good. After that, when apprentices become independent, the relation would be diluted unless the masters have higher added value.*

A: So, it means that to a certain extent this so-called apprenticeship has stages.

B: *Yes. It must have stages.*

A: They can be long or short. But once apprentices are equal to their masters in ability, their relation disappears spontaneously.

B: *That's right. So, it has stages.*

A: Despite another situation that masters have added value, it means that through the relation apprentices learn something that make them equal to their masters.

B: *That's right.*

A: So, I attempt to know whether you as a manager have to do something in such process. What and how should you do to keep this relation or process moving? Do you know what I mean?

B: *I ask you something first. Why do you want to investigate this part? What is your purpose?*

A: Alright. First, we all agree that this stuff is existent, right? We all agree that such kind of tacit knowledge conveyance is existent. To us, this is a part of knowledge management. This is the process of knowledge delivery that managers can do something about it. For instance, managers can do something to keep as much as experience. This is a kind of knowledge conveyance or you can say

knowledge conversion. There is another kind. For instance, there is a situation where everyone write down everything they know. They use the ways of document or tape to record they know. This is another kind of knowledge conversion. To us, this is a so-called tacit to explicit process. You write things down. You make them public. They become explicit. In addition, there are other kinds. Anyway, it means that knowledge can be converted like this. No matter the conversion is about being influenced unobtrusively and imperceptibly or being conducted systematically, it exists in mankind. So, what I am interested in is under the circumstances of different knowledge conversions, what kind of role should you play as a manager or leader? Would you have different roles because of different circumstances? It is that simple.

B: *I usually say that it has to depend on different circumstances. Management itself should be live. Like this thing, since it is positive so we advocate it very much. Nevertheless, we always have some problems. For instance, some masters are conceited, which are not accepted by their apprentices. In this case, it is impossible to make the masters change. It is impossible. So, sometimes apprenticeship is a kind of resistance in the company. It is not always good. It depends.*

A: So, it depends on how you manager look at this thing.

B: *If you see something bad to the company, you have to stop it immediately; if you see something good to the company, you have to encourage it continuously. For instance, if we see this master's behaviour and advantages are good to the company, we would advocate them.*

A: Right. Even this is the case, in fact ...

B: *Your question is about the manager's attitude, isn't it? So, I tell you that it depends on different circumstances. It has to depend on whether the behaviour and opinion of the master are positive or negative to the company. Sometimes, they cannot accept new stuff. It then becomes resistance.*

A: That's right. So, I want to know how you look at ...

B: *This thing. Right? I just mentioned my whole opinion about it. If they are positive to the company's development, we would advocate them. I give you a practical example. There is an experienced master in our company. He has worked here for forty years. He just cannot change his temper. No one is able to tolerate his temper so that his apprentices always leave within two years. There is another master who is specialised in lathing. This is the skill that is hard to learn, and it sometimes depends on temporary reactions and instincts. So, if apprentices attempt to learn this skill, they have to tolerate frustrations. For instance, if they are dressed down, they have to tolerate it.*

A: If so, does it mean that you cannot do anything about it?

B: *I do not know whether it is right or wrong. From my observation, I think every master has unusual temper. If someone is a master but has no unusual temper, they gradually would be promoted to managers. If you are a master with unusual temper, you would become resistance to the company. Anyway, we still agree on the system of apprenticeship since newcomers still need to be guided. If apprentices are also willing to learn, we would push them to do so. If they become masters and have no unusual temper, we would promote them to become managers.*

A: So, it is the problem of personal fate, isn't it?

B: *No. it has to do with family education, school education and fortunes. Everyone is so different. For instance, why it is not easy to lead youngsters? It is because they are the one being served at home so that it is difficult for them to serve or help other people. Nevertheless, if they are trained to do housework at home, they would care and concern much about other people. They are good at public relation. Whilst they attempt to learning something, lots of people would be willing to teach them. They are the one who is more likely to succeed. People always try to find out why someone is successful. I think that if you are successful, it means that you are the one who is supported by the others. If you cannot get supported from the others, there is no way for you to succeed since there is resistance. So, I think that the family education and school education have a great effect on people's ethics in the company. Why do we deal with things more smoothly than those young people? Why are we more willing to take challenge? First, I think that we are clear about our goal in life. Second, we have lots of brothers and sisters so that our interaction is high and we learn how to respect each other. Nowadays, for this generation, they are indulged at home or even at school. So, when they join the society, how can you make them serve other people? Can they get a job in service sector? I do not think so. That is why so many young people do not work in recent years. They are unable to face themselves.*

A: Having said so, it seems that if you recruit someone who is at the age of twenty, you cannot do anything to them since they have already affected by their family education and school education. To a certain extent, they have already got shaped.

B: *That's right.*

A: Though people in twenty years old are still young, strictly speaking they are all shaped. Can I say so?

B: *Yes, you can. If so, it has to depend on different circumstances to try them. We have encountered a case before. One person was reported by his leader that he dropped off during the work since before that day he played video games until three o'clock in the morning. He argued with his leader that he shouldn't inform against him. For us, this case is so unbelievable. But for him, he thinks that there is no problem for him to drop off during the work. I believe that this has to do with family education. He can drop off as much as he wants at home. But at work, the situation is different. You know what, he did not think he was wrong. During the process of skill learning or apprenticeship, you have to know what apprentices really want. Few years ago, they told me that they wanted three things from the company. First, they wanted more money; second, they wanted fewer work; third, they wanted the company close to their home so that they could get up late in the morning. I told them that if they find such job, please tell me. I think that apprenticeship is a good thing, so we try to carry it out. Also, I think that ethics in our society is also good. It is just that it cannot be applicable to every stage and everybody. Knowledge economy is also a good thing. We have gradually learned from it.*

A: You just said that the stuff like knowledge economy is also good. Despite what have been talked about, you think what is knowledge economy or what is knowledge management? From your point of view, how to manage knowledge in an organisation? What is knowledge management whatever the

knowledge may be? Or, you think how to manage knowledge?

B: *I am learning this part right now. I was not familiar with it before. Having known the idea of knowledge management, I start to think about how to create enterprise culture in the company. Before I came up, my brother just asked me what is our enterprise culture? My father has run this company for forty years, and I have been working here for twenty years since I was graduated. Many things are conducted by instinctive behaviour pattern. My father is an old-fashioned boss. He has some basic concepts. They are integrity, hardship and generosity. In the factory management, it is gradually updated by the growth of the business. We learn things by ourselves or from the friends in this industry. We have never thought about what our enterprise culture might be. For me, I like integrity and hardworking. I think they are applicable to everywhere in the world. They are the basic condition of surviving. I know some of my clients from American. Do you think that they are relaxed? No. They work so hard. People who succeed in certain areas usually work sixteen hours a day. That's right. Why are they so strong? Perhaps, they have some advantages. So, you have to clear about where your position is. What is your advantage? What is your disadvantage? For instance, about the competition between Taiwan and China, it is obvious that the only thing we have to concern is our quality. We are not able to compete them with costs. We have to focus on quality. One more thing. This kind of casting industry is a moral business. It is because though product's material can be tested, its intensity cannot. So, our key point is the product has to be safe for our clients.*

A: So, you think that the so-called knowledge economy or knowledge management is about forming a kind of values that is accepted by everyone.

B: *It has to be accepted by everyone. Especially in democratic times, it has to be accepted by everyone. That kind of closed and totalitarian times has gone. I remember my father told me that in his time it was very difficult to get a job. Sometimes, they were oppressed by employers. This is the case in China now. It is because information is insufficient or ability is not good enough. Sometimes, it happens in Taiwan. Actually, it depends. I think that the concept of knowledge economy has to be learned by managers. Managers have to learn this part. Then, they would know some behaviour patterns or some ...*

A: From what you say about knowledge economy or knowledge management, actually you mean that first everyone has to reveal what they believe in their heads. After it is known by everyone, it then has to be internalised as everyone's values. That is to say, first you have to let everyone have common recognition of something, then you would be able to build something called culture. If so, this is the culture that is accepted by everyone and can be expressed.

B: *That's right.*

A: At last, the most important thing is this culture is absorbed or internalised by everyone. It is about recognition. It is about recognition of this company and this culture. For me, it involves in many conversions between tacit and explicit knowledge. Despite those deeper stuffs, I today am interested in your position as a manager or a leader. Whilst you lead this company or do whatever you have to do, it may involve in different kinds or levels of knowledge conversion. The fact is they are different in

terms of their characters. So, I want to know how do you look at these different knowledge conversions? Would you have different management means towards these different conversion circumstances?

***B:** I think that the answer is positive. As I said, it has to depend on different circumstances. In last few decades, our company has increased its investment in welfare and devices. Certainly, it is about creating an environment that makes the employees think that this place has hope. You know what? It is the company growth that brings them hope. So, to answer your question, my answer is yes. But why there exists differences, I cannot tell. I cannot describe it since I just started to learn about this part.*

A: But basically, you think that there must have different ways of conducting.

***B:** That's right. There must have.*

A: OK. I see.

INTERVIEW TRANSCRIPT – Socialisation 016

Note: "A" represents interviewer and "B" represents respondent.

A: Can you roughly understand what this is all about?

***B:** Yes.*

A: Having had overall understanding, we can then have a discussion about it. What I am doing is about knowledge management. Basically, we divide knowledge into two kinds, one is tacit and the other is explicit. Here, we concentrate much on tacit part. Tacit part refers to ...

***B:** Something in the head.*

A: That's right, something in the head. It is like the accumulation of years of experience. Although tacit stuff is in the head, it still can be passed on to other people. As it says here the situation is like apprenticeship. Through imitation and observation, as time passes, apprentices will learn something from their masters. Perhaps over five or ten years, apprentices will become masters. It means that in the process of being masters, the masters are imparting their craftsmanship or you can say knack to the apprentices.

***B:** If it is like doing sculpturing, it has to be like this.*

A: Yes, you are right.

***B:** Slow work yields fine products.*

A: That's right. If so, tacit stuff to a certain extent is handed down. This Description is talking about this kind of situation. In fact, experienced masters in production units must have this kind of knack. Therefore, it turns out that the site staff will be learning this. Or, regardless of the likely relationship between master and apprentice, I think everybody will be imperceptibly influenced by what they constantly see and hear. This is the situation that the Description is talking about. Given that, I am more interested in understanding that for you as a leader or manager, how do you look at this thing? How do you lead this part? What are you going to do so as to make people's tacit knowledge in the

head communicate imperceptibly? From a manager's point of view, what are you going to do? What is your management means?

B: *In the aspect of management in Taiwan, if it is in a factory, mostly it involves in conducting ISO, systems. Conducting systems means that it has to have SOPs, operation guidelines and so on. They have to be clearly written or established. You have to write the knack in your head down. Otherwise, it cannot be imparted. If you are absent or something bad happened to you and you are unable to work or even dead, you will be no longer to impart your knowledge to other people. So you have to write everything you know down. Alternatively, you may leave this job or be transferred to another post. So you have to get your work standardised, systemised or written down. General management is like this. If you do not do this and you want to learn things through the traditional way of stringing along with someone, it will be first, too slow and second, incomplete. You probably have to give a discount of what have been learned. You are right that the masters have accumulated years of experience. But I think that no matter how smart the apprentices are, they will not be as good as their masters. So the masters have to write something down for the apprentices to experience or learn. Then, the masters can check whether the apprentices are doing well or not. I think that the situation is almost like this.*

A: So you think that they have to get their knowledge revealed or written.

B: *It has to be like this in terms of management. You cannot manage those which are in their heads. They have to computerise, digitise or characterise what have been known. They must be getting it out.*

A: So you think that it is meaningful to do this.

B: *Certainly.*

A: Of course, you can regulate that they have to write everything over years down as detailed as possible. After it is revealed, everyone can see it and it can be passed on.

B: *That's right.*

A: However, for those who have ten or twenty years of experience, they may feel difficult to reveal everything they know over this period. With ten or twenty years of experience, they are extremely good at operating machines. But for writing every detail involved in it down, they perhaps have no idea of how to do it. This situation might take place.

B: *Other people can write it down for them. They just concentrate on describing it.*

A: Of course, they can just describe it. But for some people, they may be getting more familiar with it whilst operating the machine directly. If you want them to describe ...

B: *They can operate it and describe it simultaneously. They can use this way of doing to do contrast. Otherwise, how can I know that you are describing correctly. Even things are written down, learners still have to do contrast to see whether what have been writing can fit in with what have been doing. They have to operate it all over again to see whether there are problems. If the output is good, there will be no problem.*

A: You are right that they can operate it and describe it simultaneously. Bystanders can take notes, record it or do whatever they like. However, as it says here that something is so ingrained that they may take it for granted. In the time of describing one step, they may have already shown several

gestures. So in this case, you may still need someone to string along with them to learn the core stuff ...

B: *It is certainly so. For the first time of doing it, it must be slow. When you start to establish the standard, it has to be taking time. Taking time means that you probably have to spend quite a lot of time to build up this thing. After being built up, you have to check whether there is any problem with it. If everything is fine, whether they are absent or not does not matter anymore. Then, you can just follow what have been established. You do not have to ask for their help unless you have some problems about it. At the beginning stage, you may want them to write by themselves, want other people to write for them or want them to operate it and describe it simultaneously. It will be much troublesome. But it will be better than relying on them for next five or ten years. Anything might happen anytime to anyone. So you prefer spending half year or one year to build up the system. In the beginning, it must be so painful to do this. Building up information is like this. It happens to the operation guidelines of many companies. It also happens to us. When a company is small, perhaps it only relies on a particular person's experience. When the company grows bigger and bigger, that person needs to lead other people and imparts his/her knowledge to them. However, that person may not have time to guide them respectively. Finally, he/she decides to get what have been known written down and recorded so that other people can use it as reference. This is called SOP and it is quite common in ordinary companies. In the past, perhaps only one person knows how to do a particular job. But now, many people know how to do it. Even if that person is absent, other people may have no problem of doing it. So this is it. You cannot say that you do not want to write it down. If you do not write it down, you are the only one who knows how to do it.*

A: If so, a likely situation is that person will be hiding something.

B: *I don't think so as you can compare what have been revealed with what have been done. If any gap between them exists, everyone will know that. I want something good to be produced. If they can be produced, it can approve the existing SOP is workable. If nine out of ten products are not good, it must be something wrong with the SOP. Then, you can to check it and improve it. Perhaps, the defect has to do with personnel because most of them are novices or it has to do with the unclear SOP. So for the first three months, things must not be going smoothly. But we can improve it and make it better.*

A: If so, do you mean that this kind of things does not exist?

B: *Essentially, you have transfer knowledge into something useful. If not, only you not everyone knows it. So if you want to do impartation in ordinary companies ... In fact, knowledge management is something fashionable in Taiwan. It is mentioned in textbooks. You have to change the knowledge collected into something useful. You must get something narrated. You must be able to keep it. Then, other people can use it. Otherwise, it is saved in your head. No one can use it.*

A: So you mean that as a leader or manager the only thing you have to do is to get something in their heads ...

B: *Standardised.*

A: Okay, standardised. If so, from our point of view, it is about changing from tacit stuff into explicit

stuff.

B: *That's right. When being explicit, for those who are senior and experienced their speed may be faster and efficiency may be higher so that they can accomplish, for instance, ten cases per day. But for the other people, they may only accomplish five cases per day. So it shows the variation in efficiency. So when people get older and older, they will become slower and slower. It does not happen to young people. It is only the variation in time. I know that there is a potential problem. That is someone does not intend to tell you. This is the case that we are all afraid of. I think this is the problem of staff management and communication. They just do not want to reveal it. They think that if they reveal it, they probably will lose the job.*

A: *That's right.*

B: *This is the worst situation. They want to protect themselves. As you said, if they hide something, other people will know by producing something bad. If they do not tend to reveal it, you have to do your best to let them reveal it. Otherwise, only they know how to do it.*

A: *That is to say, they may decide not to reveal it or unable to reveal it clearly. However, you may know that their experience is very rich ... They may just not know how to do it ...*

B: *That is not a problem. Other people can do writing for them. They just need to speak it out. That is it. As I said that we might have that kind of problem. They may not always in certain posts. So if they think that they want to protect themselves and are afraid of losing job whilst revealing it, we can protect them. That is we can transfer them to another post. For instance, if the masters are in production units, they can be transferred to production technique units. They will become technicians. Their salaries may then be increased. So we let them to do more and learn more. They can become multi-skilled workers. They can go to learn something else. Their salaries will be higher. So you have to communicate with them. You cannot let them be afraid of losing job when they reveal it.*

A: *So to this aspect of tacit, something invisible ...*

B: *You just standardise it. It has to be standardised. It must become SOP. Like American companies, they are all systemised. Their SOPs are very complete and detailed. So for something that has been standardised in Taiwan, you can invest it in China. The whole set of SOP can be brought to China. The administrators only have to follow the SOPs. At best, you send some technicians there to do some guidance. You just follow this way of doing. This is quite simple. You can duplicate it over and over again. If you want to rely on those masters, you may need to wait for years for them to train the apprentices. It is impossible to have such time. Masters are really good at some areas. They may be able to identify the problem with their ears. Their apprentices may not be able to do that. So they have to write every single thing down for their apprentices' reference. Otherwise, their apprentices will never know how to do it.*

A: *So you think that everything has to be clearly revealed.*

B: *In manufacturing sector, it has to be like this. You must have SOPs to follow in manufacturing sector. Experienced masters may not have good memory to remember everything. Standing at the position of management, it has to be like this. We do not allow that the masters are the only one who*

knows everything. They have to let other people know as much as they do. It is not allowable that without them things cannot be run.

A: So in manufacturing sector, this is the only thing that has to be done.

B: *The situation is like this in general manufacturing sector.*

A: So this kind of invisible stuff is not likely to happen to manufacturing sector. That is to say, the kind of stuff between master and apprentice is not likely to happen to manufacturing sector.

B: *It can easily be dealt with in manufacturing sector. In other industries, it may not be so. It is possible. For the kind of knack, it is presented by output in manufacturing sector. Output can be seen. But for those which cannot be identified, it relatively will become more difficult and slower.*

A: So you said that other industries may be more likely to face this kind of situation, for instance, the industry like handiwork or sculpturing. It will be much difficult to impart that kind of skill. Also, it will be much difficult to produce relevant SOP for this kind of impartation.

B: *For instance, like painting or art. It is about personal creation. So how do you copy this creation? It is the creation that needs to be developed. However, it cannot be duplicated massively. Each painting is unique. Something I paint today will be totally different from something I paint tomorrow. Apprentices will not be able to do exactly the same thing. They have to develop their own things and learn by analogy.*

A: That kind of industry is like ... musical instruments manufacturing, for instance, making violins. The good one is totally handmade. Perhaps, it is made by the master who has dozens of years of experience. So if the master tends to impart this skill to the apprentice, it may need to through that kind of process.

B: *If it is purely about something musical as you mentioned the manufacturing of violins, perhaps it has to do with material or size. It can easily be worked out. However, if it is about something that needs creation ... For instance, like making pearl necklaces, they are made differently each time. So you have to be very creative and possess many skills. You cannot just copy things.*

A: Like the industry of jewellery design or ...

B: *It has to be different for each product. If they are all the same, it means that they are duplicated. So you have to vary it.*

A: That's right. So what they are going to impart is something in their heads like craftsmanship. If that kind of things needs to be imparted, it is much relevant to the way of observation, imitation and learning. Or, it has to do with stringing along with the master ...

B: *They themselves have to have the space of imagination. If they decide to write it down, that is fine. But they still need to vary it.*

A: So to this part, for you as a manager how can you make your people feel more smooth and effective in the process of being influenced imperceptibly? You think that under these circumstances, what are you going to do as a manager? How can you let your people be so?

B: *This is out of my control area. I think you have to use training or some innovation lessons to let them accept this kind of concept. They must have that kind of knowledge or training before accepting*

the kind of concept.

A: If so, you mean that you will let them have a more comfortable environment to ...

B: *Let them enter into that kind of situation. Let them have some space of imagination and innovation. You have to provide them with the environment. Let them head to that direction and stimulate their ideas. Or, you have to provide them with more foreign or relevant information or magazines. Let them have chance to view and emulate other people. It has to be like this so that they will not be limiting to certain area.*

A: So you mean you have to have a more open attitude to ...

B: *You have to let them contact something outside. Even if you are a small company doing this kind of business in Taiwan, you still have to know the current trend of the world. For instance, you have to know the popular style of jewellery in Paris or New York. It applies to clothing and fashion industries. You have to know what have been popular. If you want to be a pioneer in the market, you must have something different from the others.*

A: So to this part, your attitude will be like this. But back to what you have been emphasised, you think that in manufacturing sector it is all about making knowledge revealed.

B: *That's right. To make it characterised.*

A: That's right. To make it characterised. If so, these two situations are different. One is about revealing something in the head and the other is as you said about ...

B: *The kind which is more innovative.*

A: So they are different. To something that needs to be more creative, you think that you will let them have more open space and develop them with more training. But in this side of manufacturing sector, you think that the only thing they have to do is to reveal as much as what have been stored in the head and make it become numbers, words, SOPs and so on.

B: *This is the normal situation. Factory management is something like this.*

A: Alright, that is the way it is. If so, in order to achieve that level of getting the knowledge or stuff revealed systematically, there must have some processes that you must go through and they are almost conducted by those who are involved in it, aren't they? Besides, they will bring influence to the final result. Under these circumstances, as a manager, how do you lead those who are involved in the process? How do you manage the process?

B: *There is nothing difficult, complicated or something like that. You just follow SOP to do it. This is how ISO system works. Before being manufactured, you have to have operation guidelines. Essentially, you have to do that.*

A: If so, would you provide them with some other stimulation or incentives? How do you stimulate them to let them do so?

B: *None. This is what they have to do basically.*

A: So you think that ...

B: *This is included in your job description. This is the work you ought to do. If the company is heading to get everything standardised, this is the company's policy. It has to be executed. So you have*

to get everything standardised and systemised. If you do not do it, we will not be able to get certified by ISO. You cannot say that I make things difficult for you. I even request our contractors to do so. Why are they willing to comply with our requests? Because they want to do business with us. It is very easy to understand.

A: So to this part, from a manager's point of view you think that this is something they ought to do.

B: *That's right. That is your job.*

A: So it does not need a manager to particularly regulate something ...

B: *Yes, there is no need to do that. All products manufactured on production line must be following SOPs. There is no doubt about it. It is just written well or badly. This is something that has to be done. If it is written badly, it just needs some amendments. There is no big deal. I think that SOP is very popular at present.*

A: Yes. You are right that this stuff has been so popular. However, SOP can be seen as a kind of result. Before a particular SOP comes out, it certainly has gone through very long and complicated processes as everyone has to work on it and dedicate to it. Otherwise ...

B: *It is normal. So in this case, it has to rely on production technique departments. It happens to ordinary companies. I said that I can transfer them to the production technique department. Their work over there is to write everything they have known down. They do not have to truly write it down. The secretary will do it for them. They just pin down the main points or draft. They do not have to do any production. They just need to reveal everything they know. That is it. If they really do not know how to reveal it, that is alright. They can check what have been revealed by other people and then give comments.*

A: If so, those SOPs or relevant stuff are something visual. For the processes involved in it, they have to be gone through step by step to achieve the last goal. If so, would you set up small targets for the processes? Or, you will ...

B: *They are not problems. They are not problems anymore.*

A: So you mean that you will still be doing it.

B: *That's right. Just write it down. It is only the matter of writing fast or slow. At last it can be imparted. It is just the matter of time. However, if they do not reveal it, other people will not know the secret of it. Other people may do it slowly. But when they are more familiar with it, they can do it faster. So the variation just relies on here. Or the difference relies on precision. Some people produce products for the use of three years but some may produce the same thing for the use of just one year. But they still are all qualified goods.*

A: As you said that some goods are produced for the use of three years but some are only for one year. However, they are all qualified.

B: *If they are all qualified, there is no difference.*

A: Even if they are all qualified and acceptable by the customer, we cannot deny that some producers are better than the others.

B: *It does not matter. It does not matter.*

A: So you think that it is alright.

B: *As long as they do not violate the standard. The standard can be loose or tight. As long as they are within the standard.*

A: So it is not saying that if someone performs extremely well, you will give them extra bonuses. You will not do that, will you?

B: *We have to concentrate on output and we have to be efficient. We have the pressure of quota per day. So we cannot let you manufacture the product slowly. Finished products are given to QC staffs to do examination to see whether they are qualified. We are not producing goods which are 100% perfect. We are producing goods which are acceptable by the customer. As long as they are qualified, they are quality goods.*

A: So you think that if certain level of standard can be achieved, that will be fine.

B: *Yes, that will be fine.*

A: Okay, if so ...

B: *As it is for mass production. So it must have certain level of standard. Of course, craftsmanship does matter in a sense. However, as long as they are not out of standard, that will be alright.*

A: As a manager, you therefore will not care about that whether someone performs extremely good or bad. You only pay attention to whether everybody has achieved certain level of standard.

B: *Quality emphasises consistency. You have to keep your eyes on consistency. You cannot allow someone who performs extremely good or bad. It has to be consistent and within the standard.*

A: From what we have talked about, I can see that your understanding of knowledge management is everything must become numbers and standardised. So you think that this can be seen as knowledge management. From my point of view, this is so-called tacit stuff changing to explicit stuff, something invisible changing to something visible. This is one kind. On the other hand, as this Description indicates, there is another kind which is hard to control. In your opinion, this is something belonging to the side of creativity or innovation. However, this stuff is existent after all.

B: *That's right.*

A: No matter what kind of industry, they are more or less existent ...

B: *Perhaps, there are different things in different industries ...*

A: That's right. So today I am interested in knowing that from your point of view as a leader, how do you look at these two things? Would you look at them differently? Do you have different attitudes towards them? Would you manage them differently?

B: *Of course, they will be different. To that kind, I have no idea about it. As I have never ever managed that part, so I do not know anything about it. I do not know whether there is any better way of managing it. I really have no idea about it. But in here, things are very easy and simple. As I mentioned, just get the SOP down well. To that kind, my understanding is you have to let them contact more knowledge and innovation from outside. Then, they can know what other people are doing and what the latest fashion is. You cannot innovate something which cannot be sold out. You have to produce something fashionable and sellable.*

A: Of course, every industry identifies things differently ...

B: *Yes, probably. Like manufacturing, it is quite simple to be honest.*

A: That is no matter what the situation might be, at last things have to be revealed.

B: *That's right. Every product has to be the same. It just needs to be copied.*

A: If certain kind of degree is achieved, it means that efficiency can then be enhanced.

B: *That's right.*

A: Afterwards, it is the issue of efficiency.

B: *It is the issue of doing fast or slow.*

A: Actually, as we have talked about different kinds of knowledge management, I am more interested in seeing how you manage these different kinds of knowledge. I tend to understand this part.

B: *If they are taught by spoken language, it is not the best way. To keep it, you must have written words. If you teach someone by spoken language, they may not be able to absorb 100% of it. Besides, if they leave, you have to do it again to someone else. So if everything is written, it will become very simple. Actually, for something which is on mass production, you can do it by reading manuals. The master does not have to be present and guiding something. It can be handed over to administrators or unit leaders on the site to do management.*

A: That is because in manufacturing goods have to be produced massively and normally.

B: *So you have to say that your research is about to focus on manufacturing or any kind of industry or not aiming at product. As a matter of fact, knowledge management covers a wide range of areas. Instead of aiming at product, some refer to data. There are lots of data. Data have to be transferred to information. So it involves in searching, searching something required. Having found something required, we have to transfer them into artificial intelligence. They are not existent before. What we have talked about is something existent and we want to put it on mass production. However, there are many things we do not have. They also are involved in knowledge management. So how do we manage them? How do we transfer something elsewhere to something we need? It also involves in knowledge management.*

A: In fact, from my perspective although we only talk about manufacturing, it involves in many kinds of knowledge communication and absorption.

B: *It covers a wide range of areas and it is very complicated.*

A: Yes, that's right.

B: *But like our kind, it is very simple to be honest since they are all set up.*

A: Even though they are all set up, to your company you still have to collect market information, judge it, absorb it and finally base on it to develop new products.

B: *It belongs to the development department which is different from production ...*

A: So to you as a production department, you are so simple, aren't you?

B: *That's right. Production is about conducting SOP well. It is about following it.*

A: So you think that different departments will have different situations.

B: *As it has to do with different people. We only manage operators. They are much simpler. Their work*

is very simple and it is about implementation in accordance with the SOP. However, if you are to manage those who do innovation work and are full of imagination, how are you going to manage them? It is much harder to manage them. How do you stimulate their creativity? For instance, for those who do programming, the management has to be quite different from the others. You must provide them with environment to learn.

A: To sum up, you mean that different departments will involve in different ...

B: *Management styles will be different. For my people, they only have to achieve certain level of standard. But for those people, they do things much of their own accord, have good backgrounds in education and want to get respected. So you cannot manage them by traditional way. They do not belong to that kind of management. You have to collect as much as information for their reference. Even, you have to send them abroad to see the world. They have to use their brains to do things and what they have down is priceless. You have no idea of when their output values will be revealed. I know that many big companies have R&D centres in which they have their own libraries, leisure centres and cafes for those who are seen as elites. They work in such environment. So the management means is really different.*

A: So it means that to different groups of people, management means will be different.

B: *Yes, that's right.*

A: Okay, I understand. Thanks very much.

INTERVIEW TRANSCRIPT – Socialisation 017

Note: "A" represents interviewer and "B" represents respondent.

A: Can you understand what this is all about?

B: *If knowledge needs to get enhanced in short period of time, it has to rely on experience sharing.*

A: Let me explain. My research is about knowledge management. To us, knowledge has two kinds, one is tacit and the other is explicit. Explicit one refers to those numbers, forms and something visual. Tacit one on the other hand is about experience. Having accumulated some experience, some skills will then be developed. You can regard them as a kind of knack. When people accumulate certain level of experience, they will be able to develop such kind of tacit or personal stuff. However, how does this kind of stuff transfer to other people and become their tacit knowledge? As it says here, apprenticeship is a typical example. Although there will have conversation between masters and apprentices, mostly through imitation, practice, learning or even doing one thing jointly like operating machines, apprentices will be catching the knack of doing it after a while. Once they catch it and keep practicing it for a period of time, we can say that to a certain extent tacit knowledge has been transferred to them. Given that, I am interested in knowing that for you as a manager or leader, how do you look at this thing? How do you manage this thing? How do you manage such invisible stuff? That is to say, to bring positive help and influence to this thing what your leadership style should be.

B: *We have never talked about this formally. Regarding to so-called experience impartation, in fact we have many mechanisms designed for this kind of thing. For instance, in our daily morning meetings, the front-line supervisors will report everything happened in the previous day, whatever referring to production or other stuffs. In this occasion, managers in every unit will show up and they will base on their specialities to bring up their opinions about everything. If there are no clear conclusions at last, the factory director will make the final decision. This meeting is held everyday. This is the current method we are using. Of course, we have other regular and irregular meetings through which experience can be imparted by making discussions. In fact, we have this kind of thing. We have been kept on stimulating such energy.*

A: *If so, you mean that through the design of management system or administrative design, such as morning meeting, they can share their experience with other people. From what I heard, I think that it belongs much to revealing your own stuff through that kind of occasion. In fact, it is a kind of changing tacit to explicit. It is brought into the open. I write it down or speak it out and let everybody know. This is about changing tacit to explicit. In this case, however, it refers to those who have dozens of years of experience and may not be able to express everything they know clearly by spoken language. For them, they are really good at operating machines. When they operate the machine, they probably will reveal the essence of their experience invisibly. So they may not be able to reveal so much by spoken language in the occasion like morning meeting. I think that this situation is likely to happen in a company. So from a company point of view, it may need to introduce the idea of apprenticeship so that invisible stuff can be released, handed down. So if this is the case, how should you do to stimulate masters having willingness to teach and apprentices having willingness to learn? That is to say, what is your leadership means or tools? What kind of tool would you use to create such relationship or atmosphere?*

B: *I apply this to our work. I do not know how to say ... Probably for the way of masters leading apprentices ... For our newcomers, we also use this way. Whatever for the basic level operation or front-line supervisors, we have so-called the stage of practical training in the beginning. That is, someone will guide them. After going through this stage, they will become formal workers in every unit. In the unit, there is a unit supervisor and someone who is insufficient in experience. As you said that, somebody may not be good at the expression ability so that they are unable to reveal their original meaning. For this case, in fact we have another design of system. For instance, everyone has to make a working report, no matter how senior or junior they are in terms of experience. In the report, they have to write everything they know and their opinions about it down. They have to do it. This can also be seen as a way of stimulating their potential. For instance, our way of doing is like this. There are many sections and units in the factory. Every section has a section manager and every unit has a unit supervisor. We therefore can regard those managers and supervisors as masters. And, our factory director is a manager at higher level. For every section or unit, our factory director will make a request and give them assignments. Once section managers or unit supervisors get the assignment, they will deploy it down to their members spontaneously. The relation between masters and*

apprentices will appear in a sense. So when those who have less experience do not know how to make a working report or have bottleneck, they can ask their managers or supervisors and their bosses will tell them how to do it. It can then be seen as a kind of experience impartation. The impartation will appear inevitably in this case. This is my opinion about this.

A: So you think that to this kind of invisible stuff impartation, your way of doing will be, for instance, designing visible systems or giving them objectives to accomplish. You think that in the process of accomplishing the objective, the so-called invisible experience or knowledge will then be released.

B: *Yes, my opinion is like this.*

A: So it means that if you have objectives for them, you will also introduce performance appraisal to them, won't you? You will introduce this kind of thing to measure and evaluate every stage, won't you? Can I say that you will bring this idea to them?

B: *That's right. We have something like performance appraisal. However, we haven't made it obviously quantified. We are unable to quantify it apparently. We only can see everyone's responsibility of ... For instance, we divide the whole production area into several sections. Each staff has to be in charge of each section. So we only see whether they really take good care of their territories. For instance, we will see whether their production lines are working well, the maintenance frequency of the devices is reduced and the overall quality is enhanced. We only examine these aspects. As a whole, we do ... not adopt the way of appraising in production line that today you have to accomplish fifty units and tomorrow you have to accomplish fifty-five units. We will not examine them by figures. We use those dimensions that have just mentioned to examine their performance. Besides, we will also examine their everyday performance and working reports to see whether they have come out better ideas.*

A: So even though you do not have an obvious performance appraisal standard, you still have this kind of concept introduced to manage and control them.

B: *Of course, you cannot totally say none. If something can be quantified, we will still be quantifying them. We have run a kind of system called proposal improvement. In this system, we will give them objectives. That is, every member in the factory has to have at least one case of proposal improvement every month. So how do we prompt them to do so? We assign one leader in each section or unit to be in charge of ten members so that this team must have at least ten cases of proposal improvement every month. This can be seen as, on the one hand, the performance of that leader and, on the other hand, the way of stimulating those members' potential.*

A: So you mean that ... although it involves in much invisible impartation of experience, the method you adopt to manage it is visible. For instance, you will set up an objective for them to accomplish. In the process of accomplishing the target, this kind of thing will appear accordingly. So it means that you will design such objective or arrangement of organisation. For instance, you said that you have leaders at the top, leaders at the middle and leaders at the bottom. As you said that, they can become masters in a sense and their members can therefore become their apprentices. So between them, there can have a relationship of apprenticeship so that they can learn each other. Therefore, from what I

heard, it seems to me that to this part you will be using much systematic way to manage this kind of situation. Regardless of what we have been discussed, another question I would like to ask is from your experience or in your opinion what you think knowledge management is. As this is the area I am studying, so I just want to know how you look at knowledge management from your perspective.

B: *Knowledge management.*

A: That's right. What do you think of knowledge management in general? Probably in your industry or from what you have contacted ...

B: *I can roughly say this way that for instance, collecting relevant knowledge and then making it becomes a database. Take our industry as an example, I collect relevant papers, reports and information from our own unit and the outside and make it become a database. Those who are junior and have no relevant experience can obtain something they want to know from this database. I do not know whether it can be seen as knowledge management ... since I have not studied this before.*

A: In fact, what you just said can be seen as knowledge management. With my sudden question of knowledge management, you probably may not be able to say many things about it. But in fact, what you just said is about knowledge management. You said that you should put the information of the industry in order and make them become a database. In my opinion about this part, I think it is about changing from explicit knowledge into another kind of explicit knowledge. What does it mean by changing explicit knowledge into another kind of explicit knowledge? Information related to the industry may be collected from the website, written by everyone or open to the public. Probably, they are well written and can be seen by everyone. So the first action is to collect it. After getting collected, it needs to be selected and put in order. Finally, it is put in the database. Through the process of editing and categorising by computers, it becomes another kind of explicit stuff. It is still explicit and everyone can see it. So it involves in the process of editing and categorising by computers or even by hands. In my opinion, this is a process of changing from explicit to another explicit. What you just mentioned refers to this kind of process. In the second half, you said that having had this database, new or ordinary colleagues can have a look at it and absorb some new things from it. What does it mean? It means that everyone can go into the database and learn or absorb what they want to know. However, everyone learn and absorb different things. Different people at different levels see things differently. As reading a book which contains objective facts, ten people may have ten different opinions about the book. They interpret and absorb different things. So you said that having had such database, everyone can enter into it and absorb what they want to absorb. In my understanding, this is the process of changing from explicit stuff into tacit one, changing into everyone's tacit stuff even if everyone's tacit stuff is different as it is absorbed and internalised by everyone. Although you only said few sentences about your opinion of knowledge management, in fact they involve in two stages and they are all about knowledge management. Perhaps, to me as a researcher, my job is to look at them separately to see what is tacit stuff as well as what is explicit stuff. However, to you as a manager in the industry, you may not have time to do this thinking or even this categorisation. In fact, when I heard what you said, I would think that it involves in two processes. So what you just said

about knowledge management in fact refers to those two processes. However, what we discussed in the beginning is another process regarding to the invisible communication of tacit stuff. That is another process, isn't it? From my point of view, I see that those three processes can be existent. Given that, for you as a manager you may therefore realise that everyone's work to a certain extent is relevant to the knowledge conversion process. Once knowledge gets converted, it can then be activated otherwise knowledge will always be static. If the database is well established but no one is interested in it, the information in it is valueless. So only knowledge gets converted, it can then get regenerated. So what I tend to see is from your point of view as a manager, how do you look at these different processes? If you think that these conversion processes are helpful to the overall accumulation of knowledge in the company, how do you manage these processes? How do you control these processes? I attempt to know that as these conversion processes have different characters, would you have different management means for them. Would you manage them differently? I want to know from this interview and the later questionnaire that whether you have different management means towards these different processes.

***B:** Having heard what you just said, I roughly have an idea of the meanings of tacitness and explicitness. For instance, first I can try to reveal everyone's tacit knowledge. After being collected, it then becomes explicit. Finally, explicit knowledge can be communicated and absorbed by everyone and become their tacit knowledge as everyone has different ability of absorption ...*

***A:** That's right. Through this process, knowledge can then be kept on increasing and communicating. In every moment, everyone is absorbing new knowledge or idea. So in the position of an ordinary organisation, it certainly hopes that its staffs can reveal as much as what they have in the head whatever by writing, speaking or even recording. Once being revealed, it becomes public goods. Everyone will then know that a certain person has particular ideas. This is my opinion about knowledge management. Of course, I can also understand that for some companies, what they think of knowledge management is about the implementation of a set of information system or database. I think that it is a part of knowledge management. However, I think that the most important thing is about whether every staff including managers is willing to do the action of sharing things. Some people may say that why they have to do that. So what I am examining is from the manager's angle to look at this thing. How do you manage this part? Besides, I want to know how you look at knowledge management. This is what I am going to ask today. So, do you think that there is any difference between them? As a manager or a leader, having known these different characters, do you think that you should manage them differently? What is your opinion about this? In fact, in the process of changing one kind of knowledge into another, there are many stages involved in it. For instance, you may need to hold meeting, do recording or even build up database. This is a very complicated process and it is done by human being. It is human being to do accumulation and conversion. So I want to know how you manage those who are involved in the process. Those people may be reluctant or unwilling to do this as it will increase their work loading. However, from your point of view, you certainly believe that it is necessary to do that. So there is a gap between these two parties. So how do*

you manage them?

B: *In general, we will use some ... you can regard it as a request. For instance, the headquarters will make a request that which department has to come out a certain theme or idea every quarter or every six months. This way of doing is to let them come out with some knowledge. Actually, the headquarters has such way of doing. For little departments like us, we only rely on current systems like meetings or reports. We use the current systems to collect some information. At present, this is our way of doing.*

A: *If so, it means that the way you will be using to manage this situation is to set up some rules.*

B: *Partly. On the other hand, for instance, our company will make a request every year that each department has to write some projects. The project is all about how to make improvement in quality, production and so on. It is open to every department to write. There is no relevant regulation for this kind of project. So it is the time for every department to bring their potential into full play. If certain departments are really keen on this, they will try to produce as much as projects. This bottom-up way of doing is quite different from the top-down one. For the top-down one, the top management will regulate everything, but for the bottom-up one, every department can perform as much as their potential. So we have these two kinds of ways.*

A: *So there is no absolute way. You will use both ways.*

B: *If they are totally autonomous, sometimes there will have no efficiency whilst in operation. So I think that you still have to give them some pressure. This is my opinion.*

A: *So I can say that to these different situations there should have no absolute ways. Okay, I see. Thank you very much.*

INTERVIEW TRANSCRIPT – Socialisation 018

Note: "A" represents interviewer and "B" represents respondent.

B: *In fact, I think that tacit knowledge is different from what we generally talk about as fixed working norm and documents that can be checked and seen. So it is the knowledge which is owned privately and is not proclaimed in writing. So it means that tacit knowledge can be seen as personal property. In general, it is like this thing. However, in the position of a company, they think that this personal property is resulted from the company's investment in someone. If someone does not have this opportunity given by the company, he/she will not have such property. So in theory, it has to be contributed to the company. From the company's point of view, they think that they pay someone to do something and then they can possess such kind of knowledge. Otherwise, if they do not recruit someone to do that, they will not have such opportunity. However, how can you make them totally willing to take it out? Although in the company's position, they think that it has to be taken out by those who own it, if they really do not want to contribute it to the company, what can you do? I think you cannot do anything about it. It is in their heads. You cannot just cut open their heads and take it. They have to write it down or speak it out. How can they be totally willing to do that? It involves in*

many aspects. First, someone does not want to reveal it since they are afraid of losing their jobs. They think that if they are the one who knows how to do particular things, other people will not be able to replace them. They will be secure from losing the job. They can stay as long as they want. What they have can guarantee them to stay as long as they want. This is the first practical problem. In addition to protecting themselves, the second reason refers to their attitude. The first one is about protecting themselves and the second one is about the attitude of not trusting anybody around them. They think that if someone is not really good to them, why should they give it to them? This is another reason of not willing to contribute it to the company. If people around them are really kind to them or have good relationship with them privately, they probably are more willing to reveal it. If not, they will not reveal it voluntarily. Even if you ask them about it, they will not tell you. This is a practical problem. So as a manager, how to dig it out? It has to pay much attention to it.

A: So you think ...

B: First, I think that ... there are many ... In normal situations of the company ... It is like what we have emergency drill today. I think it is quite nice. For instance, emergency drill is for something which is seldom happened everyday. Or it is for something which was happened before but has little probability to happen in the future. However, having little probability to happen in the future does not mean that it will not happen. So if you have gone through emergency drill and it happens one day, you will know how to deal with it. The reason of holding this emergency drill is to create an opportunity for everybody's knowledge to communicate and to work out how to deal with particular cases. In addition to this factory, we also have factories in Mi-Liao and American. Next week, we will hold a technology interchange meeting for these three factories. To discuss with other people, you have to share your things with other people. You cannot seal your things off anymore. You have to display what you have. So it has to through some normal means to let them expose their stuff. Regarding to other methods, for instance, if something happened to someone, they have to handle it, report it and file it as soon as they can. If other people see the report later, they will know what is going on and how to deal with it. So if something happened, we have to write relevant reports to impart the experience. Or we can communicate the experience to everyone through the opportunities of technology interchange or on-job training. Through such channels, experience can be kept passing on. These are normal ways for them to reveal their stuff. If they still decide not to reveal it, you really cannot do anything about it. I think there is another way. I think some people or most people have religious belief. We can use such power to change people's attitudes. You can see many examples in our society. Religion is so powerful to make people change completely. It can change a person's attitude and behaviour totally. If you can lead your group with more kindness and care, like the atmosphere in religious groups, your members will be willing to do anything, including revealing what you want them to reveal. I think this is another way of doing it. I think religious power is quite enormous. This is the method which you can use to stimulate them and it is apart from the normal ways. In fact, there is another ... rewarding is another way. However, unless the reward is big enough to cover their fear of losing their job when they reveal it, otherwise it has no effect on influencing them. For instance, if someone thinks that their core stuff

can let them stay until they are retired, your reward has to cover them until they leave otherwise they may decide not to release it. So the problem is can your reward be so big? I think it is not possible.

A: So in this aspect, you just mentioned that there are two kinds of methods, one is much formal and the other is much informal. In the formal side, it is through the design of some systems ...

B: Yes, that's right.

A: For instance, like proposal system. It is the system designed to take place every month or regularly. Of course, rewarding systems can be introduced into it. What you are doing is you try to use this visible design to induce something invisible. However, the problem is things may not be as perfect as you think. They may ...

B: So as I said that there must have two channels. One is formal and it refers to what we called as invisibility and visibility. It is like the result we see is visible. Something visible means that how much money I can get or how many things I can calculate. However, there is also a result which is invisible. What is the invisible result? It is invisible because you cannot see it. It is like the tacitness you mentioned. The invisible result is the feeling or emotion between those who are involved. After knowing each other for a while, it will generate something which is helpful to people's interaction and to the increase of everyone's working abilities. Although it is something which cannot be seen, it really brings help. I hope that I can use this invisible thing to increase the employee's loyalty to the department, manager or even company. If they have such loyalty, they will be more willing to share their stuff with other people. I think that religion always has great power. So when people are gathered together for meeting, chatting or something like that, you can introduce such idea into them. Then, you can gradually change their attitudes and let them be more willing to contribute it to everybody.

A: If so, you mention something formal as well as informal.

B: You have to paint a picture with two brushes at the same time.

A: That's right. Painting a picture with two brushes at the same time. To this situation, which way you think will be more effective?

B: I think both are needed.

A: Really, there is no which one is more ...

B: For something visible ... as you said that if there is no something invisible to help ... they may decide not to reveal it. Unless the visible thing is big enough to cover their potential risk, otherwise ...

A: To cover it totally.

B: That's right. If this is the case, they will be willing to contribute everything. For instance, if you can provide them with twenty million dollars, I think they will be quite happy to give everything to you. However, for the company, is it possible to do that? Is the boss willing to give them that amount of money? I do not think so. Besides, if the boss really gives them twenty million dollars for what they have, they may take the money and leave immediately. So for the boss, for them and for those who attempt to get tacit knowledge, invisible temptation or rewards may not be the best way to adopt. So I think that two ways, visible and invisible, must be used simultaneously. Consider taking medicine, two persons suffer from the same disease so they take the same medicine. However, one is cured but the

other is not. I think that the problem relies on the mentality of the person who is not cured. Without the mentality being released, it will give a discount of the effect of the medicine that person took. So besides using visible method to cure them, you also have to pay attention to their mental part.

A: So actually you do not think that which one is better than the other ...

B: *I think you have to use both. You can see that in history autocratic governance has finally failed. They must be overthrown at last. It works in short-term, but in long-term they must be removed. If you use that kind of method to rule people, they must be recalcitrant and finally they will overthrow it. So it is not possible to use high pressure to control them ... Like many emperors, they introduced religion into their countries. This way of doing was about to change the atmosphere of their societies. Besides, it was also helpful to the stability of their governance. So I think that these two kinds of methods must be carried out simultaneously.*

A: So to this situation of changing from tacit into another tacit or being influenced imperceptibly, you think that in addition to using visible systems to stimulate them, there must have invisible influence to ...

B: *So I think that if you only concentrate on using visible systems and ignore the effect by invisible means, their attitudes will not change so that they will not reveal it. However, if you only focus on invisible means and do not provide them with visible channels to contribute it, they may have no idea of where to share it with the others. You cannot use either of them. You have to use both of them.*

A: Okay. Now, we disregard what we have been discussed. As my research is about knowledge management, so what do you think of knowledge management? In your opinion or from your experience, what is knowledge management?

B: *We have done a lot of knowledge management in our company. We have many knowledge database systems. Knowledge management is the same as what I just mentioned. It is like what I said as visible channels. How do you collect everyone's experience? How do you put everyone's experience into a place in which everyone can go there to learn, check and absorb things? How to build up knowledge database? How to get everyone's experience? It refers to what we just talked about as visible channels. We are about to use these ways to make knowledge ... Otherwise, if something happened today, everybody may still be able to remember it. How about after ten or twenty days? Nobody will remember what happened today. Human being's memory is limited. So we have to rely on something written and recorded. Therefore, how to put information into, for instance, computers? How to make electronic documents? How to collect this kind of stuff? I think they are very important and the management involved in it is quite crucial.*

A: Based on what you just said, I can therefore identify two processes. One refers to what you talked about as getting everyone's experience out and then using it to build up some systems or database.

B: *That's right. We base on this to hold some regular training courses. That is everyone comes together to study previous experience. This way of doing is to reinforce their own image. So this kind of training is about to build up knowledge database. Alternatively, they can write some reports regularly. This can make them do some brainstorming. You can give them a subject to study. In fact,*

there are many ways.

A: So what you have talked about involves in many different knowledge conversions. One of them refers to as you said of writing everyone's experience down, making it become public whatever through paper, photo or anything else. This is about tacit changing to explicit.

B: *That's right.*

A: Simply speaking, it is about this situation. Once becoming public or explicit, everyone can see it. On the other hand, you said that you can hold a workshop for them to discuss and probably they can learn something from it. So what is this? In my opinion, it is the process of changing from explicit into tacit. It is internalised by everyone. Although information is quite public, perhaps different people will read it differently and at last it becomes people's knowledge. So knowledge circulates. I think this is so-called knowledge management. From what you just mentioned, at least it involves in two knowledge processes of tacit to explicit and explicit to tacit. My research is about to understand that having understood these different situations, for you as a manager or a leader, how do you manage them? How do you manage these different situations?

B: *In fact, the important thing should be after explicit stuff is changed into tacit stuff. They can process tacit stuff and generate more explicit stuff. So you have to reward them. Besides rewarding them, you can also promote them. So if they perform well and reveal much stuff, you can encourage them by increasing their salaries or promoting them. Whatever tacit to explicit or explicit to tacit, it applies to such kind of method.*

A: So it seems to you that those are the methods you will use mostly.

B: *In general, what is the tempting stuff for human being? Regardless of tacit methods, what is the explicit tempting stuff for human being? Fortune and sex. However, sex is not appropriate in this case. Normally, we do not use that kind of method. Besides that, what has been remained? Fortune. That's right. Fortune. Human being always loves fortune.*

A: So can I say that if you look at those different situations, those different conversions, your management means will be the same? It is because you understand what human being really needs.

B: *As a matter of fact, I do not like this method very much. I do like ... I keep emphasising that tacit power must be greater than this.*

A: Tacit power.

B: *It is heart. How to change their thought and let them be willing to contribute. This kind of power must be greater than that.*

A: Greater than visible one?

B: *That's right.*

A: Alright. So you think that this invisible method is the long-term method. If so, do you think that it is particularly effective to which situation?

B: *It works for any kind of situation.*

A: Any kind?

B: *Absolutely.*

A: So you think that it is workable in any kind of situation.

B: *That's right.*

A: Okay, I understand. In fact, what I am studying is quite simple that I just want to know whether you will have different management means towards these different situations. So as you said that you will not use different methods for different situations.

B: *For visible methods, they are like what we have been discussed. Those methods are fixed. But for invisible one, like religion, you cannot imagine its potential effect on human being.*

A: So you think that invisible methods will be elaborating more.

B: *Yes, that's right. But it is not easy.*

A: I understand.

B: *If you use visible methods like increasing their salaries, they may feel satisfied with it today, but perhaps not tomorrow. By tomorrow, they may want more.*

A: So you think that it is not a good idea in the long run.

B: *It is also a method and it is still needed.*

A: Of course. It is just that you prefer much invisible methods.

B: *Uh-huh.*

A: Alright. Thanks very much.

INTERVIEW TRANSCRIPT – Socialisation 019

Note: "A" represents interviewer and "B" represents respondent.

B: *I think that it is not necessary to adopt traditional way of education. If someone really has this kind of ability, this kind of tacit ... This is about my understanding of this.*

A: Okay, let me explain. My research is about knowledge management. To us, we divide general knowledge into two kinds as tacit knowledge and explicit knowledge. Explicit one is like figure and forms, which can be seen by every one of us.

B: *That's right. We can see them.*

A: However, about tacit knowledge, in general it is like experience. If you have accumulated years of experience, you will be generating so-called knack or unique technique. It is probably known by only you. Or you can say that everyone's knack is quite different from the others. So this kind of tacit stuff is like people's experience accumulated over years. How does this tacit stuff transfer into another person and become that person's tacit knowledge? How does it transfer? As it says that, apprenticeship is a typical way. Through observation, imitation and practice, apprentices follow everything done by their masters. As time goes by, apprentices will learn something. What does it mean? It means that the masters' tacit stuff has passed on to their apprentices. It belongs to the communication of tacit knowledge. It is true that it is much invisible, but it is existent, isn't it? This is what the Description is talking about. This situation or phenomenon is existent. Given that, what I want to know is for you as

a manager or a leader, how do you manage this thing? How do you manage the impartation of this invisible stuff? What is your leadership style? How do you manage this situation?

B: *Having listened to what you just said, I give you an example. One time, I was on a business trip to Japan. When I was back, I reported to our Chairman. As I went to Japan with a manager in another department, so he also had to report to our Chairman. You know what. In his department, all the lathes are operated by experienced masters. The experienced masters know anything about lathe tools and how to do lathing. They conceal everything they know. We have a similar situation. In our department, the crucial work is to balance pumps. How to do it? In previous times, when we had no measuring tools, we had to rely on our masters. But now, we are thinking about how to make the masters' ... We have to let them be willing to reveal it. In the past, our masters could easily make the pump balanced with little efforts. No one understood how they did it. How do you make them ... They are so afraid of their knowledge being learned. So we give them a piece of paper to write everything they know down. We even design a form for them to fill in. After they fill in the form, we will get the information we want. Do not ask them directly why. Just give them a piece of paper and they will write everything down. All you have to do is to collect this information. Then, you can use this information to build up a computer model. After the computer model is established, everything becomes much easier. Having had the computer model, newcomers can do better than the masters. At present, our largest machine is operated by young rather than old people. In the past, impartation had to be done slowly and people had to be taught step by step. But now, it is all changed. So I think that you cannot ask them directly. You must try to work out a way through which you can draw something from them. Do not be so direct to ... You have to use some techniques. The best idea is to give them a piece of paper or form to fill out.*

A: So you will use this method to want them to write everything down. You hope that through this method they will be revealing everything they know. However, there are two possible situations. One is they only reveal parts of what they know. The other is although they are so willing to reveal what they know, having had dozens of years of experience, they probably are so good at using their hands to operate machines rather than to write manuals ...

B: *It does not matter. It must be going through the stage of processing. Usually, masters do not have time to do processing, they just rely on their ... So the easiest way is I want the masters to write some points down. I only want the essence. Based on it, I can generate SOPs. So I will tell them to record everything. Having had the record, I can do some statistics. After doing the statistics, I can get some general rules. If I have the general rules, I can do things much easier.*

A: So the way you will be using is much specific that you will give them some forms to fill in. The way of doing is about trying to release the essence they have. Once you get the essence, the subsequent stuff will be easy to deal with.

B: *Subsequently, we can use the essence to produce SOPs.*

A: Having heard of what you said, in my opinion, in fact you are talking about changing invisible stuff as experience or something in masters' heads into visible stuff. You want them to write it down.

You want them to reveal it. After it is written down or revealed, you can use it to develop standard operating procedures. So this is about tacit stuff changing to explicit stuff. If so, do you think that this kind of situation, tacit changing to tacit, does not exist? Or ... how do you look at this thing?

B: *I think that sooner or later tacit stuff will be changed to explicit stuff as long as you have the heart to ...*

A: So you think that in reality this kind of situation is less and less likely to happen.

B: *That's right. Tacit stuff is about experience. Once we keep doing recording and statistics, I think sooner or later it can be changed to ...*

A: In fact, the point relies on the way you are using. How to design a method that can change something from invisible to visible? How can you design a method that can quantify things?

Nevertheless, for some industries like handicrafts or sculpture, perhaps it is very difficult to release this kind of skill and change it into numbers for statistics. In this case, it still has to depend on certain relationship between people to observe, imitate and practice that kind of skill. Under these circumstances, how do you manage this situation? How do you look at such thing?

B: *If it is about art, I think that ... in the beginning, it needs some skills. But later, it will be much involving in feeling rather than skill. In fact, art is about people's feeling. Different people will have different perspectives. So I think that art will be different from those techniques involved in engineering. There may have some differences.*

A: If so, about this kind of invisible stuff, you think that it is about an issue of personal feeling. Given that, if you see this from a higher position, you will not step in this, won't you? You will not influence the way or situation they are learning each other as you think that it belongs to the problem of personal feeling or ability. So you will have a much open attitude to look at this thing.

B: *Yes, that's right.*

A: How about something you just mentioned of transferring or releasing experience into written words? To that kind of thing, what would be your attitude? How do you control this process? As a manager, how do you control this process to make them more willing to reveal the stuff systematically?

B: *In my experience, I will give them a problem to solve after knowing everyone's specialties. I just examine the result. I will let everyone elaborate their specialties. I just acquire the final result.*

A: So it means that to this part you will be much using a systematic design to plan for the target.

B: *That's right. My target has to be like this. Why it has to be like this? Perhaps, it is given by my boss or top management. So I will use these people to ...*

A: So this is your attitude towards this kind of situation. Therefore, if I make a comparison between these two kinds of situations, I can say that your attitudes towards these two situations are different, can't I? That is to say, as a manager or leader the way you use to control or manage these two things will be different. Can I say so?

B: *I do not quite understand what you mean by this.*

A: In this side, it is about transferring something tacit into written words. To succeed, it probably

needs someone to get involved in this process. This is for this kind of situation. In another side, as we said that it belongs to much tacit stuff or the problem of personal intelligence. To a certain extent, you still have to stimulate it or create an environment for it. If so, will your means to control or manage these two situations be different?

B: *That's right.*

A: How are they different?

B: *I back to the lathe example. In fact, the lathe master is quite good actually at the skill of lathing. But the time is progressing. The machine is becoming more and more advanced. However, before that, we still have to depend on the master to do impartation. Mostly, they have high pay and some of them have bad tempers. As a manager, I will communicate with the master and try to work out a way to induce them.*

A: I am doing something about knowledge management. It is like what we have discussed. In industry, some of the companies think that it is about transferring as much as the employee's tacit stuff into explicit. They think that this is the most important thing to do. Otherwise, if everyone hides their own stuff in the head, no one will know it. So this is a kind of knowledge communication. There is another kind like apprenticeship even if in this modern society it is less and less popular. As the technology becomes more and more advanced, we can use much sophisticated manner to transfer what we want to transfer. So we may not need to assign an apprentice to the master for five or even ten years of apprenticeship. However, in other industries this kind of model is still existent. This kind of situation is still existent. So I want to understand that in these different knowledge conversion situations, what kind of role you should play as a manager. To make different knowledge conversions working smoothly and efficiently, what are you going to do? How should you lead them?

B: *Once I used a way. I sent my people to other factories since they had their own training programmes even if we all belonged to the same company. I wanted them to compare and compete with other people. I will use this way. I will also send my masters to other factories. For the young staffs, if they really learn something from this opportunity, I can feel it. So I will give them more opportunities to learn.*

A: So you mean that you will design some competition for them.

B: *That's right.*

A: To let this situation develop.

B: *In fact, as the machine becomes more and more advanced, the master's tacit stuff will become less and less meaningful.*

A: So you will be much using visible systems to manage such situation. Okay, I see. Thank you very much.

INTERVIEW TRANSCRIPT – Socialisation 020

Note: "A" represents interviewer and "B" represents respondent.

A: After you read it, do you roughly have an idea of what this is talking about? Can you roughly know what it is describing?

B: *Yes, I know.*

A: OK. What I am doing is about knowledge management. Have you heard of this stuff knowledge management?

B: *You are talking about knowledge management. I learned about it in the school.*

A: Here, we would talk about tacit knowledge. In knowledge management, we divide knowledge into tacit and explicit.

B: *That's right.*

A: About this tacit part, it is like the stuff of so-called invisible experience or something that is hard to describe. Here, it says that someone's tacit knowledge can become another person's tacit knowledge. How does it happen? As it says here that it is through observation, imitation and practice. An obvious example is apprenticeship through which some stuff is transmitted from one person to another one. Roughly, this is what the Description is talking about. Today, what I want to know from you is as a manager how do you look at such thing? How do you manage this thing? How do you manage this process of knowledge conversion? How to make the whole system ... Like apprenticeship, how can you make the process happen smoothly? What is your leadership style?

B: *About what you say as the impartation of experience, technique or knowledge, I comprehend it since I started from the basic level and I have been through it. However, about this thing, we all know that in a Chinese society from ancient times to the present masters always hide something. Sometimes, for masters something is too hard to teach. But, there are other cases that masters are not willing to teach. They want to hold back a trick or two. This situation also happens.*

A: You are right.

B: *In general, what you can learn is surface. In fact, what you can learn or see has no techniques involved in it. The real know-how is something that cannot be seen obviously and easily.*

A: So, you mean that whether those who have tacit stuff are willing to share involves in two aspects. The first one is the problem of their wish.

B: *That's right.*

A: Are they really hiding something? There are two concerns. One refers to their wish to hide purposely. The other is though they are willing to share they are struggled with it since for those who have ten years or more experience they are probably good at operating machines rather than writing manuals. It is hard for them to write down or speak out anything about the machine, but they can operate it very well. Despite the case that some of them hide something on purpose, most of them still attempt to do impartation. If so, from your point of view as a manager the only thing you can do is to use apprenticeship to extract something hard to express from their heads. So, how do you do it? How do you as a manager create such environment or you can say atmosphere to let tacit thing ...

B: *In our company, we set up the system of ISO9000 about three or four years ago. Through this, all working rules and procedures are documented. The problem of impartation is our initial concern.*

Whilst any experienced employee leaves, we do not have to worry about whether the substitutes can handle the work or not since all working procedures are well documented. We, however, can only control 60% of it, 70% at most. So, where is the rest of 30%? Are they gone? In fact, many things are unable to be documented. They can only be spoken. Or, they can only be expressed by some kinds of concepts. In addition, another thing we can do is to keep or control the experienced employees as much as we can.

A: Control them? What kind of management means or tools you would use to control these people?

B: *It is a fact that those who hold major techniques are supervisors. So, basically if their recognition of this company is still strong or they are satisfied with their pay, they would not leave unless there is bigger incentive from outside. Besides, those who possess techniques have spent years in this company and get aged. It is more difficult for them to get a new job somewhere else. On the other hand, they have got used to this environment. In this company, they have subordinates who can share in things. All they have to do it to command their people. They just tell their people how to do things. They do not have to do things by themselves. Yet, if they leave the company, they probably have to start all over again. So, basically they would think that it is still nice to stay here. For the techniques they have, they would be imparted to other employees who have only three or five years of experience. Another case may be that they are replaced by other techniques developed by more intelligent employees. Under these circumstances, we would face the same problem. If the new techniques known by a person are imparted to some other people, those people may at most only get 60% or 70% of its essence.*

A: You just said that for some people they probably develop certain techniques which are unique and best known by them. First, they certainly are supervisors. Second, they probably have spent dozens of years in this company so that they would not leave unless having strong incentive from outside as you said. Nevertheless, the problem is even they do not leave, they get retired one day.

B: *Yes, they would get retired.*

A: Actually, from you or the company's point of view, you surely hope that something they possess as those 30% to 40% tacit stuff can gradually be discharged. If so, how do you let this stuff ...

B: *In fact, you do not have to worry about it. When they are about to retire, their techniques probably have gone through three generations and already been replaced by new techniques. Their techniques can no longer be called "techniques". They do things quicker probably by using the techniques. But, is it really good? Perhaps, much easier and simpler ways are found. This is another stage. Of course, techniques can be imparted, but they cannot last for ten or even hundred years. They probably have to be replaced after five or ten years. So, someone may keep certain techniques for five years. During this period, they know how to do things quickly and safely. Things, however, are kept ongoing. New techniques may achieve the same or even better quality as the old one did. They may use different, but faster, simpler and cost-effective routes.*

A: If so, does it mean that from your point of view as a manager, you would not pay much attention to such conversion situation? Alternatively, you look at this thing passively. You would not actively create an environment in which this thing can be imparted. Perhaps, some people can do things

quickly and safely through something called trick or knack. Yet, the problem is such thing will not last forever. New techniques are coming in by newcomers. Other people are developing their own stuff.

B: *That's right.*

A: So, you think that under these circumstances you as a manager would not worry too much about it.

B: *That's right. Basically, we only want finished products. Regarding how they are done, I think there are many choices to make. For these supervisors, they can manufacture the same product with the first-, second- or latest-generation techniques. The only difference is in costs, time and quality. We just believe that new techniques must be better than the old one. These supervisors probably know what I want. But for newcomers, they have no idea of what you want. Old employees and supervisors know what I want. No matter what kind of method they use, they have to get what I want. Actually, if a company only concerns about some employees who possess certain knowledge, this company is at risk since whilst they leave the company it collapses.*

A: So, from your point of view, simply speaking, you do not think that it is an issue, do you?

B: *It is an issue, but its injury to the company is not as big as we imagine unless the business you are talking about is the only kind in the world.*

A: It seems rare.

B: *Yes, it is rare.*

A: So, what you mean by having no great, instant influence is you think that it would not greatly affect a company's operation condition even if you disregard or do not pay attention to it. That is to say, to the impartation of such tacit stuff you would not regard it as a serious issue.

B: *We consider it as an issue since techniques still need to be passed on. Though they are probably old techniques or something, we need their concepts. If you lose such concepts, where can you find such appropriate techniques to accomplish our products?*

A: So, you mean that in fact the key point is about the concept behind it. It is the invisible concept that needs to be communicated. Accordingly, how can you make such concept to ...

B: *We are in a traditional manufacturing industry. All the visual parts of a machine can certainly be made. The only thing you cannot see is the control of electronics. This is the only thing that is hard to handle.*

A: Does something that is hard to control involve in certain people's tacit knowledge part?

B: *You are right.*

A: So, how to manage this ...

B: *In roughly ten or fifteen years ago, this kind of knowledge was probably specialised. But, right now, under the circumstances that everything is automated and controlled by computers, for me it is hard to imagine that there still has something that cannot be dealt with by automation control. In this industry, we have several competitors all over the world. We all can use similar technologies to produce machines, but the only difference is how to make the best one. This is where the know-how is. After investing so many years, we have become a pioneer in this industry. We only let few people know where the key know-how is. They of course are top managers. They know how to make things perfectly.*

To be honest, the key stuff is not documented. Instead, it is in these people's heads.

A: OK. If so, the point is it has to be succeeded or passed on generation by generation.

B: Right.

A: So, how to ...

B: No matter how it is succeeded or took over from someone, it has to do with the company's policy.

First, this stuff is hard to be understood by anyone. On the other hand, the company would not let the managers give it to employees at will. Second, for those who are the one to be passed on, they must be senior staff in this company and their ability must achieve certain level. Also, their loyalty must be high. After having these conditions, they would then be put into consideration. Otherwise, from the company's standpoint, it is impossible to pass the key know-how on anyone.

A: So, from your or the company's point of view, you actually set up some rules in advance. That is to say, you set up certain conditions for certain people.

B: That's right.

A: You would see whether certain people are suitable for ...

B: You are right. First, we examine whether those who attempt to learn the stuff have strong background in skills. Second, we examine their working attitudes and loyalty. We do not want to see a case that they join another company after getting key stuff from us. Our boss has his own rule in mind. Even we attempt to develop new technologies, according to our policy we are allowed to release the last generation of technology. It is still confidential.

A: So, you would start with examining some people's conditions and backgrounds. After this stage is done, it seems that you would then have no position on whether they are learning well or not. Or, do you think what else you can do to make such ...

B: Basically, we spend three or five years to decide who is going to take this job or position. It is impossible to impart everything to them once since it is useless to do that. As this stuff is not documented, we want them to stand next to us and watch how we operate. If they have questions, they would ask us. Then, we would tell them why. It is limited to a condition that they really have questions and ask us. If they do not ask, we do not tell. If they really do not attempt to learn, telling them everything would be meaningless.

A: Therefore, you mean that as a manager you do not have to put your hands so much in to control or manage such process. According to what you just said, if you have examined some people's conditions and then chosen the appropriate candidates for it, there should be no problems for the rest of the process.

B: That's right. After we open a door for someone, we then see how far they can go. For some employees at the basic level or newcomers, they would not have any chance to involve in this stuff.

A: So, to such impartation or conversion of invisible knowledge, you certainly would not provide some substantial incentives to encourage them to learn faster or better, would you?

B: In fact, it cannot be said that no incentive is provided. As we have high-level and low-level machines, being able to handling high-level machines means that you can get higher pay. If you only

can deal with the basic one, you get that level of pay. If you attempt to learn more difficult technologies, you have to satisfy one premise. It is you have to prove to the company that you are capable of doing this or the company has to decide whether you are allowed to get into that level.

A: You mean that if the company decides to let someone get into a higher level and the chosen one is also willing to learn more and enhance themselves, you would still watch them.

B: *That's right. I would watch them.*

A: For machines or even invisible knowledge, they have different levels. So, you see how far they can go or how high they can reach. Then, you take this stuff shown invisibly as a foundation of substantial encouragement or incentive for them.

B: *That's right.*

A: It means that this can make them learn more advanced technologies.

B: *This is probably different from foreign companies. The way of doing in Taiwanese companies is they would first examine the ability of their employees. But in foreign companies, they would first invest and train their employees. Here, it is not possible to expect your bosses to invest you in learning languages or technologies. They believe that if you want to get this job you should have these abilities before. They think that is your problem. Besides, suppose there are ten employees in the office. They must be not totally good or bad. Some must be good and some must be bad in terms of ability. Those who are good would be noticed by the top management.*

A: Although something imparted to or obtained by the learners is invisible and hard to reveal, you as a manager at the top should be able to identify their levels.

B: *That's right.*

A: If you can identify their progress or improvement, you certainly would provide them with relative rewards or increase in salary.

B: *That's right.*

A: Alright. My research area is about to understand how do you manage this process as a manager?

B: *I think that your subject emphasises how to make subordinates understand the technology or experience which is unable to get documented. As it has already been tacit, it means that it certainly has some difficulty or is unable to get written or recorded. Sometimes, it is a concept or something like that. So, the only thing we can do is to get better employees who understand or attempt to know this knowledge.*

A: About this invisible stuff, you can regard it as concept or invisible knowledge. Though it is hard to be written down or get concrete, this stuff is still existent. It is existent and probably it is a key factor. Therefore, no matter how it is imparted to someone or it is disseminated or communicated each other in an organisation, the best situation is this knowledge itself can circulate. If so, knowledge can then be activated in an organisation. Otherwise, if knowledge is always kept in people's heads, it will never be exploited.

B: *Perhaps, it has to do with the situation of company. Some companies do not want this stuff exposed to many people.*

A: It is possible.

B: *If it is ordinary technology, everyone should know about it. You do not have to do impartation. But something is confidential to the company, you do not want it exposed to everyone.*

A: The problem is although it is a core technology and you do not want many people knowing it, you still have to face the problem of impartation after all.

B: *Yes, that's right.*

A: It may involve in one-to-one, one-to-many or many-to-many impartation.

B: *Yes. It may be one department manager to one section manager. Only these two persons know. Or, it may be one section manager to one unit manager, and the unit manager only knows half of the story. If something in the middle is lost or damaged, we still can recover it with other technologies. Even, we can develop another new technology.*

A: So, what I am interested in is to know how you lead your people whilst their work involves in the occurrence of such situation. How do you guide your people? What is your leadership style to make sure that such process is working smoothly and efficiently? I attempt to know how you do it as a manager.

B: *In fact, the most important core in our industry is a person's soul. Take car industry as an example. Every car has wheels and doors. But, what make cars from Mercedes Benz superb? It is their computing systems. So, it is not about how much you control, it is about how important you control. About the impartation of this thing, sometimes the company is not willing to give this to its employees, not even to other people.*

A: Apart from what we have talked about regarding the conversion of tacit knowledge and the likely role of manager in it, in your own opinion or from your experience, you think what is knowledge management? What kind of situation can be seen as knowledge management in a company or organisation? How to manage the stuff called knowledge?

B: *About knowledge, it implicates firstly, creating; secondly, proceeding; thirdly, maintaining; and finally, imparting. This is a complete process. Suppose we develop certain kind of machine by a special set of technology, and this machine can work well for next five or ten years. So, in the first two years this machine is still in good condition. But after five years, we probably need to repair it. Therefore, how to manage or record this set of technology? How to maintain it? We probably need to have a good information management system. About impartation, I think that the key know-how is still there, and it must occupy less than 5% of the whole knowledge. Only few people including the boss know about it.*

A: If so, you think that knowledge has to follow a pattern of being maintained, imparted ...

B: *That's right.*

A: It would involve in different conversions. You just mentioned about, for instance, developing a machine. If this is the case, it means that certain technologies have already existent so that you can use them to develop a new product.

B: *That's right.*

A: Right. It means that there is a kind of explicit knowledge in this process ...

B: *Right. What can be seen cannot be named as technology.*

A: Explicit knowledge converts to another explicit knowledge. That is to say, though you have some mature or even new technologies, they are explicit since they may be well known and documented. Through these, you develop new products which are also explicit. You said that certain key stuff is only known by the top management. It may be the case that some explicit knowledge is internalised into their heads at last.

B: *You are right.*

A: Only few people know. Or, even it is publicly revealed, only few people realise the secret of it.

B: *You can see that in Taiwan if something big happens to a company, it must be resulted from the top management's leave. If they leave, they inevitably take away key technologies or knowledge. If the company wants to carry on its business, it has to use other existing knowledge to make products. This is so practical. First, you cannot ask employees to reveal something that they cannot express or do not attempt to express. Second, knowledge kept by someone is not always the latest or the most advanced one. So, for a company, first it has to keep the technology or knowledge from discharging. Despite its technology or knowledge level, you at least keep its concept. If you have the concept, you know where to go next. So, the crucial thing is concept. It cannot be disseminated out.*

A: Except the stuff of concept or core technology, the rest are obvious ...

B: *That's right. They are normal technologies.*

A: Of course, to those knowledge or information that is visual, the only way to keep them is through those powerful information systems. This is about editing and processing existing knowledge. It is so-called explicit converting to explicit through computers or database. It involves in editing and categorising systematically.

B: *Even, for something which is on rotation, you can photo or video them. Then, you use computers to do movement simulation to see what is going on. It means that in the first place you probably have no idea of what is going on. Yet, through devices like video and simulation software, they to a certain extent let you understand how it rotates. That's right. You change tacit to explicit. Nevertheless, you only see thing rotating. You may also know how it rotates. But, you still have no idea of why it rotates this way. This is where its tacit resides. You still have no idea of why it has to rotate that way. Even, some stuff cannot be recognised by naked eyes. Perhaps, it rotates in 1/100 second so that you are unable to simulate it. It probably has to do with its original design involving materials and angles. You can duplicate all of it but you cannot make it as good as the original one.*

A: It means that though you can use some external machines or devices to make tacit stuff become explicit, you still cannot understand something deep behind it. You just do not get it.

B: *You can make exactly the same product, but the quality is still different. We had a case before. All the components are made in Taiwan, but some of the products are assembled in the Taiwan and the others are assembled in our China factory. Though the components are exactly the same, quality from different factories is totally different. So, how to assemble is also a problem.*

A: So, though it is about explicit conversion, the conversion process still implicates tacit stuff.

B: *That's right.*

A: You really have no idea of what people are thinking. In fact, we have talked about many different knowledge conversions such as tacit to explicit and explicit to explicit through computers and database. Through something stored in computers, newcomers at least can understand 50% of what is going on in the company. So, in a company's operation, there are many knowledge conversion processes like these around.

B: *That's right.*

A: Tacit to tacit, tacit to explicit even, explicit to tacit. What does explicit to tacit like? For instance, magazines are quite explicit since they are published openly. Yet, everyone gets different stuff from it; everyone has different feeling about it. Right? Everyone absorbs different stuff. It means that different stuff is internalised by different people.

B: *Actually, it is quite interesting. For instance, you probably think that this product is explicit. You think it still needs a lot of improvement. After being upgraded, it becomes a better product. You then get the idea of how to upgrade it. That is something tacit you learn through the process. So, through explicit stuff, you learn something tacit.*

A: So, if you think about it very carefully, you would find that this stuff happens to your daily work or a company's operation.

B: *That's right. Also, in a company's position, it does not want to see that your ability is immutable. Though you only learn 50% of the stuff from your supervisor, if you can learn another 50% from outside even it becomes your tacit part, that would be great. Then, your ability must be better than your supervisor. So, if supervisors in a company only impart immutable technologies to his people, this company must be at risk. That's right. It is tacit, but it can be added by explicit stuff from outside. As a result, a more complete technology is formed. Once the technology stops upgrading, the company would not have competitiveness any more.*

A: Especially in some industries implicating technology, concept even service, new things are coming in continuously.

B: *That's right.*

A: Whatever tacit stuff or explicit stuff, they are coming in continuously. Actually, we started with one part of the knowledge management, and then we discussed other kinds of knowledge conversions. So, my research theme is under the circumstances that you realise these different knowledge conversions, would you have different management means? To such different circumstances whatever tacit to tacit, tacit to explicit or explicit to tacit, would you have different management means as a leader? If the answer is positive, how would that be different? Or, you think there is no difference.

B: *For those which have already been documented, they can be possessed by every member so that you do not have to control them. What we need to control is about the core technology in the company. About incoming new technologies from outside, supervisors have to decide whether they want new technologies add to our existing technologies. Of course, we still need to control the incoming*

technology. After infusing incoming technology into existing one, the latest technology is then developed and the old one can therefore be communicated to every member. So, it is impossible that top management holds the core technology immutably or does not communicate it to anyone. If this is the case, no one would be willing to stay in this company since they cannot learn new things.

A: So, it means that as a manager you look at these different kinds of knowledge or technology respectively, even the way of controlling these different processes is different.

B: *You are right.*

A: Can you give me any example of how would that be different? Or, is there any example referring to the management of tacit stuff or explicit stuff? You think how would that be different?

B: *Basically, it is still a concept of control. For instance, for those which are written or documented, they can be given to every employee. There is no problem with that.*

A: In this case, you said that you can give those stuffs to your people since they are already open.

B: *That's right.*

A: Even, every employee in the company should be familiar with those stuffs. Or, from your point of view, you may want to make sure that everyone has certain level of understanding of his stuff.

B: *In fact, every employee has work to do. From their performance, you can realise whose ability is better than whom and how deep they understand the technology. That is the easiest way to judge the employee. With the same stuff, why staff A only spends two days to finish it, but you have to spend five days?*

A: That is to say, you would provide people at the same level with the same information and resources ...

B: *That's right. We treat those who at the same level equally.*

A: If some of which are really bad in ability ...

B: *Of course, in our tradition, we would not talk to them about this face to face. But, we have a ruler in our mind to evaluate everyone's performance. It does not mean that those who perform not very well have to get fired. We think that there must have some work suitable for them. They may need to do some basic work or may not be able to get as much promotion as the other colleagues.*

A: In fact, you keep emphasising the issue of control. Does it mean that the only difference relies on a fact that your control over the visual information or knowledge is looser?

B: *In fact, there is no need to control it. Yet, there is one condition that department documents can only be circulated in the department. Given that, we then can realise who is stronger in comprehension, who is weaker in ability and who is capable of going further. If someone's comprehension is not at certain level, it is pointless to give them the most advanced technology. If you do that, you just make them struggled.*

A: As you cannot understand what have been written, there is no point to ...

B: *It is not necessary to realise the advanced technology.*

A: If so, it means that ...

B: *This is a good way of selecting people. With the same resources, who can make the best of it? Or,*

by giving you a project, we see how you can make it.

A: OK. If so, it means that everyone has to make the best of themselves.

B: *That's right.*

A: On the other hand, to the conversion of tacit to tacit or the high level or core stuff, as a manager you would take it seriously or put your hands much into it.

B: *That's right. If these documents need to be provided to the other people, even the boss has to agree to it. Some bosses may like this way of doing since they can keep something confidential from discharging and can use it to judge their people's loyalty.*

A: So, to those which can be seen or documented, contrarily you think they are easy to deal with or manage.

B: *That's right.*

A: As for the tacit to tacit or even tacit to explicit stuff, it seems that you cannot control much about it.

B: *As it is written as tacit, you cannot control it. The only thing you can do is to possess those who own the tacit stuff. If you possess them, you will be controlling it.*

A: This is the key point. How can you possess them? How can you let them put their hearts here?

B: *That's right.*

A: To be totally willing to release some tacit stuff or concept which may cost them years to get understood.

B: *So, if someone from outside can use their new technology to overthrow the existing one so that things can be made more cost effective, they would become managers. But, don't worry. Previous managers are still there. They still have the old technology. Our boss would not let them go and give existing concepts to the competitors.*

A: So, though you said that it is hard to manage or control the tacit stuff, you still would use some other ways to do impartation.

B: *To be practical, the major purpose of a company is to make money. The boss will keep any factor damaging the generation of profit from happening. If you talk about sharing experience, it is impossible to share the experience with other competitors. Sharing experience with competitors means sharing profit with competitors. So, for companies, they would use any possible resources to keep their strongest competitiveness. They have to know where their know-how resides. An interesting thing is they would try to find out where their competitors' know-how resides.*

A: They certainly do. So, I want to know whether under different knowledge conversions having different characters, you as a manager would have different management means. Or, you think that there is no difference in terms of management means.

B: *For me, what you can really manage is the technology which is visual. If your people have new technology but do not attempt to reveal it, you still have no way to manage it since you have no idea of what technology they possess. You cannot manage it unless they are documented and shared with the other people.*

A: So, it means that your management attitudes towards this visible or existing stuff and that invisible

stuff are different.

B: *Yes, different.*

A: Alright. I just want to know your point of view about knowledge management. That is to say, how do you look at this ... As I said in the beginning that knowledge has two kinds, tacit and explicit. Given these two, there will be four ways of conversion as tacit to tacit, tacit to explicit, explicit to explicit and explicit to tacit. In fact, human factor is largely involved in these processes.

B: *That's right.*

A: So, I just want to see how managers consider these different circumstances. Would their leadership styles be subject to these different situations? This is what I want to know.

B: *I know some managers from high-tech companies. They manufacture motherboard. Their companies have strict control on managing important data or technology. You only do what you have been assigned. You do not need to ask so much. If you ask so much about other projects that are not relevant to you, you get fired. It is true.*

A: That is so tough.

B: *That's right.*

A: It is another kind of management style.

B: *You are right. Their management is so hard. They think that everyone just do their own job. There is no need to get in touch with other parts. This is one way of controlling things. They allow several groups to do the same project. Then, they pick up the best one. Of course, they really are a big enterprise.*

A: They must have sufficient resources to do that.

B: *So, basically, their experience does not share with each other. If the know-how of a certain team is obtained by the others, this team has to be dismissed.*

A: So, that is another way of management.

B: *That's right.*

A: There is nothing wrong or right. So, what I am interested in is I want to see whether different knowledge conversions need different leadership styles.

B: *About leadership, it is true that managers have their respective styles. Some managers always keep their eyes on what their people are doing, but some are not. They are really different.*

A: OK. I understand.

INTERVIEW TRANSCRIPT – Combination 001

Note: "A" represents interviewer and "B" represents respondent.

A: Can you understand this thing, this Description?

B: *Yes, I can.*

A: In fact, what I am doing is about the problem of knowledge conversion. Here, we talk about

Combination, some explicit stuff combining into other explicit stuff. About this Combination, it is like what MIS or information department is doing. What they are doing actually involve in this kind of process. For you, you probably have not thought of this as having a specific term. So this is so-called the Combination process and it is about processing information through sorting, adding, combining and categorising. Finally, it comes out some forms or new type of information. So it is about changing a kind of knowledge into another kind of information through such process. The whole situation is like this. Having understood this kind of process, I today would like to know that for you as a manager, how you look at this process. In your department, if your people's working content mostly belongs to this, how do you manage this? What is your management means?

B: *Management means ... I have not been asked this question before.*

A: We can discuss it slowly. In fact, for most of MIS staffs, their working content belongs to this kind of pattern. So as a manager, how can you make sure that in your department this kind of operation can be processed very smoothly? As a manager, what is your role? What kind of management means you would use to manage such process?

B: *In our company, the MIS department is positioned as a department which only brings in computing devices. About what you say as combining the data, it is not managed by the MIS department.*

A: If it is about maintaining some devices, it belongs much to the hardware. In the aspect of software, it is probably that ... of course it may be involved not only by MIS, but by financial departments or relevant departments. They may need to use the company's information and then do some processing with it. If the main job of MIS staffs is to deal with this kind of work, as a manager how you lead them to do that.

B: *I think that this kind of question is likely to refer to the on-line of data warehousing system in Eva Airway. In that time, the system mainly focused on data modelling. That's right, data modelling. Data modelling is a bit like this Combination. If so, this is the job of Eva Airway's information planning unit, not IT.*

A: To someone outside like us, we may think that they all belong to IT departments. Actually, IT departments still have many ...

B: *That is because MIS departments are relevant to knowledge management. But our work is still about introducing platforms which are suitable for the company. They may not be the largest one, but have to be the most suitable one for the company's scale. For instance, our job is to introduce certain platform and maintain that platform. About the part of Combination or data modelling, it is the work of planning units or so-called information management units. If they decide to assign the work of Combination to IT managers, then IT departments may need to be re-positioned. Like this company, Evergreen International, the work of Combination should go to inspection units since we do not have planning units. If Touring Division of Evergreen International itself has the function of planning, that is to say, if they have the function of planning knowledge management systems for their hotels, the staffs in the Touring Division will do this Combination process.*

A: So you mean that it is them to do the work of so-called information processing.

B: *That's right. Usually, we say that data changes to information, information changes to knowledge and knowledge finally changes to intelligence. For the raw data, it is managed by MIS departments. But for the part of modelling, we are only in the position of assisting. We always think that MIS department will not be a leading unit for knowledge management. It just assists in introducing IT technologies.*

A: So you mean that to you your position will be like this.

B: *That's right.*

A: If so, to this so-called Combination of transferring explicit knowledge or information, what is your opinion about this? Imagine that you are a manager who is going to manage such kind of process. If so, what kind of manager you will be?

B: *If not saying that knowledge management has to have a system as the prerequisite, how to fulfil the spirit of knowledge management in the work? About this, managers whatever in which department have to do the job of communicating to the bottom and suggesting to the top. That's right. If you can spend some time to think about how to keep and impart as it says oral and visual presentation such as documents, manuals and computer databases, you will be implementing the essential spirit of knowledge management.*

A: You just said that for this kind of process, every department has to pay attention to it. Having done that, those so-called documents and information can be put into order and then be passed on. So in this case, what should you do as a manager to let your employees pay attention to this? For instance, would you provide them with some substantial incentives? Or to achieve this kind of target, would you provide them with rewards? To be honest, would you provide them with something as an exchange? That is to say, if it is the premise that you know this kind of thing is important to knowledge impartation in the department, would you use certain means to let your people do this kind of processing? In the position of a manager, what would you do to let this thing ...

B: *The manager's position would be ... At the end of the project, technicians usually ignore keeping relevant documents. As a manager, you have to pay attention to the output of project document. You have to tell your employees that you will pay much attention on the proportion of project document in the whole project. Naturally, it will induce them to concentrate on the importance of project document.*

A: So you will be using a much inducing way of, for instance, letting them realise the importance of this thing, rather than providing them with rewards if they do it. You will not use either rewards or punishments to ...

B: *We definitely will not punishments. If they can produce relevant project documents, they are plus for the project. If not, the project can still be perceived as successful since it may still satisfy end users' needs. In this case, the project can be narrowly defined as successful. However, if there are project documents produced and handed down to other colleagues in the IT department at last, it must be a plus for the project and it can be seen as so-called knowledge sharing.*

A: So if they can do something extra, it can be a plus, can't it? In the position as a manager, you certainly hope that everyone can do this additional thing as it can bring bonus to knowledge

impartation whatever at departmental or organisational level. If so, would you provide them with some exchanged incentives? If they do this thing or impartation, would you give them some rewards? Would you do that? Would your management means be like this?

B: *In Evergreen, unit managers or even the highest managers in the departments have no power of rewarding someone. Only personnel departments have the right to decide. About substantial rewards, in our culture we do not have the power to do this kind of thing unless the managers use their own money to do that.*

A: I can understand that in Evergreen, personnel departments have the largest power. If you escape from where you are and its relevant culture, do you think that you will need this kind of thing to let this process take place? Or you think that oral encouragement will be quite enough in this case. Or you think that you will be providing them with something substantial as a kind of price. What is your personal opinion about this?

B: *I do not think that I will provide them with any reward if they accomplish the project with the generation of additional project documents. However, if they really put a lot of efforts to build up a platform for knowledge sharing, encourage everybody to share their knowledge and come out some ways of measuring or quantifying it, I probably will reward them. If they really build up something which can be used as a standard to do measuring and will be willing to share it with every colleague in the department, I will reward them. I will reward them as they are excellent knowledge sharers. If it only refers to a single project, I do not think that it can result in a cause for me to reward them substantially.*

A: So you think that as a whole the premise is you will be building up a set of standard. That is to say, you will be establishing standards or rules for everyone to follow. Having had this, you can then talk about how to reward or even punish them. So you mean that you have to have certain evaluation standards first.

B: *That's right. First, you have to build up a fair mechanism as a basis for rewarding.*

A: Alright.

B: *To carry out knowledge management or knowledge sharing, I think an important thing is fairness. Only fairness can get rid of side effects. If you just roughly think that someone is quite good at sharing knowledge rather than using certain measurement to assist you in judging this, it may result in the perception of unfair rewarding by the others.*

A: So you think that before talking about rewards, you have to have fair rules coming out first. So it means that from your position as a manager, you will first be creating some game rules and then you will be examining who has and hasn't done what. Okay, I understand. Here, we have been talking about the Combination process of transferring explicit knowledge into ... This kind of knowledge conversion can much be seen or quantified. As you said that data change to information. In this case, data are visible and information is also visible. This is all about visible knowledge and its likely conversion. If we have explicit knowledge on the one hand, we must have tacit knowledge on the other hand. Tacit knowledge is ... it is much harder to describe tacit knowledge. To a certain extent, it

refers to people's experience. Or it is about something being influenced imperceptibly by colleagues in the company. This is also a kind of knowledge floating around between colleagues. This is a kind of situation in which everyone influences each other. Under these circumstances, as a manager would your attitude be different from what we discussed in the beginning? For the previous situation, you mentioned that you will be trying to build up some fair game rules. Having done that, you can then measure some things fairly. However, for this kind of situation, it refers to something invisible. It seems that you will be hard to see it or feel it. But in organisations, this thing does exist. Whatever between employees or between employees and managers, everybody influences each other unobtrusively and imperceptibly. If you today realise the existence of this situation, how do you look at this? How do you look at this tacit stuff? Would you look at this stuff and that stuff differently?

B: *An upright manager has to work out some ways to induce his/her employees to transfer their tacit knowledge into explicit knowledge. This is as what have been mentioned that if some rules are established, you can then know who transfers his/her knowledge from tacit to explicit and furthermore shares it with every colleague in the department or even in the company. So simply speaking, tacit knowledge transferring into explicit knowledge is the same thing as what have been discussed.*

A: So actually, it is all about building up so-called rules. Perhaps, it is about the part of tacit changing to explicit. However, some tacit stuff is not able to be transferred into explicit stuff. For instance, like the way we talk or behave. Suppose I string along with a manager. I may learn the way or skill of how he does business with other people. Maybe this kind of perception is internalised into my knowledge and I may have no idea of when it will appear. This thing may happen. Or for colleagues, they influence each other. This situation may also happen. But for this kind of situation, it is hard to calculate exactly how many things I have learned or how many things you have learned. But this invisible learning process does exist. This process of being influenced unobtrusively and imperceptibly does exist. Given that, as a manager how do you look at this likely situation? How do you activate it? You can imagine that in the long run it will be enhancing employees' loyalty to the company and increasing the friendship between employees. And, it must be good to the company. So what are you going to do as a manager? What kind of role should be played by you?

B: *Is it also a part of knowledge management?*

A: That's right.

B: *I give you an easy example. If you praise the employee, you have to do it publicly. However, if you criticise the employee, you have to do it privately. Do you think that this is also a part of knowledge management?*

A: It should be saying that as a manager what kind of means you should use to activate or generate knowledge management. That's right. This can be a kind of means used by the manager. You said that if you are going to praise the employee, you better do it publicly. You have to stimulate them and let them have face. However, if they do something wrong, you certainly cannot condemn them publicly. This can be seen as a means used by the manager. Yes, that's right.

B: *About this part, it means that if someone's behaviour pattern is good, you have to ... let them have*

the effect of popularisation. On the other hand, if someone's behaviour pattern is bad, it has to be warned. In everyday life, behaviour pattern should always be examined and copied. About this, we will remind senior staffs not to bring wrong behaviour into the office. Junior staffs may imitate it. If this kind of this has to do with knowledge management, this is my way of doing right now. If I find that senior staffs bring inappropriate behaviour into the office, I will choose the tool of email to announce that senior staffs should not have such inappropriate demonstration. That is to say, to this part, I will use the tool of email to do one-to-many and simultaneous communication.

A: That is to say, you will be using this means to correct or propagate bad or good things.

B: *I will choose the tools of email and telephone. It should be relevant to knowledge management.*

A: Yes, that's right.

B: *Sometimes, I will remind my colleagues that you have to take advantage of the tool of email. When do you have to use telephone to shorten the distance between you and users? When do you have to use email to let other parties have some space to think? I will remind them the timing and skill of choosing these tools. Having talked about this, it really has to do with knowledge management.*

A: So from what you just said, as a manager your attitudes towards the conversion of visible stuff and what we talked about as the conversion of invisible stuff will be different, won't you?

B: *Visible to invisible?*

A: This is visible to visible. Combination is about explicit to explicit. However, we also talked about the kind of invisible stuff, the stuff of being influenced imperceptibly. So as a manager, if you look at these two, one is visible to visible and the other is invisible to invisible, your attitudes towards them will be different, won't you? One refers to something which can much be seen and measured and the other is about something that has to be felt.

B: *There is no difference.*

A: How?

B: *Are you saying that whether the way of measuring is different?*

A: Yes. Or you can say the way or means of management. Will it be different?

B: *Management means ...*

A: As you said that to this part you will be building up some fair rules to measure who really passes the document down. However, it will be difficult to introduce this way of doing into another situation where things involved in it are all invisible. So when you look at these two processes, would your attitudes be different?

B: *Invisible knowledge ... Could you repeat the question?*

A: It is like ... As you said that some people may bring bad habits or behaviour to the office. Right? Especially for those who are senior in the company. Although those people may not think so or feel that it is inappropriate to do so, you may think that the behaviour shown by them is truly inappropriate. It is something invisible and it may be imitated or learned by other people. If so, it means that the invisible knowledge or stuff owned by the senior members is communicated to other people. This is invisible to invisible. So you said that you will use the tool of email to tell them that they have to

correct it. In fact, this kind of behaviour or habit is very hard to get measured. Besides, those who are involved in it may not realise that their behaviour does affect other people. Given this situation, you said that you will be using email or other ways to tell them to correct it. So to a certain extent, it means that you use your status of manager to intervene in such situation, wanting them not to use such stuff to influence other people. So this thing is different from that thing which contains all about information and documents. Unlike the former, the latter is all about something which can be seen and identified. So in one side, it is about the conversion between visible stuff and in another side, it involves in the conversion between invisible stuff, about being influenced unobtrusively and imperceptibly. Today, from the position of a manager, would you look at them differently? Or how do you ...

B: *It sounds that tacit knowledge has much to do with people's characters.*

A: You can say so. You can categorise it this way. Yes, you can. To a certain extent, what has been expressed by them is "You do not have to be so serious in this company". This is a kind of information. This is a kind of communication feeling. You can regard it as a kind of knowledge, a kind of tacit knowledge. So this is what I am studying. Actually, I think that to industry everything you do or contact in everyday life can be considered as part of knowledge management. It is just that you are seldom to have time to think the likely connection between what you are doing and knowledge management.

B: *If this so-called tacit knowledge truly has much to do with personal characters, it is likely that the point applies to the traditional values in the Chinese society that if the upper beam is not straight, the lower ones will go aslant. If a certain person is a senior staff, he/she will be regarded as so-called the upper beam. So when the upper beam cannot be corrected and becomes a good example, I will transfer him/her to another unimportant post. This way of doing is to keep that person's behaviour from influencing other junior staffs.*

A: So to this situation you mean that you will be transferring that person to another post. You will not let that person stay on the important post. To a certain extent, it can be seen as a kind of punishment to that person's behaviour. Can I say so?

B: *It can be seen as a punishment.*

A: On the other hand, suppose a certain staff's behaviour is very good. He goes to work on time every day and dedicates to what he is doing. Such positive tacit message or you can say knowledge may affect other people. This good tacit knowledge may circulate around people. So in this case relatively, you will be providing this person with some opportunities of promotion or ... rewards, won't you?

B: *Such person will relatively have more opportunities of getting promoted. At least, the unit manager will report this case to the top management. So if the employee is very good at so-called explicit knowledge like the skill of project management as well as tacit knowledge, they certainly will have more opportunities to get promoted since they can be regarded as good employees in the company. In the field of knowledge management, they can play a leading role. Or they can become a benchmark for other staffs. If so, it certainly can bring positive help to the company's promotion of knowledge*

management.

A: Okay, let me sum up this interview that whatever which kind of conversion, tacit to tacit or explicit to explicit, you mean that if your people perform well, you will do your best to promote or reward them. Relatively, if they perform badly, you will be using the way of transferring or even firing them. If so, can I say that as a manager your attitudes towards these two conversions are consistent?

B: *Yes, that's right. I think you have to interview someone who really has the power to decide the staff's promotion or increase in salary. It should be the top management in the company.*

A: Alright, I see.

B: *They can make such decision. Like me, a department manager, as I said that all I can do is to transfer those who perform well to more important positions and those who perform badly to less important positions. In less important positions, they will be unlikely to lead junior colleagues. Unable to lead junior staffs means that they cannot influence them with their inappropriate behaviour. So what a unit manager can do is to transfer those who are good and full of potential to better positions and let them have much space to elaborate themselves and to influence more people. If you do so, it means that in fact you provide them with more stages to perform themselves. I think that this is the reward from the unit manager to the good employee. So the conclusion is we will put those who have good performance in more important positions and relatively put those who have bad performance in less important positions. I think that this way of doing should also be essential to the promotion of knowledge management.*

A: Okay, I see. Thanks very much.

INTERVIEW TRANSCRIPT – Combination 002

Note: "A" represents interviewer and "B" represents respondent.

A: How do you manage this thing, this process? If your subordinates or department's main work is to deal with the circulation or conversion of massive information, as a manager today, how do you manage this thing? What is your means? What is your manner?

B: *Are you asking how do we manage it? Do you want to know that it is generated for the internal use or external use?*

A: I think both. That is to say, as a manager, how can you make sure that such process of transferring explicit knowledge into another kind of explicit knowledge will be going smoothly? How can you make sure that everyone can fully operate in coordination as it may require them to deal with enormous information? So as a manager, how do you manage such situation?

B: *In general, we first will try things in small scale. We will do them from beginning to end. If we feel that by this way of doing or process the final result is good and has no big problems, we will then assemble everybody and tell them that this is what we are going to do. After that, we will tell them how to do it and what will be expected at last. Then we will go through the whole process. Finally, we*

will divide it into several categories and assign them to those who are involved. We may set up a schedule for everyone. In the middle of it, we will try to find time to monitor everyone's status to see whether they are coincident with what we told them before. If they are really coincident with what we told them before, we will check the result at the next meeting time. If we find that their direction was partial in the beginning or it has been wrong, we will correct it or even suspend it. In general, our way of doing will be like this.

A: In such kind of process, will you try to establish so-called an evaluation standard?

B: *Generally, I will. That's right. We will expect that ... Generally speaking, we will have a time or checking point for everything and make a request in terms of quality. We hope that everyone can do things in accordance with the timetable. On the other hand, we will monitor whether its quality is what we expect. If there is something wrong with it, we will try to find out the reason behind it. If it has to do with quality, we will figure out where the problem is. We will try to sort it out.*

A: In fact, such working situation will involve in the problem of efficiency. Probably it is because such information processing whatever for internal use or for other departments in the company is about the provision of accurate information.

B: *That's right.*

A: Given that, as you said that you will be having certain evaluation standard to monitor what have been done. Can I say that having evaluation standard means that you also have standard for rewards and punishments?

B: *From a certain perspective, you can say so. That is to say, in general if you do things well, I will use many ways to encourage or praise you. Of course, as many things are short-term and do not require much time to deal with, I may not have enough power or ways to give them substantial feedback. However, I think that at last we will be rewarding them as long as they dedicate to the work and get every single achievement accumulated.*

A: So you mean that if you consider the accomplishment of such process as a project, you will not reward them on the basis of project completion. However, you will still reward them at some time.

B: *Yes, that's right. After doing couple of things, if the quality you reached is really better than other people, I definitely will give you something different. If you do better, you will get better treatment. But if you do worse, you will get worse treatment. They must be different.*

A: So for you as a IT manager, it means that your objective will be very clear.

B: *That's right. Generally speaking, if you do not set up a clear objective, expectation for them, basically they must become slack or something like that in their work. If you do not build up an expectation for them, they may just put it there and not to do it. So in principle, we mostly will set up a clear objective unless we are at the stage of developing embryo. In that case, we really will provide them with free space. Let them try everything. Of course, it is a special case. At that stage, I will find one or two persons and tell them that they are free to try anything. Of course, I expect good results from them. But if there is no result, I will not ... as some things really have no results. However, they will learn something from what they have been doing. However, if the pattern has already been*

established, there should be no problem for everyone that it must have objectives and time limit.

A: So if it has to do with objectives, it must involve in the issue of performance and evaluation standard.

B: *That's right.*

A: That is to say, it will be reflected monthly or quarterly by rewarding.

B: *That's right.*

A: If so, can I say that from your point of view to this situation, you think that as a manager you have to use real prizes or rewards as a control tool? That is to say, to make this process going well or let everyone feel happy about doing this, you will use prizes or something like that as an exchange tool. Can I say so?

B: *You can say that. I am not so sure of the other work. But I think that for those who are doing IT work, money is not the only consideration. Their first priority will not always be money. I can only say that usually we have many ... If you perform well, I definitely will tell you that you have done quite well and will encourage you. However, if you perform badly, I will also blame you and let you know that I am not satisfied with what you have done. Definitely, I will be doing this. I definitely will give them such guidance. For those who perform well, I will provide them with more opportunities. But for those who perform badly, I will not provide them with better opportunities. It must be different. Particularly for those who are doing IT work, they like to try new technologies and play new stuff. So if they can perform well, I will do my best to let them try new stuff. However, if their performance is not considerably good, I will not ... since you may not come out any result. In his case, I will let them do some routine jobs. To IT staffs, this is a reward or a punishment for them. I think that the company must have different kinds of promotions and rewards. But from my point of view, those kinds of things are always inactive. So it is impossible that once the project is conducted for a month, I reward them immediately. I can only say that based on the company's policy I will examine overall performance to see whether someone is worthy of being rewarded. I will not tell them before doing anything that they can get what if they perform well. Rewarding must be dependent on continuous efforts and overall performance. If some staffs perform perfectly well but some are not willing to cooperate with the others, it is not acceptable by me. I will be examining it as a whole.*

A: However, it is still a control tool after all. Perhaps, it is just that its effect is immediate and short-term. Nevertheless, you also said that from a manager's position for those employees having good performance, you will provide them with bigger space, let them have larger stages. You will let them have visions rather than just give them basic requirements. So you mean that ... even though it is about this kind of IT or information processing unit, you will also be much considering some long-term planning.

B: *That's right.*

A: In fact, like this situation of requiring immediate handling, some people may use instant ways or they offer rewards as a tool. It is like case by case and everything is clearly cut. It is something like that. So from your attitude, you will not prefer this way of doing, won't you?

B: Basically, let me say this way. It is about whether your company has given you the power to do such thing. In fact, this is a practical stuff to me. From my understanding of manufacturing, they will not allow departmental managers to have the kind of power to do such thing. Basically, it is not possible. I think it is so practical. Without this kind of tool, you will look for other tools. From another point of view, if it is for front-line employees who work in production lines, things will be different. If they are informed that they can get additional pay of NT\$1,000 or NT\$2,000 by working harder every month, they will be very happy to do so. But if you tell those who do programming that they can get additional pay of NT\$1,000 or NT\$2,000 by working harder, it means nothing to them. If you really want to stimulate those software engineers by prices, the amount has to be higher.

A: So you mean that you can regard it as a level problem.

B: That's right.

A: Of course, it has nothing to do with whether the level is high or low. It has to do with different people have different requirements.

B: Different requirements ... as the working situation is completely different. For those who are in production line, they just go on duty and off duty on time. But for those who are doing IT work like us, we usually work until late night on weekdays and on weekends. So if you really want to judge our work by money, I think that we at least have to get extra pay of NT\$10,000 or even NT\$20,000 every month. You cannot just give us extra NT\$1,000 or NT\$2,000 every month and say "Well done". Basically, it will not generate any effect on us. If you really do that, to a certain extent we will regard it as compensation rather than stimulation.

A: You may feel that you are getting humiliated.

B: That's right. So this is different. It is different in terms of working content and working character. Especially for the work like programming, when we are busy, we usually work until mid-night.

A: My research is about to explore what we are talking about as the part of explicit stuff. How do you change it into another kind of explicit stuff like reports through some processing? This is also a kind of knowledge conversion process. It is from information to knowledge. So under these circumstances, I am interested in what the role of a manager is. What kind of role should you play? To let this situation take place quickly, to execute this thing efficiently and to get more accurate result, what kind of role should you play? I am more interested in the manager's role in this. What kind of means or tools should be used by the manager to ...

B: Generally speaking, I think that for this thing you have to find right persons to do it, you have to find appropriate persons to do it and finally you have to give them time to do it. They are always busy. So if you want them to do something additional, it is not difficult to imagine that they will not do it because they have no time. So can you plan in advance that whether this thing can be done by appropriate persons with sufficient time? That is to say, you have to find appropriate resources in advance and put it in the right place. I think that this is the first key point. If the resources are not appropriately allocated in the first place, it will be difficult to make progress the subsequent stuff. With the right resources including personnel, the next thing is you have to monitor this thing. Mostly, the

situation is they are willing to do it but their way of doing is wrong or the stuff they are doing is different from what you thought. So you have to monitor them in the first place to see whether their way of doing is the same as what you thought. If there is no problem with that, you just need to monitor this thing regularly to see whether it is in progress. I think this is the way I will be using generally.

A: What I am doing is about this kind of thing. Probably, for people who are in industry or particularly in IT departments like you, you may think that knowledge management is about the implementation of ERP or the whole information system. But to me, I think that knowledge management should be defined more broadly. It is like this thing even if it still involves in using computers to do some processing. I think that in your everyday life, you must be dealing with lots of this work, for instance, processing a report and then making it becomes a new report. Sometimes, it even has to be processed manually. So I just want to understand that under these circumstances, what is your role as a manager?

B: *To me, I will pay much attention to something that whether historic experience in the past can be saved and whether newcomers can learn from the historic experience. Another consideration is whether we can learn from the bad situation in the past. How can we keep it from happening again? These are the things I care much about.*

A: If so, what are you going to do essentially? Would you have some concrete ways of doing ...

B: Right.

A: ... to make sure what you have been mentioned can occur?

B: *In general to us, if we have newcomers coming, we definitely will arrange appropriate training courses for them. We will assign suitable persons to train them. Besides, another thing is we will train them step by step. In the beginning, we will plan what kind of thing they should learn and when. After that, we will be examining the whole situation of their learning. We will let them have practical experience and will assign someone to watch or monitor them to see whether they are doing well. We will guide them continuously. Certainly, it will produce many documents and records. For instance, if we conduct a project today, we have to keep all the relevant documents. The document can become useful reference for other people who face the similar situation. It involves in the storage of information and impartation of experience. Besides, sometimes we will assemble those who are experienced as well as novices to discuss something. Everyone can share their experience with the others. They can discuss why they can do this or why they cannot do that. Like us, each of our teams has regular meetings. Whilst we are in meeting, we are not only to let them report their working progress or whether they have any problem, but also to let them practice how to do things by making presentation. Some people think that this kind of thing wastes time. But I think that when you present your ideas and something involved from beginning to end, for those who are new in the company, they will learn something from it and for those who are senior in the company, they will provide you with their previous experience. Under these circumstances, everybody's experience can communicate constantly. In addition, as the adopted way of doing is to make presentation, relevant documents can*

be kept for future reference.

A: So you mean that to this kind of situation, despite providing some training, doing certain advocacy at proper time or occasions and saving relevant information, as we just talked about that you will also be considering the problem of incentive or motivation. Actually, you will also pay attention to this perspective, won't you?

B: *That's right.*

A: So for you as a manager, you mean that on the one hand you will have long-term plans, for instance, regarding to how to enhance the overall efficiency. On the other hand, you will also be thinking about some short-term and instant satisfaction of the employee.

B: *That's right.*

A: Alright. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 003

Note: "A" represents interviewer and "B" represents respondent.

A: You should be quite familiar with this kind of situation. In fact, this thing is about so-called ... We divide knowledge into two kinds as tacit and explicit. This is about explicit part which regards to some information or data. This kind of stuff can be transformed into another type of form through the processing of computers. According to our interpretation, this is a kind of explicit knowledge conversion, changing from data to forms. Given that, I would like to discuss with you that in such kind of process, as a manager or leader, how do you manage this thing? How do you lead your people to accomplish this process successfully as it may involve in processing huge information or the time required to do it is limited? From a manager's point of view, how do you manage this thing? What is your attitude? What is your means? Or even what is your likely tool?

B: *Which aspect you want to talk about?*

A: That is to say, considering the aspect of the leader's style or character, how can you make sure that such conversion process will be conducted smoothly and accurately? Or what can you do to increase its efficiency? As a manager today, how do you manage such process? How do you control such process? What is your leadership style? Or even what is your leading tool?

B: *In fact, about this kind of thing, I think that everybody has their own basic abilities. So you have to trust them. Hence in this aspect, in fact, when you recruit people, you will find that they have certain level of technical abilities. They do have certain level of abilities. However, in their efficiency particularly, there is no way that you can make any request. Of course, you can do that. But if you attempt to make a request that they have to reach a certain pattern in terms of efficiency, it will be impossible. Therefore there must have a gap. You can only try to shrink the gap. That is the reality. So everyone has basic ability to do things like transforming words, recording meeting minutes or conveying documents. The focus now goes to how much you need or require from them. Of course, you*

want everyone to become better and better or become more and more efficient. But humans are humans after all. They must have their limitations in efficiency. So under these circumstances, my management is I will not pay much attention to their personal techniques or something as they have reached a basic level. Under this level, you just let them accomplish this thing smoothly. If you want them to become more efficient, you just create demands for them. As long as you create demands for them, they will try to satisfy them. In the process of satisfying the demand, they will try to consider how to make it better and more efficient. This is my opinion. Alternatively, you can force them to learn things, to develop themselves, to study English, to learn programming and to attend courses. These things are quite one-sided and may not be satisfied by everyone. For some people, perhaps their desires to learn things are very strong. But what they want may not be technical ability, but communication ability or some conversion in attitude and thought. For instance, some people may be very active and aggressive but they only focus on their personal interests and will achieve the goal unscrupulously. However, this is not required by the company. So basically, there is no need to pay much attention to individuals. You only need to create a great environment in which they can conduct their affairs. If they can elaborate 50% or 60% of their abilities in this environment, it would be quite enough. To require more, it has to depend on mutual stimulation between people. If it generates some demands and they can be satisfied, it means that those who are involved have superior abilities. So I do not care about their own skills and whether they are doing good in knowledge management. If they can fulfil the request asked by the company and the result is fairly acceptable, I think that I will be quite happy about this. They themselves will try to work out how to fulfil needs. In this environment, they know that if they do not try to fulfil the need, they will not get punished. They can just do what they have been told. However, when they are appraised, they will find that other people's performance is better than theirs. At that time, they have to accept that other people can get better bonuses or promoted than they can. As a result, they will adjust themselves. Yes, that's right. Generally, this is my opinion about the IT staff.

A: So you mean that instead of aiming at particular individuals and making requests to them, you will create a big environment, big request, say department target or company target for them to work for.

B: That's right.

A: You will not aim at every single individual.

B: Yes, you are right.

A: Alright. So having created such environment, as you just mentioned, there will have some appraisal or standard, aren't they? If so, does having standard for appraisal mean that there is also standard for rewards and punishments?

B: Yes, we have such situation.

A: If so, do you personally think that using the way of appraisal, resulting rewards or punishments, is a good method to let them fulfil the overall target of the company?

B: This is just basic. This is the basic stuff that you should have. It is like you have to have car doors for cars. This is the fundamental stuff that you should have. Of course, this is the stuff which cannot

satisfy everyone's needs. It is impossible to do that. This is just the basis, platform. It is like cars must have doors to drive.

A: *So you mean that it can only be considered as a basic tool to use. It is just that it may be a short-term tool or a ...*

B: *It is not a good thing. But it is like countries must have infrastructural regulations or traffic must have some basic rules. You have to obey them. You cannot say that you do not want to obey them. But is it really good to obey them? Sometimes, it has to depend on different circumstances. When you drive, sometimes you might need to ignore traffic lights otherwise it will be too dangerous. To avoid a hole on the ground, you may even need to pass through the traffic light. Of course, it will generate some risks but for this kind of thing it is very hard to judge by rewards or punishments.*

A: *So you mean that this can only be considered as basic equipment. It means that if employees achieve basic requirements, they can enjoy the so-called basic rights like what have been mentioned. However, if they perform better or have the motivation to perform better, this kind of thing will utilised more often.*

B: *You are right because all the rules and appraisal standards can be amended. Originally, they were set up by humans. So of course, you can amend them. But the amendment has to base on a premise that you have to consider why it has to be amended. We are not saying that it cannot be amended forever. We just want to provide the employee with an idea that it will be amended anytime and the purpose of doing so is to make it become better, not fairer. Here, there is no such thing that everyone is equal or something like that. This environment itself is full of competition. There is nothing fair or unfair. You have to think about what the most fundamental thing to care is. Of course, the elementary system of personnel appraisal has to be fair. For instance, when do people have to go to work? It has to be fair for everyone. Besides that, nothing is fair. Performance appraisal is not fair, always unfair since it is based on everyone's competitiveness. So how can it be fair to everybody? For instance, everybody has different starting point in education. So how can you search for fairness for everyone? The only fairness will appear when there is fair standard to judge what have been performed. Usually, it is hard to get this kind of standard. It is very hard to compare this project with that project. It is very difficult to say which one is better than the other. It is very hard to do evaluation. So you have to let the employee feel, at least on the surface, that in this environment everything is supposed to be fair. That would be quite enough. Just let them feel satisfied. I think that every company is in the same condition that its job is to make money. It has to make profit first and then it can talk about rewarding. So you have to let the employee know that there is no so-called fairness. They have to know whether they can be confident of revealing the impact of their output. So it is not suitable to use any method to quantify it or put it into a certain frame. If so, it will let the employee feel that the only thing to do is to satisfy that particular frame. Their aim will become to satisfy the appraisal, satisfy the standard and satisfy the frame. This is wrong. You cannot put all the projects, targets and directions of the company into a frame and then say that we only do that much or we only do the sales revenue of 10 billion dollars and if we reach the target of 10 billion dollars, the company shuts down for the rest of the year*

since the target is 100% achieved. This is the part that cannot be done otherwise the employees will think that they have 100% achieved the target and they have been perfect. In fact, nothing has even been perfect.

A: Alright. So you mean that you will be letting them jump out of the stuff of frame and trying to let them have higher view or further targets. You will let them look at such kind of stuff.

B: *So this part refers to how you define the standardisation and regularisation. Also, you have to make sure whether your definitions of standardisation and regularisation are okay or not. At last you will find that your so-called standardisation and regularisation have to be upgraded constantly. The most fundamental standard is about remaining dynamic to tackle contingencies. It is not about remaining still to wait for contingencies. It is about remaining dynamic to tackle contingencies. If your competitors have changed the strategy, are you going to change? If the current trend has changed its direction, are you going to follow? If you are going to change, relevant systems, including performance appraisal system, also have to be changed. The employees will suffer from it, won't they? At that time, what are you going to do? Are you still using the previous performance appraisal system to evaluate them? So at that time, they must be unwilling to change with you. In that case, you will be consuming a lot of time with your employees. So you should not build up this system or structure and let the employee play with it since many things are existent before ... if you have no absolute power or boldness to break this notion otherwise you will be wasting so much time with them or held up by them. They might say the manager is unfair. So I will tell my people that I am unfair to everyone. That is it. About this notion, you have to insist on it or even you have to suffer from insisting on it. Even I told my boss that I am unfair. Take training abroad as an example, some people are offered this kind of opportunity every year but some are not. In my department, not everyone can get this opportunity unless they perform extremely well. That's right. I am unfair. So you will find that the employees will know what the fairness is in such kind of environment. Fairness will appear only when you adjust yourself to meet the company's requests. You have to adjust your target anytime. When the company makes a request, can you provide the company with relevant service or can you change yourself to provide the company with relevant service? If you can change yourself to provide service, that will be great. The company's requests have been changing all the time, so as an employee you have to change as well.*

A: So you mean that employees have to adjust themselves in accordance with the change of the whole environment.

B: *That's right.*

A: Looking at this stuff from another angle, from what you mentioned, so you mean that the whole infrastructure, including reward and punishment system, of the company may need to be upgraded or downgraded as a result of the change of the whole environment.

B: *Yes, you are right.*

A: In fact, what I am doing is about to understand the role of manager in such process. From our position as a researcher, we define it as the Combination process. Actually, in ordinary companies,

there are many situations like this stuff. Even for some kinds of departments like IT department and Finance department, their working character will be much like this. For Finance departments, their job is to “play with” the stuff of numbers. So I want to understand that when you as a manager look at this thing, what is your position and role?

B: *Look at which thing?*

A: This whole situation, this whole situation of processing ... information. The situation of information flow. That is to say, under this kind of working situation or ecology, what are you going to do to let every employee or those who are involved ...

B: *Are you talking about the way of manipulating by managers?*

A: That's right.

B: *This is so-called the manipulation manner or management skill.*

A: That's right.

B: *It belongs to leadership.*

A: Exactly.

B: *Actually, I do not know how to describe this kind of thing. As a matter of fact, this is the stuff happened in daily life. Essentially, it is ... As you go to work every day, so you live here. It really belongs to livelihood. Besides, I myself have some power. As a manager, I certainly have some power so the employee must be able to ... no matter they are happy or not, they must obey my instructions. So when I make some decisions or give some orders, they have to obey them. Therefore you on the other hand have to think that since your people care much about your power, so your ... it must be explicit and seen that you can transfer someone to another post or even you can fire someone. You have such kind of power. This power can be seen explicitly and is obvious. However, if managers use this kind of thing quite often, on the contrary it will cause problems quite easily. As I said, this thing is the basis. As a manager, if you use this stuff quite often in management, gradually you will feel tired of using it and business is business will become the attitude of your people to you. In addition, it is not enough for you to use this basic tool to respond to the outside changes. In textbooks, you will find that there are many materials teaching you how to manage your employees and how to appraise your employees' performance. In fact, they are not enough to assist you in coping with outside requests. For these things, you have to specify them. As you mentioned, you have to specify, characterise them. Before doing that, you have to put them into consideration sincerely. Even if you put lots of efforts to do it, your employees may misunderstand your original idea and interpret it with their own way. It is possible. So basically, you do not have to pay much attention to that kind of basic management skill. Instead of paying too much attention to it, I will be using much so-called tacit, invisible skills. About so-called invisible skills, for instance, they are like giving a facial expression, using my eyes or even adopting different tones while speaking. If you use this manner to ask your people something, they will feel differently. According to this different feeling, they will adjust themselves spontaneously. They will think whether the manager does not like them, whether their stuff has some problems or why the manager asks them this way? In the process of thinking this stuff, they will consider whether they need*

to change the previous way of doing. The effect on this way of doing is greater than that of asking or yelling them directly what is going on. They will think that it is THEM not YOU who are doing this work. They will think that you know nothing about what they are doing. They will think that they are programming every day but you are not. Sometimes, you have to think what kind of manner should be used to manage them. Like this kind of staff in particular, they are very strong in self-thinking. If you want them to do routine job, they will not accept it. Under these circumstances, you cannot use the way of managing production line in the factory to manage them. It does not work. Everyone will suffer from it. Even, it will make you lose your focus. This is my opinion about it.

A: Alright, I see. Thanks very much and sorry to occupy your time.

INTERVIEW TRANSCRIPT – Combination 004

Note: "A" represents interviewer and "B" represents respondent.

A: What I am studying is like this kind of thing. In fact, generally speaking, we divide knowledge into two kinds as tacit and explicit. Here, we talk about the explicit part like numbers, information. Here, it says that through some processing or calculating by computers, original information can change to another kind of information. Through such kind of categorising, processing, the stuff will be transferred. I think that to a certain extent, what you are doing must be relevant to this thing. So what I want to understand is from your position as a manager today, how do you look at this thing? How do you manage and control this thing? How can you make sure that this kind of process will be progressed smoothly and accurately? From your point of view as a manager, how do you control this thing? What is your means? Would you use any kind of management skill to control this thing?

B: *I do not how to answer this question ...*

A: That is to say, today you lead this kind of staff ... Or in banks, in fact there are information departments, whose job is to deal with massive information. Or what your people are doing is quite similar to this thing. If you are having this kind of staff today, how do you lead them? How do you let these people do this thing smoothly since it may involve in dealing with huge information or requiring efficiency ...

B: *But has our information been divided into explicit or tacit?*

A: Here, what we are talking about is all explicit.

B: *That's right. You talk about something explicit. But our information ... There is nothing special to our information processing. It is like the stuff you mentioned. So I am not so clear what you want me to answer since our information processing is user has to key-in information which will be processed by computers and it results in the output or report required by other people. That is it.*

A: That's right. This is it, isn't it? In fact, what you just said is quite simple. But it is about this stuff ...

B: *But I have no idea of what you want me to answer ...*

A: Alright. You just said that your people are to key-in information and produce reports. You are right that it is so simple. But the problem is this is the process that has to be done by mankind after all. Therefore even though you manage information or information department, to a certain extent you manage people. You also have to pay attention to their key-in accuracy or the increase of their efficiency, haven't you? You certainly do not want things to go wrong. So how do you manage those people? How do you manage those people to do that kind of thing? What I mean by managing those people is do you provide them with incentives, saying that if they do certain thing well, they will get rewards? Alternatively, you think that this kind of thing is not necessary since this is the job they ought to do. Or do you think that you have to provide them with special rewards, prizes so that they will be much willing to spend extra time to deal with those things every day. That is to say, from your point of view, how do you look at these people? How do you lead these people?

B: *In our work, if it is about doing data key-in, it should be someone's responsibility. There is no special incentive. That is to say, if your job is about to key-in data or something like that, this is the job that you have to do. That is it.*

A: So you mean that you will not provide any kind of incentive ...

B: *I will not.*

A: You will not. Alright.

B: *Like cashiers. They just have to key-in some data when the customer comes. There is no special incentive.*

A: If so, do your occupational activities have peak hours or not? Like some industries, they will have peak hours at certain period of time ...

B: *Our peak time will be on Monday. It will be on Monday. There are many customers on Monday. This is for the business units. Here, we do not have such ... we just do this kind of key-in ... But in the business units, they are quite busy on Monday or by the end of month or year. But they also have no special incentives.*

A: So it turns out that from your point of view, they have to do what they ought to do. There is nothing to say.

B: *That's right, something like this.*

A: I think that this thing may be much relevant to what you are doing as processing data or maintaining information or database. So in such process, it must be involved in human factors. For instance, if someone's life is abnormal, it may affect their efficiency or performance while doing this work. They will make mistakes quite often. This situation may happen. So I attempt to understand that from your point of view, how do you lead these people? How do you lead your subordinates? Or how do you look at their work? How do you lead them in order to make them ... To be honest, this kind of job is a bit of boring. It is much mechanical. So I want to know that under these circumstances, how you look at these people. How do you manage these people to at least let them work happily or not let things go wrong? I just want to know that as a manager, how you ...

B: *... lead these people?*

A: That's right. Or do you have any trick?

B: *No, nothing special. They just do what they have to do. I have no special way to lead them. I think this is it.*

A: So you think that there is no need to have any training in particular or to ...

B: *We certainly have some training for them. Every company has this kind of thing. It is just that since everyone is a mature person so they must know what they ought to do in their work. As to whether they are doing well or not, the manager will judge it. If there are two persons doing the same work, it must be existing difference. The manager will judge it. For things that have to be done, they just have to do it. When something is done, it must generate the issue of whether the quality is good or not. But it is not possible that if someone's performance is particularly well, they will be rewarded or something. Besides, I will not tell them that they have to be 100% perfect. I think it also involves in people's characters. Some people are a bit slack but some are not.*

A: So from what you said, you mean that you will not have so-called evaluation standard. For instance, suppose you lead four subordinates, so you will not have a specific evaluation tool to measure their error rates or completion rates, for instance. So you mean that there will be no such evaluation standard to measure their performance.

B: *Yes, I will not do that since our stuff cannot be quantified, cannot be fixed. This is Information Department here. The Information Department is a place in which people write programmes. You can complete it by one day. You can also complete it by three days. If you want to complete it by three days, there is no problem with me as long as the programme can work perfectly. But I will make notes that you write certain programme by three days. One day I may know that some other people are better than you that they can write the same programme as you by just two days. It is because their efficiency is faster than you. So I will use this indicator to judge their performance over the year to see whether they are really good or not. In fact, I can judge whether someone's ability is good or not in their first month, three months or five months. From your first three or five months, I probably can know your performance for the next ten years or so ...*

A: Yes, almost.

B: *That's right. Your workload is that much so your quality will be that much. So if you perform reasonably well, there is no problem with me. It is just that by the end of the year, I will make a judgement of your performance over the year. But there is no evaluation standard for everyday work.*

A: So as long as performing reasonably well in the everyday work ...

B: *That's right. As long as something does not go wrong ...*

A: Right, as long as everything goes well.

B: *That's right. As long as programmes can work ... If they don't, someone will be in trouble.*

A: So my understanding is for you as a manager you think that if they can fulfil the basic requirement, that will be alright. You will not particularly want them to do something ...

B: *Yes, I won't. Here, our workload is not so heavy that someone has to do something within certain period of time and after it is down they are forced right away to do another thing. We will not do that.*

We probably will let them judge and do what they have to do. This is our way of doing.

A: So you will not voluntarily tell them that, for instance, if they perform considerably well, you will bring them to go for a trip or something. You will not particularly give them incentives ...

B: *Yes, I won't.*

A: Giving them incentives to let them do it quickly ...

B: *If they are not slack, it will be great.*

A: It will be great if they are not negligent. Perhaps, this thing is quite structured, which follows the prescribed order. So from your point of view, you may think that if they can reach certain level of standard, it will be quite enough. In fact, what I am studying is this kind of thing. That is, what is your position? How do you lead these people to make their efficiency increased or make they work happier? I am interested in this kind of thing as what we are talking about is information, information processing that can be seen. In addition to explicit knowledge, some knowledge is tacit. It is much harder to be seen. It is like what is called as trick or knack. Everyone has different way of doing things. This kind of thing is invisible, which cannot be seen. You can only feel it. For instance, in the past, masters led apprentices. Apprentices had to watch and feel what their masters were doing. Over three or five years, they could become as good as their masters. In fact, this is about tacit stuff gradually transferring to the apprentice from the master. Under these circumstances, for you as a manager or leader today, your attitude towards THIS thing may be different from your attitude towards THAT thing. That's right. What you are looking is different. So I am interested in looking at how you see this thing from a manager's point of view. How do you lead them? Is there any special way? Would you use the stuff like performance appraisal, rewards or punishments to ...

B: *For rewards or punishments, it is unlikely to use them. As for this thing ... ordinarily there is nothing worthy of being rewarded. If it is the work that has to be done by someone, there is no need to mention it in particular. As to punishments, I do not think that it is a good idea. If they make mistakes but they do not do it on purpose, there is no need to ... Usually, we ... as you said ... we also have the way of masters leading apprentices. We have this kind of system as many things cannot be learned by instant training. So you may need to string along with someone to learn. Alternatively, instead of stringing along with certain persons, you can ask certain persons only when you have problems. You just stick on certain persons and look how they are doing things. About how much you can be taught, I think it has to depend on those persons. If you want, you can dig as much as you can. If your learning attitude is good, you will learn more things. If you do not give a damn care, you will learn fewer things. We still have the notion of masters leading apprentices. We will not leave someone behind and teach them nothing. We will assign someone to them. Roughly, this is the situation we have.*

A: So as you said, you also have the situation of masters leading apprentices. To you as a manager, would you look at this thing of apprenticeship and that thing of what we discussed in the first place differently? Alternatively, you think that as long as things are going alright, you will not need to worry so much.

B: *That is temporary. They are led by them temporarily. After certain period of time, we want them to*

become independent. That is to say, as long as they can do things by their own, we will let them become independent and will treat them as normal people. At that time, they are no longer at the stage of learning. In the beginning, they may not have any idea of what is going on. So we provide them with some training and assign someone to teach them, letting them have time to learn. After a short period of time, I will examine their situations to see whether they can do things by their own.

A: So no matter which kind of situation, from your point of view, you do not think that you will provide them with something additional to make them much willing to contribute more. You will not introduce something like the idea of exchange into it, won't you?

B: *Here, I have nothing to reward them, to give them. Nothing.*

A: So basically, you will let them know that it is their responsibility to do it.

B: *That's right. It is your responsibility. If you perform well, I will know it. I will give you good score in your annual performance appraisal and in consequence you will have much year-end bonuses. But in ordinary days, there is no special reward or something. In ordinary days, I just watch them closely and keep them from making trouble. That is it.*

A: If so ... will some staff be negligent or slack ...

B: *Yes, it is possible.*

A: Given that, what are you going to do as a manager?

B: *What am I going to do?*

A: I am not your employee ... I just want to realise that if you encounter such kind of situation ...

B: *If it is not far away from what is normal, I do not think that I will do anything about it. If someone's way of doing or character is like certain kind, I have nothing to say. But if things go wrong seriously, I will report them to the top management and transfer relevant staff to other posts since they may be unsuitable for this department. We had this kind of situation in the department. We even wanted someone to leave since things went terribly wrong. We had this situation before. We do not hope to see this.*

A: Sure.

B: *The worst situation happened to us before. It did. It was resulted from someone who did not get on well with others. Finally, they were transferred.*

A: So basically, such way of doing will not be excluded.

B: *Yes, that's right. It happened before. Ordinarily, we do not take such violent action. However, if we have no choice, we will do it.*

A: Understood. I just attempt to realise that in general companies or industries, how does the manager look at this thing? In fact, this thing can be considered as so-called knowledge management. From my point of view, I do not think that knowledge management is as simple as implementing ERP system or something. I think it can be broadly interpreted that every staff's work involves in knowledge management. I just want to understand that in this aspect the manager should play what kind of role. Under different circumstances, should the manager play different roles? Or the manager's role should be consistent. I am more interested in this aspect.

B: *I think that different people have different ways of doing. Every manager will have their own way of doing. Some are very positive but some are negative. They are different. The difference also relies on how many tools you have on hand. Today, if I have absolute power, I may be able to give someone rewards or punishments right away. So if you have different power, your way of doing will also be different. Besides, the company will provide different departments with different incentives. They are enormously different. If your department can produce a lot of business for the company like sales departments, you will get much more incentives. If you are doing extremely well, you probably will be rewarded promptly. But like this Information Department, I think that such incentives will be much less. For this kind of thing, if you are doing extremely well, everyone will take it for granted since you do not create business for the company. It is the reality.*

A: So to sum up, you think that it has to do with the position of a certain department in the company. For instance, sales departments and information departments are totally different in terms of the position in a company. On the other hand, it also involves in the resources or “bullets” given to the department. If you get more, you can use more. Of course, it is also relevant to the position of the department in the company. Alright, I understand. Thanks very much for your help.

INTERVIEW TRANSCRIPT – Combination 005

Note: “A” represents interviewer and “B” represents respondent.

A: Here, what I want to understand is ... As what I am doing is about the stuff of knowledge management, knowledge economy. We basically divide knowledge into two kinds as tacit and explicit. Now we are going to talk about the explicit part. It is like the stuff of figures, information or reports which can be seen and circulated. Generally speaking, through analysing, categorising or processing by computers, the explicit figures may come out certain reports which are also explicit. So this is the process of changing explicit to another explicit. This so-called Combination process is talking about this kind of process. In fact, as you are from information departments, you may be much easier to understand the existence of such conversion. Even most of the staff in your department is doing this kind of job. Given that, I attempt to understand that for you as a manager how do you look at this process? How do you lead these people to do this thing as what they are doing may involve in processing huge data and something that has to be efficient and accurate.

B: *Yes, that's right.*

A: So how do you manage these people? Or how can you make sure that in such process things are going nice and easy? What kind of leadership means or even tool would be used? Or ...

B: *You mean ...*

A: Your leadership. How do you lead these people to do such work? Or how do you stimulate them? How do you let them feel that this thing is ...

B: *You can use comparison, use reports. It is something like ... Like us, we produce many information*

forms every day. Suppose we amend programmes ... take amending programme as an example, we examine their results by how many have been amended. Or we will examine their demands and try to understand why their demands are so huge, for instance, or why they have to spend so much time to amend it. We use this way to see what they are doing. Second, you have to look at their input data. As for this kind of stuff, report stuff, it has to have a comparison relationship and a source relationship. Suppose information coming in ... As the stuff of knowledge is appeared recently, there is no such thing in the past. Without it, it cannot be compared. In most of the time, it has to rely on the accumulation of experience to make judgement. For instance, we have to use the experience to judge when something can be done and why it takes so long. Probably, it is the problem of the novice or something. Usually, we use this way to examine it. About this kind of knowledge you are talking about, to us, in the aspect of programming, we seldom use the kind of report to do statistics. What you are talking about mostly refers to people who are doing market or stock analysis. By and large, we use experience to make judgement.

A: You mentioned that you will use so-called experience to make judgement. Can I say that it is about from your position as a manager to use the experience to judge, for instance, whether something can be done or the status of the target being achieved?

B: *Yes, that's right. It is all about the experience accumulated. Like the stuff we are writing, it depends on the accumulation of experience. It is hard to get quantified. For something quantified as the explicit stuff, you can only use it to refer to how many hours a certain person spends on the work in a month or something. As to how much time spent on a programme, that is a different case. Really, there is no way to make it quantified. Usually, it has to cooperate with our long-term accumulated experience. The long-term accumulated experience is rare to use something quantified. We quantify general things. For instance, why do we have more demands this month than the last month of ten programmes? Suppose we are in a bank and our work is to maintain its system. So if the demand is dramatically increased in a certain month, we have to find out why. Is it happened because of a certain period of time? Normally, we have ten programmes on average every month. If they are assigned to someone experienced, they probably can be completed within ten days. However, if they are given to novices, probably it has to take one or even two months. So how do you evaluate their performance? If they are new, you have to guide them slowly. So about something being quantified ... Sometimes, it takes long time to do it. But if they are familiar with it, the time will be shortened. Therefore to us, many things have to depend on our experience to judge.*

A: You talked about experience. Actually, from your experience or your position as a manager, you certainly have relevant experience to make judgement. But with regard to so-called experience, in fact it is something tacit.

B: *Uh-Huh.*

A: You internalise it by yourself.

B: *That's right.*

A: Perhaps, you have no idea of what exactly your experience is, but you just can use it to make

judgement ...

B: *Yes, you are right.*

A: It is much tacit.

B: *Tacit. That's right. It cannot get quantified.*

A: So what you have been saying is you actually use your tacit knowledge to judge the explicit stuff.

B: *Oh yes, in my work ...*

A: To measure the explicit stuff.

B: *That's right. In my work, explicit information is for reference. Mostly, it has to work with tacit information to make judgement. As to something tacit, it really cannot be quantified. It is totally generated by the accumulation of experience.*

A: Despite using such kind of tacit experience to judge the explicit stuff of, for instance, how long it needs and how many resources it costs, on the other hand, would you use some explicit stuff to manage such process? What I mean by explicit stuff in this case is, taking a project as an example, would you provide no matter experienced or new staff with something when they accomplish the project? Would you use such means to manage it?

B: *In general, if talking about something explicit as the schedule you just mentioned, if a week is given to them to finish it, usually I will not pay my attention to it for the first three days or so. I will let my people to elaborate it freely. When half of the period is gone, I will go to check what have been done. If nothing has ever been done, I will intervene in it. I have to make sure that it can be accomplished within seven days. I will not allow the project to get delayed. I use this way to divide things. For the first half, it is like being laissez-faire.*

A: So you mean that your way of leading is a bit mixed. That is to say, you will let them elaborate freely in the first place. You let them control themselves. Of course, some people do things of their own accord and finish everything on time. However, some are not ...

B: *I am not being laissez-faire all the time. Sometimes, I will pay attention to them and help them. I will not just leave them to themselves. First, I will ask them whether they have any problem. If there is no problem, that will be fine. If they are so sure of having no problems, I really will become laissez-faire since they said that they will be fine. When half of the time is gone, I will go to check their progress. If they are a bit delayed, I will give them a push.*

A: So when the time is gone half, perhaps you will formally ask them how far they are going.

B: *Yes, that's right.*

A: If they can explain the progress to you clearly and reasonably, probably you will let them carry on what they have been doing ...

B: *That's right. If I investigate that they are doing well or have completed the work, I will not ... The whole schedule can be planned by them.*

A: Alright. Nevertheless, if there is a situation that someone's progress is far behind the schedule or after your investigation, you find that the problem is caused by their personal factors and it can be improved by ...

B: *In general, if a schedule is came out in the beginning, I probably know that where my bottom line is. If a project needs three days to be finished, I will give them one week to do it. Given that, if the first three days of the week are really wasted, it will not cause any effect to the whole project. Usually, I will use my know-how to judge how long a project needs to take. In fact, I will do something for the project after it is launched but I will not let them know that ... as it is about training, you just have to let them participate, let them do it by themselves. Let them overcome the difficulty if they really face it. If so, I will be able to teach them.*

A: Alright. If you find that in the middle of it someone's condition is not really good or you need to give them more pushes or something, would you use much more rewards or punishments to let them ...

B: *I will not use the way of punishment.*

A: Or would you use the way of reward to let them contribute more to the work?

B: *As a matter of fact, there are many kinds of people. It has to depend on different people. Some people deserve to be dressed down. Really, some people deserve to be dressed down. Usually, for most of people ... especially females, I nearly do not blame them. Usually, I use the way of encouragement. For females, really it is hard to ... since they are quite emotional after all or ... Normally, we will have different way of managing them. It depends on people. For some people, they will be alright tomorrow if you blame them today. For this kind of thing, it is also hard to get quantified. Usually, you can get some idea through observing each of your people's character. About punishing people, we nearly have no such thing. We have not punished people over ten years or so.*

A: Of course, punishment is for something completely exceptional ...

B: *That's right. From my point of view as a manager, I am in charge of the project. No matter it is done well or badly, I will take the full responsibility of it. I will not blame my people on it. That is why I need to intervene in it when it has been done half. If it is done badly, the top management will come to me, not to my people. So there is no punishment to my people at all. Everything stops on me.*

A: Regardless of getting punished as it is for the case which is quite exceptional, let's talk about reward. For instance, would you use the method of reward to get them ...

B: *Normally, I will not do that. If we adopt this method, it will be endless since we have cases to deal with nearly every week. I think this is what they ought to do as they get paid. So we do not have such thing. It is happened only when the time of year-end performance appraisal comes. Generally, we will have such ... unless the case is really big and lasts for half or one year. In this case, when it is completed, we will, as you said, go to a restaurant to celebrate and of course I will pay the bill. Otherwise, we will not do that.*

A: So precisely speaking, it should be depending on different situations. That is to say, if a certain case does not have anything special or belongs to someone's duty ...

B: Right.

A: So there is nothing to say.

B: Yes, that's right.

A: If suddenly ...

B: *Right. The whole system is going to change ... That's right.*

A: That is to say, if everybody has to contribute more in particular ... to work overtime ...

B: *Yes, that's right. If they have to overtime on Saturday, Sunday, usually I will buy them some meals ... That's right.*

A: It is like to console their great effort ...

B: *You are right. As they have to work on Saturday, Sunday ... you may feel embarrassed with them ...*

A: So about this ... It should be considered as the use of a kind of tool to the employee ...

B: *That's right. If it is like what they ought to do in normal working hours, I think that there should have no rewards as I think that they are under obligation to finish the work unless as I said that they work overtime or work on something particular.*

A: Alright, I understand. I think that in your position, it should be depending on different situations. Generally speaking, there is no special reward unless there is something big ...

B: *Yes, that's right. We can then treat everyone equally. I do not have that kind of special ... being good to any particular person. So when the time of appraising annual performance comes, it puts me in a hard position since I treat everyone much equally.*

A: Here, we talk about some explicit stuff like information. This kind of information can transfer. However, you mentioned that you will use experience to judge some things. In fact, it is your tacit stuff. About the explicit stuff, it can be transferred to another explicit stuff. Information changes to another kind of information.

B: *That's right.*

A: To reports, for instance. They are something that can be seen. Another situation is your experience, this kind of tacit stuff, to a certain extent can transfer to other people through being influenced or interacted imperceptibly. After a period of time, everyone's feeling will be much similar since they affect, influence each other. However, this kind of thing is all tacit ...

B: *It can be sensed.*

A: That's right. It can be sensed. But it is very hard to get quantified ... very hard to be described.

B: *That's right. Usually, to us, the stuff of information is imparted by apprenticeship. That is if I teach someone, someone's ability will be increasing. You can recognise it by the speed they write programmes. We use this method to judge. Otherwise, there is no way to judge it. Something like technology is explicit. This is the experience that has to be accumulated.*

A: To the tacit stuff resulted from everyone affecting, influencing each other, as a manager, how do you look at this thing? Will it be the same as that explicit stuff? Will you use the same management means, management tool as the character of tacit stuff cannot be seen or described after all?

B: *It has to do with attitudes. If I teach someone two times for the same thing and they still do not get it, I will not teach them again. This is my attitude. So my people know that if they come to ask me two times for the same thing, they better know how to do it.*

A: So are you saying that under these circumstances ...

B: *It is like giving them some pressure. If you are taught two times and you still have no idea of how to do certain things, you will be ...*

A: Quite shamed.

B: *But sometimes when we write programmes, we are so easy to make the same mistake as this kind of thing is not like doing something in production line. Unlike production line in which everything is well set, what we are doing is diverse. It is just that the combination is different. In fact, they may still make the same mistake.*

A: So as a manager, your way of doing will be depending on different circumstances or even different sex.

B: *That's right. To us, it is very difficult to use this thing to do it. For the stuff like knowledge, it is hard to get quantified. Really, it is very hard unless you are doing cashiers' work so that you can count how much money you receive or loan. Such kind of thing can easily be quantified. For the stuff of knowledge, it is hard to obtain something quantified.*

A: Since it involves in something that is invisible and cannot be identified.

B: *I think that experience is still the most important thing. Experience is the real stuff that you have to use. We had a situation that for the same purpose, Staff A wrote ten programmes for it but Staff B only wrote one programme for it. The effect of that ONE programme was equivalent to the effect of those TEN programmes. If so, how can you say that the performance of Staff B is worse than Staff A? We cannot look at it this way.*

A: It seems that it is very hard to do that. Its evaluation should be based on the effect rather than how many lines of programmes are written.

B: *You are right. It is not to look at that thing.*

A: With regard to writing programmes, in fact you have to base on the existing computer language to write your programmes ...

B: *That's right. You have to use the tool to ... right, the point is if you can make it, it is yours ... it becomes your knowledge. Where does our knowledge come from? As I said, it is through impartation. It is generated by accumulating experience gradually. It is accumulated into it. Even you make notes of something, you cannot get it.*

A: So it means that at last such process will have two results. One is the knowledge you absorb you yourself, you get something from the situation and the other is, for instance, you give something concrete to the company.

B: *Yes, that's right. That is just the result. To our top management, they just want to see the result. They do not care about your processes. They just want to see something they want. As to how it is produced, it is hard for them to imagine. It is like going from Taipei to Kaohsiung. Some people will do it by bicycle but some will do it by plane. The situation is, for the top management, they only care about someone finally gets to the destination. They do not care about which way is used.*

A: I am interested in understanding that in the process that we have been talking about, what should be your role? What kind of role should be played by a manager in the process?

B: *Like us, we are a little manager. Mainly, what we are doing as a little manager is to get along well with our people. When I am off duty and take off the manager clothing, I am their friend. That's right. In my opinion, I treat them as my brothers. So I will not have such ... Especially for those who are knowledge people, usually they do not like to be restricted. This is quite important. It is useless to use your title to force them to do things. If you do that, they may quite the job. However, if their main work is to maintain a system, you as a manager will be in big trouble since you may have no idea of how to handle the system. You will be tied up by them.*

A: *Or they may spoil something ...*

B: *Yes, you are right. If they are bad enough, they can put a bug or something in it. Nobody knows. So we are ... we adopt more laissez-faire policies. We use the way of self-management. We are seldom to use mechanical way to manage them. We use humanity stuff.*

A: *From your position as a manager, if there is nothing significant, you probably will stay behind the scene ...*

B: *That's right. Our supervisor is also very simple. As long as you can make it, I will not say anything. So my work is I just give what have been done to the supervisor. I have to collect everything done in this team and give it to the supervisor. As to how it is done, perhaps it is resulted from everybody's study or from my impartation. So I think it has nothing to do with explicit stuff. Our supervisor almost never looks at such explicit stuff of, for instance, how many programmes are written. We are unable to do such thing.*

A: *Of course. In fact, you have to give final results to someone at the top. They only see results that can be seen as a kind of explicit stuff.*

B: *That's right. Someone at the top can recognise it. However, we cannot do that. As they are at the top level and have to do management, so they can only see results. They are result-oriented. But here, we belong to something technical. Of course, we have to produce some results, but for the processes involved, it is very hard to quantify them.*

A: *Regardless of the process that has been hard to get quantified, finally it generates something visible after all, isn't it?*

B: *That's right. It is only seen by the supervisor. But to me, I cannot look at it by being result-oriented. Sometimes, the outcome is the result of my intervention. But sometimes, it is the result of the whole team's action. It is very hard to ...*

A: *In dealing with such process, of course it involves in your experience as well as some concrete facts as interpreting data. So I am interested in knowing how you accomplish such process. How do you lead your people to accomplish such process? What is your leadership style? How do you ...*

B: *I told you in the beginning that the whole demand is judged by me. I decide how long for a project. I will give my people double time to do what they ought to do. It is totally based on my experience. It is impossible to ... regulate it. If you just give them projects, they probably cannot evaluate how much time they need to complete them. Usually, it has to rely on our experience in years to make judgement.*

A: *So besides something extremely big or significant, you probably can judge how much time is*

needed for something. To sum up, you think that to normal projects they are under obligation to finish them. Therefore there is no need to stimulate them with any incentive. You think that it is not necessary to do so. However, as we talked about, if there is a sudden case or something big is coming out, that is another story.

B: *Yes, that's right.*

A: Alright, I see. Thank you very much for your time.

INTERVIEW TRANSCRIPT – Combination 006

Note: "A" represents interviewer and "B" represents respondent.

A: What I am doing is about so-called knowledge management. I think you must be heard of it.

B: *Yes.*

A: Here, we divide knowledge into tacit and explicit. Right now, we talk about the explicit part, regarding to what it says here as numbers, forms.

B: *Yes, it is something like formulae.*

A: Right, something you can see. About this so-called Combination, it refers to original data changing to forms, reports which are also explicit through computers or humans' processing.

B: *Right.*

A: Right now I am interested in understanding that in your position as a manager, how do you look at this thing? How do you manage this thing? Perhaps in your department, what your people are doing is quite similar to this.

B: *That's right.*

A: To this kind of conversion. So for you as a manager, how do you manage and control this thing? How do you manage, control and lead these people to make sure that this process is going smoothly even if this thing involves in processing enormous data?

B: *Right.*

A: Or it requires accuracy. So how do you manage this process?

B: *In the Computer Division, you have to use your brain to make yourself progress, accumulate knowledge all the time. So being a manager, a leader, as your subordinates' knowledge perhaps is different from yours, so it turns out that everyone has to compete and cooperate with each other. They have to make progress and you also have to make progress. This is a much special aspect in the Computer Division. There is no problem in management as this is a place in which everyone uses their brains to work. In management units or other departments, you probably can use the idea of scale to do management. But in the Computer Division, it is probably ... As its turnover is much higher, so you have to keep making progress otherwise you will be hard to write any programme. For you as a leader, your ability must be stronger than your people so you have to make progress all the time. So how do you manage it? It involves in many parts. When a requirement comes, how do you distribute it? We are*

workers of middle level as we usually have had ten years of experience or so. About my people, they have three or four years of experience on average. Here in the Computer Division, the environment is much free so it is not so solid in management. I distribute the work to my people. If they do not know how to do it, we then have a discussion. Everything is moduled. That is to say, information has to be communicated. Everyone has to use experience ... leaders have to use the experience to plan the requirement quite well. So the main point now goes to how leaders plan the work. About leading the subordinate, as long as the work is well planed, they can be divided easily. Being divided easily means that some people can do the picture design and some people can do the paperwork. We are free here. We do not have the notion of class. You should say that the Computer Division is very special. There is no serious problem in management. I have some friends who work in other companies' information departments. Their situations are more or less the same. It is much special. Information departments are much special. You do not need to manage it as in the Computer Division everyone uses the brain to do things. Those who have ability can survive here.

A: So you mean that ... in fact ...

B: If a youngster comes in, everyone will respect him/her. As that youngster is new, he/she may be very good at internet. For the old people, they may not have any idea of internet so they have to count on that youngster. Newcomers always have new stuff which is not known by the old people. It applies to new programmes. If the new one is kept developing, the old one has to be eliminated. People have to start all over again. As to knowledge management you are talking about, it only has to rely on experience. When you write programmes for a certain period of time, you will be able to module them. So finally, it comes out that you have to distribute the work. But you still have to learn, you still have to constantly ...

A: So you mean that from your position as a manager, you will be creating a ... much free environment to this situation.

B: That's right.

A: That is to say, not to make them have the feeling of being restrained.

B: That's right. In the Computer Division, we will not have that feeling. They have to keep accumulating new knowledge ...

A: If so, you certainly will learn things and make progress by yourself. You will also be in such interaction process, won't you? Regardless of your own situation, as a manager you must be hoping that they can make progress with you. Therefore how can you let them make progress? What I mean by "how" is would you use some substantial incentives? Or would you provide them with better rewards or something like staff trips to make them put more efforts?

B: Like myself, I will go to investigate what the current trend is. That is to say, I will put some systems, some small systems into the PCs. I will put them into the PCs from the mainframe. I will ask them to learn something new, to attend lessons and to study on their own. Unlike the mainframe environment which is much complicated, here the environment is much simpler. Four or five persons can write programmes and start to do some research together. If someone is of better ability, they will make

breakthroughs at some key places since they have much in experience. As a fact that programmes have continuity whatever for new programmes or old programmes, so if everybody can do research together, it will be easier to make breakthroughs. Then, everybody can make progress together and will have true-heartedness. This belongs to the aspect of new programme as new stuff is much easier to everybody. Unlike the old stuff in the past, it is much difficult to write. So there is no problem in management. As to rewards, someone at the middle level like me does not have the right to ... It must go to the top level. So it becomes much like making friends. But there is nothing about holding staff trips. This is the stuff that the top management has to pay attention to. So there still has discrimination. To us, there is no problem to buy them some foods or drinks when they study together. There is no problem for that. We are much free in the Computer Division. Unlike other departments, their authority is much bigger, the kind of bureaucracy is much bigger as they rely on people to govern. In that kind of department, if certain leaders are senior and experienced, they will be much ... It is different from the management in the Computer Division. The Computer Division is much like managing the status of being progressed since here we deal with new stuff. Although it is quite mechanical in the Computer Division in which information transfers in and out, it is much free as you have to elaborate your imagination to solve problems. It is much free and flexible in terms of time. It is much fun and free.

A: Therefore you mean that your so-called management means also has to be liberal. **B:** Perhaps when I go outside, I am also liberal. So it is personal, it is personal style.

A: That's right. Every manager has their own style.

B: The stuff of knowledge ... is very good. As through such to do knowledge management, it is very good. It depends on how you do it.

A: If so, certainly your premise is that you will create a much liberal environment in which everyone can make progress spontaneously. Given that, would you introduce something like evaluation standard into such process for everyone's performance?

B: Everyone is different in terms of character, ability and working attitude. By and large, you can go to evaluate them. Of course, if you want to consider it much reasonably, you have to know what everyone's requirement is ... it must be clear. The requirement has to be finished, isn't it? If you do not know how to do it, I will do my best to lead you so that you can grow. So in the Computer Division, you must be able to write something otherwise you are in the Computer Division ... if you are in other companies, you also have to do that. In the same period, someone can write ten programmes but you can only write five. In fact, some people can do much but some cannot since the speed is different. Some people are quite fast but some are slow. For those who are slow, they will face the problem of evaluation. I think that in the year-end appraisal, you still cannot evaluate them so badly. You have to let them have opportunity to make progress.

A: So it means that the stuff like evaluation, appraisal is inevitable. It is just that it happens once or twice a year or even ... it is just the matter of time. In fact, such so-called appraisal mechanism can be seen as the control tool of a manager. As I mentioned that there are different levels of managers, the

authority and resources they can manipulate are different. As you said that for the big affair like holding staff trips, there is nothing you can do at your level. But for something you are capable of doing like buying your people some foods or drinks, you will be using this way to ...

B: *I do this kind of thing very often.*

A: So you will use this to stimulate your people, to let them finish the work as soon as possible. So this is a means you will be using.

B: *That's right. I will go for it. There is no problem for that. You have to finish it because it is the requirement by the department. To myself, I have to distribute the requirement quite well.*

A: Alright. What we have been talking about refers to something explicit. It is about information transferring in and out. It is the stuff which can be seen. On the other hand, there is some stuff which cannot be seen and are tacit. It is like what you mentioned as experience, using experience to make judgement and do impartation. For the stuff like experience, of course you can feel it but you will be hard to measure it. Besides, in the process of being influenced imperceptibly by each other, you impart your experience to me and I impart my experience to you. Perhaps, it does not need language to express. I think that this is the situation which may happen to everybody in your department every day.

B: *It happens frequently.*

A: Right, it happens frequently. If so, would your role as a manager to control and manage this stuff be relatively different? Or comparing what we have discussed in the first place as explicit stuff with this tacit stuff, your control means towards them will be the same.

B: *As long as it is tacit, it cannot be expressed by numbers.*

A: Yes, that's right.

B: *Tacitness refers to ... you may be contacting with ... You think something is tacit, but other people think that it is normal. With regard to experience impartation, if someone writes so much, they probably will generate certain knack. So regarding to impartation, there is no way for this kind of thing to be imparted. In the Computer Division, if you string along with someone for a long time, you will know the principle of every time they handle things. For the old people, they know how to write programmes. But for the new people, you have to watch them or lead them. You lead them to see which part is more important. It becomes explicit. It can also be systemised. Is knowledge management about imparting their experience or leading them? About experience impartation, if it is tacit, it becomes humanity management. If something refers to tacitness, it has to be humanity management. Management level is different. If it has to do with tacitness, it will be different in terms of everyone's management. My position should be there is no difference between tacit stuff and explicit stuff.*

A: So you mean that from the position as a manager, there is no difference actually.

B: *If it is about something explicit, it should be ... consistent. As long as you are a manager, you should be consistent. As long as it is knowledge management, it has to be consistent.*

A: Alright. Despite what have just been discussed, simply speaking, you belong to a manager with

liberty style. It is quite interesting. So you think that as long as you are with this style, they will do what they have to do and progress what they have to progress spontaneously.

***B:** That's right. It should be saying that this department is very special. In the Computer Division, you have to write programmes, you have to have that ability. But in other departments, the situation and the consequent attitude may be different. If I today were in other departments, the management may be different as you are a manager and your performance is over there that everyone may check it. But in the Computer Division, everyone is more or less the same. It is much free.*

***A:** Perhaps, it is relevant to the department ecology of the Computer Division. Like the stuff of information, IT, it has been progressing constantly. So perhaps ...*

***B:** Looking at the successful case of PS2 ... if you are younger, you have more value. For the old people, they do not know how to write new programmes.*

***A:** Or those who are recruited half a year ago are different from those who are recruited right now.*

***B:** In other departments, the situation may not be like this. I have a colleague who is a deputy manager in the Management Division, his attitude is quite different. He is very serious ...*

***A:** That is the way it is.*

***B:** There, management has to be conducted step by step. It has to follow the rule. Probably, it has to do with explicit as well as tacit stuff. He cannot be opened.*

***A:** Here, you do not have such problem, do you? That's right. Since ...*

***B:** Ecology, the problem of ecology.*

***A:** As the ecology here is like this, the only thing you as a manager can do is to give them more space, more free space ...*

***B:** It must be like this. You have to make progress all the time, haven't you? Here, everyone just writes programmes. As time goes by, they will have experience and may not need your guidance anymore. At that time, you just distribute the work to them.*

***A:** Even though it is the process of writing programmes, it must be based on some modules or some ...*

***B:** It is like this. Management itself is something modularised. Information is the most modularised stuff. Comparing with other departments, here they have to use much brain but they are quite happy here. If you assign them to do the counter job, though it is quite routine, they cannot have fun from it. But here, although everything is modularised, it is about scientific formulae and it is flexible.*

***A:** Even though this stuff is existent, everyone's means is different so that the thing created is different.*

***B:** That's right. Although it is also modularised, comparing with the situation in the counter or in the management department, its flexibility is bigger.*

***A:** Even though it deals with the existing stuff ...*

***B:** That's right.*

***A:** But they work it out by themselves after all.*

***B:** Elaborate freely.*

A: Besides, the requirement has been changing all the time.

B: *It is to elaborate freely. Programmes are moving, progressing all the time. So you have to make progress all the time. Today, your topic is about knowledge management. In the Computer Division, it is much open.*

A: Alright. Today, we have roughly talked about two different kinds of conversion processes as explicit knowledge one and tacit knowledge one. I just want to know what your role as a manager is. What is the position of a manager? How do you look at this thing? How do you manage this thing? My research interests are in here.

B: *My role is like this that from my experience, everyone's attitude, opinion is different.*

A: So this stuff largely involves in ...

B: *Probably, it has to go higher since their management level is much broader. For us at the middle level, our role may not be so obvious. So for the stuff you are talking about like something tacit or explicit, you should go to someone at higher levels. Their means and experience will be different.*

A: Alright, I see. Anyway, thanks very much for your help.

INTERVIEW TRANSCRIPT – Combination 007

Note: "A" represents interviewer and "B" represents respondent.

A: You must be easy to understand this kind of situation. Basically, what I am studying is about knowledge management. We divide knowledge into two kinds as tacit and explicit. About the explicit one, it is like what it says here as numbers, data or reports. So how does it be converted? That is to say, for instance, through computers or hands' categorising, editing and processing, data or information will transfer to reports needed. This is a kind of conversion, explicit stuff at last changing to another explicit report. What I am going to understand is as a manager how you manage this thing. How do you control this thing? If your people's main working content is similar to this situation, how do you lead them? What is your tool? To make sure that this process can be going smoothly and quickly, how do you lead these people? This process may involve in processing massive and instant information and may require higher standard in accuracy. Under these circumstances, as a manager, how do you manage such process?

B: *Basically, you have to separate their working characters in the first place. Like our environment, we have programmers whose work is to do system analysis, operators and those who do information control. Their working characters are different. Given that, your evaluation to them has to be different or even your checkpoint to them has to be different. So if you look at the whole computer environment, it involves in several aspects of people, events, time, places and stuff. Your data is one of your control areas. Your programme is also one of your control areas. Besides, you have to investigate how many exits you can use to control your data. In this case, it has to do with security control. So we will use these ... of course, it has to depend on tools like information control, programme control ... If you*

today simply look at ... operators' operating procedures, there involves in many operating tools to assist them. So if there is something wrong with their processes or something wrong happens to them, there must have warnings or something coming out. Take those programmers as an example, the programme modified by them will be monitored by security control. As to their performance, it has to depend on their output amount or ... for some stuff, you cannot say that quantity means quality, so we have to check the quality, error rates. Even we have something which is ... we have developed some systems. For instance, the accumulation amount of each case. That is, when a case is opened and when it is closed and by whom, something like that. I think that you can see something obvious from this stuff. In fact, I personally think that managing IT staff is different from managing staff in other departments. IT staff's thinking pattern does not follow the logic of ordinary people. As you are talking about IT staff right now, in fact it is very hard to manage IT people.

A: Really. How come?

B: I give you an example. IT ... or I should say engineers' characters. One of the engineer's characters is they think that they are the most brilliant people in the world. They have such kind of thought. Everyone will think that ... They may think that in the IT area they are ...

A: Invincible.

B: They are the king. They have such character. So when you today manage such IT people, you cannot use the way of managing pupils to manage them. You have to stimulate them. You have to let them perform well and let them have the sense of achievement. This is quite important. Actually, I think that the biggest character of managing IT staff is you have to let them have the sense of achievement. It is like sparkling fireworks, you have to let them elaborate splendidly. They will feel that their work is quite rich and full of achievement. At last, they will work smoothly and happily. Simply speaking, you may worry about that, for instance, your information will be damaged or something. In fact, in the internet environment, everyone has such worry. I think that certainly you can use some tools to manage it, use some tools to suppress them like suppressing criminals. But that is all passive. It can only be changed by using positive management. It is about letting everyone feel that they can get satisfied with their work, not their pay. You have to let them feel happy about their work. That is the point.

A: Just let them feel happy.

B: With regard to happiness, it is not about paying them so much money or allowing them not to work every day. The so-called happiness is about letting them have the sense of achievement on the work.

A: Alright. So you think that it will be more important to use such means, creating a complete environment rather than ...

B: It should be saying that you have to let them have element of progress. Let them feel that they can make progress every day. Let them grow in terms of techniques and general knowledge. Let them feel that they have future. I think this is more important than giving them high pay or good welfare.

A: So you think that even though those IT staff is doing this kind of job, you think that creating the sense of achievement for them should be quite important.

B: *To be honest, the most terrible thing in the IT industry is the turnover of staff or something like the leave of the whole team. We can see that in Taiwan many companies are nearly dead as the leave of a certain group of people. If the R&D team in a certain company leaves, the company has to suffer more from it since it has one more competitor. There are many cases like this. Today, many bosses think that they pay you so that you have to do it. They just have such attitude. But for those engineers, this is not the stuff they want. They want to have the sense of belongingness. They want to have the sense of achievement. They want to feel that this place has the future. Even though some people work for money, most of the people will be following this pattern.*

A: *If this is the case, would you use some special rewards to reinforce so-called their sense of achievement? For instance, would you use your position as a manager to tell them that if they work overtime to finish a particular project, you will be inviting them to go to a restaurant to enjoy a meal or something? Would you use such kind of substantial means to strengthen their working motivation or even their sense of achievement?*

B: *As you mentioned this, I tell you something that this is really art. Really, management is a kind of art. You talk about having a meal. However, you cannot buy them a meal every day. You can do it occasionally. You cannot always give them carrots, can you? Sometimes, you have to take sticks out as someone may fall behind. You have to push people who are fallen behind. For those who are not fallen behind, you cannot take carrots out every day, you have to do it occasionally. However, you have to create that kind of atmosphere, scenario. I like to say scenario. Scenario is quite important. You have to create a competitive environment. You have to let everyone has competitors. If there is no competition, it is like the environment is static and everyone is waiting for death. If so, those who are good at something will leave. The final consequence will be like this.*

A: *So you mean that such way of doing can be used from time to time.*

B: *It is one of the methods, one of them. I do not much emphasise such kind of substantial reward. What I do much emphasise is to let them feel that they can make progress in technique ... That is to say, to make them feel that in their current positions, they can increase their technical know-how every day. I tell you something. Those who recognise such perspective are really good people. If someone does not recognise this perspective with you, they may have already ditched themselves. I do not think that they want their future better. They may not have such thought. If so, we prefer not to have such employees. If your people think that a living ass is better than a dead lion, you better tell them to die. Everyone has to make progress.*

A: *If so, according to your position as a manager, you mean that you will be providing them with visions, bigger space ...*

B: *I think that I cannot provide them with such kind of stuff. I am not so mighty.*

A: *If not so, what are you going to do?*

B: *I think that you have to do your best to provide that environment. You have to do your best to explore where their potential is. You have to do your best to find the way suitable for their potential. Some people may not be suitable for writing programmes, but for doing other things. They may be*

suitable for making hardware. The biggest responsibility for managers is they have to find where their people's potential is, arrange suitable work for them and then let them elaborate themselves in the selected area. This is quite important. If someone does not fit this place but you still want them to stay in this place, it is a kind of harm to them.

A: So you do not believe in so-called visions or something.

B: *No matter it is called vision or something, you are not the boss. If I were a boss today, I can give you visions or draw a nice picture to you. But who knows what is going to happen tomorrow?*

Especially, nowadays, no one knows what is going to happen. No one knows. You cannot predict the future. So if you give other people lots of visions, no one will believe you. You cannot lead them in the long run. If you want to manage them with long-term leadership, you just have to explore where these employees' potential is. You have to do your best to arrange suitable jobs for them. And then you have to let them gain the sense of achievement. If you can let these people follow this way, they will follow you forever. You do not need to take carrots out all the time. It is not the point. You just need to do it occasionally, don't you? To be honest, you do not have that much carrot. For instance, how many meals can you buy for them? I think one or three times a year will be enough.

A: What we have been talking about refers to something explicit. It is like what IT staff is doing. Their working content will involve in this thing. However, there is another situation which may also happen to IT staff. That is whatever their work has to do with software or hardware, after a period of time, they must have their own experience. The stuff of experience is quite personal and ... of course it can be expressed by language. But for much of the experience, perhaps it is not easy to be expressed by those who own it. So it may need to be observed, felt by other people. Or to make the experience communicate, interact, it probably has to through the process of being influenced unobtrusively and imperceptibly. Given this kind of situation, how do you look at it as a manager? How do you manage this thing? Would it be different from that thing?

B: *I do not quite understand what you mean.*

A: That is to say, we talked about something explicit in the first place ...

B: *Your so-called tacit stuff refers to which one?*

A: As it is tacit, it means that it is hard to be described by everyone. It can be seen as the knack of handling things. It is different for everyone ...

B: *That's right. So I just said that you have to explore their tacitness, their potential. Where are their characters? Where are they suitable to go? This is something you have to find out. Before arranging which way to go, you have to find this tacit stuff. So actually, I have already mentioned something tacit.*

A: Alright. So you will talk about this problem from a tacit angle.

B: *I think that you cannot see everyone's tacit stuff but you have to observe it for a long period of time. It takes time. I think that if you want to have a clear picture of it, you have to at least spend three months. After three months, if you have opportunity, you can arrange something for them to ... Even though you arrange a road for a certain person, it is that person who has to walk down the road. How*

do they elaborate most of their potential? In fact, I like to make them feel that they make progress from zero point to sixty points, rather than from ninety points to one hundred points. If they can jump from zero point to sixty points, it is huge progress, stimulation to them. Their perception will be totally different. They will think that they are very important. They will think that they are very important people. However, some people may not be able to achieve that. There is nothing you can do.

A: So you think it is very hard to manage IT staff.

B: *I have led some people in a software company. Software companies have a very high turnover of staff. That is to say, when a person enters into a company, that person will leave the company approximately after three years as that person has already learned something. I found that the boss did not let them feel their importance. Their potential had not been fully elaborated. Besides, they had no future visions. Like those software companies, sometimes they have to deal with special cases. To them, the environment is various. Their pressure is higher than any other industries. Therefore, they tend to find a place in which they can feel more comfortable. This is the situation that may happen. For IT staff, they are much easier to find new jobs. They have more opportunities. Nowadays, nearly every kind of industry needs IT staff. In addition, their intelligence level is by and large higher than those who are in other general industries like service or manufacturing sector. That is why they can get more pay. One day, if their knowledge becomes common sense, there will have no value. It varies all the time. So you have to get much higher level know-how. Like internet, when it came out in the first place and you knew how to use it, it would be so brilliant. But now, even children know how to use it. That is the example of know-how changing to common sense. So this sort of stuff varies from technology to technology. So you have to let them feel that they can make progress all the time and they can learn more advanced technology. You have to let them feel that this is the only place in which they can make progress, have the future and increase their ability.*

A: As a fact that for most of IT staff, their working situation will be like this. So I am much interested in your role as a manager. Simply speaking, how do you manage these IT people? That's right. I am much interested in knowing what kind of means you will use to lead, manage these people.

B: *For that kind of thing, it cannot be so methodical, can it? It does not like mathematical formulae, does it?*

A: In fact, it involves in what kind of means you use in the middle of it. As you said, you cannot give them carrots every day. They may be sick of it or they may want more.

B: *That's right.*

A: So you think that it is not a long-term way of doing.

B: *That's right.*

A: Alright, I see. Thank you very much for your time.

INTERVIEW TRANSCRIPT – Combination 008

Note: "A" represents interviewer and "B" represents respondent.

A: What I am interested in or what I am studying is the stuff so-called knowledge management. We divide knowledge into tacit one and explicit one. We roughly have this kind of division. Here, we talk about ...

B: *Something explicit and can be quantified.*

A: Something can be seen or quantified like figures, reports. Therefore something is explicit. However, it can be transferred into something you want through computers or even humans' categorising or editing. The outcome is also explicit. I think that you must be quite familiar with such kind of situation.

B: *That's right. I have a general idea of it.*

A: Even your people's working content may involve in this kind of situation. So I would like to ask you that as a manager today, how you manage this process. What is your leadership style?

B: *If we talk about working content, roughly it has to do with procedure documentation. Generally speaking, we think that recording is one of the ways to introduce knowledge. In other words, we just make everything, including any procedure and programme, documented, indicating how certain work is done. We use this way of doing.*

A: In fact, human factor is involved in this sort of process ...

B: *That's right.*

A: ... to deal with such process.

B: *You are right.*

A: As to the kind of hardware stuff, they are static.

B: *That's right. In this Computing Room, the situation is most of the stuff is existent. There are some modules you can use. But sometimes, in order to solve some problems, you have to create something new. Such way of doing will generate several different directions. For instance, we may encounter a kind of bottleneck or difficulty. So we have to try to figure that out. We have to figure that out. To solve it, we can change our current procedures. After something is changed, it will be applied to the current procedure. Therefore it means that the whole procedure has been changing all the time. We have to record what have been changed and keep relevant documents.*

A: If so, for you as a manager, how do you lead your people to do such work? I will be much focusing on the issue of leadership style. So how do you lead these people to let them overcome the kind of bottleneck or difficulty? What is your way of leading?

B: *As a matter of fact, I will be using the way of personal involvement. Take encountering problems as an example, of course ... we will seek for assistance or some resources. We will try to work out where the problem is. We will try to find out whether there is any way to solve the problem. We will try to get any resources required and to supplement what have been missed. I give you an example. Suppose that we have a new project. It has many things that we have already had. However, the problem is in addition to the existing stuff, to make the project succeed, we may still need some ... knowledge or probably tools. So we will go to include or recruit those stuffs. That is the way it is. That's right.*

A: So you mean that from the position as a manager, you will be playing the role of introducing

resources. You will be introducing the resources needed by the department or even the project.

B: *Yes, that's right. But it is not entirely what I have to do. That is to say, we will first decide what kind of resources needs to be introduced. Afterwards, we will find out who might have the channels to the resources. Finally, we can go for the resources we want. This is the way much implicating the division of labour and it is for bigger cases. Sometimes, when projects are small, certainly there is no need to be so complicated. For instance, we know that the whole movement may have certain bottleneck and it refers to the problem of knowledge. So it is possible that those who are involved do not know how to do it. In this case, we will go to find out the way of doing it. Sometimes, it is not about the problem of hardware, but about the problem of software or the lack of certain knowledge. For instance, they attempt to do something and they think that they can do it. But the reality is they lack certain knowledge to do what they want to do. Given that, we will seek some resources or something to solve this problem.*

A: Alright. Saying that after such action is finished, for instance, after introducing wanted resources, how do you use this stuff? How can you make sure that your people can finish what you want them to finish on time? Or after the resources is brought in, what is your leadership tool?

B: *With regard to this work, the general situation is we distribute things in the first place. That is to say, before doing a certain thing, we roughly have to know the purpose of doing it. We also have to know what kind of thing needs to be done if we want to reach the target. As to what needs to be done, it may include something we do not have right now and need to have support from the outside. We just follow this kind of procedure to execute. Of course, it is for bigger projects as it involves in many things. In fact, lots of work is routine. That is to say, according to the situation in the company, after data come in, you have to do the action of mapping. It is because our work is about producing information reports. That is we provide pharmacists with information. After the information comes in, it will generate many routine jobs. I can say that about 80% of our work is routine. That is to say, it is about the action of how you map the oncoming information with our own resources. Therefore about 80% of the work in the company can be dealt with by the existing procedure. For the rest of 20%, it probably has to do with the problem of data or its form needs to be changed or something. About that sort of change, how can we make it standardised? That is to say, after it is solved, how can it become the reference for other people? In fact, our way of working is similar to this. That is accumulating slowly for the generation of standard. Yes, that's right. About 80% of our work is routine. For the rest of 20%, you have to incorporate it slowly. Roughly, we have a standard way of doing.*

A: According to what you said, 80% of the work will become routine. It is like the situation of building up or processing information. However, some exceptional situations reside in the rest of 20%. In such kind of working environment, would you ... of course, everyone does or is assigned different work, so as a leader or a manager, would you introduce some mechanisms like rewards or punishments to let them finish the work as soon as possible?

B: *In fact, I have not set up such kind of thing as it is associated with the company's policy. Generally, my mission is to oversee and urge them to finish what they are assigned on time. If they have any*

problem or difficulty in the middle of doing it, we will try to help them to solve the problem and not to exceed the deadline. In fact, as I said that about 80% of the work is routine, so about this kind of work we will try to consider whether certain procedures can be shortened or whether certain sections can be assisted by computer programmes. As a matter of fact, we have many sources of information. If they are checked artificially, it will be so time-consuming. However, it seems to be inevitable. Therefore what we can do is to use procedure to do examination first. That is to say, we focus on something which might go wrong. We let them focus on something which might need some amendment. These things sometimes are ... We encounter different cases every time. So we have developed some patterns. That is to say, under which kind of condition, you have to use which kind of way or standard to solve it. As I said that 80% of the work is routine, so basically there is no big problem. On the other hand, we will try to make the rest of 20% gradually become the part of 80% routine work. If so, the smoothness and progress of the entire work will become better.

A: As you mentioned, the character of each company or each manager is different.

B: That's right. The character is different.

A: As I asked you that whether you will be providing rewards or punishments, you said that it is probably associated with the company's policy. Alright, if we disregard ...

B: If you talk about the problem of style, I much tend to cooperate with the employee. That's right. To cooperate with the employee to finish the assigned mission. That's right.

A: Perhaps, as you mentioned, most of the work is routine in this company.

B: That's right.

A: It involves in processing data. Besides, the information you are processing has more or less the same character. This kind of working environment is quite different from, for instance, sales departments which have to face miscellaneous circumstances.

B: That will be a bit different.

A: Therefore I attempt to understand that under these circumstances, as a manager, how do you manager these so-called IT staff or information staff?

B: Generally, that is to say ... take those staff into consideration, they have already possessed of a certain level of knowledge and ability to do their work. Now, what we may encounter is the problem they are unable to deal with. We will search for some assistance to help them to finish their mission. The current situation is, as I said, most of the work can follow some existing procedures. However you still will encounter some unpredictable situations. In fact, we will be focusing on dealing with the unpredictable situation to let them carry on what they are doing.

A: So by and large, from the position as a manager, you will be much cooperating or standing up for the employee to solve the problem they encounter.

B: In fact, the main situation relies on a fact that IT work needs a bit of technology to assist. That is to say, it is not all about general management. In other words, to let the work carry on, you have to not only manage these people, but sometimes manage ... for instance, the party who provides knowledge to you or something. Besides, you have to search for help or listen to their opinion. You have to

compare several alternatives and pick up the most feasible one.

A: I am much interested in under these circumstances or under this knowledge conversion process, your role as a manager ...

B: *Actually, for us in such conversion process, we probably will much focus on whether something is conducted by someone and whether it is well conducted. Also, we will concentrate on whether sufficient documents are made for the reference of other people who might face the similar case in the future. In general, this is the situation we have.*

A: So you mean that from the position as a manager, you have to make sure certain thing is done by someone and it is done perfectly well.

B: *That's right.*

A: Also, you have to make sure that if someone leaves, other people can take over the work right away ...

B: *It has to be taken over. It has to be taken over immediately.*

A: Right. However how can you make sure that they really can do things well?

B: *The first important thing is the document and their results. We will QC (quality control) their results.*

A: So you mean that in this case relevant so-called evaluation mechanisms will be introduced into this ...

B: *That's right. We will do that. In fact, there are many measuring standards. They include, for instance, the allocation of your time, the quality of the output, users' feedback and so on.*

A: So far we have been talking about something explicit and visible. Certainly, there is another side, regarding to knowledge which is tacit, invisible or even ...

B: *Cannot be quantified.*

A: It is much about being influenced unobtrusively and imperceptibly. It happens between each other or even between colleagues. Even it refers to the situation of apprenticeship in some kinds of industries. That is to say, junior staff stringing along with senior staff to watch and learn ...

B: *Most of the ... actually I think that IT work more or less has the taste of apprenticeship. That is to say, for those who are senior, they have more resources, are familiar different situations and can handle much sudden circumstances with their accumulated knowledge. Those are the stuff which is being accumulated by those who are new in the company. Those are the stuff for them to ... provide good opinions or better solutions about sudden situations in the future. In fact, it is resulted from this sort of accumulation.*

A: If this is the case that, for instance, apprenticeship is a potential relationship, their working content should be different from such kind of situation.

B: *Actually, there is a bit of ...*

A: As you said, 80% of the work here is routine, so it is possible that ...

B: *In fact, it is about the same. That is to say, in normal situations, when someone enters into a company, they have to constantly accumulate required knowledge and ability. That's right. In fact,*

under the structure of our company, it is a bit like everyone does their own work. That is to say, everyone takes full responsibility for their own projects and sometimes they communicate with each other. That is the way it is.

A: As a whole, I want to realise that how you look at these people in doing such kind of routine thing. How do you look at this kind of working content, working ecology? I am much interested in your leadership on this.

B: *With regard to much routine stuff, generally speaking, we will be much paying attention to whether they can finish it before the deadline. Yes, that's right.*

A: Timing and accuracy.

B: *Regarding to routine work, the situation will be more or less like this, roughly like this. It is all about whether they can deliver their results on time.*

A: Would you have any means or tool? From your personal point of view as a manager, how can you make sure that these people will finish it actively? Would you stand at a so-called prevention position in the first place and tell them that if they can finish it they may be rewarded or be bought a meal or something? Would you use this sort of thing as an exchange of their even more contribution? Would you use this kind of thing to ...

B: *In fact, we ourselves do not offer such thing. But their future opportunity of the increase in salary will be based on their yearly performance. We certainly will set up some targets in advance. Take our work as an example. We produce reports not only for internal use but also for external use. So we have to concern about its quality and the feedback from our clients. To us, these are important measuring indicators.*

A: So the internal performance will finally reflect this stuff.

B: *That's right. As a matter of fact, we will set up targets at the beginning of the year. Then, we will review and revise them in the middle of the year. At last, we will take them as the indicator of performance evaluation by the end of the year.*

A: So you mean that timing will be put into consideration. It is not examined case by case that you can get something right away as a result of doing something.

B: *Yes. The situation will not be like that. We do not have such system. But for the routine work, we can base on the previous experience to set up the target, including, for instance, how much time is required. In fact, we have developed some fixed patterns. If something new comes in, we will update the entire schedule to see whether they have any opinion about it. If everyone agrees on everything, we will follow the new schedule and then we will examine whether they can achieve it before the deadline. It becomes a reference to their performance.*

A: Alright, I see. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 009

Note: "A" represents interviewer and "B" represents respondent.

Everyone has their strongest parts; also they have their weakest parts. I must realise where the strongest and weakest parts in each of my member are. Then, I will do lots of cross-training. If I today have four subordinates, my biggest target is to make them good at something which is not good before. But, on average, I want them to stay on the same line. This is my target. When everyone is trained to reach the target, I will communicate with them. I will tell them that you have to use your own thought in the last five years to see what we are doing right now. For me, I probably have my own thought. You probably have your own thought. You write down what your thought would become after five years. We can then have a discussion. Once you have a discussion with five or six people, you will find that you can supplement something that has not thought before. Then, you know the right way to go. After achieving this stage, you then do the next thing. If so, you can be at the minimum risk. That is to say, you can achieve ... two brains is better than one brain. Besides, everyone has different backgrounds. So, it has to follow this way.

A: Alright. If so, in this Description, where you think your leadership can be shown?

B: *Can you say that again?*

A: In this Description of stating the situation of knowledge management, you think where your leadership can get involved or be shown? How can you manage this process?

B: *I think it relies on making decisions, solving things. As the discussion we just talked about, in that time there must have someone who can step forwards and say that "This is what I want to do". That's right. In that time, someone must step forwards and say that "Right, this is what I want". As a leader, you have to see things which may take place after five or ten years. Afterwards, while at the stage of final decision, there must have someone saying "Right, this is the way to go". There are probably four or five solutions, but one has to be chosen. In that time, how to decide which is good and which is bad? It has to depend on a leader saying that whatever good or bad, whatever the decision is right or wrong, this is the way we have to go. If the decision is finally wrong, certainly the leader has to take the full responsibility. There must have someone who can step forwards. So, this is the time to show the capability of a leader. This is the time. Have I answered your question?*

A: This is about to discuss, realise your opinion of how to look at this thing as a leader or a manager. In fact, what you say is all right.

B: *Just different opinions.*

A: That's right. Different opinions. As you said that, you would have a much long-term concept to lead your subordinates or even some projects done by your subordinates. Does the leadership style you are talking about only apply to such situation?

B: *That's right.*

A: For the other situations ...

B: *That would be different.*

A: How to say?

B: *Today, I talk about things from IT's point of view. With regard to IT, everybody knows that IT has always been changing. It changes every one or two years; it changes every one or two years. So,*

under these circumstances, it has to be like this. However, if today it is about production, it would be different from development. Production is about maintaining current situations, not letting things go wrong. As a leader, I can only change the procedure in production. My way of doing is if I get A, B and C, I only make sure that they are working properly. Production is much different.

A: So, you think that if you, as a manager, are to lead a production department, that would be different.

B: *That's right. I think for production, it is about putting current production on-line. Going through testing and training, they should achieve certain level. If not, I would train them to reach that level for production to run. It is a routine job for everyday. As a production leader, I only change my current situations. I probably shorten the time of doing one thing from ten minutes to five minutes. Or, I decrease the number of people required of doing one thing. I change the current situations so that it can be run smoothly, much easy to go. So, as a production leader, I just make sure that the time is scheduled and the procedure is arranged. If someone leaves, I can have someone for backup to do the same thing. In fact, I have been a production manager for one or two years since I feel that it is quite boring. Why? It is like doing the same thing. There is no any change. Changes all go to the side of design, because you have to have someone to do design, to make change. I probably would raise my requests since I feel that the way of doing is not good or there are some problems with the programme. I raise requests, and then you change them. So, my opinion is it depends on different areas. When you do development, research development, you have to think deeply. However, when you do production, your greatest importance is to do current things right. You have to make sure that production runs smoothly. If I today run a ".com" company, the worst situation is my website is down. If so, this company would be dead. So, my people in production are quite important. Why are they important? They are important to run smoothly everyday. My job is to make sure they run.*

A: So, you mean that on the side of production, your experience tells you that you only have to make things very efficient. You think that in production everything is well controlled.

B: *That's right.*

A: You just shorten the procedure in the middle so that it can become efficient.

B: *Right. Like database. Here, it mentions about database. About the management of database, it probably needs to do double-checking everyday to see whether data is back-up. If people want to use it, how can it be pulling out? Is the data back-up every few minutes, every few hours or every few days? Do you clean up miscellaneous objects during the process? For these procedures, you probably can define that it has to be done every one hour. However, it is not necessarily so. You can make the system do it automatically. Can you understand my meaning? My meaning is when you do production, you have to make everything efficient. But, if you are to manage people, you have to let them understand that while doing one thing there is not just one way of doing it. You can have different ways of doing, but you have to reach the maximum efficiency. If today you have some problems with your data, you must be able to pull them out at the fastest speed. This is your biggest job. As a leader, I would also head to this direction. But for R&D, IT and design departments, the way of doing things would be*

totally different.

A: That is because for IT, for the situation it describes here, the main problem is within the IT industry things are changed so fast. So, you have to have such space or even you have to think about something which is long-term. Then, for the process involved in the middle, you just let them develop. However, for production, probably ... this is something which is all set.

B: *Before production, something like design, test and simulation have to go through. If these actions are okay, you can then go on production. You have to maintain it. But, after going on production, lots of things still need to be amended. This is not the job for production, this is the job for R&D. So, they have to understand that if they do things like that, how to keep the efficiency. For production, I only have to make sure that my operation is okay since my job is to make the thing on production, without anything going wrong. If the database is shut down and the machine is dead, my job is to pull them out at the fastest speed. That's it.*

A: So, you think that in production, you would care much about the thing called efficiency. Do you think that this thing [meaning the Description] does not need such thing?

B: *No. They need it. But, your emphasis would not be 100% on efficiency. Your emphasis would probably be on ... Certainly, efficiency is very important. It is still required. The point is if you stay higher, you see further. Things are designed to use for after five years. When you do the design, certainly you have to be efficient. But, when it turns out something for production, efficiency is the most important thing. When executors do their jobs, it is not efficient at all. How can you change it? Today, I can tell you the shortest route from Pa-De Road to Shin-Yi Road. This is based on a software package I have. However, when you actually walk the route, you find that this software does not calculate the possibility of natural disasters and accidents. Especially, this route has lots of traffic lights. Instead, you spend so much time on this route. At last, you probably can find another route which is faster than the previous one. As programmers or research developers, they probably know the shortest route between Pa-De Road and Shin-Yi Road since it is the shortest. However, they forget something else. When they actually walk that route, they would find out the real situation. So, production has to follow this way.*

A: OK. If so, for the production part, if today you are a manager, how can you approach that efficiency? How can you do?

B: *Of course, first of all, I would try to understand what the current situation looks like. I would ask some basic questions. Take time study as an example, what is called time study? Everything I do has its fixed procedures, isn't? How long does it spend? How much effort do you put? They all have to be clearly identified. About the subordinates I have, I must know who is in charge of what. Let's say someone is in charge of database. He has to spend extra five or six hours every week on his work. Besides, if something happens, he needs to spend three hours to solve it. I would think that it has large space of improvement. So, how to improve? I would start from realising his current procedures to see whether there is any defect. This is not just my job to understand it since I may not know as much as he does. So, I would sit down and have a discussion with him. Once you start to discuss with him, you*

probably find that if he does one more or one less action, plenty of time could be saved. This is something that you have to realise slowly.

A: So, does it mean that in your belief you would use the manner of so-called “carrot and stick” to manage? That is to say, if you reach certain targets, I would give you certain amount of carrot, and so do stick. Would you do that?

B: *I think that as an approach, yes, I would do that.*

A: That is for production, right?

B: *Right. Everyone must be given targets. Without targets, someone would quit in half way through or get tired of it. So, everyone has to have a target. If you have a target, reward, that would be the best, wouldn't it? But, everyone must have ... In the last five years, I have told my subordinates that if you do production, that's the way it is for this company. Nothing has been changed. What do you want to do after five years? Say you are doing information management today, but what is your interest? If you are interested in doing development, then you just gradually head to that way. I would encourage my subordinates to do what they want to do. I do not like to force someone to do what they do not like to do. If I force someone to do what they do not want to do, I totally would not get any efficiency. If so, I do not have to spend time understanding what the procedure looks like at all. So, my way of doing is to ask them what they want to do. After five years, would you like to do something which is the same as you do right now? Or, after five years, you want to learn more such as in networking. If so, you can start to move to that direction gradually, start to do cross-training with another network team.*

A: So, you mentioned that the idea of so-called rewarding would be used in production.

B: *That's right.*

A: How about this [meaning the Description]?

B: *It is also applicable.*

A: Also applicable?

B: *What do people work for? Only money. I do not believe that people in my age do not work for money. Without money, why do you work? So, what is the basic requirement for everyone? You have to fill their requirements. If I am just graduated from the college, my way of doing would be different from the others. Because of just graduating from the college, I have nothing and do not know anything, so I just want to learn, learn as much as I can. I would not care so much about money. However, if you today have children, house(s) and wife, I tell you what your biggest requirement is. It is money. Only money can make you secure and stable.*

A: But, someone may argue that rewards or that sort of thing are so-called short-term stuff. Right now, vision or the sort of long-term stuff is very popular. You can say that it is about drawing a big cake, but someone may say that it is a kind of encouragement. So, you do not believe in such thing, do you? Or, you think that it is a different situation. As you said that, if I am just graduated from the college and still young, I may not have great demand for money. For instance, I do not yet think about buying a car or something. Because I do not care about that sort of thing, so I just work for fun, or I just want to make friends. However, when I am thirty or forty, I probably would pay much attention to that sort

of thing. So, you mean that it should depend on different situations, don't you?

B: *That's right. If today I am a software engineer and I am still young, what I want to learn? I want to learn everything. If you give me millions of dollars in stock, not in cash, I would be so happy about that. But, think about one thing. Stocks are only about some white paper having black words written on it. Are they real money? If the company collapses, they are all gone, aren't they? For me, if the reward is all about stocks, that is good. Also, if the company I work for has long-term future, that is better. I can put the effort of all my life on it. What is the worst situation? Like the company Anron in American. So many people spend thirty or forty years and get lots of stock there. What is happened to that company finally? It collapses. They get no money in return, not even a penny. So, I would encourage my people to take what they deserve right now. I would give rewards, bonuses to them. I totally agree with giving people bonuses. If you think that your capability is better than mine, I would give you higher positions. I do hope that you can be better than me. Only by this, you can understand what you are going to do in the future. So, today you are my subordinate, but someday you may become my boss. We never know, don't we? So, how to lead people? Just think about the way you hope to be led. My motto is "Treat people the way you want to be treated". My way of leading you is your way of leading me. That's it. It is so simple.*

A: It is quite interesting. Ordinary people may not deny the importance of rewards, but they think that it is short-term. For instance, if today I give you ten dollars, I probably have to give you twelve dollars tomorrow to make you satisfied. Then, the day after tomorrow, I probably have to give you fifteen dollars.

B: *Right.*

A: Therefore, some people believe that if so people would never get satisfied. In consequence, they raise the issue of vision. But, from what I heard from you, certainly you also pay attention to the stuff of rewarding.

B: *That's right.*

A: In addition, you emphasise the stuff of long-term planning. However, it seems that from what you have touched, what you have seen and your current position and status, you probably think that to a certain extent the stuff of rewarding should play a much important role.

B: *Because for the so-called vision, it is something in the future. If you today have kids, payment to make, and I tell you that I give you vision, give you two million dollars in stock, what do you get in your hands? It is true that the example I provided is not so positive. But sometimes you have to consider the worst situation. Some people say that they are millionaires. But, their fortunes are presented by stocks. If the share price goes down, they would suffer from losing their fortunes. So, I sometime agree that for rewards cash or increase in salary is much more realistic. It is a much more reasonable and practical way. So, if I become a boss in the future, I certainly would do that. Also, I would give you stocks or vision, but they are illusive. They are not money; they are only some white paper having black words written on it, aren't they?*

A: As you said that the company Anron in American, there are lots of "Anrons" in Taiwan. They

probably collapse tomorrow. Who knows?

B: *That's right. If you spend thirty or forty years in such company and you have a family to take care but the company collapses, what would you do? The promises made by the company become bullshit.*

A: This is quite interesting.

B: *I think my ways of doing and thinking may be different. Because when I was younger, I planned to open a company with my colleagues. That was the booming time of ".com" company. In that time, I found that all the promises were bs(bullshit). You can only count on what you really get in your hands. The company made lots of promises. Because we were in charge of programming and someone else took care of accounting stuff, we had no idea of what they did to the money. When the company collapsed, they just said that we were closed. Good-bye. What can you do?*

A: So, from your experience, your current situation, or even your dream of being a boss in the future, you believe that the kind of substantial thing or you can say rewarding is a much important incentive.

B: *Much important. Like Microsoft, the biggest software company in the world. Many friends of mine work there for more than ten years. They are millionaires now. What do these millionaires rely on? Just stocks. The different thing is some of them sell their stocks for cash every year, but the others don't. Those who do not sell their stocks in fact gamble on whether this company is still existent after ten years. Or, if you are not so sure about it, you can just sell the stock and get money. You can sell your stocks while the price is good. However, why do many people still stay in this company? That is because, first, Microsoft is so needed in the world, it is much difficult for it to collapse. So, I would gamble on this company. Though their salaries are not so high, the incentives are quite good. About incentive, for instance, if you spend one extra hour in the work, you would have a day off; the company pays for your activities, holidays or insurance. There are different kinds of incentive. It is not all about money. You feel that this company really takes care of their employees. I give you one more example. A friend of mine designs video games. The company he works for is in American. I forget the name of it. This company has the history of twenty years. During this period, nobody resigns. Only being fired, not getting resignation. Why is that? They do not care about when do you go on duty and go off duty.*

A: That is great.

B: *They do not care about what you wear. The company has swimming pools, gyms and video games. You can go for them anytime. The company says that human being uses his brain only four hours each day. So, the company only wants these four hours, this period of creation and imagination. You just give these four hours to the company and help the company to develop new products. Then, the company can make lots of profit. Is that good to the employee? It is very good. Can the employee earn lots of money? Not sure.*

A: But, the feeling would be different.

B: *Like to work, you like to work there, don't you?*

A: So, from what I just heard, whatever this IT part or the production part you further mentioned, you mean that to a certain extent it is short-term. That is to say, it is necessary to build up an exchange

relationship between the employee and manager or boss. As you said that in Microsoft, if the employee does more, they can have more days off. So, you mean that you would adopt such manner to stimulate employees, make them contribute more.

B: *To be honest, it is all about exchange. I give you something and you give me something. If today I do not give you anything but want you to work for me, would it be possible? Human being just lives for money.*

A: So, in fact, you do not so believe in vision, something long-term, that sort of thing.

B: *Vision or fighting only on paper. How can it be good? I want actions. I do not want visions. I want actions. You have to give me some actions in advance. Otherwise, if you talk about lots of vision, after one or two years, I would know that you are bs(bullshit).*

A: I think that probably this has to do with your backgrounds.

B: *That's right. Everyone has different backgrounds. Everyone has different thought. Everyone has different growing directions. So, everyone has different requirements.*

A: That's right.

B: *My opinion is like this since I grow up in such background. So, I think this is a better way. Because I hope to be treated like this, so I treat the others this way. It is right that visions are necessary, but so many people just say it, don't do it.*

A: Or, you can say that they pull it too long. Do you know that? They pull it too long. What is the variable involved in it? I think right now not only the IT industry, but also any industry is extremely competitive. You tell me that after three years I would become someone else and get something else. But, right now, I still worry about whether I can get bonuses by the end of this year. So, it is pointless to tell me what I might get after three years time.

B: *That's right. Say that your business is about CD manufacturing. How many CD manufacturers in Taiwan? Is your company the biggest one? You tell me what would happen after three years. I just do not believe it. Why? The reason is you have so many competitors. Many competitors are superior to you. You tell me that after three or five years, you would achieve certain level in the market and then would give me money, give me stocks. That's bullshit. I want actions. Don't give me visions. I want actions.*

A: Alright. Understood. As you may hear of knowledge management, my research is something about it. In fact, we today divide knowledge into two kinds, tacit and explicit. Here, it belongs much to explicit stuff, something like programmes or something can be seen. Then, through such as programming, you finally have a product coming out, or you change it into the other kinds of programme. They are something that can be seen. Therefore, I am today interested in for you, as a leader, how you can manage this sort of thing. For instance, if the people in your department have working content which is quite similar to this process, how do you manage it?

B: *You say knowledge management. Sometimes, knowledge management is unseen. As a leader, you cannot see it, you just accumulate it. It is just experience accumulated by individuals. We just talked about that everyone has different growing processes, so that the accumulated experience is different.*

How can you make sense of it? I suppose that EQ is very important. When you do much execution work, it is right that IQ is important. But, when you climb higher, EQ becomes much more important. It is not necessary that IQ has to be high. In this case, if EQ is high, it would be fine. You can use it to expand your personal relation. Bill Gates. That Bill Gates in Microsoft. Is he smart? I don't think he is very smart. It is his best friend who is the smartest one. He knows what to do and what not to do. The boss of Oracle is only a salesman. He is the one who just knows talking, not doing. But, he has a best friend who just knows doing, not talking. Microsoft and Oracle have the same situation. They all have one person who keens on drawing visions and another one who makes them come true. That's why they become the first and second largest software companies in the world. I think that whatever in which industry vision is necessary. You must have a leader, a chairman, a vision. What is the goal you want to achieve after ten years? What is the procedure to achieve it? This is very vital. However, there must have someone to implement it. You must have someone to do that action. With vision but without action, what do you get at last? Nothing.

A: I think that surely a company has to have a vision. From your opinion, I sum up that vision is something you use to attract people to recognise your company. When they are in, as you said that you have to have actions to take care of your employees, rather than drawing a beautiful, but illusive picture for them.

B: In fact, the situation is a bit different. The so-called vision is defined by the boss, describing the next stage of the company. If today I have employees coming in, I would not tell them vision. Instead, I would tell them the current situation of the company and what you can get at this stage. As you live in the south of Taiwan, I say that I can give you free flight ticket to let you home every month. This is something I can give you right now.

A: OK.

B: This is attraction. After you are in, I then would let you know what the company's vision is. The company's vision wants to go there. Your current situation is like this. If you want to go for that vision, how should you do? From my point of view as an employee, I would like to achieve the goal. However, if you only tell me the vision, not with the current situation at the beginning and I find that the current situation of the company is so unstable after I am in, I certainly would not spend so much time here. So, my way of doing would be a bit different. When you just join the company, I would tell you what the company currently has, what your benefits are and how we treat you. Afterwards, I would tell you where the vision is. I would tell you that this is the goal we want to achieve and while it is achieved, what kind of reward you can get.

A: OK. After they are in, you would let them know what the vision is. And, the related reward is based on a fact that the vision is achieved by everyone.

B: I believe much in practicality.

A: Yes, it makes sense.

B: If I want to buy something to eat, but I have no money ... Can vision make me full? Besides, if I today have wife, kids, mortgages to pay but you still tell me lots of vision, would it be useful to me? I

think it depends on different individuals. Someone may have different thought. Some are conservative and satisfy with a stable work. They are not interested in knowing too much. They just want a job. It is also fine with that. Most of our engineers are shy and quiet. They do not consider what to do in the future. They just do their jobs step by step. They are very happy about the work. However, I feel that some people are quite agile. Their brains are so active. They think much and want to make more money. This kind of people must be kept. Why? They have lots of ideas. They can help you in creation since they have many ideas. There must have both someone who has lots of ideas and someone who can implement them. If someone can have the combination of both capabilities, that would be great.

A: So, you mean that besides using vision to let them go for a particular direction, you think that those rewarding stuff is also necessary.

B: *It is also needed. Even more important than vision.*

A: More important than vision?

B: *I think that vision is bs(bullshit).*

A: It is interesting, it is interesting. OK. I understand.

INTERVIEW TRANSCRIPT – Combination 010

Note: “A” represents interviewer and “B” represents respondent.

A: Having looked at it, you roughly can understand what this situation is all about. That is to say, from your position as an Information Division ...

B: *Uh-huh.*

A: It should be much easy to understand what it says here as the conversion of explicit knowledge ...

B: *Uh-huh.*

A: So I want to ask you that you think as a manager what kind of leadership character is helpful to the situation described here? As it says that for IT staff like R&D engineers, design engineers and software engineers, you think what kind of leadership character is helpful to them, helpful to their work?

B: *How do leaders make them to generate much explicit knowledge? I think it has to depend on the unspoken consensus between the leader and his/her team. This is about trust. Personally, I am much strange. I will think differently. I think that if team members can much trust their leader, they will be easier to convert or grasp much explicit knowledge, reveal their personal tacit knowledge. Simply speaking, I personally will much trust this kind of thing.*

A: Okay, if this is the case, you mean that you have to let your people generate trust in you.

B: *I think it should be mutual.*

A: Alright, mutual.

B: *I think that we have to trust each other. You have to have trust between you and your members. As a team leader, you have to share your experience with the others. It is good to them. I think it is quite an*

important experience. At least in my work, I think that if this basic spirit does not exist, your team members may conceal something from you. Besides, they may conceal something from each other. As a result of it, you may not be easy to generate a lot of knowledge.

A: So you are saying that your management means towards such processing of much explicit information or data is you contrarily will be using a much tacit stuff, say trust or the establishment of mutual relationship, to manage this ...

B: *It is probably because I am a Chinese. You certainly can use many American-style methods as using some systems to divide the work and then try to select, catch something from it. But the most effective way goes to a kind of tacit trust in the traditional Chinese culture. It is not a quite objective standard to ... With this thing, the subsequent stuff can easily be done and generated. I give you an example. Generally, enterprises will set up something called visions. Visions are quite tacit stuff. Generally speaking, visions will not be clearly used. They are quite tacit. But you have to let your people have some idea and feeling about the vision. After that, the subsequent missions, strategies, procedures and actions can be identified by them and be conducted smoothly. I think this perspective also applies to American-style companies. For many American-style companies, they first of all will constantly emphasise their value, their enterprise value and where their visions are. They will let everyone in every unit know that what we should be doing. This company has this kind of culture character. It has this kind of culture character. It keeps emphasising that ... it will let everyone know what the top management is thinking about. Its core stuff may be just one sentence, one vague sentence. This vague sentence is very tacit. So how can you display it? How can you let the employee identify with the company? It applies to the department level. As a leader of the department or team, if you do not let your people know where we are going and let them have trust in you, you may not be able to grasp a lot of knowledge from their heads.*

A: Alright. People may think that this is a kind of working situation in which massive information needs to be dealt with and such information processing requires efficiency.

B: *Uh-huh.*

A: As well as accuracy.

B: *Uh-huh.*

A: Given that, some people think that managers may need to adopt some so-called substantial ways, means or even incentives so as to make sure that such situation, process can happen smoothly. Nevertheless, you think that you will pay much attention to something invisible as the feeling of trust with each other. So do you think that as long as that kind of thing is done, you will be able to control this thing? Or you think that there still has something ...

B: *The following steps still have to be taken. Having done that, you can therefore transfer team members' knowledge into explicit knowledge or much information in it can therefore be transferred out. It must be like this. I just talked about my own opinion. My personal thought is ... I personally tend to believe that if the preceding foundation is not well established, you still can do the subsequent transferring but the effect may not be so good. For instance, you may assign relevant design staff to*

generate some documents for the purpose of retaining knowledge. This is the most direct way of doing. This is about hoping them to directly transfer something in their heads into words, documents. This is the most direct way. However, such way of doing involves in how many stuff they are willing to reveal. If they do not want to reveal it, there is nothing you can do. Perhaps, you can use many complicated tools to examine them from every single angle and then grab something out. But many things can be faked. They can fake something for you. In my working experience, I have ever seen someone had this kind of situation. They just did not like to ... Even in our department, we had such kind of colleague who did not identify with the entire value of the department and your leadership style. They were not willing to reveal what they had in their heads. Of course, we used many ways to ... For instance, we asked other colleagues to persuade them, transferred their posts, interviewed and understood what had been done by them. We simulated everything step by step. There must have a big gap between what had been simulated and something actually in their heads. The gap must be great. Suppose there is another situation. Certain colleagues have trust in you. They identify with the value of the department. There is another example in our department that a certain colleague still identified with our department even if he wanted to leave. So what had been handed over by him such as relevant documents and experience was so rich and fascinating. You can see that the knowledge donated in this case and the knowledge donated in that case I just mentioned are of totally different value.

A: *So you mean that even though the use of those so-called substantial means to a certain extent will be necessary, it should be based on the deeper feeling of trust in each other ...*

B: *I personally think so. Perhaps, I am a strange person and my personal thought is much stranger.*

A: *So from your understanding of such information or knowledge conversion, your opinion will be putting invisible stuff like trust in the first priority. To manage such situation, you first will establish this sort of atmosphere. However if you face other kinds of situations or lead other kinds of people, would your way of managing be different? Or your way of leading, managing people is quite consistent.*

B: *So far, my way should be like this. That is to say, if you lead a team, all of the team members may not trust in you in the first place. They must be so. At that time, you certainly will adopt some basic means. But that kind of means will not cause any essential group effect. It just temporarily lets you have a normal connection with your team members. I think that this situation must be happening. If you have much experience in leading teams, you must have encountered such kind of situation. My personal opinion of such situation is first I will try to think about how to keep or gain more trust from them. You have to make them trust you that you are the one who is suitable for them to get along with. You have to make them trust you that you are the one who is suitable to tell them something. You have to let them know that you have your own value and you can share it with them. Of course, you on the other hand need to approve their value. It in fact is a kind of building up trust. Certainly, you can use another angle, try some different perspectives to ... In management, you probably will consider any potential means to try to understand or even take control of the whole situation. Truly, this more or less will also happen.*

A: So it seems that the use of means will be dependent on different situations ...

B: *Certainly. I think that there have been many theories and books in management field. To me, I think that management is a kind of art of learning, a kind of learning of art.*

A: So you mean that from your point of view, you just kept emphasising the importance of the establishment of the feeling of trust. Therefore no matter you are in charge of this thing or other things ...

B: *I think it helps me a lot. In my personal experience, I think that it helps me a lot. I have seen many cases that there is no trust between the team leader and the team member. Perhaps, it is because I have seen so many such cases, so I will remind myself not to go that way. However, I have found another situation. I think that if a department's job description, working content and relevant knowledge are very well-organised, complete and documented in detail, the team actually will come out another problem. That is, the turnover between team members may be quite high. It will not generate better incentives to the whole department. The whole productivity of the department may reach the standard defined by documents. If there is no trust in the department, the team members at most follow what the system tells them to follow, do what the document wants them to do. I have seen certain kind of system like this. In Taiwan, many local and foreign companies have very clear, organised job descriptions. If you read through all of them, you probably can know what you are going to do. But if you have no trust between you and your leader, you probably would only follow the SOP or job description to do what you ought to do. You follow something, you do something and you drop something.*

A: So you think that ...

B: *I think that it is a kind of long-term impetus. But I think that you certainly will have other kinds of means. You certainly will try any other ... as the stuff you wrote on this. You will try to use these stuffs to catch, retain or understand what their brains are doing and what their practical, existing knowledge is. They may have some ways of doing that you do not know. So you certainly will use some means. But the real situation is how much you can get sometimes has to depend on their ... It must have interaction. I think that humans are intelligent. When you use certain means to deal with something, they probably have some ideas of what you are thinking about. They more or less can feel what you are considering. Why are they suddenly asked to do certain kind of thing today? They will think why. When they think why, here comes a problem. Will they think positively or negatively? It reacts to the subsequent attitudes they possess. Of course, with different attitudes, the consequences will be different.*

A: Alright. So far we have been talking about IT staff or that sort of personnel. From what you just said, you therefore mean that to not only IT staff, but also production staff or any kind of staff, you seem to build up some kind of trust to ...

B: *When you talk about production, you have to see what kind of level you are referring to. If you talk about production in manufacturing, you have to see which level you are going to refer. If you talk about production line in general, there have many groups. The trust between group leaders and group*

members will be much important. However, if I take the supermarket as an example, its top manager is called Store Manager or Store Director. If that person has to manage some two hundred people, there is no need for that person to have trust in those two hundred people and there is no need for those two hundred people to have trust in that person. I think that basically the gap will be different. In principle, what does this situation have to rely on? It has to rely on dividing its organisation. It has to divide its organisation. I think that it has to do with levels. What we have been talking about is when the relationship between team members and their leaders is very close in terms of business, the trust between them has to be so important. Generally speaking, production lines have their own basic rules and so do information departments. It also applies to the headquarters that it will try to divide the organisation into several departments. In this case, something between the leaders and their members in each department will be quite important. The stuff like how to get along with each other or how to trust each other becomes much important. If you put one more layer of bureaucracy on top of it, the situation may not necessarily be so. This is my personal opinion. So for some organisation, some big organisations, they basically have to be divided into different functions. Suppose a store has 300 to 500 people. It basically will be divided into several functions. You must know that how many units can be divided from the store. Of course, organisations will be adjusted by time, functions, opinions of the managers or strategies. So organisations will vary. Take the Information Division as an example, this is a small unit with about twenty members. For such small unit, we also divide it into several functions. We as the Information Division have to think about what IT can do in this company. We have to think about what basic operations are. We have to think about what strategic operations are. Then, you will try to do some division or distribution to your organisation. But this division or distribution means different stuff, thought to the manager. But I think that for a good leader or departmental manager, he/she will think over what kind of thing should be done in this department, how many things should be done in total and what kind of thing should be in charge of. He/she must set up the target and then divide it. Of course, when every leader has their own thought, they must be different in terms of their performance.

A: So as you said that if you take production units as an example, managers in different levels will have different ways of doing.

B: I think it happens not only to production units, but to R&D, design or software engineering units. I give you an example. If some software engineers are to do a project, the role of their project manager will be quite important. What is that manager thinking? That manager will affect the target of the project. Where is that manager's aim? Where is that manager's position in this project? Does that manager think that it will be alright if the project or system satisfies the basic requirement? Or that manager thinks that it has to be perfectly done and must have certain degree of flexibility for the adjustment in the future. If that manager has different thought, it will affect every single detail of the project. In fact, how project members do the project will be influenced by this general direction. It must be influenced.

A: So you mean that if managers have to contact their employees directly, you think that the

establishment of trust in such relationship will be much important.

B: *That's right. Despite the relationship between me and my subordinates, if I consider our General Manager as our leader, in fact I think that the trust between me and him is also important. When he trusts me, I can have the feeling of being trusted. As he trusts me, he may not much care about the detail of what I am doing. If there is no trust between me and my boss, we will suffer from each other. If my boss does not trust me or my department, he must be trying to understand or even take control of every single detail of what we are doing. In consequence, as the manager of this department, I must feel uncomfortable when I do anything. I may have to report anything any time to the top. I even cannot make any decision. All decisions may need to be made by him. So I think that this kind of character more or less exists between layers. If the General Manager have trust in you and he approves that revealing the knowledge of the department is valuable and necessary to the company, you two can go for the same direction and strategy. You two will spend much time on revealing everyone's stuff in the head, valuable knowledge and making it become documents, systems. After it is documented, systemised, it becomes a much safer form to the company. This is my personal opinion. Necessary means will also be used. You still have to do it. This is not the case that if you get trust, you can do anything you want. Trust is only assistant power. It can only let people be more comfortable before participating in anything, including combining all of the knowledge ... as it says here that explicit knowledge may need to be processed, categorised, edited and combined. If you and your members have consensus about it and feel that it is right to do that, it seems that you can get better results.*

A: *So you mean that in fact you will not get rid of the use of those stimulating incentives or tools. But you may think that kind of thing can only help you to reach so-called basic requirements. As to you hope that they can do better or do more perfect, you seem to let this expectation rely on mutual trust. Only through this ...*

B: *I think it must be like that. If the incentives you are using is quite obvious, it may give you increase in quantity. It is not necessarily mean that the quality will also be increased, isn't it? Increase in the quantity of knowledge may not necessarily produce any substantial effect. Increase in its quality will be much important. However, how to evaluate the increase in quality? How to evaluate its quality is good? It involves in something which is much subjective. For instance, I may not know everyone's ... So I want them to reveal everything they know, that must not be known by me or by other people. So how to evaluate its quality is good or not? Sometimes, it is very difficult to do that, very difficult to do that. But actually, those which are good in quality have real value. So if there is no trust between you and your members and you give them lots of substantial incentives to do documentation, they may produce plenty of them. However, if you are not so familiar with the details of what they are doing, how do you evaluate their quality? Further, if you use your subjective way to evaluate them, they may not agree with you. When they do not agree with you, what they are producing may be different. But how can you evaluate it? Many things are hard to be quantified. Whilst reaching certain stage, things will become hard to get quantified.*

A: What I am going to study is in such information department, you will face some situations as what we have been discussed. But in production departments, for instance, they may face totally different situations which much belong to tacit interaction. What do I mean by tacit interaction? Take masters who make bread as an example. They may have certain knack to knead the dough. They know how to do it but they do not know how to express it. Perhaps, it is because the knack is resulted from the accumulation of experience over ten or even twenty years. I attempt to know that for you as a manager, how you look at this visible knowledge processing and that invisible knowledge processing. Would your leadership means be different? If the answer is yes, how does it different? I am interested in this.

B: *Alright, I understand. I understand what you want to ask. I think that for leadership ... Good leaders must be ... I personally think that good leaders must be able to adopt different ways of doing by different circumstances. With regard to bread masters, even they are all bread master, but with different personalities, they will teach their apprentices differently. With different people in different personalities, you may need to lead them with different ways. To us, whose main work is to do programme development, every development engineer may have their own character. They may be more characteristic than general operators. For instance, operators' work is quite routine and mechanical as the know-how of what they are doing is not so high. However, it does not mean that they do not have know-how. For some companies which are very good in management system, they will do some stimulation. This kind of stimulation is based on the trust by the employee who believes that the stimulation can come true. In consequence, they will do their best to do anything. Therefore many companies spend what have been saved on the employees. The main point relies on a fact that people in the bottom believe that if they can save ten million dollars for the company, the company will spend this money on them. If they can have trust in the company, they will work out many ideas from the detail of production line. It applies to the relationship between bakery masters and their apprentices. To make delicious bread, apprentices may need to spend so much time on learning their masters. In additional to this, it also has to depend on their masters' trust in them. This is not the case happened only in Taiwan.*

A: We just mentioned the situation of bakery master. Suppose you are the boss of a bakery and you have an experienced master. From your point of view, you certainly hope that this master can impart his/her experience to junior staff.

B: *Yes, certainly.*

A: So what are you going to do? Would you have any practical way to let that master be more willing to impart his/her experience, tacit stuff to other people? How do you manage the relationship between this master and his/her apprentices?

B: *I think that the first thing is ... I think that for many things you cannot directly say that firstly you have to do this and then secondly you have to do that and so on. But in my opinion, I think that my first way of doing will be to observe his/her personality. What does he/she want? What does this master want? In fact, it applies to the management of your team. You have to spend some time to understand what each of your members wants. After knowing what they want, you then can realise*

what kind of action should be taken. If you do many things which are not appreciated by them, you better not to do them again as these are not what they want. So my personal experience is I will first observe them or get along with them to see what they really want. I will see whether I can sense what they really want from their behaviour. For that experienced bakery master, what does he/she think to the end? As he/she has already been so professional, he/she may now care much about having a pleasant working environment or getting along with colleagues. If this is the case, you will then need to think about how to make the environment more comfortable or how to create pleasant atmosphere between colleagues. In consequence, the master will be happy to work here. After that, I will propose something to see whether the master identifies with it. If the master identifies with it, we can join together to do what I propose. Then, I may start to share the master's knowledge out. I personally use this kind of angle to do management. As I said, different leaders may have different opinions about it. If so, their strategies and ways of doing will be different. I can only say that so far I will adopt this way of doing.

A: As a whole, it is true that the working pattern of bakery master and the working pattern of IT staff are different after all ...

B: But ... In fact, I lead my people with the same manner. If you do not know what they want, can you expect what can be designed by them? Of course, they can design something, but they design it with their own will ...

A: So you mean that you will not treat them differently because they have different working characters ...

B: I think that in some operational details, there must have differences. But about main value, I personally tend to believe that the main spirit should be quite similar. To humans, as I said, you just go to understand their characters. With different characters, they will give you different feedback. The subsequent way of approaching may be different. But first, you have to understand who your target is. Take programme design engineers as an example, you have to understand what they want from doing this job. What do they love to do? Of course, you need to understand their specialities from many aspects. Are they suitable for what they are currently doing? You have to try to find out how to get along with them, lead them or lead them to what you expect. There was an example happened in our department. A colleague was put in the wrong place at the beginning. His performance was really bad. I told him that his performance was really bad because we had observed him for quite a long time and we found that his performance had not satisfied our expectation. So we communicated with him and tried to understand what was going on. At last we found that he was not suitable for what he was doing. Then, we had a consensus with him and gained his trust that we transferred him to another post. Before transferring someone to another post, I will do my best to let them know the situation and gain their agreement. I will tell them that they will be performing quite well in the new post. The reason of doing this is to gain their consensus. So after that colleague was transferred to the new post, his performance became fascinating. He found that the new post was really what he wanted. He did not need us to give him a push anymore. I think this story can apply to the case of bakery master ... I think

as long as it involves in human nature, it will be more or less the same.

A: So you mean that instead of regarding them as bakery masters or engineers, you will treat them as humans to see ... what humans really want.

B: Yes, that's right.

A: Okay, I see.

B: I am much tacit. Many of my ideas are tacit. I think that it can apply to enterprises. If an enterprise sets up a vision, the vision must be general unless the enterprise is quite small. If the enterprise is small, its vision can be set up quite specifically. If the enterprise becomes bigger and bigger, its vision will relatively become more and more tacit. The vision at the level of department must be clearer than the vision at the level of whole company. Like here, the vision I set up is quite clear but it still consists of some tacit components.

A: So you think that the use of some tacit stuff can be long-term.

B: Some. Yes, I agree with you. Only some. It cannot be totally tacit.

A: As something still needs to be controlled by explicit stuff after all.

B: Sure.

A: Alright, I see. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 011

Note: "A" represents interviewer and "B" represents respondent.

A: Can you roughly understand what this is talking about?

B: I can roughly understand it.

A: Alright. So now I want to understand that for you as a manager you think what kind of leadership character is helpful to this thing.

B: Leadership character ...

A: That's right. It says in here that ... the so-called Combination, information processing. Your people may involve in such kind of work. So as a manager, how do you lead this thing? How do you lead your people to do such kind of working content?

B: I do not know whether your question is under certain prerequisite or hypothesis. Take our current working condition as an example. You ask whether there is any leadership character straight away. Is your prerequisite or hypothesis about making the work or projects in the entire organisation become knowledge that can impart to other people in the future? Or do you mean that in management how do make these people ... For instance, our department is in charge of developing machines of all our chain stores. Besides, we also develop some new stuff which can be used in our chain store. The point is we let this kind of platform become a tool. I do not know what your prerequisite is. Is it about how we can make knowledge developed by every member in every project become concrete? Or is it about how we can lead them to produce something ... I do not know what is the point of your question.

A: It covers everything. It depends on how you look at it. It does not matter if it is about how to make your colleagues work smoothly or something. I think that for you as an information manager, I can see that your department covers a wide range of business and has different categories. In fact, it involves in a general idea of how you lead such kind of working condition, your people to do anything.

B: *Frankly speaking, here we use project as a basis. So when we talk about project, we have to concentrate on its scope, target and requirement. So from the point of view of our whole organisational operation, we have to first examine the qualification of our people. Perhaps, they have to have certain degree of experience and quite understand the operation of our retailer. Also, as the machine we develop includes some functions of finance, telecommunication and insurance, they have to know something about these. So our people have to know many things. In the process of our leading, we first have to let them know what the project they are doing is all about and what kind of knowledge they have to possess. So we are quite simple that in our leadership we examine their performance by target, by project.*

A: Alright. So you mean that it is a bit like case by case. You will use project as a unit to do management.

B: *You can say so. For most of the work, the situation is like this.*

A: If so, you will be setting up a clear target for your people. If this is the case, from your point of view as a manager, would you also set up a clear standard of rewards and punishments for your people? Say that the project is like this and the target is like this. If you reach certain stage, you will be getting feedback or something. Would you lead them this way? Or you have other ways of doing.

B: *Theoretically, the operation of the entire organisation should be like this pattern. But in practice, the way of operation in each organisation is quite different. For instance, our projects have to coordinate with many other departments in the company. Unlike some general project teams, they just develop new stuff on their own. As we are in retailing, we first have to see what our customers want and then we can examine whether our projects meet their requirements. So our way of operation will be connected with user units. So in our department, we are based by project. We are a bit like a matrix organisation. You are right that for us as project owners, we will set up the scope and target of a certain project and say what should be achieved at the first stage, second stage and so on. In this process, as it involves in communication between many departments, sometimes it is hard for everyone to form a consensus for a certain project. For instance, if three colleagues in Department A participate in our project but they still have their own projects to conduct, how do you examine their performance? In this case, the project manager becomes extremely important. That PM has to coordinate all kinds of resources. So I will set up something that has to be done for the first stage. I will make sure what the requirement is. So you ask me whether I will set up targets for them. Yes, I will. You ask me whether I will introduce rewards and punishments. It has to depend on their yearly performance of, for instance, whether there is any delay or the quality is fairly good. We will have this sort of thing. If you talk about documentation, frankly speaking we do this kind of thing but we do it generally. What I mean by doing it generally is we only set up a broad direction. We will not do it as*

doing balance scorecard that it has to be completely quantified as it involves in the operation of the whole organisation. About internal management, it will be like this.

A: So you mean that you will be much ... In accordance with your working condition and content, you will be much target-oriented ...

B: *I should have clarified that our department is so-called intelligence system department. It is an IT department. The pattern of our internal operation may be different from many other companies. Our internal situation is all of the members in the intelligence system department are planning staffs. They do not do any coding or any IT technology design. They do none of them. That is to say, we only deal with internal operation procedures like booking procedures and accounting procedures. Here, we plan how certain procedure is routed and then we outsource it for coding and maintaining the entire network system. So our role is to improve the operation procedure constantly. So our department is quite different from other IT departments that have to do planning as well as coding. So you are right that our work is project-based but one project may take quite a long time. For instance, we spent three years in updating the retailer's cash register system. So the size of project does matter. I am not so sure of the purpose of your interview or what you want to get from this interview. Frankly speaking, I am not so clear about that.*

A: The purpose of my interview is to see how you manage this kind of thing from the angle of leadership character. That's it. It is very simple. In the process of managing it, what do you consider? What do you consider as a leader or manager? The stuff you consider has to be helpful to the operation of this thing, making it more smooth and efficient. In other words, how do you manage these people even if you said that they do not do the stuff of coding or programming? But they still integrate some kind of information into other kind of information. So in such process, I just want to know that what your role as a manager is. How do you lead this kind of stuff? I attempt to much understand what your leadership character is. How can you have more efficient leadership?

B: *More efficient leadership?! Frankly speaking, it should be saying that there are several levels. I think that when a PM conducts a project, the first person who will be involved is that PM. It involves in that PM's skill. You have to let that PM be aware that if a project is unsuccessful, there are many factors. The first one is that are you clear about its scope? Are you clear about your requirement? Are you clear about your whole resources? You have to let the PM clear about these. The second one refers to the management skill. It also has to do with KM. For instance, if you have Project A and Project B, you may need to have different operation patterns as these two projects are different, but the management skill for these projects may be more or less the same. That is to say, no matter which kind of project, you only pay attention to certain specific points. So from this angle of project management, I may have several ways of doing in my mind. One of them can be referred to documenting and saving any relevant stuff and then communicating or sharing it with other people. However, to our current working condition, we prefer to have the way of something like apprenticeship to lead them to do project and to make the skill and knowledge imparted. So from our point of view, we much prefer to have such way. However, frankly speaking, this way of doing may be*

interrupted if someone leaves. In this case, nothing will be kept. Therefore we hope that there can have some output in the process. But the interesting thing is generally in Taiwanese organisations, people do not like to make documents. They do not like to save things as visible but fragmented knowledge. So for this part ... From our point of view, we hope that we can at least take control of 70% or 80%. As the whole operation is continuous, without spending at least six months or one year, newcomers will be hard to understand the operation of the retailer. So in our position, we must be ... letting them be familiar with the entire operation gradually. From the perspective of a manager, we certainly have many levels. Our level tends to make members or PMs' knowledge base consistent. In such process, we just do our best to use experienced staff to lead junior one by co-working projects. You said that you can let them read documents, study by themselves. But I think that you still have to let someone teach them as everybody sees things differently after all.

A: So you just mentioned that ... to a certain extent it is necessary to introduce that kind of apprenticeship system ...

B: *That's right. I think it is necessary. However there is one premise that you must have strong desire to learn. Nevertheless if you have strong desire to learn but no one can be telling you relevant tricks, you still cannot do anything. Besides, the way each organisation operates is different. For instance, if you compare with two different retailing companies, as their cultures and sources of know-how are different, their operation patterns must therefore be different. So for a manager, how to make it imparted continuously? I think it is a process and will be dependent on the most efficient operation way of the enterprise. There is no absolute way. This is my opinion.*

A: That's right. There is no absolute way. For managers, there is only relatively efficient way, isn't it? Some managers think that they will encourage, train and develop their people and plan for their future and visions. But some managers think that they will provide their people with real prizes to stimulate them to move forward. So it refers to the problem of how it is manipulated. Some people think that they have to lead their people with much softer manner, but some think that to enhance their people's motivation they have to give them something substantial. So how do you think? In practice, how do you ...

B: *I think that for those kinds of visible stuff like salary or prizes, I wonder that they are the best way. Sometimes, those are associated with the organisation and you cannot do anything about them. Especially for foreign enterprises and local enterprises, they are a bit different in terms of this aspect. In local companies, managers do not have such authority. However, I think that this question has to do with how to lead the entire organisation and make it become more efficient. It has to do with how to stimulate your employees and make them have better output. If this is the premise, I think that they have to be very clear about what they are doing and whether they are doing it happily. Of course, you can set up a target that if someone achieves it, their performance is excellent and they can get the performance prize. In the company's operation or system, this kind of stuff may be quite static. However, there is no absolute standard to judge their performance. So you asked that whether such kind of encouragement will bring the greatest effect to the organisation. In my opinion, at least its*

basis has to be fair. You have to let them be clear about all the standard, target and direction. I think that it still has to do with the entire system of the organisation. For me, I only have the right to make suggestion rather than make decision. So like me as a manager at this level, we will instead tend to focus on whether they have any project-related problem in, for instance, the sense of achievement. You can read many reports that salary is not the best way of promotion. Especially for those youngsters nowadays, they probably care much about whether this work can make them feel more comfortable.

A: In fact, this question involves more deeply in the structure of the organisation or even the problem of authority. Despite that, you seem to feel that it is not an effective, long-term way to achieve ...

B: That's right. You always can use better salary to get better people. But they may not stay long. They may leave for other companies as they get better pay. If you regard your people as assets and you want to keep them, I think that you have to combine the stuff of salary with the whole organisational culture and the sense of working achievement. There are many factors and salary is just one of them and is the basic, not absolute one.

A: Alright. In fact, you have been revealing your characters as a manager. Do your characters only apply to this situation, this department or your people? For instance, if you lead other kinds of departments or have an opportunity to manage other business, would your management style be the same? Or you think that to other kinds of departments like sales departments, your management style will be different. To different situations, would your leadership character be different? Or you think that there should be no difference.

B: This is a good question. I think that some basic things will not be changed. But something still has to depend on the character of the department. If you lead different departments, the way you use may be different. For instance, leading a sales department and leading people who do process design are totally different. As a fact that the characters of salesman and IT staff are fundamentally different, it is not possible for you to use the same way to lead them. But at least, there are some similar concepts. That is to say, they all have to fully realise the core of what they are doing. Frankly speaking, I think that you have to lead different departments differently in terms of leadership means. But for the leaders themselves, their characters may not need to change so much. Why? I give you an example. Compare with managers in marketing departments and IT departments, suppose they are at the same level, I think they all have to concentrate on execution, but the way they use may be different. So frankly speaking, their leadership characters may not vary so much. You can see their commonality. For every manager whatever in foreign or local companies, they are all aggressive, but their way of doing may be different. Some are with the type of teaching with patience and skill, but some are with the performance-oriented type. However, their common thing is they all focus on strategy or execution. So you said that if I am in different departments, I think that ... the way of doing may be different. But for my personal characters, I do not think that there will have much difference as you have to be aggressive, you have to focus on execution, you have to be clear about numbers and you have to have a clear target. So I think that even though in different department, leadership characters will not change. I think that leadership itself has to have some basic characters otherwise there is no way to

lead people.

A: So you mean that more precisely, leaders' values perhaps are consistent but the way they use is different and has to be dependent on different departments or situations. That's right. The way of conducting is different. Can I say so?

B: *You said that leaders' values are consistent ...*

A: That's right. Perhaps their ...

B: *Their characters must have something in common. For instance, for the director in Company A and the director in Company B, even though their leadership styles may be different, I think their leadership characters must have something in common. What do I mean by having something in common in terms of leadership character? It means that they may all emphasise the efficiency of the organisational operation. However, their ways of promotion may be different. One of them may use salary as a tool to keep their people moving, but the other may like to use training to develop their people. So the directors' leadership styles of these two companies may not be the same, but their leadership characters may be ... for instance, their execution power is quite strong. I can only say that for every leader in the successful enterprise, their execution power is very strong.*

A: So you think that there should be different in terms of leadership.

B: *You mean ...*

A: As you said, due to different characters of different departments, your way of leading will therefore be different.

B: *That's right. The way will be a bit different.*

A: Alright. Actually, what we have been talking about is a kind of explicit knowledge ... From our point of view, we think that it is so-called a kind of knowledge conversion. In this case, management can then be introduced into it. So how do you manage this process? In addition, what do you think of so-called knowledge management? In your opinion, what can be called as knowledge management? As a manager, how do you look at the stuff of knowledge management?

B: *I think that first of all knowledge management is about concentrating on your core. Take the operation of our convenient store as an illustration, it has its operation pattern and core competence. You said that you can get any knowledge you like anytime, but it may not become useful knowledge to you. So it depends on how you define which information or knowledge is the core one to you. About this part, you have to take full control of it. Especially for us, as our job is to develop the system of the convenient store, we have to realise why we need to develop certain system. Are you going to let one procedure consist of five or ten actions? Are you going to give three or two forms? It involves in some know-how. And the know-how itself represents a knowledge base. Given that, it has to be collected and then imparted. So how do I look at knowledge management? In my opinion, I will be much standing in the position of the company that it should be about building some mechanisms to impart knowledge even if we still have not assigned someone to do that. If so, you have to tell your people that what kind of stuff should be put in the project for the purpose of future impartation. Frankly speaking, my understanding is if they can collect relevant information continuously, they will be so great. If they can*

collect any relevant information of the project from beginning to end, including every single process of the project, meeting minutes and so on, that will be so fantastic even though I think it is very hard to do so. The process of collecting information is extremely time-consuming and exhausting. After the information is collected, the next stage is about to study it. However, can they have any opportunity to study it? Enterprises are not like schools in which pupils can sit there and read some books. Here, if you have any problem, you certainly can check relevant information from our KM system. But mostly, you have to gain knowledge from practical experience. So I think that the first step of doing knowledge management is to collect relevant core stuff. This is the most important thing to do. If you do not record every procedure of the project in the first place, you will face some problems if someone leaves. As the project still has to carry on, those who take over the position may not have much time to ... In consequence, the impartation of knowledge is interrupted. So human beings become very important. Of course, you can use certain kind of media to save what you want or transfer something into visible stuff, it is only a kind of means or method. Everyone has been talking about knowledge management. I think that it truly has to depend on how the atmosphere of learning is operated in the organisation.

A: Alright. You just mentioned that the categorising and processing of information, documents are quite important. On the other hand, you also said that there still has something which is much invisible like tricks. Therefore to a certain extent, you said that it is necessary to introduce the stuff of so-called apprenticeship into this kind of ecology to generate some functions. If so, how do you stimulate this kind of thing as a manager? How do you let someone be more willing to play the role of master or to impart such kind of invisible stuff?

B: *I think that it also has to do with organisational operation and organisational climate. Of course, in my position, I will make a request that tutors have to be assigned to support newcomers. However, tutors cannot protect newcomers all the time as nannies. Newcomers have to be active. I will tell newcomers that there are many tricks involved in the process. They can transfer invisible stuff into visible one by writing it down and making it become their working manuals. This is a kind of process that needs to take quite a long time and involves in many stuff. They have to be clear about the core of the project, the core of the department and the core of the company. They have to know what the project is all about. They have to know what needs them to pay attention to. KM must have its own way of discussion. How to do collection? Where is the point? Otherwise, department A and department B may have different directions. If they have different directions, their information formats and content may also become different. In consequence, the entire company will not be able to do impartation. So to us, we must assign someone to newcomers. Newcomers cannot get their tutors by themselves. It may not be good to them.*

A: Given that, you mean that your position or the company's position will be to plan, interfere in the establishment and operation of such system. If so, it seems to you that you will be setting up certain performance standard for such stuff of apprenticeship, won't you?

B: *Frankly speaking, the performance standard will be reflected in the side of apprentice. You talked*

about performance standard. Frankly speaking, in our operation, we have not got used to defining everything clearly and orderly. For instance, as a manager how can I examine the interaction between newcomers and their tutors? It is very simple. I examine what newcomers actually learn after three months of their entry. I will use this to judge the interaction between newcomers and their tutors. I assume that after three months newcomers must have a basic understanding of how the entire department operates and relevant projects. If they do not, there must have some problems between them. The problem may go to the side of newcomer that they are not so active in learning everything. Or the problem may go to the side of tutor that they are not keen on teaching their apprentices. There are many kinds of problems.

A: *So you mean that to such apprenticeship ... such stuff of invisible impartation, your position is it is necessary to set up much substantial standard. Even though that kind of standard does not need to be so detailed, it has to allow you to measure some performance within certain period of time.*

B: *Yes, it is necessary. Otherwise there is no need to assign tutors to them. From our point of view, assigning someone to them is not only for tacit knowledge. In fact, the whole process consists of tacit as well as explicit stuff. So we do hope that tutors can do better impartation to newcomers. The processes of getting led by someone and getting studied by yourself are quite different.*

A: *My research involves in both explicit stuff and much tacit interaction like apprenticeship. I am interested in how managers look at these different situations. I attempt to know whether managers' leading characters, patterns will be different because of these different situations. My research scope is to understand some conditions of the manager.*

B: *In fact, about tacit and explicit ... I think that different managers in various backgrounds and organisations will have different opinions. From my point of view, explicit stuff ... can be seen quite easily.*

A: *Yes, that's right.*

B: *It is quite obvious. About tacit one, it is disseminated by colloquial language. In the process of being disseminated colloquially, it can be specified and become explicit. The requirement of tacit one has to be decreased as much as possible. However, it cannot be 100% revealed as it has to do with personal characters, managers and organisational cultures. So it is impossible to have an ideal pattern of operation.*

A: *In fact, I am much interested in understanding the role of manager in such kind of situation ...*

B: *With regard to tacit part, frankly speaking, the role of manager may not be so important. The reason of my announcement that managers may not be so important is it has to depend on whether the employee's desire to learn is high or not. If someone is very active and asks me a lot, they can learn many things. Besides, in our position as a manager, we therefore will have better interaction. If they are not active, I will not have any idea of where their problems are. As a result of this, I will assume that they know everything. So we will try each other. Of course, managers are quite important. They have to take full responsibility of the whole performance. Even though managers are quite strong, they still have to spend some time on developing their people. But the problem is how many resources and*

operation costs they can spend on their people. It has to do with the organisational culture. That is why managers have to recruit someone suitable for their departments. They have to recruit right people for their departments. So are managers important? Yes, managers are important. Managers are important in recruiting the right people. So my point is from managers' point of view, they have to see the character of each person.

A: So you just mentioned that the extent to which managers interfere in the tacit part depends on the problem of employees' learning willingness and learning motivation.

B: *This is one part. Of course, the other part refers to a fact that managers have to use their experience to do their best to communicate with their people even if everyone's understanding will be different. The role of manager is to remind employees of something invisible. It must be an interaction process. It cannot totally rely on either manager side or employee side. So there must have some interaction.*

A: Alright. How about explicit part? As it is quite obvious stuff, can I say that managers have to play more important role in it? Compare with the tacit one, do managers have to interfere much in the explicit one as it involves in the control of existing information?

B: *I think that to the explicit part, as it deals with something existent, you can use some good ways to guide it. On the other hand, to the tacit part, it is not necessarily to ... it involves in some experience. It will have experience values. That is to say, if manager A has five years of experience but manager B has ten years of experience, the tacit knowledge they possessed will be different. However, it also has to do with their personalities and ways of doing things.*

A: Okay, I understand. Thanks a lot for your time.

INTERVIEW TRANSCRIPT – Combination 012

Note: "A" represents interviewer and "B" represents respondent.

A: Can you have rough understanding of this thing? I think that the previous business you handled should be ...

B: *A bit similar ...*

A: It should be quite similar. The affair of tax actually is about dealing with ... this kind of stuff is explicit, isn't it?

B: *That's right.*

A: It is all about processing information or something, isn't it? So what I attempt to know is from your point of view as a manager, what kind of leadership character is helpful for you to manage such thing and those who are involved in it? Simply speaking, how should you manage those people? Or how did you manage your people?

B: *I have to understand everybody first. Of course, they are recruited by me. I have to understand everybody's specialities as well as characters. If they only have specialties but lack of certain*

characters, there will have some problems. I think that characters are quite important. This is my opinion. I recruited people because of their specialities before. When they came in, I found that their characters were not suitable for this place ... For instance, they did not have team spirit. Also, they did not have good skill of communication. They had to be so careful and they were not allowed to do anything wrong. So besides requiring their specialities, I also paid attention to their characters to see whether they were suitable for the work. At that time, I had to recruit my people by myself. So we had a hard time setting up the department. After that, I started to integrate them. I integrated them into a small team. Especially when I wanted to do a system or theme, I had to integrate relevant staff into a team and then divided them into several groups. I would examine their work regularly. I wanted them to have group discussions. In the discussion, everyone had to report their own progress and to see whether other team members required any help. I only would give them a big direction. Sometimes, they had to invite user parties to attend their meeting and to give them some advices. User parties had to see whether the system was suitable for their tastes. I sometimes stimulated my team to do something long-term. I told them that they had to be very clear about their visions for next ten years. If they did not do things as complete as possible, it would be so hard to change anything if the system was finished. So it is very important that things have to be complete and comprehensive in the first place. Before starting to do programming, I think that it is considerably important to do the analysis of the whole system and the integration of various businesses. If it is not perfectly done, you will not be able to design any system which can meet the future needs. So you have to understand what it is for in the future. You have to ask why we should do this. You have to be clear about what the future needs. You cannot say that right now everybody only needs a glass of water so you only prepare a glass of water for them. Perhaps, they need more water tomorrow. So when you do planning, you have to make your plan cover as much as possibilities. If you do that, your plan will be so complete.

A: So you think that first of all selecting people will be an important thing to do.

B: That's right. That is very important.

A: After certain people are recruited ...

B: *If someone is not suitable, I will get rid of them. It has to be mobile. If someone is not suitable for certain job, I will transfer them to another post. If someone really has to be transferred, I may need to find other suitable staff to take over their places. I may need to do recruiting all over again. That is why I emphasise the importance of selecting people.*

A: Let's assume that the staff recruited has no problem of suitability. You said that you will let them know that, for instance, what they are doing is for next three, five or even ten years. You will let them know that there is a target out there. You can say that this is so-called a vision. You have to let them know the reason of doing certain thing. If so, how about the process in the middle of it? What do I mean by the process in the middle of it is as you know that the affair of tax involves in dealing with massive information. Besides, you just mentioned that the whole taxation computing system cannot allow any mistake to occur and has to be run smoothly and accurately. Given that, how can you make sure that your people can be of accurate at doing every single detail? How do you lead such situation?

B: *We at least have one time of review every week. We have one every week. We discuss deeply in the review. The situation is if you do not sort everything out and make everything clear, you will not be able to do anything in the following week. So sometimes the review meeting lasts for all day long. If there is no serious problem, the meeting may just last for an hour or less and after that, everybody has to go back to work. If there are some problems, we have to have a discussion and come out some conclusions. So at that time of doing the programming, as we cared about this kind of situation, we had to leave some space for the future flexibility. But on the other hand, we had to consider that if we left some space for the future flexibility, the disk capacity would have to be increased. Nowadays, there is no such problem. In my time, the computer disk was too big to carry and its capacity was too small. In that time, we had hundreds of millions of data. Especially when we had to do on-line operation, we need to put dozens of disks on the mainframe. That was so exhausting. So when we wanted to use it or find some information, we really felt so difficult. So we had to put many things into consideration.*

A: That is to say, that kind of system was too big for you so you had to split the whole process into several stages. For these stages, you reviewed them every week or every month. This could be ruled out. If so, does it mean that you have set up targets for different stages?

B: *Yes, that's right.*

A: Having set up targets meant that there was performance appraisal.

B: *Yes, that's right.*

A: Having had performance appraisal meant that there was a system of reward and punishment.

B: *Yes, that's right.*

A: So you mean that in your position as a manager, you will be using rewards and punishments as a means of stimulation.

B: *Yes. We regard rewards and punishments as a kind of ... I emphasise this thing. In that time, as we were in a government organisation, it was very hard to ... But if I were a boss in the private sector, using rewards and punishments will make me do things quickly and easily. But in the government organisation, it has to involve in the problem of budget. So in that time, I usually budgeted more money. Frankly speaking, in our time, many people did not like computers, did they? Everybody was afraid of touching computers. They thought that computers were hard and cold machines. No one liked to touch them. In that time, they got used to do things with their hands. So they did not like to use keyboards to play computer. Many colleagues blamed me. So I forced everyone, including the chiefs, to get trained. So for a certain period of time, they really disliked me. However, when they finished the training course and passed some simple examinations, I rewarded them. The prizes they got were two or even three times greater than usual. As I had budget, I could give them double or even triple prize. It applied to the completion of the project. When a project was finished, I would reward my people. Furthermore, when that project was accepted by the government and then was introduced into other counties, I would reward my people again. If my people performed extremely well, they could get many prizes in just one year. So they worked so hard.*

A: So from what you just said, regarding to the processing of the explicit stuff, you mean that as a manager, to achieve the target, using prizes as a means will be necessary ...

B: *It is necessary. But if they perform badly, I will also be hard on them. There must have a clear line between rewards and punishments. There have to have a clear line between rewards and punishments. As a matter of fact, the system we were working on was so big. They had to be very careful about everything otherwise things would go wrong. So in that time, I asked them to do two or even three copies for a project. If nothing went wrong, everybody would be fine. However, if something went wrong, we could use different copies to do some matching to find out the problem.*

A: That is because your system was too big and implicated too many things. So no matter how careful your people were, things might still go wrong.

B: *It might happen. That's right.*

A: So it means that if something goes wrong, your people, organisation or even government may need to spend so many resources to correct it. How do you look at this case from your point of view as a manager? How do you look at your people in this situation?

B: *In this situation, you have to understand that they may be more anxious than us. Those who are in charge of the project may be more anxious than us. I will let them calm down. Sometimes, I will ask them to take a break. I will tell them to take a rest or have a nice sleep. Maybe they can dream of solving the problem. I once told them to do the project all over again to see whether the problem could be found out. We had this kind of experience before.*

A: So you mean that in your position as a manager, rewards, prizes to a certain extent are necessary.

B: *Yes, they are necessary. I think they are necessary.*

A: If so, does this kind of leadership style, using prizes as a kind of leading tool, only apply to such situation? That is to say, is it your own character? Would you use the stuff of prize to deal with anything done by your people?

B: *I tell you something. Bonus is only one of them. In addition, to be honest, emotions are also important to human being. I do not see my people as my subordinates. I see them as my brothers and sisters. So there is no distance between us. I tell them that you just do everything you have to do and I will take the full responsibility of everything. If someone at the top blames me, I will not blame you. You just do what you ought to do. You have to love and take care of them. If you do that, they will do anything for you. Sometimes, when I was really busy, they asked me whether I needed any help. I once had no time to pick up my children at school, they said that they could do it for me. In fact, I had already forgotten to pick up my children, my colleagues came to remind me. That is because I did care about them. I even cared about my colleagues' families. When their husbands/wives or children were ill, I asked them whether they needed any help. I did care about them. So the relationship between me and my colleagues was so good.*

A: Alright. So in this aspect ...

B: *The way of leading people should be like this.*

A: Of course, it also has to concern about ...

B: *On the one hand, bonuses are needed; on the other hand, emotions are also important.*

A: It should be saying that to the part of prize, you as a leader will be going to ...

B: *I will do my best to fight for it. If I can get something for them, they will appreciate me. But if I cannot get something for them, they know that I have done my best. They still will carry on supporting me.*

A: Of course, you will stand by them to fight for it. But in your or your organisation's position, the purpose of using the prize is to make sure that your target can be well achieved.

B: *That's right. Let them have the sense of achievement. For some colleagues, they pay attention to not only bonuses they can earn, but also the sense of achievement they can get. It is because in that time I put their names in the operation manual of the system. Everyone would know who did which part. It was an approval to them. Let them know that they really did something extraordinary. Some colleagues did not care much about whether their names were put in the manual, they cared about your spiritual approval instead.*

A: What I am studying is about changing explicit stuff into another explicit stuff through the processing by computer or even by hand.

B: *I see.*

A: In fact, this stuff is so-called knowledge management in a popular term. This is also a kind of knowledge. This is just an explicit knowledge. Through certain processing, one kind of explicit knowledge can be changed to another kind of explicit knowledge. What I am studying is to understand that for you as a leader or manager, what kind of role you should play in such process. How can you make sure that the process can be run smoothly and accurately? How can you manage those who are involved in it?

B: *What I have been talking about represents my leadership style. If the system required is small and does not need my participation, I will assign someone to be in charge of it. In that case, I will tell them to deeply understand what they are doing is all about. I even tell them a stupid way that they pick up several projects and do them manually. They have to know every single step involved in the project. They have to know everything. If they can fully understand every single detail appeared in the project, they will be quite easy to lead their teams. I think the reason they could lead their teams quite well is because I told them my personal experience, let them know that the way of doing should be like this. In consequence, they were so relaxed in leading their teams and did not need to waste so much time and energy.*

A: Okay, I understand.

B: *But that is all my previous experience.*

A: That's fine. I think that if you are now leading someone to do what you talked about, your leadership style should be like what you referred. Alright, I think that is it. Thanks very much for your help.

INTERVIEW TRANSCRIPT – Combination 013

Note: “A” represents interviewer and “B” represents respondent.

A: Having seen this, can you understand what this is all about?

B: *Uh-huh.*

A: You asked me that why I came to you. As I thought that what you are doing is relevant to information stuff, so I assume that with this kind of background you may be much easier to understand this kind of situation.

B: *Okay.*

A: That is the reason why I chose you. So having understood this kind of description, I want to ask you that from your point of view you think which kind of leadership character is helpful to this stuff? As it indicates, explicit knowledge can be converted through computers or even hands. After massive information is processed, it will come out required forms or reports which are also visible, explicit. This situation may be quite similar to what your people are actually doing. So I attempt to understand that for you as a leader or a manager, how can you manage such situation? Or how do you lead your employees to conduct such working content? What is your leadership style? How can you make sure that the whole process can be well conducted as you must know that such kind of thing involves in processing massive information, which may require efficiency and accuracy? Under these circumstances, for you as a manager, how do you lead those who are involved in such process? How can you let them achieve the goal you set before? How do you lead such people? What is your leadership style?

B: *I am still not so sure about your ... as the question is so broad. To me, I probably still have not got the whole picture. Could you be more focused on ...*

A: Simply speaking, how do you manage this Computing Division? That is to say, what is your leadership style? How do you manage these people? What is your leading means? Or even what kind of tool will you use? To you as a manager, in fact you represent the organisation, whatever hospital or any kind of company, or the boss behind you to manage such department and to let this department achieve the set target. Under these circumstances, how do you lead such department? As a manager, which kind of feeling you will give to your employees? How are you going to do? The purpose of how you are going to do is to achieve whatever big targets or small targets. So your purpose is to achieve the target that has been set up before. Before the target is achieved, there must be going through some processes. So how do you manage those processes? How do you control those processes? How do you lead those who are involved in it to do what they ought to do? As a fact that the working content of your people may be quite similar to this kind of situation, I am therefore much interested in how you are going to manage as a manager. How do you manage these people to ...

B: *I think that we will design something like a system of project management. As this is a school, which may not be suitable for this case, I talk about my previous company. In my previous company, we were so simple that we had a sales department and an application department which had to do*

with programme design. To the sales department, they had some forms, regarding to, for instance, forecasting. In the beginning of the year, they had to set up their targets. They had to analyse their markets and so on. We had a way of doing. After the annual target was set up and we agreed with the sales quota they proposed, we would want them to follow up their plan. When they started to execute their plan, we would pay attention to the figures. Then they would have some visiting records. We would rely on how many visiting records, how many target rates and how many transaction amounts on average to forecast whether they had to visit more customers or they had to increase the amount. If their transaction rates were declining, did it mean that they had some problems? That is to say, we would use some ... I do not know whether this answer is something you want. Those kinds of stuff were what you called as explicit information like forms, documents and records. We would put all of them into computers. We had some management or rules to see whether it was reasonable or whether they had to do some adjustments. We used this way to assist the persons involved as well as the managers. As we were not possible to manage all of the stuff, we had to do something like exceptional management or target management.

A: *Alright. So from your previous experience, you said that to this stuff you will be setting up a long-term, for instance, annual target. Then you will split it into several sub-targets that have to be finished every month or even every week.*

B: *Yes, that's right.*

A: *So in your position as a manager, you will be setting up a big direction. After it is set up, the subsequent thing refers to the problem of execution. How to achieve this thing step by step? So how can you make sure that these people are really doing their best to carry out something, contribute their efforts? How do you manage them? What I mean by how to manage them is as a manager would you provide them with prizes or this kind of encouragement? Would you use this stuff as a management means or tool? How can you do to make them heading to the annual target step by step?*

B: *I think that you must have a kind of performance appraisal to ... no matter from the principle of fairness or from the principle of stimulation. You must have a system, a system of performance appraisal. It is very simple to sales. If they fulfil the quota ahead of target, I will give them certain percentage of reward. If they do not reach it, I will punish them. So there are rewards and punishments. To technical staff, they also have so-called ... That is to say, when a project comes out, we will set up a target of, for instance, fifty persons per month to do this project. So if they can do the project with forty persons per month, we will reward them something additional. For instance, if they can do the project with forty persons per month rather than fifty persons per month, they save the cost of ten persons per month for the company. I can therefore take the cost of three persons per month out of ten persons per month to be their prizes. The project leader can take this prize to reward their people. However, if they do the project with the planned fifty persons per month, they get nothing for additional bonuses as they have already got pay. But if they do the project with more than fifty persons per month, we will involve in and see what is going on. That is to say, to different people, you need to have different ways of rewarding. What I said is sales staffs and technical staffs are different. But*

basically, our way of rewarding is like what I said as it is very direct to sales staffs. The reward directly goes to the individual.

A: So you mean that the way of managing sales units and the way of managing engineering units are different.

B: Yes, that's right.

A: It is mainly because their working environments are different.

B: You are right.

A: In your point of view, managing sales units is quite simple that as long as they achieve additional percentage above the quota, they get that percentage of reward.

B: But there are some more details. For instance, we will see their profit rates and whether their relationships with the customers are good. It involves in a quite complicated system. It is not possible for me to tell you all. I can only let you know a general situation. In fact, we have a quite complete incentive programme in our system.

A: In addition to sales staffs, you also mentioned staffs in the engineering units. You just said that if they can save some manpower from the project but still can achieve the required target, you will be rewarding them by certain percentage of what they saved.

B: That's right, only a part of it.

A: Sure. You said that there still have many details. Apart from those details, in the position of a manager do you think that you are the one who will introduce the idea of prize, reward or punishment entirely? Are you the one who will use this kind of stuff as your main leading means to let your people ...

B: As a matter of fact, I should say that it is one of the methods. Not all of the staff in a company care about money. Some people care about self-development. They care about whether the company will give them such kind of environment. They pay attention to whether the company is growing and has the future, rather than their own salaries. Everyone's requirement is essentially different. Somebody wants money, somebody wants stability and somebody wants the future and so on. So companies have to do their best to satisfy their employees with the limited resources. If they can do that, they can keep most of the employees. So under these circumstances, you also have to do education and training, letting your employees have opportunities to grow. Especially for technical staffs, to cope with their work they have to learn constantly. So you have to give them complete training programmes to let them grow. The second thing is as a manager do you care about your employees? Are you communicating with them? Are you talking to them? Are you planning for their careers? Relatively speaking, technical staffs sometimes concentrate much on techniques. But you have to know that they finally will get into the management level. When they become managers, besides their original technical skills, they have to have some management skills. So are you helping them to develop certain kind of management skill? Are you planning this kind of programme for them? We had a case before that a certain technician was very senior and had contributed a lot, but he was not a good manager. So when you put that kind of person in a management position, that person will suffer from it. So you

have to give them that kind of training programme before they get into that position. Otherwise if they are not appropriately trained but get into that position, they finally will choose to leave. If they really do not like certain kind of position or place, shouldn't you plan for another career for them? The whole situation is dynamic. It is hard to tell you that it should be like this or it should be like that.

A: Certainly.

B: *Managing a company in fact is quite complicated. It is like running a restaurant. You cannot just sell spicy cuisine and restrict that only those who love spicy cuisine can come to your restaurant. As I said, there are many different people with different requirements in a company. Somebody wants money, but somebody wants the sense of achievement. That is the reality.*

A: If so, do you mean that your way of doing will be dependent on different people rather than different departments? As you said, some people are more ...

B: *I think it should be saying that it is impossible for a manager to design a programme for every single member in the department. There must have some company policies or big principle over there. There are some principles that have to obey. Besides that, if someone needs something special like going to attend certain training lessons, I will do my best to make arrangements for them or use the budget to open some lessons for them. We on the other hand have the reward, incentive payment system for those who put emphasis on money. Besides, somebody likes to work in a company which has the future. If so, we have to plan for the future direction of the company and announce it in the company meeting. You have to let them know that the company not only involves in what we are currently doing, but also will do some other things someday. You have to let them know that the company will be led to another world. Those are the things that have to be done. But basic management rules are set up over there. That is to say, simply speaking, the difference between good managers and bad managers relies on a fact of whether they can notice these tiny things or whether they can strive something or arrangements for their employees.*

A: So it turns out that to a certain extent for you as a manager, you will be using those kinds of means reciprocally.

B: *That's right.*

A: Or it will be adjusted in accordance with different situations. As the outside environments and people have been changing all the time, you inevitably have to do some adjustments in return.

B: *So I will consider management as art, not science. I will not look at management from a scientific perspective.*

A: Alright. Let's now get rid of the leadership character and style. In fact, what we have discussed is about knowledge management. Here, we talked about explicit knowledge can be changed to another explicit knowledge through some processing or categorising. Through such way, knowledge can be converted from one kind to another. From our point of view, this is a kind of knowledge management. It involves in how to manage such process. So from your point of view or experience, you think what can be seen as knowledge management. I am so interested in knowing what you think of knowledge management as a manager in industry. How do you look at the stuff of knowledge management? What

do you think you should be doing?

B: *Let me say this way. I once read an article. It says that what the difference will be if moderns and primitives both go to learn something. Even though they are all human beings, some people still stay in the relatively primitive status. The article has a discussion about the existence of such difference. After I read it, I was so impressed. It says that the biggest difference between moderns and primitives is moderns have written language but primitives have not. What does written language mean? What is the biggest difference between written language and spoken language? Spoken language can be imparted generation by generation. I tell you something in fact means a kind of knowledge impartation. For instance, many legends or myths are delivered this way. Grandparents tell parents something. Parents tell children something. Children tell grandchildren something. If something is delivered generation by generation, it will gradually lose its factuality or be twisted. However, if things are written, the situation will be totally different. So the biggest difference between written language and spoken language is the extent to which knowledge is accumulated. If something is written, it will not disappear due to certain person's disappearance. It can be firmly accumulated. Similarly, in a company, if everything can be recorded through a well-designed system or method, we will not be afraid of losing anything. For instance, if we can design something like a Q&A system in which everyone can post their experience on it, newcomers can catch all of the relevant experience in just one time. So from our point of view, why do we have to make everything characterised? It has to do with knowledge accumulation and knowledge categorisation. Like a library, if you do not do categorisation management, how can you find something you want? So in the beginning, it must be accumulating. After that, you can then do categorisation management that for instance, some belong to the sales department and some belong to the technical department. For the technical department, you can do further categorisation. It is like doing library management. Only this way of doing can let you make progress. Also, you can make this thing become your training material. Through this, you can make your people get on-board more quickly. I think that the speed of getting familiar with the work by newcomers depends on whether they are well trained at the time they entered. If their work can get on very well, you can then generate more revenue rather than spend more money on training them. So where does the teaching material come from? On the one hand, it can be obtained from the outside. On the other hand, it can be collected from the inside. I once compared foreign companies with local companies. I found that foreign companies were better than local companies in some aspects. Why? In foreign companies, many things were recorded. They put emphasis on something like documents. However, when Taiwan started to do IT business about ten or twenty years ago, our engineers did not like to do documentation when they finished programming. They thought that it was quite boring and could not make them have the sense of achievement. They thought that they could not get any benefit from writing it down as they knew all about it. However, as we said that if it was accumulated, it could bring great benefit to the followers. So that is why we had to push them to write their working diaries or whatever. You have to push them to write something so that things can be accumulated.*

A: What you have talked about is quite interesting. From our point of view, the situation you just talked about refers to tacit stuff changing to explicit stuff. You just talked about that everyone should be writing their experience or what they have encountered down. Once they are written, they become visible stuff and can be seen, edited and categorised. If two persons, twenty persons or even two hundred persons' experience and feeling can be revealed, it will bring enormous meaning to the junior staffs and to the company. So whatever to any organisation in public sector or private sector, the most important thing to do should be to reveal everybody's experience and to let them write everything down.

B: *That's right.*

A: In fact, it is about making private, tacit stuff become public.

B: *Yes.*

A: If it is written or shared, everybody can see it. Given that, if we again put leadership, your leadership character as a manager back into this, I want to ask you that as a leader today, how can you do to let your people be more willing to do such thing? You said that from your position as a manager you certainly hope that your people whatever engineers or salesmen can reveal and impart what they have learned from customers or anybody. So in your position as a manager, how can you ...

B: *From our position as a manager, one of the methods we will use is incentive. If you solve a problem which is important but has not been encountered by other people, I will reward you. The second one involves in having a kind of system. Suppose the engineer goes to the customer's place to repair something. When they come back, they have to report what the problem is, how they judge it and how they solve it. I think that they only have to give some descriptions. So how can you force them to give some descriptions? First, we make it become a routine job. Their managers have to take the responsibility of watching them. There are two meanings of doing that. One is for the customer it is a kind of maintenance record as the customer pays us to solve the problem. The other is it is a kind of internal reference. We can see where the problem is? Is it something wrong with our procedures? Or is it something wrong with our working machines? We can refer the problem to the engineering or R&D department. So the clearer they write the stuff, the better for the individuals, company. So I said that I will use certain incentive. But I cannot always use incentives. So I make it become a routine job. They have to write that kind of stuff and they have to comply with the requests of their managers. They have to make it become meaningful. I think that the stuff of document is easily for appearance's sake. They may write down something which is meaningless. So you have to set up some formats for them. On the other hand, their managers can assign someone to report what have been happening in the regular meeting. I think that this could be the way of forcing them to do some recording. They also have to think about what they have recorded. As I said, they have to think why certain part or programme always causes problems. There must be something wrong. They have to think about it through what they have collected. What are we going to do as managers? We have to force them to think. We have to remind them something that they have not thought of. I think these are all methods. It is very difficult for me to describe them in more details.*

A: Alright. So to that kind of situation you broadly think that on the one hand incentive is quite important. On the other hand, you seem to believe that more routine, systematic management pattern ...

B: ... is also necessary. As I said, there must have some basic stuff. Besides that, you have to design a system, letting them maintain certain level of standard. If they have good managers, their managers can help them to make things become better. However, if their managers are not so good, at least they can achieve certain basic requirements through the system. So you talk about knowledge management. Do you know who has done the best knowledge management? 7-Eleven and McDonald's. They make everything become extremely standardised. I studied 7-Eleven before. I found that those who are at the educational level of elementary school will be able to do the work as 7-Eleven has already made everything standardised. That is to say, through some company's standard operation procedures, many things can be simplified. Then, if they just follow it, they can reach certain effect. Or you can do something like making everything digitised. That is to say, first you have to do some collection, then you have to do some statistics and analysis and finally, you have to use what you got to make decision.

A: As a matter of fact, we have discussed two different situations. One is that we all hope to make something in their heads revealed, documented.

B: That's right. That is what you said as tacit changing to explicit.

A: That's right. This is one kind. However, what we discussed in the first place is another kind regarding to processing, categorising the existing explicit stuff. It is like what most people in the Computing Division are doing as processing information. Given these two different situations, would your leadership style be therefore different?

B: I do not know whether leadership style is ... let me say this way. If it is from tacit to explicit, it needs to set up many rules, systems. As I said, if we use the way run in 7-Eleven, we can produce many "7-Eleven shops". On the other hand, how can we fully elaborate explicit information? I see it from another angle. That is to say, how can you create more values from the existing information and make it become the reference for your decision making. Take 7-Eleven as an example, the headquarters of 7-Eleven can collect all of their stores' data and process them. After the data are processed, analysed and categorised, they probably can decide the best location of opening the next store. So information needs to be processed. Some people belong to ... I think that decision makers have to do processing. But some people only do daily operation. They just do the action of collecting data. Some other people process the collected data and try to make them become meaningful. So if you have lots of experience, are good in management knowledge and are at the senior level, we hope that you can use the collected data to create the future.

A: As a matter of fact, I am interested in looking at the different knowledge conversions of explicit to explicit and tacit to explicit from the angle of leadership, leadership style. I am much interested in knowing how you look at these two different things as a manager. As these two different situations have different characters, it means that there might have two different groups of people involved.

B: Uh-huh.

A: Some people's working content may belong much to this side and some people's working content may belong much to that side. So I am interested in how a manager looks at these two different situations. Should the manager have different attitudes to look at them?

B: *Can you be more specific about tacit to explicit and explicit to explicit? Can you give me some specific examples for me to follow?*

A: For instance, if salesmen reveal their experience of contacting with customers or even put it in words, this is about tacit changing to explicit. On the other hand, explicit to explicit is about processing massive, existent information and then making it become more advanced information like financial reports or something.

B: *If so, it should be like data warehousing or data mining. In general, when IT staffs are programming systems, they will do some basic processing and digitise ordinary data. For instance, they will work out the costs of medicine and how many hygiene materials are consumed. This is a basic system. It is like what you said as changing information from tacit to explicit. They can use computers to help them to record it. They just need to enter the data constantly. However, for some people, we assign them to use existent data to do more advanced information processing. They can become decision making supporters. They process information for the purpose of decision making at the top. So some people only need to do basic information processing but some people have to do more advanced processing. We will treat these two kinds of people differently and we will pay them differently. Of course, what we expect from them will be different as their influences on the company are different.*

A: So if you look at these two kinds of people from a higher position, you said that your expectations will be different. Do your different expectations mean that your ways of leading them will also be different?

B: *In an enterprise, we have some people doing marketing and some people doing sales. Those marketing people in fact are doing some planning. They have to plan what kind of product or market should be developed. They have to collect massive information and then do analysis. Finally, they have to come out some plans and give them to the sales people. They have to tell the sales people where the market is in next year and why. They have to tell the sales people why they give them certain amount of quota. So one group is doing something macro and the other group is doing something micro. I think that is it. Have I answered your question?*

A: Certainly. In fact, I am not looking for certain specific answer. I just ...

B: *I just want to know whether I have answered your question ...*

A: Yes, you have. In fact, as I said, I am interested in knowing where the role of leader is. Or as a whole, no matter which kind of conversion, what is the attitude of leader to knowledge management? What kind of role should they play? How should they do to let this knowledge management ...

B: *Suppose there is a big enterprise with many managers at different levels. I think the higher the managers, the more advanced information they need to make decision. That is to say, the information has to be comprehensively processed for someone to make decision like whether the company has to*

spend two billion dollars to construct a new building. So different managers at different levels look at things differently.

A: That is true. In a company, there are big managers and small managers. Due to their levels, they look at things differently.

B: *This is the process of growing and training.*

A: Yes, that's right. It is hard to say anything about it. For those managers who are at the bottom levels, what they are doing must be quite different from those who are at the middle levels. In consequence, their conceptions and understanding must be different.

B: *That's right. With different backgrounds, levels and positions, they perceive things differently.*

A: Alright, I see. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 014

Note: "A" represents interviewer and "B" represents respondent.

A: Having seen this, can you have some general understanding?

B: *Some.*

A: Alright, having some understanding. I think that according to what you are currently doing, you should be much easier to understand what it describes. About so-called explicit stuff, it is like the stuff of information, data. The term Combination is invented by us, saying changing explicit stuff to another kind of information like reports through the processing of computers or something. So you may be much easier to understand such kind of situation with your background. Having had basic understanding, I want to ask you that for you as a manager in an information unit, as your people's main working content may be similar to this situation, how you lead these people. How do you lead these people to do such kind of thing? What is your leadership style?

B: *We only have few people right here.*

A: That's alright. It does not matter how many people you are now leading. It is about how you lead someone to do such kind of work.

B: *Basically, we are a bank. We just comply with our company's policy to carry out what should be done. What should be done includes what you just mentioned as some reports. As to what you asked as how to manage these people, the easiest way of doing is to guide them how to do it. About what kind of result or information form should be saved ... For instance, if we are going to save some information, we will save everyday working information in some media. That is also explicit stuff, isn't it? About leading people, basically it depends on their working characters. For instance, some people are dedicated to writing APR, you have to, for instance, give them a schedule. For instance, the company is going to do some homepages. In this case, I will try to work out what kind of stuff should be produced. Of course, I will do some examination. If you are a manager, you will go to review their work. For instance, you may give them one week to build up the key database profiles and other*

relevant profiles. Or you give them some guidelines, telling them how to do it. Then, you just do some double-checking.

A: Alright. I think you must also understand that such kind of working situation may involve in processing massive information and may require efficiency and accuracy. So even though it is about dealing with visible information, data, its request of accuracy is very high. In your position as a manager, you probably will not allow any trouble occurred ...

B: *That's right. In fact, something is instant. In the bank, there is much stuff which is instant. They are not allowed to cause any trouble. Here, the most instant stuff is about stock business. Stock system does not allow having any trouble.*

A: Alright. Given such working content and character, you just said that as a manager the only thing you have to do is to monitor the whole procedure ...

B: *Sure. It certainly has to monitor their schedules. You must be examining whether they are doing well or not.*

A: Alright, you will do some examination. However, from the position as a manager, would you use some ...

B: *Certain way of leading ...*

A: That's right. Or would you use some means? What I mean by using some means is would you use performance prize or something to make sure that they are doing good and not causing any trouble in such process?

B: *I think that it involves in something which is not so relevant to information. To this part, you have to give them some targets. It is like you will set up a target for yourself. You have to let your people feel that if they work in this place, they can have challenges and the future. About something like performance, rewarding system, before using it, you have to think about how it can be used properly in the unit.*

A: So you mean that for that kind of thing, you will also use it.

B: *To conduct leadership, it is needed. If you lead more and more people, you have to use those ways. You have to give them not only schedules, but also hope. They will then ... simply speaking, concentrate much on working.*

A: Alright. In fact, there are many ways of doing you can use.

B: *Sure.*

A: From my point of view, I just want to know that for you as a manager in such unit, you think what kind of leading way will be more efficient ...

B: *More appropriate? Generally speaking, I will be using ... the way of salary to interfere. Salary and the sense of achievement. For instance, you have to tell them what kind of thing they should be learning and how it can bring them a better future, including the increase in salary. You also have to give them directions. For instance, the most popular thing nowadays is internet. After they finish their routine work, they can go for this direction. They can do such kind of thing in accordance with the current situation of the company. It will not be so practical if you tell them something irrelevant to*

their business. You have to encourage them. There are many ways of encouragement. One refers to colloquial encouragement and the other is about substantial encouragement. Besides that, you have to tell them what they have to learn, what kind of potential thing they have to learn. I think such way of doing will be better for IT staff.

A: So you mean that to IT staff, you should be on the one hand encouraging them and on the other hand rewarding them or giving them much substantial incentives. You think they are both necessary means.

B: *I should be saying that these are what anybody likes.*

A: Okay. As you are now managing such unit, you just said that it is necessary to on the one hand encourage them and on the other hand reward them. However, which one you personally think is more important?

B: *I think at present the effect of reward should be better.*

A: How come?

B: *It is quite simple that ... first of all you have to see what your people want, the type of your people. For instance, they may need to earn more money. If they have brought the house and got mortgage to pay, they may be much in need of money. Visions or what they can learn may become minor to them. In this case, if you can be more practical, for instance, giving them more pay, they will be so happy to work for you. Of course, it depends on different people. Some people are very strong in desiring knowledge. If you give specific assignments to those who show great interests in them, they will think that they are highlighted. If some people care much about salary, you just give them more. Of course, it has to be dependent on their performance, evaluation.*

A: So you mean that it depends on different people as everyone requires different things.

B: *Yes, different.*

A: As you said that perhaps to such kind of staff, you think that using salary, a means which is much easier to be measured, will be more effective.

B: *It should be faster. You must feel happy if your boss wants to pay you more. If your boss gives you two options of one is giving you more money today and the other is providing you with hope tomorrow, what kind of option would be choose?*

A: So it means that from the position as a manager, you think that you will be providing your employees with something additional to exchange their efforts, won't you?

B: *You cannot totally say so. First, you have to obey regulations.*

A: Sure.

B: *Sometimes, you can use your own money, manager subsidies to buy them something. You can buy some foods to have fun together. It depends on different managers' ways of doing. Generally speaking, companies will have relevant regulations. For instance, companies will regulate the extent to which salary can be increased in certain departments. For those who perform very well, their salaries will be increased dramatically. For those who perform not so well, their salaries will not be increased so much. This is one way of doing. Besides, as we mentioned, some people like to do thing which are*

more challenged, in this case, you just have to give them this kind.

A: So in fact, these methods will be used reciprocally.

B: *They should not be static.*

A: That's right. So to this kind of situation, you think that using substantial management means will be much effective ...

B: *I think it will be much effective ...*

A: To such kind of IT staff ...

B: *I think it will be much effective.*

A: If so, do you mean that from your point of view as a manager, if you want to control so-called substantial stuff, you better use substantial ways?

B: *Half for encouragement and half for rewarding.*

A: Given that, does this kind of leadership style apply to any situation?

B: *No, I don't think so.*

A: You don't think so. So under what kind of condition, you will have different leadership style?

B: *As I said, it has to depend on different people. For instance, if someone are not so in need of money and they are very good in technical skill, you have to match up their characters. They hope that other people can pay attention to their techniques. Given that, if you have some work involving in advanced technologies, you can assign it to them. For instance, you can give them some assignments like website design or something. If you do that, they will get the feeling of being respected and will not pay much attention to how much money they actually earn. However, some people are burdened with household mortgages or debts. They think that if you can give them more pay, that is the most substantial encouragement and approval to them. I think most of the people care about salary.*

A: I do not think anyone will not care about it.

B: *That's right for most of the people.*

A: Of course, they more or less still need encouragement. But if they can get more pay, I do not think that they will reject it.

B: *You have to lead their hearts. Sometimes, the method does not need to be static. About the adjustment in salary, it just happens once a year. It will not happen many times a year.*

A: So you think that under different situations, you will have different ways of leading. However, what kind of situation you think is different from that of IT staff?

B: *It should be depending on different situations. It is hard for me to have a sudden thought of other situations ...*

A: But in theory, you think that it should be depending on different situations.

B: *Basically, they are so similar. It is just that they may not be immutable and frozen. They should be a bit variable.*

A: Alright, I see. The next thing is ...

B: *In fact, you should let a unit generate some kind of so-called positive competition. You have to let the member of a unit feel that they are the most important people in their managers' eyes. You have to*

let them generate some sparkles by themselves.

A: Alright, I understand. Another question I would like to ask you is from what you have contacted or your experience from beginning to end, you think what so-called knowledge management is.

B: *Knowledge management ...*

A: As the most popular topic right now is knowledge economy, knowledge management, so from the extent you have contacted, what do you consider as knowledge management? As this is what I am studying, I attempt to know how you look at it as a manager in industry.

B: *Knowledge management ...*

A: Or how do you define such kind of thing? What is your opinion about it?

B: *Basically, you should be quite familiar with what the current trend is, what the latest technology is. You have to be so understandable about them. Take motherboard as an example, you have to know what the latest CPU is, the speed of the latest CPU. If you want to have conversation with them, this is something you have to know. If you want to manage them or build up certain relationship with relevant people, you must have some common language with them. You must have some common perception. For instance, if the latest CPU is Pentium 5 but you are still talking about Pentium 4, you will be a bit out of fashion. They will know that your knowledge is out of date. Do you know what I mean? About what you mentioned as knowledge management, I think it should be about absorbing the latest technology all the time.*

A: So your perception of such kind of thing is you think that to the new stuff, employees or colleagues should be ...

B: *They should be more progressed. Otherwise ... For instance, if you are in such industry and are those who do technology, you should know much of the newest stuff. So you also need to update, update your working experience and knowledge. So you must ask them to know something. For instance, if their work has to do with foreign companies, you have to ask them to improve their English. If they are not so good at it, you definitely will ask them to improve it.*

A: So from what you just said, from your position as a manager you must be asking your people to update relevant knowledge or information.

B: *It should be necessary if you want your team to become strong. If you want your team to become a more dynamic group, you have to let every single member run smoothly in the group. You cannot let someone delay your work. If someone is not good enough, they have to get improved. If they do not get improved, they will hamper the whole team. In addition, if they do not get improved, they will negative influence those who are good in the group.*

A: If so, as a manager what are you going to do in practice to prevent this situation from happening?

B: *The easiest way is to do testing. There are many aspects of testing. For instance, you can test their work or language. It is quite easy to test their abilities in language. Or you can assign some projects to them. If they are complained by the client, you will know where their problems are. You will be easy to identify whether the problem belongs to the client or your people. Alternatively, you can use the way of job rotation. If a specific problem appears on different people, you will know where the real*

problem is.

A: So you mean that if you do some tests, you will realise the whole picture.

B: *That's right. As long as you test it, you know it.*

A: So as long as you test, examine it, you can get some ideas of it.

B: *The easiest way is to do some tests.*

A: Alright. So does having the stuff of testing mean that you will have certain standard to measure it?

B: *Should have.*

A: Having standard mean that ... if they perform below certain standard, you will do something to them. However, if they perform above certain standard, you will have another ...

B: *If you want to let a unit become more active, you probably have to use some methods. Perhaps, it is not about kicking them out, it is about letting them to ... I will tell them what should be reinforced as everyone's character is not necessarily ... heading to the way you set up. It is just that I will tell them their weaknesses and what should be reinforced. I will not be so strict that if you do something bad, I will kick you out or something. I will not do that.*

A: Okay, I understand. In fact, what you have seen refers to one kind of knowledge management. That is to say, it belongs to the management of explicit knowledge. It is like what we talked about as processing, integrating through computers. It involves in one kind of knowledge converting to another kind of knowledge. In this case, it has to do with how to manage the process in the middle of it. That's right. In fact, what I am studying is about how you manage such process as a manager or a leader. How can you let it run smoothly and not cause any trouble? This is one situation of knowledge management. As a matter of fact, we think that there is another kind of knowledge which is so-called tacit. It does not like what is clearly revealed. This stuff is like what we call as knack or trick. It may be resulted from someone who has been doing some actions for quite a long time. In consequence, some tricks may be developed by them. They may feel difficult to record or write them down. So how can such tacit stuff be converted into another person? To a certain extent, it has to rely on the stuff of apprenticeship ...

B: *Uh-huh.*

A: Apprentices string along with their masters and see what their masters are doing. After one month, two months, one year or two years ...

B: *They can get it.*

A: They probably will get it. So that is the situation in which tacit stuff is invisibly passed on to another person. That involves in another kind of knowledge management. So under that kind of situation, for you as a manager how should you do to make sure that ...

B: *Tacit stuff can be passed on ...*

A: Tacit stuff can be invisibly passed on to another person ...

B: *It has some difficulty ...*

A: So what do you do? From your point of view ... That's right. It is very difficult.

B: *Sometimes, they will hide it rather than teach it.*

A: That's right.

B: *They just know where the problem is as they try it by themselves.*

A: That's right. They just know it.

B: *For that kind of stuff, they will not reveal it unless their managers know it. If their managers know it, they have no reason to hide so that they will reveal it. Many companies have technical manuals, technical documents. With this kind of stuff, they can prevent something similar from happening again and again. They can go to check the manual or document.*

A: To that kind of situation, in fact for you as a manager, you will be hard to manage it ...

B: *Too difficult as it has the word of tacit. That's right. They just want to hide it and do not let anybody know.*

A: That's right. Or you can say that ... they probably do not know how to let other people know. They just do it everyday. They may not know the principle involved in it. However, the strange thing is if two persons do the same thing, one may be better than the other ...

B: *So sometimes it has to have some meetings or some kinds of inquiring. For instance, in the meeting, managers can ask them whether they have any difficulty in technology or in any area. It can be through meetings. About something involving in impartation, it has to depend on whether those who have something tacit want to release it or not. Basically, you have to manage it. So for these people, managers may need to use some methods. For instance, managers have to take care of these people's everyday situations. They have to build up informal relationship with them. They have to build up friendship with them. If they have good personal relationship with them, they may reveal it imperceptibly. If so, managers can pass it down and praise someone's contribution in the meeting. This could be one of the ways. But it has to depend on chances. And the chance has to be based on the personal relationship between managers and those who possess tacit stuff is good even if they are still managers and subordinates. You may reach the function of impartation through a kind of relationship. Basically, it will be much difficult if it involves in something tacit. That is why in the Chinese society things will never be 100% imparted to other people. It applies to the western societies.*

A: In the eastern societies, the kind of "family knack" ... is always concealed.

B: *It applies to the western societies that ... like many famous violins, they are unable to manufacture them at present.*

A: That's right. They are now unable to make it.

B: *Is modern technology so advanced?*

A: That's right. But it has to rely on an old, experienced master's hands. That master may have ten or even twenty years of experience. You will be hard to use machines to analyse every single step conducted by that master. It is impossible to do that. Even though you can analyse every step and be a copycat, you just cannot do exactly the same thing as that master did.

B: *Some of the world famous violins are collected in the Chi-Mei Museum. You see, that kind of craft cannot be made at the present day. Those famous violins were made by the masters at the age of eighty or even ninety.*

A: Why did they make the violin at that age? Perhaps, that was the perfect time of making that famous violin after accumulating dozens of years of experience. If you consider this situation from a manager's point of view, it certainly will be much difficult to manage such stuff.

B: *So for the tacit stuff, it will be much difficult, much more difficult.*

A: So if you look at tacit stuff as well as explicit stuff at the same time, as a manager would your leadership style be different?

B: *Absolutely.*

A: How come?

B: *Do you mean that leadership to everyone will be different ... or you think that different leaders will have different leadership styles?*

A: I mean that if you compare tacit part with explicit part or one group of people is doing the former part and another group of people is doing the latter part, how do you manage them? How do you manage these two groups of people? Would your means be different? If yes, how should they be different?

B: *Basically, to the tacit part, perhaps managers may not know much about it. So if you want to involve in management, as I said, you have to through something to obtain that kind of technique or skill. I am still not so sure about what kind of tacit stuff will be involved in the information industry. I am not so sure about that. Can you understand what I mean?*

A: Perhaps ... In theory, we can divide it into two parts as something much visible and something much invisible. However, when you put this rough division into the industry, company or even department, it is possible that everyone's perception will be different. Some people may think that this kind of thing is quite obvious ...

B: *They think it is not tacit.*

A: That's right. So it is very hard to distinguish one from the other. To a certain extent, they are mixed up.

B: *That's right.*

A: Of course, from our point of view, we first split it up into two parts and then to see whether your attitudes are different to these two. Or you think that your management pattern is consistent in no matter which kind of situation. Some people are like this.

B: *Some people manage them jointly, but some manage them separately.*

A: That's right. From my interpretation, perhaps you can now understand much that the character of explicit stuff is different from the character of tacit stuff.

B: *Generally speaking, managing affairs finally turns out to be managing people as affairs are conducted by people. Even though it involves in managing information, originally it has to do with human problems. So managing affairs is like managing people. Therefore how to make things become smooth? You just have to use the skill of managing people.*

A: So you can say that what I am going to ask is how you manage these people to do this thing and those people to do that thing. That's right. Will your management means be different?

B: *Must be different. They must be different as people are different and everyone's characters, habits and opinions are all different.*

A: *If you think that they must be different, could you tell me how they are different?*

B: *How are they different? The easiest way is to see their directions, to see where their directions are. You do management in accordance with their directions. Of course, for some basic jobs ... they are shared. However, for some jobs which are more instant or difficult, they have to be handled by those who are in good ability. As some work is quite urgent, you have to deal with it right away. But for some routine work, they are dealt with by everyone. However, those who are in good ability do not have to deal with routine work as a fact that routine work sometimes is not so important. Basically, the whole work has to be done. It is just that you have to judge by yourself that which work is more important than the others.*

A: *In fact, what I want to understand is from your position as a manager, how you look at such stuff of knowledge management. For you, you just have not had any chance to understand that knowledge can have different kinds.*

B: *It must be different. For instance, if some of your people are not so familiar with computers, you probably will assign them to deal with some basic work. However, if some other people are quite familiar with computers, you probably will let them manage something like electronic media. Naturally, you will do certain division. For instance, for the work like personnel stuff, as the format is quite fixed, you may assign those who are not familiar with computers to take care of that stuff. However, if the work involves in doing programming, you will get some people having such kind of idea to do it. There must have some separation. If not, you will be in big trouble.*

A: *If so, does having division mean that basically you will treat these two different groups of people differently?*

B: *That's right as you have to base on the character of the stuff to do division. For instance, for common, routine work, they have to be dealt with by some 80% of the people. For the rest of the 20% of the people, as I said, they have to deal with what 80% of the people cannot deal with. I may allocate them different work. This way of doing should be making the work more smoothly. Of course, it still has to depend on different situations to do adjustment. For instance, if sudden affairs come out, we will do some temporary adjustments.*

A: *My major attempt is to understand your position as a manager.*

B: *As managers still have their own bosses, so managers' main work is to complete what they are assigned by their bosses. As to how the work can be completed smoothly, it depends on every manager's way of doing and their styles. For some managers, they are quite generous to their employees. But for some managers, they want their people to do something extra but are unable to give their people something extra.*

A: *It is quite obvious that these two, one is tacit and the other is explicit, have different characters. So we attempt to know that under the circumstances of their characters are different and those who are involved in them are different, would your leadership style be therefore different? Regardless of the*

human factor, would your leadership style be different because of different working conditions?

B: *Should be different. It should be different.*

A: One focuses much on speed, accuracy and processing massive information and the other involves in having difficulty in measuring how much stuff is invisibly transferred. For the latter one, how should managers do?

B: *They have to use some methods as tests, meetings or job rotations. You have to rotate some people to see whether the situation will become better. It is like doctors giving medicines to patients. If medicine A does not work, they have to use medicine B instead.*

A: Okay, I understand.

B: *Whilst managing people, you only need to know that they do follow your procedures to do things. Basically, companies, especially in manufacturing, always hold meetings for the purpose of checking progress. For instance, if error rates go high, they must hold a meeting immediately to discuss whether something needs to be changed, replaced.*

A: Of course, that is also a kind of management. That is a kind of strict management. If things are fine, nothing will happen. However, if things go wrong, something has to be changed.

B: *Some are strong but some are soft. They are different methods.*

A: Or some people just put lots of money in it, don't they? If you reach certain target, I give you certain amount of prize.

B: *The strategy of some foreign life insurance companies like Prudential is prize. It is quite simple. It is impossible for a life insurance company to make profit within a short period of time. Now AIG and Cathy make lots of money. But they lost lots of money when they started the business about decades ago. However, for the new entrants like Prudential, to increase their market share within a short period of time, they spend quite a lot of money on recruiting people to open their market. Besides using these people to develop the market, Prudential uses them to lead people. Leading people means developing organisation. In recent years, Prudential has concentrated much on organisational development as they know that to expand the market share, they have to rely on their people. It is like doing direct marketing. As long as the people network is completed, their expansion speed will become very fast.*

A: So it means that ...

B: *They are spending quite a lot of money on it ...*

A: They just use money to recruit talents from other companies.

B: *They use money to expand the whole force. That is the quickest way.*

A: That would be quite interesting. You just mentioned Prudential. Its history in the Taiwan market is not as long as its competitor, Cathy which has about more than twenty years of experience. However, foreign companies like Prudential still want to reach certain scale within a short period of time. So to reach such kind of target within a short period of time, they may need to use such kind of special means.

B: *That's right. It must have strategy.*

A: That will be totally performance-oriented. If so, I think it is a kind of strategic management way.

B: *It involves in their board of directors. It is their leadership pattern. They have to segment the market and then target their market. After that, they have to work out how to reach the target. If they want to reach it, they have to use some new or unique ways. In fact, it applies to many industries. It is a commercial world in which winners take all. To become a winner, you have to use some strategic ways. To become a successful businessman, you have to have agile brains no matter what kind of product you sell.*

A: Okay, I see. I think it is quite enough. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 015

Note: “A” represents interviewer and “B” represents respondent.

A: Having read this, you should be understanding what this is all about.

B: *Uh-huh.*

A: To such kind of description, you can comprehend it, can't you?

B: *Uh-huh.*

A: Alright. As the business your people or your department is doing is more or less similar to this ... Such description content should be much relevant to what your people are doing. In fact, what I am studying is about knowledge management which is the popular subject nowadays. Here, knowledge refers to explicit one like information. Or here as a taxation unit, the information you have dealt with can be seen as a kind of explicit knowledge. Through the process of computers, this kind of information can be changed into another kind of information. So what I attempt to know is under these circumstances, for you as a manager or a leader, how do you lead such kind of situation, lead your employees to do such ... What is your leadership style? This kind of stuff may involve in processing massive information and may require efficiency and accuracy. So under such premise, what should be your leadership style? How do you manage this ...

B: *I think that before I answer your question, I better let you know that the culture in public sector is quite different from the outside. I usually tell my colleagues that with the same IT backgrounds, if you work in private sector and need to learn some knowledge or skills, unless your boss is quite good and willing to pay for your training lessons, you have to pay for the tuition fee of your training lessons. However, in public sector, you are free to attend any lesson if you like. As a result of this, they will think that staying in public sector can be so comfortable and as long as they do not do anything wrong, they can stay here for the rest of their lives. So I tell them that if they stay in public sector for say ten years, they will not get any job in private sector after that period. In the past, we used centralised, closed mainframe. They just had to upgrade the machine. After the machine was upgraded, it probably could be used for ten years. However, in recent years, we have been through a huge change for the whole taxation information environment. Nearly all the concepts used in the outside such as client*

server, database or UNIX are introduced. It has brought them inevitable impact. I usually tell them that my background is not relevant to IT. I only see things from management's point of view. Even though I am a leader in a technical unit, I have to be informed by them about technical stuff, about whether something can be done or not. The next thing refers to how I make decision as a decision maker. In the whole process, IT staffs have a defect. If I ask them whether something can be done, their answer is always positive. From management's point of view, I of course have to make sure that they really can do it, they can do it step by step. You have to tell them to do it step by step. To cope with the change of the whole information environment, I let them to attend many training lessons as knowledge management, data warehouse and data mining and so on. Lots of them went to attend the lessons. However, when I want to do a project, I cannot find any person who is capable of doing it. Can you imagine that I cannot find any person who is capable of doing it? Nobody wants to take the responsibility. The situation will be totally different in private sector. If someone learns many things but relatively does few things, other people will think that they are ...

A: Useless.

B: Useless. That is the culture difference. They have no pressure. Do they know that they are in crisis? Yes, they know that. But they do not feel any threat. However, if you are in private sector, you definitely will have the sense of crisis.

A: Everybody will be quite nervous.

B: You are right. So this culture difference is something that is hard for me to deal with. In fact, with regard to change in environment, if something new comes out like knowledge management or data mining, I plan lessons for them and look for lecturers for them. I plan everything for them. I tell them that my background is not in IT, so my plan only gives them a direction. I always encourage them to learn things. I even go to find lessons for them.

A: Of course, IT staff in public sector will be quite different from IT staff in private sector. Their environment is quite different. Given the fact that the environment in which they are in is quite different, at last their attitudes will therefore become different. You just mentioned that in public sector, the staffs always have such attitude. However, even though you are in public sector and have such attitude, you still will be assigned something by the government. You still have to keep walking with the society. To you, you said that you are not an IT staff. So you may be using some management means, techniques to manage these people and to keep them moving forwards, don't you? If so, you think how you should manage them. You think how you can manage these so-called IT staffs.

B: I tell you something. I have led some people with PhD and master degrees. Frankly speaking, in public sector, their educational backgrounds are so great. You can imagine that how exhausted will be to lead such people. Can you know it? The first point is in management as you are supervisor, they have to obey you. However, you cannot say that as you are their supervisor so what you are saying is always right. I always think that if I want to say something to them, I have to at least let them feel that what I am saying is right. Otherwise, they will say that I know nothing about what they are doing. Can you understand that? Before I entered this field, I went to other units to learn things and attended

many lessons. I accumulated relevant knowledge by myself. If I did not know something, I went to ask someone. At that time, I usually attended some lessons, so I made some friends from the IT industry. For some friends, we meet once a year. These friends have become my backup, my resources. So if my subordinates say to me that they can do a certain thing, I will take it to ask my friends whether it is feasible or not. Or sometimes, I will introduce the outside resources to my people, letting the outside resources support my people. I will allow my outside friends to do presentation and introduce some new ideas to my colleagues. I always use such way of doing. Through this way of doing, outside resources can be introduced and my people can have the chance to learn something new. If you want me to totally rely on my people, it will be impossible. In our department, we have two sections as Sales Section and Information Section. I always tell them one concept that they have to do their best to do everything. If you are unable to handle the case, you have to tell me. You cannot just leave it there. You have to tell me and I will see how to solve it. This is quite an important concept. I say to them that this is quite an important concept.

A: According to what you just said, it seems that there exists great difference between public sector and private sector. Even though this is the reality, from what you said you seem to hope that your people can keep progressing and indeed you have arranged many things for them. If so, do you think that such way of leading can bring some effects? Or do you think that you should be using more substantial way, saying that if they reach the target you set up before, you will reward them or something? Would you like to use such way? Or you want to use something softer. So what are you going to do?

B: *I have kept emphasising the difference between public sector and private sector. You have pressure in private sector. When your ability is of insufficiency, you will be in trouble. You may be fired, laid off. Anything is possible. But in public sector, they do not have that kind of pressure. They do not have that kind of pressure. Do you know that? I always tell them that if I today run a private company and have employees like you, the company must go bankrupt. I am not saying that they are not good. They still do what they ought to do. They are just lack of being active and initiative. I am not saying that every one of them lacks those characters, but most of them do. This is a general phenomenon in public sector nationwide. If this department does not perform well, I am the first one to get affected. Indeed, I am the first one to get influenced. So if I let my people loose on the work, I will be in big trouble. So sometimes, I will stimulate them. As to what you mentioned as incentive, reward ... if I were in private sector, I can decide it. For instance, if there is an opportunity for someone to get promoted, I can decide who the lucky one is. But here, I have no right to make such decision. I only have the right to suggest. Do you know that? I only have the right to suggest. Here, some people just do not care about whether they can get promoted or not. There is nothing you can do. But in private sector, if you do not try to perform well and to get promoted, you will be in danger of getting laid off. Do you know that? In private sector, if you are unable to do this and incapable of doing that, you will be questioned by the boss in terms of your value. You said that I have to stimulate them. I always say that there are so many staffs in this department. It is impossible for me to pay attention to all of them. I can only pay*

attention to one certain person who has potential to get promoted. I will focus on that person. It will be much useful. To other people, they only have to do what they ought to do. If they really perform very well, they certainly will have that chance to ... I will reward them. It does not mean that I will reward them substantially. Substantial rewards mean that there are bonuses. There is no such thing so far. I will reward them spiritually instead. It means that I will give them a merit. Receiving merit means that they can get bonus on their way to get promoted. That is the only way of doing. I always tell my section leaders that you have to find someone reliable from your own teams to assist you and you have to be good to them. I tell them that it is impossible to treat everybody well. You have to find someone who can really help you to do things. So this is the way I use.

A: From what you said, you seem to have thorough understanding for those who are in public sector as well as private sector. Disregarding public sector or private sector, if you simply play the role of a manager, how do you manage these people? In the most ideal situation, you think how you can manage those people no matter they are in public or private sector.

B: *I think that there are two extremes in our department. I mean that in our department there are two extremes. There are hundred of people in the information department. Do you know that? We still have offices in the outside. Besides, for those who are in the information department, as I said, some of them have Master or even PhD degrees. Their quality is quite high and their autonomy is quite strong. You have to respect them. For some other members in the department, they are part-time contractors and their quality is not so good. They only do the work of data entry. They just simply do data entry. For these two groups of people, they are managed differently. As a whole, we have hundred of people in seven different sections. These seven sections are not overlapped in terms of working content. You can see how many details we have if we deploy the work of seven sections. The first main job of our department is to take the responsibility of all the information, computer devices. Also, we have to be in charge of processing income tax data. They are all huge. My way of doing is to ask them to ... for instance, use the way of project management. I just ask them to use the concept of project management to do things. They have to deploy all of their work. Besides, they have to work out, for instance, how many data they have to key in, how many people they require and how many costs they have to spend. They have to set up something like rules. About the rule, it is like the stuff of SOP. They have to give me that kind of thing. They have to regulate many things like how to key in, what to key in and where to key in. They also have to set up some forms. When the rule and form are set up, they have to give them to those who are in charge of the system for confirmation. They have to get everything confirmed. If everything is done by them, they must come to me to ask my signature for final confirmation. It is about to make the whole responsibility have a clear cut. When the next year comes, they have to make a request that whether the existing system needs to be changed. If nothing needs to be changed, they can carry on following the existing one. They did not have such way of doing before. By the end of the year, they have to do a summary, indicating what has been happened and how they dealt with it or what kind of changes have been made for the system. In the summary, they have to reveal significant records, events and meetings. This kind of summary has an advantage that through*

it I can understand what they have been doing during the year. Otherwise, how can I know what hundred of people are doing? Also, from the summary I can know who is doing well and who is not. I always tell my people that they have cultures but they do not have systems. Even though they have cultures, I do not think that they have good cultures. As a fact that I have so many people, so I have to use such way of doing. I must be using such way of doing. Otherwise, how do I know what they are doing? Through this way of doing, I can know who is in charge of what. Otherwise, if something goes wrong, I will have no idea of who is right and who is wrong. So at least, mistakes can be reduced. I have to use this way of doing to take control of the whole process. I said that they have to use the concept of project management. They only have to use part of it as deploying all their work. They can just use a piece of paper to do the flowchart or use Excel or something to do it.

A: Therefore from what you just said, you think that even though you are in public sector, to manage these people and what they are doing well, the concept of performance appraisal has to be introduced into public sector from private sector.

B: *About this ... I agree with you. It is just that ...*

A: You do not have to care about whether it is likely to do it ...

B: *Alright. I can only care about the resources that I can take control of. Frankly speaking, I only have the right to say yes or no if they want to attend lesson. My resources are quite limited. About incentive, I cannot give them any substantial reward. I can only give them "A", "B" or "C" in their year-end performance appraisals. But some people do not care about this. They think that first, they may not be promoted; second, they do not want to be promoted; and third, they think that they have not done anything bad, they just do not want to accept any change. If so, there is nothing you can do. Besides, in the information department, as this place is self-contained, there is nowhere to get many people promoted. They have to fight for few section leaders. For those part-time contractors, they are contracted every year. Do you think that they have the future? They do not have the future. So if you want them to do more, they will resist. About rewarding, in fact I nearly have nothing to reward them. About promotion, I cannot guarantee that certain people must get promoted. I can only say that I will do my best to promote them. Besides, such information department is only a supporting unit in the whole system.*

A: So this is the situation in public sector. No matter what, the situation is like this. If you were in private sector or in a general company, I think that your way of managing will not like this. That is to say ... if you have many resources and can take control of much stuff, I think that you should be much forcing them to grow.

B: *I always tell them that when I have not been in this position, I often went to learn new things. I knew what happened in the outside. One day, when I had a chance to take this position, my nightmares started. Since then, I had to manage people all the time you know. They have pressure as I learn things, learn how to write programmes by myself. They do not do as much as I did. At that time, I had a perception that I have to push my colleagues. In fact, I led them to do things. I always tell them that if I give you three or five minutes, can you systematically describe what they are doing? If you can*

describe what you are doing systematically in such short period of time, people will think that you have been successful as they understand what you are doing and you did dedicate to it. You cannot say something which is not understandable by the others. You have to categorise what you are doing in ordinary day. I tell them that I will lead you to do it. In private sector, the situation will be totally different. The boss will not lead you to do such thing. They think that it is your business. Otherwise, what do they pay you for?

A: Alright, I understand. There really exists a huge gap between public sector and private sector.

B: *Their cultures are absolutely different, absolutely different. Here, they have no pressure. If they are given "B" every year, they still get pay. As long as they do not cross the line of being laid off, they will be fine. As long as they do not make big mistakes, they will be fine. However, on the other hand, I have to say that they still do what they ought to do. It seems that I cannot ask so much from them.*

A: If so, from your point of view, you probably will become more and more passive to manage them. To be honest, the situation may become like this.

B: *In fact, I have the spirit of not admitting defeat. Before I took this position, this department always took the third, fourth place in every year's bureau competition. There are five departments in total in the bureau. I told them that it is not difficult to become a champion. I said that it only depends on how you package your services. For instance, if you want to be able to describe your business within three or five minutes, you have to think about how to structure your business in ordinary day. You have to have comprehensive understanding of what you are doing. It applies to the whole business of the department. In the yearly bureau competition, you just need to systematically market what have been done by this department in the whole year. You just need to speak it out. It is only a matter of marketing. You have to innovate. You have to change. You have to do something different from the others. As a result of forcing them to change, they get a champion for three years. In these years, different things are examined, but they still can get a champion. It is not an easy target to achieve. So the most important factor still relies on human being.*

A: Okay, I see. Thanks very much for your help.

INTERVIEW TRANSCRIPT – Combination 016

Note: "A" represents interviewer and "B" represents respondent.

A: Can you roughly understand what this is all about?

B: Yes, roughly.

A: With regard to this, we think that one kind of knowledge is explicit. Explicit one relates to information or something you are quite familiar with as taxation information. They are all explicit, aren't they?

B: That's right, information.

A: They can be seen. The stuff of so-called Combination is about processing information by

computers or even by hands and finally ...

B: *It becomes something useful.*

A: It becomes something useful.

B: *It can then be called as knowledge.*

A: That's right. It can then be called as knowledge.

B: *Something useful can be called as knowledge.*

A: The stuff that comes out at last is also explicit and can be seen.

B: *Yes, that's right.*

A: It is what this Description is talking about. I think that you must be realising the occurrence of such situation.

B: *Yes, that's right.*

A: So today what I want to ask you is for you as a manager or a leader, how do you look at this thing? Perhaps, the main work of what your people are doing is much in association with this stuff. If so, how do you manage these people? What is your leadership style? How do you manage in order to make this process ...

B: *It involves in how to do knowledge formation. In here as Legal Division, our business has to do with providing legal service for taxation. It means that we are in the position of making judgement. Under these circumstances, we have to build up all of the cases. So the first and most important thing to do is to use information systems to let my people ... Before this was established, I asked them that if someone has problems for a particular case, other members have to email relevant files to those who are stuck with that particular case for reference. We had reached that stage. Besides, we have already keyed in all our cases into the computer. Through our intranet, everybody can check and further see the contents of the case. So the situation is ... knowledge management is quite important. Having done that, now we are about entering into the stage of management. The situation is like this so far.*

A: So it turns out that ... you have to make sure that the information can be processed accurately by your people, don't you?

B: *That's right.*

A: That stuff needs to be categorised, set up, doesn't it?

B: *So the accuracy of information becomes extremely important. If the information is incorrect or biased, it becomes refuse and misleading. Therefore, our cases are examined by a committee of twenty-five members. After examining by those members and getting their approval, we can then key in those cases into the computer. The computer can therefore put them into the system. We have been strict with such knowledge.*

A: So as you said that for the entire procedure, you will be monitoring, controlling it strictly.

B: *That's right.*

A: However, the process of monitoring is only to prevent mistakes from happening.

B: *Yes, that's right.*

A: But from your point of view as a manager, you certainly hope that the information can be accurate

in the first place.

B: *Sure.*

A: You certainly do not hope to hold subsequent meetings for the mistake, do you? In fact, it is people to process the information, isn't it? It is human being to do the information processing. So I am interested in knowing that from your point of view as a manager, how do you manage these people to not make them cause any trouble or be more willing to contribute more to such work? In other words, what is your leadership style? How do you lead these people?

B: *To the part of people, in fact, I am much adopting exceptional management. With regard to exceptional management, it is about ... As in the Legal Division, there are about sixty members. I only pay attention to those who are much easier to become slack and careless. However, for those who perform reasonably well, I examine them randomly. For those who are always negligent, I pay much attention to every single case they handle. In general, human being is the most important factor, the most important factor in a unit. So my way of doing is if I hear of a certain person in another department is of great ability, I will do my best to persuade that person to join my team. Of course, that person's boss will not let the person go. They must be providing me with plenty of excuses. If so, I will ask when that person's boss can let the person go. I just wait. Once I even waited more than one year for certain persons.*

A: So you mean that if you know someone is of great ability, you still hope that you can strive for them. After they join your team, you certainly will be realising that ...

B: *Apprenticeship becomes very important. You can see whom that person likes to ask. If the person asks colleague A but colleague A does not like to tell him/her, he/she will go to find other people. If someone is more willing to tell that person something, I will ask them to teach that person more. It will be better.*

A: So it turns out that from your higher position to look at apprenticeship, you will be adopting some attitudes of encouragement or letting such kind of apprenticeship occur, no matter invisibly or visible, formally or informally. From what you said, the way of impartation by apprenticeship should become an important means.

B: *That's right.*

A: Alright, it is quite important. So from your position as a manager, how do you create this thing and then let it happen?

B: *About this kind of thing ... In fact, I will ask them to be so careful when they write official documents. If they really pay attention to writing official documents, I will praise them publicly. They will realise that I am so strict and I only want something with high quality. Under these circumstances, they will imitate it. I am very strict in terms of leadership style.*

A: I think that you must be so strict.

B: *I ask my section leaders to provide me with some statistics every week. I think that I am the only one who asks for this in the whole bureau. So I am aware of who is and is not doing what every week.*

A: So from your position as a unit leader, you will be much fastidious about some control means,

won't you?

B: *That's right. I am much fastidious about it.*

A: That is to say, it is not allowed to cause any trouble. If they are required to do particular things, they just have to do those particular things. So your way of doing will be like this. If so, disregarding that you are now in public sector where managers at different levels have different resources to use, for you as a manager, you just stressed that ...

B: *In the Legal Division, resources will be in better ... Compared with other divisions, more things can be learned here. As we have to do with law and law can be quite dynamic, they have to go to find some relevant cases and study how to do defence. From such process, they can learn many things imperceptibly. So in the Legal Division, they do not much care about ... they only care about whether they can learn things. This is quite important.*

A: If so, you will be making use of the existing resources in this department ...

B: *That's right.*

A: Would you use such resources as a kind of management means to provide them with incentives and to let them contribute more?

B: *In my department, If I see someone has learned enough, I will suggest them to transfer to other posts. I will make suggestion. I will tell them that if you can learn something you do not know before, that would be better. Perhaps, you have become so familiar with what you are currently doing, but it is impossible to make any further progress if you keep staying in such status. I will ask my people to go on internet to find good cases and email them to everybody for reference. I will tell them that when we deal with legal cases, we have to be independent. If other people are of better excuses than us, I will ask my people to obey them. So in our department, we do things openly and independently. Nothing has been done under the table. So the most important thing is your people must have trust in your style. It is quite important.*

A: So to what we just discussed as knowledge management, regarding to explicit stuff changing to another explicit stuff, you think that as a manager today, you will be much paying attention to ...

B: *To put things in order ...*

A: Putting things in order as a means to control it ...

B: *That's right.*

A: Having had methods and targets to a certain extent means that you will also have the stuff like rewards and punishments.

B: *Certainly.*

A: If it has to be like this, it has to be like this.

B: *That's right. If it has to be like this, it has to be like this. I tell my people that if you can perform extremely well every year, I will give you "Distinction" every year. However, if you perform extremely bad every year, I will give you "Fail" every year. This way of doing certainly has an advantage that for those who get "Fail" all the time, they will leave gradually. They will go to other places. As a result of this, the vacancies can be left for someone I look for. In consequence, the quality of my*

people will become better and better. You have to be so clear about rewards and punishments. If you can do that, people, especially those who are of great ability, will be more willing to follow you and to join your department.

A: This kind of knowledge conversion is about something visible, explicit changing into another kind of stuff which is also visible. The outcome can also be seen and fairly judged, can't it? Given that, you think that even though it involves in something quite clear, it still has to be dealt with by human being. As long as it needs to be dealt with by human being, you as a manager think that they must be quite sure about what they are doing.

B: *That's right. A main principle of mine is if I plan to solve a particular problem, I will work out a plan in advance and let everybody know all the details. If they can persuade me not to use it, I will accept their opinions. Otherwise, I will adopt it as I have to take the full responsibility of the success of this Division. They have to obey me.*

A: Alright. If so, would you be much clear about rewards and punishments? Or does this kind of management means only apply to such situation? That is to say, if you encounter another situation or today you go to manage other units in which they have different working characters, would you also apply such kind of management style over there? Or you think that with different working contents ...

B: *In general, I will put much emphasis on what certain person's advantages are and where I am going to use them. It will be much important. However, if I lead fewer people ... I used to be the manager of Information Division. In that time, there were ninety-two employees in that division. After that, I was transferred to Planning Division in which there were only twelve members. When I was in this division, everyone had to become independent and I had to guide them individually. When I found a certain person who was good at a particular area, I assigned him/her to do that kind of job as he/she would be much easier to do it well. In that situation, as there were only few people, I could control, manage them directly. However, I have sixty members right now. It will be impossible for me to do that. I can only use those section managers to ... As to those who perform badly, all I can do is to pay much attention to them and to keep them from becoming worse and worse. Having done that, our overall performance has improved in recent years, especially in last year.*

A: What we have discussed is one kind of knowledge management. As it involves in the process of knowledge conversion, the only thing that can then interfere in such process is management. So how do you manage such process? From your experience or what you have contacted, what do you think as knowledge management?

B: *Most importantly, knowledge management is like what we had operational manuals in management. It is certainly good to have operational manuals. We have ISO standard books and a wide range of SOPs. We have kept updating them all the time. Now computers have become more popular and everybody can go on internet. The work in one of our sections is to update the information in the website. If something new such as cases or new opinions comes out on internet, they have to email it to all of the members. For instance, if there are new regulations or interpretations from the Ministry of Finance, they have to pass them to every member in the bureau.*

About our legal service, if anyone has any hesitation or objection to our judgement, they can go to our website to have a check. In fact, I think that we have done quite well in knowledge management.

A: So you think that so-called knowledge management is about making information open and updated. So it is the target that has to be reached. Given that, everyone can have the latest, updated information and the same perception, can't they?

B: *That's right.*

A: Otherwise, some may think this way and some may think that way.

B: *They must have the same perception.*

A: That's right. From your understanding of knowledge management, I think that to a certain extent it is a bit similar to this. That is to say, today you can have so much open information on internet, you can have so much information today ...

B: *If it needs to become knowledge, it has to be put in order and categorised. You have to identify which information can be ditched and which information is worthy of being imparted. You have to do that.*

A: You have to find out which information is helpful to the organisation. The process involved in it including selecting, categorising or something has to be dealt with by human being, doesn't it? So it refers to this kind of stuff, isn't it?

B: *It is so convenient to use internet. It is so convenient. All you have to do is to read what I give you. That's it. If I give you something to read, you just have to read it. If you have been provided good food and you decide not to eat, there is nothing I can do.*

A: So it means that the information provided to your colleagues in fact has already been categorised.

B: *Be categorised. As I said, it is cautiously approved by the committee.*

A: So to make sure everybody sees exactly what you want them to see, you have to take control of the quality of the entire process from beginning to end. Accordingly, what you mean is as you said that the most important thing in fact is control.

B: *That's right.*

A: To control strictly. If so, it on the other hand needs to introduce certain evaluation standard, doesn't it?

B: *They generally know that ... It is very important for a manager to set a good example with his/her own conduct. If managers take things seriously, their subordinates will take things seriously as well. So for me as a manager ... I have been in the management position since 1992. For many years, my people have not done anything against regulations. I think that is because I have demanded myself first. For instance, if I go to another place to attend a conference, after the conference is finished, I will go back to the office immediately no matter how long the conference takes.*

A: So you mean that as a manager, you manage not only other people but also yourself.

B: *I manage myself much stricter, manage myself much stricter. I demand more from myself than from my people. I manage myself.*

A: So this is where your style resides as a leader. You think that this is a good way of doing. Alright, I

understand. In fact, what we are discussing refers to something which can be seen and is explicit. However, you also mentioned the stuff of apprenticeship. To a certain extent, apprenticeship is about delivering something which is tacit and cannot be seen ...

B: *The reason why apprenticeship is important refers to a fact that if you want to do something and you do not understand its cause and effect, you will be wasting a lot of time. However, if I ask my master, perhaps my master will tell me something, wanting me to look at a similar case or something. If so, I will become so easy to handle it. I can see how other people dealt with the similar case. At least, I will not do worse than other people or I can copy what other people did. I certainly can learn from other people and I will be quick. This will bring benefits.*

A: In fact, what masters can do today mainly depends on their experience over years.

B: *That's right.*

A: Masters will be capable of telling their apprentices what should and should not do. About such kind of thing, it can be learned by apprentices whilst they are in the common environment with their masters.

B: *That's right.*

A: Even though doing the same thing, different masters will have different ways of doing.

B: *They are certainly different.*

A: As what people say, tricks are different. The ways, tricks of doing things are different. So it turns out that this situation to a certain extent is about communicating tacit stuff ...

B: *It is very important to select masters. If someone has been arbitrary, I will not let them become masters. If I select someone arbitrary to become masters, their apprentices will become arbitrary too. It cannot be happened. If someone has been serious, they can teach better apprentices. If you do not select such people to become masters, the trick will not be able to be exactly communicated to other people. So I keep stressing that human being is very important. Human being is very important.*

A: So you are saying that you will go to find the appropriate person to take the position of master.

B: *That's right. It is very important.*

A: It involves in great wisdom.

B: *It should be alright as our work is in the same vein. For some unusual cases, if they have no idea about them, I will help them to solve them out.*

A: Alright. If there is such a master leading some people, how do you give them space to let them learn and to let them communicate? How will you do?

B: *In fact, I am a strict person. For instance, suppose a piece of work is done by twenty people. If a certain person gets promoted or transferred to another post, his/her work has to be taken over by someone. If someone who takes over the work is entrant, he/she has to be able to do the average amount of other members' work. I usually ask that person to be able to do the average amount of the work ...*

A: What we have talked about are explicit stuff as well as tacit stuff. About the tacit part, we discussed how you create its ...

B: *Become explicit ...*

A: *The apprenticeship one ...*

B: *That's right. Apprenticeship is very important. In the past, categorisation of information was not done very well. So everything was put in the head. The tacit is ... Of course, in this situation, it has to be dug out gradually. That is the way it is. Gradually, there is apprenticeship. In the past, nothing had been documented. But now, everything has been documented. Right now, we make everything become not only documents, but also media. We now make everything become media. If you want to check something, it will be so easy.*

A: *As it has already become something public.*

B: *For instance, in the past, newcomers had to suffer a lot. But now, they can go to our inquiry system on internet to see who has been in charge of which case. If they still do not know how to deal with a particular case, they can go to ask the person who is or has been in charge of the similar case. In fact, things are now getting much easier.*

A: *In fact, we have talked about the part of explicit stuff as well as the part of tacit stuff. About the tacit part, you just said that some situations refer to changing tacit stuff into something explicit. Or it is about writing previous experience, experience over years down. That is tacit to explicit. Once being written down, it becomes explicit. However, some things may not be able to get revealed as they are some tiny things like personal skills, means or even craft.*

B: *When you encounter this kind of situation, you have to use the way of public praise. If they do particular things right and make our direction correct, I will praise them. For males, I will clap them on their shoulders. I will not do that to females. I will encourage them to reveal what they have been through. They have to make tacit stuff changing to explicit one otherwise they are the only one who knows it. They have to do their best to make tacit changing to explicit. Only by doing this, the effect can then be elaborated. Otherwise, if they are the only one who knows how to do particular things, that will cause many troubles. That will cause many troubles. At least two persons must know how to do a particular job. It is quite important.*

A: *So whatever public sector or private sector, as a manager today in the position of an organisation ... perhaps the only thing you have to do is to make your employees' knowledge become public property.*

B: *That's right. That kind of thing has to be dug out. I am so proud of building up an inquiry system for all of the cases. Before that, if we wanted to check something, we had to get those procedure documents, standard documents or something.*

A: *So to this part, do you mean that as a manager, you will be doing your best to encourage your employees or even to provide them with substantial incentives?*

B: *Yes, that's right.*

A: *So it means that using such kind of thing is inevitable.*

B: *As a matter of fact, the incentive is I let you feel fair and let you learn things in this working environment. That is the most important thing. Besides, it is about to create an environment in which*

nobody intrigues against each other. It is important for everyone to work in harmony. Given that, their efforts will not be offset by conflicts.

A: So you mean that you will not keep away from necessary means ... as a manager, there must have such kind of interference.

B: *Generally, yes.*

A: What we have talked about contains explicit part as well as tacit part of conversion. As a matter of fact, their characters are different. About the explicit one ...

B: *If tacit one needs to be converted, you have to systemise your work. You have to do that. Everything can be documented. As to digging out tacit stuff, apprenticeship is a method. Or if the problem has not been encountered before, it has to rely on someone who is talented and experienced. They have to make it become explicit.*

A: I just attempt to understand that from your position as a manager, would you have different leadership styles to these different situations? In fact, I only want to know whether there exists such difference.

B: *There are differences but the differences cannot be so huge. If they are too huge ... You have to let your colleagues feel that everything is fair. This is the most important thing. You have to pay much, cautious and careful attention to them. This is so important. You have to do that.*

A: I only want to know whether there is any difference.

B: *There are differences, but not too much.*

A: Can you tell me how they are different?

B: *Some are much ... What I mean is for something much difficult, it may not be done by just one or two persons. Perhaps, you have to find a group of people with a leader. The main difference relies on the difference in difficulty, the difference in difficulty. Other ways of doing are all the same. Others are all the same. Some problems can be solved by experience. However, if you encounter new or difficult problems, you may not be able to solve by experience.*

A: Alright, I see. Thanks very much for your time.

INTERVIEW TRANSCRIPT – Combination 017

Note: “A” represents interviewer and “B” represents respondent.

A: Can you understand what this is all about?

B: *I think that it is clearly written. The definition is also clearly written. Yes, that's right.*

A: As we look at the stuff of knowledge, we divide it into two kinds. This is one kind as explicit stuff like information, data. Such explicit information, data can turn into something you want which is also explicit through processing, editing and categorising by computers or even hands. This kind of process is called Combination as here. I think that you must be so understanding the existence of such situation. So what I am going to ask today is from a manager's point of view, how do you manage

such thing? That is to say, under the circumstances of what your people are doing may mostly belong to such thing or so-called IT staffs are generally doing this kind of work, as a manager today, how do you manage, control such thing?

***B:** Basically, I do not quite understand what your question is. Now I do not know ... Are you asking my control over my people ...*

***A:** These things are done by human being, aren't they?*

***B:** Yes, that's right.*

***A:** So as a manager today, what is your style to lead these people to make sure that the process of such knowledge, explicit stuff transferring to another stuff ... How do you make sure that your people can be accurate and efficient whilst doing such thing? As a fact that such thing involves in processing massive information, it may require certain degree of efficiency.*

***B:** Basically to your question, I will answer it with two aspects, one refers to affairs inside my department and the other refers to affairs outside my department. As a fact that Information Department is a supporting unit, its users, we called internal users, are those departments other than Information Department. The existence of Information Department is for the purpose of assisting other departments in the company, categorising what you called as explicit stuff but we called as attributes. Those things are very important to us. This company has existed for twenty years or so. There must have plenty of information stored. However, huge amount of information does not mean anything unless it can be efficiently analysed and used. How can it be analysed and used? Of course, it can be done by human being. If so, I will be very difficult to do that as the information may be considerably huge. So what you called as Combination is about first to take out explicit stuff. After it is taken out, we will quantify it. After it is quantified, we will look at its attribute. We have very strict definition for each attribute. After that, we can then do some analysis. This is for other departments. For something needed inside, it will be much different. Basically to us as an Information Department, we roughly can be divided into two categories. One is about IT infrastructure. IT infrastructure contains all kinds of hardware, including networks, mainframe and storage media and so on. We just concentrate on building up such infrastructure. There is another group of people who belong much to the part of SA and whose work has much to do with system, software. They have to sit down and work with other departments. In fact, what we talk about explicit is like the clothes we wear. Clothes have colours. You have to have definition for each colour. What is defined as red? What is defined as deep red? What is defined as brick red? For this kind of thing, everybody has to be in common agreement. How to define it is not important? The important thing is everybody has to have something quantified to follow. So our people have to sit down and talk to the people from other departments. Also, you can find that an affair contains many explicit things. So are you going to include all of the explicit stuff? It may not be necessary. You may need to eliminate something. It depends on how you use such information in the future. We usually talk about KM, knowledge management. Our only perception of knowledge management is knowledge has to be shared, has to be effectively shared. This is the greatest point. If we keep much knowledge but we are not able to use or analyse it effectively, it will be*

meaningless. So about such process in the middle of it, we will have a team to do it. Of course, this team is part of the company. To knowledge management, we have our own requests. The request is whenever you do anything, you have to finish it systematically. You have to produce documents in good quality. What you have behaved must be recorded. Besides, the way you do record has to be the same with others. You have to set up its attribute. If you do not set up the attribute ... Take those who are in the hardware team as an illustration, one of their job description is about end users' computing support. If they can the attribute in the breakdown report categorised, newcomers can easily understand what have been going on as they can search for attributes and find anything they like. From our point of view, it is about how to change knowledge from private to public and then let everybody find what they want easily.

A: In fact, from your position as a manager, your perception of so-called explicit stuff is it has to be put in order and categorised systematically. Its attributes have to be distinguished. Having done that, structures with different layers can then be established, can't they?

B: Yes, that's right.

A: Alright. However, it needs to be constantly maintained by someone, doesn't it?

B: That's right. That's right.

A: So what I attempt to know is for you as a manager today, how can you make these people achieve what you want them to achieve? In other words, what is your management, leadership style? How do you manage these people?

B: Basically, from my personal point of view, I usually will have a seat with all of my people and talk to them what I think my target is. Certainly, to achieve the target, you have to consider the practical situation in your surroundings. You have to consider what your situation might be? For instance, we think that we have to categorise all of the stuff. Whilst categorising them, we have to make them defined clearly. We may only be able to select few things from those explicit stuffs. Our life is linear. As it is liner, it is infinite. It is impossible for me to do something which is infinite and it is meaningless for me to search for it. So I will start to quantify it, make some categories. Of course, there are different functions like finance, personnel, production and R&D in a company. Especially in the part of PD, product development, in fact they will be much difficult as some of what they are doing involve in concepts. If something involves in concepts, how can it be quantified? It will be quite difficult. Is it feasible to quantify concept? It is still feasible. But how? For instance, if we regard something as old-fashioned style, we can give a definition of it. This definition may be quite general. But, frankly speaking, we only can do our best to make it become as specific as possible. As we usually talk about colours, everybody recognises and defines them quite clearly. However, is your perception of red colour the same as those who are from printing institutes? So at least, we will try to work out a strict definition and then quantify something which is hard to be quantified. However, it takes long time to do such thing as IT staffs only specialise in IT stuffs. Other stuffs are specialised by the people in other departments. So people from both sides have to have a seat and than have a talk. However, this process is so time-consuming. Besides that, you have to devote lots of energy to it. So basically to us,

we always have a goal over there. We hope to reach that goal. But we still have to compromise something under the current situation. We will be reaching the goal step by step. Today, we have to have a map in our mind. The map has to be recognised and wanted by all of us. Sometimes, in the aspect of IT promoting, we will find that even though we have resources and willingness, frankly speaking other departments may get much used to their traditional ways of doing things. You may tell them that doing such thing is good to their future. But to them, before they benefit from it, they have already suffered from it. Why is that? It is because they have to change their habits and then use a new and unfamiliar way to do scientific analysis. They usually do not like it. So the only thing you can do is to get yourself ready and wait for adequate time. One day, when they encounter the problem, you can take advantage of such occasion to talk to them and persuade them to do it. But it has to depend on the premise that you have already had a certain map in your mind. So we have been conducting it step by step. You have to put several factors into your consideration. First, how many resources do you have? Second, is your situation, timing adequate or not? No matter what the situation might be, you just need to do constant training, constant training. You just need to tell them what your concept is and why constantly. When the timing is approached, you will be able to do it. In addition, it is impossible for this thing to be done within one or two days. I give you an example. We may think that we have already done something so well. However, it is based on the perception, knowledge, experience and technology we have today. But after tomorrow, we may be able to find a solution to quantify what we could not quantify before. Or even in the past, we thought certain attribute or explicit stuff from your point of view was meaningless, but now we find that it has brought us tremendous help. If so, we can put it into the system. So I think that this is a dynamic system.

A: *So you mean that in such dynamic system, as you just said, those who are involved in it have to have a clear map, picture, saying that this is what I am going to do. But in reality, of course, how it can be conducted has to depend on different situations. Given that, as you said, you will be constantly using ways of training, communication and advising to let everybody move towards certain direction. If this is the case, would you provide them with substantial incentives? As there may have different levels of targets, would you therefore introduce some methods and mechanisms of evaluation? If the answer is positive, would you on the other hand provide them with substantial ...*

B: *In the company, in fact it is like ... what we called as carrots and sticks. In fact, such things are always existent. To me as the head of an information department, it is impossible for me to sit here and wait for opportunities to happen. So basically, we have our plans every year. If a certain goal needs three years to accomplish, we will work out its short-term, mid-term and long-term plans every year. When the plan is set up, we will announce that for instance, in this year we want to do what and we need the cooperation from which department. So in about July or August, we will start to do budgeting. After budgeting is done, we will propose our goal in the executive meeting, telling them that this is what we are going to do and what kind of advantage we can bring to them. This is the first thing. The second thing is if we do not do it or we do it late, what are we going to become? We will do such analysis. After such analysis is done, the company will base on what we reported to provide us*

with the money we can spend. Of course, not only IT, but also production, personnel and other departments need money to spend. In this case, the company will set up a priority list. If we do not get the money we want this year, we will try it next year. So basically, we can say that regarding to the long-term plan, we will not change it. But for the short-term plan, we are quite dynamic.

A: Having said that, does it mean that from your point of view as a manager to such situation, you will be introducing so-called the concept of target or performance appraisal?

B: *That's right. With regard to the target, basically it works like this. For instance, if we propose ten plans and they are all approved by the top management, I will then deploy those plans to my people. For instance, if you are in the hardware team, to accomplish this, you may need to expand the capacity of your database. So you have to tell me when it can be done. In fact, I will have a seat with my staffs and talk about what their objectives might be every year. I will tell them clearly that what kind of thing they should do and what kind of role they should play in the organisation. I will give them resources and budgets. They have to tell me when they can finish it in return. So it is called management-by-object, MBO. This is an old tool. Under these circumstances, my team will follow the same direction to move forward. As to the team of software, as their work is about SA, system analysis, so what are they going to do? They have to cooperate with other departments. They have to attend the executive meeting and report to every department what they are going to do and what needs to be cooperated. After the presentation is done by our team, other departments will know what our goal is and what they need to do to cooperate with us. To my team, I will tell them that if you do well by the end of this year, you will get some carrots. If not, you will get some sticks. To those users, I will let them know that if they can cooperate with us well and get the thing done, what kind of benefit they can get from the information. For instance, they may be able to predict the trend for the next year. To the financial department, perhaps they may be able to produce the required report right away. These things in fact are carrots. On the other hand, I will let them remember that this is the assignment they have to do, this is what the company pay them for.*

A: It is quite interesting. So you mean that to such kind of operation or working content, what you have been saying is you certainly will have a much long-term goal over there. And you will be using constant communication, training to let them know it. Having had the long-term goal, there will have small targets to achieve for each month or quarter. For those small targets, you said that it will be inevitable to use carrots or even sticks to control the progress, to make sure that your people are doing what they ought to do. That is to say, you may not be getting rid of using such kind of strong, substantial way as your management means.

B: *In fact, we rather think that giving carrots is a good thing. But if sticks need to be used, I think that it is not the problem of the staff. In fact, their managers have to take a great proportion of responsibility. Why is that? We certainly have sticks. But a good manager will never need to use sticks. Why is that? As long as you use sticks, it tells you that your staffs have already failed. It also tells you that the failure causes not only the staffs' loss, but also the department's loss. Loss to your department means loss to the company. It is not right. However, we still have such kind of thing. We just hope that*

it will never be used. How can it not be used? Basically, as I said that in the beginning of the year, I will give them their objectives. In fact, they are not reviewed by the end of the year. I will review them regularly, say every month or every quarter in the earlier time. Mostly, I will adopt the techniques of project management, PM. That is to say, as long as I give you the goal and budget and then it becomes your annual objective, you have to deploy it as detailed as you can. I hope that the time you need to finish each of your sub-objectives is not less than three days. If it is less than three days, the sub-objective will be too small. But it does not need to last for more than two weeks. I hope that you can give me a report every week, say that what have been done, what should be done but not yet been done last month, what are being done this month and what will be done next month. There are just several items in the report. You have to give this report to me. I can see your progress and compare it with the others. In fact, we think that when employees enter into the company, they must have already had certain level of ability. So when they do not do something, we think that perhaps they are too busy to do it so they forget to do it. However, when they have to write this stuff every week, they can review themselves. So what is the advantage of doing it? When they split one big thing, they will have several little things. As long as they solve these little troubles, they will not have bit trouble. So I hope that the period of each of the tasks should be between three days and two weeks. That is because when they encounter problems, I can jump into it and help them right away to see whether they are lack of resources or whether their knowledge is not enough. Do you know what the most terrible thing for those who do IT job is? We try to catch mice in a dark house. We may not be able to catch any mouse for the rest of our lives. One day, when we turn on the light, we just know that there is no mouse in the house. We probably set up a plan in the beginning of the year. When we are in the middle of doing it, we find that it is not a good plan. At that time, do we still need to carry on doing it?

A: *If so, from what I just heard, you as a manager seem to pay much attention to the stuff of right and duty. That is to say, when you have certain rights, you have to have certain duties. However, you also said that it is not a good thing to use sticks. Does it mean that you think carrots are a good means that can be used?*

B: *Basically, so-called carrots contain many things. They include, for instance, the award I give you. The award may be cash awards, incentives or encouragement. I think there are many ways of doing. It is just that in management, I still think that giving carrots will be better than giving sticks. But I will never tell my employees that there are no sticks here, even if we have not used them before. I heard of something very interesting. It says that rewarding those who should not be rewarded is a punishment to those who should be rewarded. So similarly, if there is no comparison between black and white, there is no any meaning. So we will tell you that if you do not do it, you will receive such punishment. However, we will do our best to help you, not letting you enter into that situation. At least, it is a baseline. You just talked about right and duty. In fact, I have no idea of the situation in other departments. But in IT organisations, right as well as duty are very important. Although IT only means two words as information technology, these two words contain plenty of things. From infrastructure's point of view, it contains OS. We have to study which OS is suitable for us. Are we going to use Linux,*

Windows or what? Or we just adopt IBM system. There is no right or wrong. There is only adequacy or inadequacy. Besides, we have to deal with security. About security, what does it contain? It contains Firewall. So what is our policy for it? Does security only contain Firewall? E-commerce is another issue. About its certification, how do you want to do it? So in fact, IT contains plenty of stuff and they are all very complicated. Therefore, I do not think that there is a single person who is capable of all these. So to me, IT in fact is like a symphony orchestra or something. Every one of them has to be professional. Besides, for each team leader, he/she is not only a pure management staff, but also a technical management staff. He/she has to know technologies. He/she has to lead other technicians to complete missions. Under these circumstances, you have to give them very clear rights and duties. Basically, in IT departments, everyone has to be professional.

A: *If so, can I say that your way of managing such IT people will be ... much open? Can I say so? Or ...*

B: *I should say that to the management of IT people, we will be much organisational, systematic. That is to say, to every single person in the department we will define his/her responsibility very clear. Everyone has to provide his/her own service to other people. For instance, for those who are doing security, nobody has bigger rights than them to say anything in security. Similarly, to the side of system development, if they want to develop a set of programme, the programme has to be certified. How can it be certified? It has to be decided by those who are in security. So to the security, they are service providers. They have to provide service to other people. In here, we usually say SLA, service level agreement. As long as everyone has his/her own responsibility, it becomes a very serious issue. For instance, when you are required by someone to provide service, you have to tell them when you can accomplish it. Such kind of thing has to be clearly confirmed. Why is that? If you do not confirm when it can be accomplished, the required unit will not be able to know how many people are needed to cooperate with you. So what you said is right that we do care about rights and duties. Take end user support as an example, we say that ... Or we take password expiration as an example, I have to have someone standing by there 24-hour a day to solve this problem. If one person works eight hours, I have to have three persons on this work. Given that, I can know how many people I need. So the whole organisational structure and right and duty are very close. When everything is clear, I can then know how many people I need. So I rather agree with what you said that we put emphasis on rights and duties.*

A: *So can I say that from your point of view about such kind of department, you think that it should be hierarchical.*

B: *Basically, we will not be so hierarchical. We will rather be flat. Why is that? Take security as an example, in that team there may have two, three or more persons. There must have one person to be a coordinator to coordinate everything. To be honest, nobody knows better than they do in security. I mean that every one of them is professional. They are not like those who are in production line in which hierarchy is a big, severe issue. That is the place in which layers have to be monitored by layers so that everyone can move towards a common target. Those who are at the bottom level cannot see the*

direction. But here, everyone is clear about their own job description. Their job descriptions are clearly written and they know better than others what they are going to do. That is the point.

A: *Of course, if this is the case, it is not entirely like the hierarchical one. However, if it is much like flat organisation, it seems that its horizontal linkage between each other has to be stronger.*

B: *That's right. That is why we need SLA. In this case, "S" is defined as service. It means that each unit has to define its own service very clearly. In fact, I think that this is very natural organisational behaviour. It is like our body that it has to be very clear about what the function of stomach is or what the function of heart is.*

A: *Despite what we have talked about the conversion of explicit knowledge, you seemed to mention a bit of your perception of knowledge management, didn't you? Could you expand further?*

B: *My perception of knowledge management is all of the knowledge should be categorised, analysed and stored efficiently and reasonably. After that, it has to be used. The point relies on how it can be used and how certain individuals or small groups of people's knowledge can become everybody's knowledge and can be obtained reasonably and quickly by everybody. That can be seen as real knowledge management. It is my personal perception. I do not know your opinion about this. I would like to listen to yours.*

A: *From what I heard from you, I think that it will be much like an individual or a small group of people who possess something specific and work together every day ...*

B: *I think that it is not only specific ... Basically, I think that in a company, all of the knowledge is sometimes like information. It is just that compared with knowledge, the term of information is much raw and original. Basically, we hope that as long as something around us is meaningful, it should be reasonably saved and analysed and then be communicated by media and finally be used.*

A: *Given that, I think that your perception of knowledge management consists of two parts or two kinds. One is the same as what we have discussed that knowledge has to be systematically organised and then be communicated within as well as outside the organisation. Everybody can use it, share it sufficiently. In fact, this is what we have been talking about as the process of categorising, editing existent knowledge. On the other hand, you also think that knowledge management is about making tacit stuff as explicit as possible.*

B: *That's right. In your terms, it is tacit to explicit. However, in our terms, it is about getting things quantified. For instance, someone speaks loudly or quietly. This thing is not quantified. However, when we invent a decibel instrument, we can quantify how loud or quiet they are. So from our point of view, we call it quantification, the process of quantification. However, it is very difficult to quantify knowledge. Quantifying knowledge is the most difficult thing to do. And it is the most common difficulty we have encountered. Take PD, product development, as an example, as it involves in concepts, how can they be quantified? How can they be quantified? It is very difficult. As a matter of fact, such quantification needs teamwork. For instance, to us, we may never understand what and how clothing is made. However, if you ask a clothing designer, he/she can tell you everything about clothing as he/she may have already involved in it for a long period of time and has developed his/her*

own way of analysing things. It can apply to us. The people in our company know the process of quantifying some stuff. They can provide us with some information from the quantification process. However, I think that this is where the difficulty comes from for IT people.

A: *It is because to some stuff or concepts, they are really hard to be quantified. But they are truly existent.*

B: *For instance, they always say that few years ago, pink colour was so popular. But what is pink colour? Can pink colour be caused by putting a little white colour into red colour? Then, they say that old-fashioned style started to become popular. About such thing, it is very difficult for us. Besides, all they can tell you is just a general adjective. This is quite difficult. Also this thing is ... We also hope that academia can help us with this thing. When you are unable to define it strictly, the information you entered can only be roughly categorised. If you base on this to do analysis, it will be meaningless. Garbage in, garbage out. In fact, I agree with what we have talked about that how to share knowledge is quite important. But don't forget what the point of sharing is. It is effect and accuracy. If you do not have sufficient categories, you cannot be effective. If you do not categorise strictly, you cannot be accurate. So I usually say that this is the most difficult thing to do. For the rest of stuff, they will be easy to get sorted. At least to us, the rest of stuff will be easy to get solved. If you want to do sorting, I can train them to do it. I can get a bigger database. But the real problem is what kind of attribute we really need. How can such attribute be quantified? I give you an example. When I work in Corning, I was one of the members of our Global Document Management Committee. We had to manage documents in our factories. After spending one year in discussing attributes or explicit stuff in your terms and what kind of element should be included in attribute, we still had not come out any verdict. We just managed documents in the factory. They included blueprint, hard copy, manuals and micro films and so on. How could these things be sorted out? We spent one year in discussing these and came out with no conclusion. If this kind of problem can be sorted out, it will be easy for the rest of thing. In fact, I personally think that it is bottleneck.*

A: *If you can work out the problem of attribute, the rest of thing will be easy, won't it? As to what kind of information system is needed, it is just the matter of money.*

B: *In fact, they can all be brought.*

A: *As to the attribute stuff, perhaps it involves in something tacit. As you said, sometimes it has to do with ideas or thought. How can you catch that sort of thing or even get it quantified? In fact, most of the managers I have interviewed cared much about how to, in our words, convert tacit stuff into explicit one.*

B: *Yes, that's right.*

A: *Once becoming explicit, the rest of thing will be easy to get solved.*

B: *That's right.*

A: *Once becoming explicit, whatever in the form of paper or something, it will be easy to do categorising, editing. That will be rather easy. In fact, people in industry care about this part at most.*

B: *Especially in ... I think that among what you have interviewed, there must have someone from*

production and technical backgrounds. Our industry is quite special. We belong to fashion industry. In fact, most companies are easy to do knowledge control especially for their R&D. They can do it easily. Why is that? For instance, in an electronics factory, to design circuit board, I can build up a library for it. I can put all of the relevant documents, data in the library and they can be used again and again. But in our industry, it becomes difficult. What we design is something conceptual. How can you get conceptual things quantified? When I can get concept quantified, I will be able to tell them the trend for next ten years. However, when I am unable to get some attributes out of something, I cannot do analysis. So frankly speaking, when I put the information into computers, I cannot get something I want exactly. If so, it cannot be called as knowledge management. So to our company, it is the most difficult thing to do. I do not know whether you have interviewed some companies having the similar problem as we have. If you have, how did they solve the problem?

A: You are really a special case.

B: I give you an example. Like the design of circuit board for mobile phone, probably it can be quantified as it is scientific. However, about the design of appearance for mobile phone, it would be rather interesting.

A: For the components of such equipment, they are evolved step by step. In fact, those are something traceable and easy to be managed. As to such fashion stuff, its problem will be quite complicated.

B: So this is the problem we have encountered. This is the real problem we have. Our industry indeed is quite special. We are in a very special industry.

A: To what we have discussed, in fact the most difficult part is about tacit to explicit. Given that, you think that as a manager, what you are going to do to let this stuff, concept or something invisible change to ...

B: To this part, we have already started. We have already started to do something. Although we were a bit late, we have already started. Generally, our way of doing is like this. We are ... as I told you, we have to understand each other quite well. For our staffs, they know IT quite well and also realise how to handle something that has already become explicit. They know how to use these things. They know how to use current technologies to analyse these things effectively and accurately. They know this part. However, we believe that in our Idea departments, as this is their specialised business, they must have their particular ways to do categorisation. So we have to sit down and talk to them. We may not be able to get it sorted clearly in the first place. But at least, we can get big things sorted. We started from this.

A: If so, from your position as a manager, what kind of environment would you provide them to let them do such thing much easier? That is to say, how do you let these people ...

B: Basically, one of the advantages in this company is we are not a very big company. We have some one thousand employees. For those who really involve in ideas or concepts, there are about twenty of them. Basically, we will assign our people to talk to them, to understand what they are doing or even to work with them. It is about to build up common language between two parties. Perhaps, they have got used to use their language to describe their behaviour. But their language may be hard to transfer

to our IT terms. After our people stay there for a period of time and understand them, we can help them to express their thinking with another language. After something is expressed, we will let them have a check and ask for their final confirmation. We believe that things will be loosely categorised in the first place. However, when we can reasonably divide some information into two groups, it will be better than doing nothing. After two groups are formed, we can think about how to divide them further. This is the work for tomorrow. I think that we will keep on doing this.

A: So compared with the communication of concept and much explicit stuff, from what I heard, it seems to me that your management means will be different. Your leading style will be different, won't it?

B: *As a matter of fact, we will still be the same. Why? To us, we assign someone a job. This job may be about helping PD to build up a system by which they can do some analysis. That is the goal for that person. Afterwards, I have to get a consultant to tell that person how to do the concept analysis. Perhaps, that person has to attend some clothing design lessons. Also, that person has to think about whether he/she needs to use colour or style as a sorting base. This kind of thing still can be controlled. Besides, the means is alike. There is no any difference.*

A: Alright, I see. Thanks a lot for your time and help.

INTERVIEW TRANSCRIPT – Combination 018

Note: "A" represents interviewer and "B" represents respondent.

A: Can you roughly understand what this is about, what it expresses?

B: Yes.

A: Generally understand?

B: That's right.

A: I do research on knowledge management. To us, one kind of knowledge is something like, for instance, information, numbers or forms. This kind of thing is explicit. This so-called combination means that through categorising and editing by computers or manpower something required is finally obtained. They are information, forms, and are also explicit. They are also a kind of information. So, this combination process is what we are talking about right now. I suppose that from your business extent and content it is not difficult to understand such process. If so, what I today want to realise is as a supervisor how you can manage such process. That is to say, if the main working content of your people is about to do such thing, how do you manage your people? How do you manage these so-called IT people, to let them deal with this process quickly and precisely? How do you manage these people?

B: *By and large, I think that documentation becomes an important thing. Basically, we ask the employee to record everything they do no matter repairing computers or installing software for the other departments. They have to record what and how the problem is solved. Essentially, we probably*

have no idea of how a particular problem happens. Nevertheless, through this recording and the use of combination concept, we then have a picture of what is going on. We realise a fact that the employee spends most of their time on repairing computers. The real situation, however, is there are some problems with our hardware. In terms of software, we therefore find that many people need specific software, but it is not installed. According to this information, we can set up a standard procedure, saying that when certain type of employee is recruited hereafter, the computer given to them must have certain software installed. Rather than they ask for it, then you install it. If so, plenty of time can be saved. We can prepare it for them in advance, make it standardised. It would become more efficient. On the other hand, human brain often forgets something because of surrounding by miscellaneous stuff. So, if you can make something standardised, make them get used to something, the whole efficiency can then be increased or the re-setting costs can be decreased dramatically. For instance, from the analysis we realise that certain brand of computer has high breakdown rates. This information can be a reference for next time hardware purchasing. Resources are limited after all. Especially from the company's point of view, every company hopes that their money can be spent on the margin of benefit.

A: So, you mean that to this kind of thing everything has to be truly and systematically recorded, categorised.

B: *I think for some problems we probably do not understand what is going on. So, we have to truly record the situation happened every time. Afterwards, what we can do is to use computers to do some statistical analysis, as you said, to re-combine, merge the data. Sometimes, we really do not understand why certain computers always have problems, but others don't. You just do not understand it. From the record, we probably can explore a trend that certain kind of computer ... It has to depend on how detailed is recorded. I think this thing has an advantage. We just talked about knowledge management, didn't we? Without records, if today a certain department has problems and the person who is in charge is off-duty, you probably have to do trial and error from the beginning. But, if we have such ... I think documentation is the most fundamental thing in knowledge management. If you do not have such foundation, your so-called knowledge management is like ... It is not explicit, it is inside everyone's brain. We do not know it, do we?*

A: So, you mean that in fact you care much about whether the staff can do such recording more systematically.

B: *Even, we, human being, are so busy everyday. Under this circumstance, we cannot think. If you, however, do such recording, you can go back to check the data, categorise the data while you are free. If you have this basic ... I used to say that you have to have some foundations. If you don't, it is hard for you to do anything. So, to us, we think that recording everything is a foundation. Everyone, including me, has to do that. Here, the management is looking for something that ... It should not be the case that because of a certain person the company can then work. It has to be the case that without somebody the company can still work. There must have something that anyone can follow up. There must have something that anyone can check up. Otherwise, no one knows how to do things.*

A: Therefore, that is to say that from your point of view as a manager or a representative of the company, this is the thing that has to be done in your department. Even, you set a good example with your own conduct. Nevertheless, in practice, doing recording, documentation could be something that is so intricate and demanding. It seems that for the employee they have to spend extra time on writing something down, categorising it and editing it. The problem, however, is that from the company's point of view this is crucial. Things have to be kept. But, on the one hand, this involves in dealing with a miscellaneous collection of stuff, on the other hand, it is something that has to do. If so, how can you make them willing to do it? How can you manage this ...

B: *A simple way of saying is everyone is so busy that no one is free to do this stuff. I think that in reality this is the problem. Our way of dealing with it is, firstly, we keep on telling our employees that this action is necessary. Even, we list it in the SOP. You cannot say that you are too busy to do it. As you said, habits need to be developed. So, we have to let the employee develop this. If you want your people to develop such habit, one thing you have to keep in mind. While the employee finds that their stuffs are seen by nobody, they would quickly think that doing that sort of thing is pointless. Therefore, on the one hand, you have to let them realise the reason of doing it. Even though the company exists for sustainable development, you cannot 100% sure that you can keep all the employees. So, for this kind of thing it has to be kept and circulated. So, what do we do? First of all, you must let the employee have willingness. To let them have willingness, you have to let them know the importance of it and what it stands for behind it. The second thing certainly is as a supervisor you must give them reasonable support. If the employee tells you that they are quite busy today so that they are unable to do such thing, you must dispatch someone to help them rather than ignoring something that needs to be done. Of course, there are some situations that they really have no time to do it. If so, we would give them more time. They have to get the work done at last. As you said, the employee actually would make resistance. On the one hand, they think that if someone else knows their work too much, they seem to feel that they are more replaceable. Hence, it is natural that people protect themselves. If the work I am doing is not known by the others, I would not easy to get replaced. So, you have to make them realise that the work they are asked to do would not cause any threat to them. Their protection minds would then get released. As a result, they would be willing to write more down in depth. Otherwise, they may just write two sentences down, describing who does the reparation for whom, that's it.*

A: That's right. As a manager or from the company's point of view, when you look at this stuff, you probably think that it has to be down slowly but surely. Nevertheless, it cannot be put off. The longer you put off, the less you want to do. To a certain extent, however, there must have some requests. But, if you make some requests, the employee may on the other hand have different opinion about them.

B: *You are certainly right.*

A: If so, you still have to make some requests. Under these circumstances, as a manager today would you provide them with something additional, so-called substantial incentives, making them more willing to do such thing?

B: *Sure. Generally speaking, some people would do what they are asked to do. We therefore would put them in a good position of the future promotion or increase in salary. It is so practical that people make comparison. If someone does not do this thing but still can get bonuses ... That is to say, people who do fewer jobs get the same payment as people who do more jobs. It definitely would raise lots of disputes. Essentially, as a manager the incentive I can offer to them is taking their performance as an indicator for the future promotion or adjustment in salary. Take this as an incentive, make them contribute more.*

A: *So, you mean that on the one hand you still persuade them.*

B: *Sure. That's right.*

A: *On the other hand, however, if the target set by the company has to be achieved, relevant measures are also needed.*

B: *That's right. I usually say that none of thought is bad. As you said, unless every thought actually accompanies a set of package, you are not able to see the whole picture. This applies to the concept of HR. This is about how to stimulate your employees, how to naturally make them more creative. It is certain that a unit manager or the company has to create such environment. After having such environment, you then can ask something from the employee. I think this kind of thing is reciprocal. Yet, someone may still not be willing to do it. If so, we would give them more opportunities to try. If they really show no willingness to do that, we finally would decide to make replacement. That is to say, to replace their positions by the others. We cannot let certain people influence the living of the company after all.*

A: *As we said that, this kind of information processing has the character of being miscellaneous and boring, and it needs long time to accumulate. You just said that from the position of a manager it is vital to let them know its importance and the meaning behind it. In other words, communication is important. So, you would use those ...*

B: *I think for some people they just have strong protection. It depends on their growing backgrounds and the whole environment. So, we are not confident of making them ...*

A: *From this point of view, it is hard to say that which way of doing is much more effective to influence them. It is hard to say.*

B: *I think that ... employees have their own characters. Of course, you say that we have to have a set of system, an identical system to treat all employees. While you talk to them, stimulate them, you have to depend on different people. Some people do not care about money. They just hope that, for instance, they can learn more. For this kind of people, you just give them this kind of incentive. For some people, however, you know in the beginning that you can only use something much tangible, material to attract them to do that. I think the last point is to make them spontaneously understand the importance of doing it. This is probably the way of my doing. I have been working for seventeen or eighteen years. I worked in different types of company during this period. It is true that you face different thought by different employees. Therefore, we actually emphasise something called mindset. That is to say, when new members are just recruited, you cannot use them right away. You have to*

shape them. There is nothing wrong with them, just the matter that whether you put them in the right place. For instance, as you said that this kind of stuff is miscellaneous. If today there is a case that an assistant is assigned to someone to help them do the recording, the problem of doing that would be one more medium is created. Hence, is it necessary to do so? Is it necessary? Employees always say that they are often asked to do both normal work and that kind of additional work. They say that they can only do either of them. Some of them really say so. I think through communication most of them in fact are willing to do all of them. We say that we understand you normally can deal with ten cases a day on average. But right now, in order to do the recording, those are reduced to five or six cases. There is no problem with that. Doing fast does not mean doing well. We want you to do the right thing, not do thing right. This is the idea we are heading to. If we believe that recording is a right thing to do, we just have to insist on doing it. Surely, it tests supervisors' patience. Supervisors without patience probably would adopt more violent measures; supervisors with patience probably would give their employees more opportunities and time to adjust. But I think at last you still have to depend on different employees. In terms of system, it is solid. But in terms of management or the way of communication, you can use different measures. For those who do not like to be asked for publicly in the meeting, you have to talk to them in private or in a more relaxing environment. So, I think for that kind of thing, it depends. The only principle, however, is it cannot be abandoned.

A: OK. If so, from what have been discussed, it seems to me that you certainly have the principle you wanted, but in reality you are more likely to use communication to let them realise what the right thought is. You think that it is much more important ...

B: *I think that in addition to this it is also necessary to provide employees with appropriate devices. If today they have appropriate devices, they probably could do it more smoothly. Yet, if you do not give them devices, systems or forms to fill in, some employees may have no idea about what they are going to write down, to record. We have such kind of employee. For them, you first have to give them a direction, and then you guide them, make them consider more. I think this part is about sharing. That is to say, as managers we have our own know-how. We just share it with them. It does not mean that the employees only follow us. Perhaps, they are more talented than we are so that they may tell us the better way to do it. In terms of technical specialty, managers may not be as good as their subordinates after all. My people may know better than me about how to repair a computer. I have to stimulate them, develop them. We need to develop the employee's career after all. We on the other hand would tell them that if your knowledge is limited to a certain level, you become an employee at that level forever. So, are you willing to do more? I think from human nature's point of view, everyone certainly hopes that they can have better income, get more respected. It is all about Maslow's theory of human needs. People also need respect. Besides salary, people also need respect. You cannot just give them salary and then tell them to do what you want them to do. I personally think that it is only for those who are so stubborn. If so, the final result is lose-lose since they do things by your order, not by their creation. As we talked about before, you have to put appropriate people in the appropriate positions.*

A: OK. Let's discuss with another relevant question and please ignore this [meaning the Description]

right now. From your previous experience and what you are involved at present, what is knowledge management from your point of view? Do you think what can be called as knowledge management?

B: *From the history, what makes you think that human being advances in the way as we see right now? I believe that the accumulation and dissemination of knowledge is an important factor. In ordinary societies, pupils go to schools. Some people write teaching materials. Some people train teachers. That is to say, knowledge is handed. I think that it applies to the company. There must have someone who is the first round of employee in the company. After a while, when the company needs to expand, they must recruit more people. The normal way of doing is senior members lead junior members. While the organisation gradually grows up to a certain level, a human resources department can then be established. At that time, we can design a more complete training programme. Right now, we have entered into information times. What is the quickest way of duplicating and then disseminating information? Nowadays, you probably find that everyone has computers. In our server, everyone's information is categorised and managed. Besides, if anyone needs information, they can enter the system and then search for it. On the other hand, I think that the interaction between employees is a kind of knowledge sharing. Some members are more willing to ask what they do not know; some are more willing to share what they know with us. Therefore, at present, our way of doing is to build up foundation, meaning that every member is responsible for recording everything they involved. Further, our company wants to set up a SOP. Then, all the stuff is put in a database, server. Due to the characteristics of our industry, another important element is senior employees must lead new employees to get familiar with the new working environment.*

A: From what you say, it is in fact all about the interchange, dissemination, categorisation or even updating of existing information. It is about putting information in the company's computer system so that everyone can fairly make use of it. You finally, however, mentioned that you also pay much attention to the relationship between senior and new members. In this case, I can see that this relationship probably involves much in tacit knowledge.

B: *You are right. This is something that we are not capable of doing evaluation. So, basically, we still hope that the company's know-how or something like that can be saved quickly by IT devices, rather than losing it because of employee's turnover. Yet, for something ... For instance, our products are made by skilled workers. Textbooks can teach you how to do it. Frankly speaking, because it is made by individuals, it is hard to be taught by textbooks. While you have a master who can gently hold your hands to feel how it is down, you probably can learn the secret of success. Surely, the whole procedure can be written on a book, but ...*

A: It is hard to describe how the strength is manipulated.

B: *That's right. It is hard. For instance, take strength as an example, what is meant by 100% strength? As you just said, this is the tacit part. It certainly has to depend on the characteristics of the industry. For some industries, explicit information still consists of many tacit parts. Especially as our production lines, in terms of production technique, it seemingly relies on people's hands. So, there must have someone who is at master level to lead. How do they teach? They have to follow some*

training materials. But, something is hard to put in words ... It has to rely on something between people. Of course, we still need to set up a set of system, describing that one of their job descriptions is to do teaching. About this, their supervisors have to make judgement, do evaluation of it.

A: *So, you think that you would consider computers, systems as a kind of tool.*

B: *That's right. My idea is like this. These things are just tools.*

A: *That is to say, it is about using that kind of tool to deal with existing explicit stuff. Further, we hope that this kind of tool can also do something for tacit stuff, making them become explicit, since only explicit stuff can be categorised. As you said, different industries have different characters. Like your industry, I think that tacit stuff occupies a great proportion. As the stuff of cutting, it probably involves in old masters' experience. It is like what people say as knack. How to exactly operate that strength? It cannot be written completely by words. That is experience. In fact, through the relationship between masters and apprentices, tacit stuff probably would be conveyed from masters to apprentices. In consequence, it becomes apprentices' new tacit stuff. That is to say, after being a follower for a while, I probably can catch the knack of strength. The major element, however, for such process is both of them have to share certain experience together. They have to be in the same environment. So, if it is the case that such tacit conversion plays a crucial role in your industry, as a manager in this kind of industry, how do you again look at this thing? What do you do to make this tacit ...*

B: *For this kind of thing, certainly there are several ways. For instance, the traditional way of doing is to set up the so-called quality circle or something like a small team in which everyone can discuss the problem. Then, they transfer what they discuss into something explicit through writing meeting minutes. We therefore can spread knowledge and experience around. Within it, it involves in how to guide them to speaking out. Take cooking or recipe as an example, I think it belongs to a part of knowledge management. So many details cannot be precisely written down in the recipe. In addition, recipes always say that you have to put something after turning golden colour. Yet, what do you mean by golden colour? How do you define it? I think this is the thing that ... Fortunately, due to some IT technologies or the invention of science and technology, apart from the old way of recording I can now use video tapes to record the whole process of your cooking. So, the way of doing in our industry is besides writing down and video tape recording, we want the senior employee to do a presentation. Of course, we would record it, edit it and categorise it. So, when you have the problem of studying the material, you can go to watch the video tape. You can imitate the action or do the analysis with machines. You can do that. We have to acknowledge that employees are the most important property in the company. This knowledge management has to be done. But, if today someone leaves and you want to totally rely on this thing to do keep the knowledge, that would be impossible. You would lose some knowledge. It is not possible to 100% re-build it. Yet, the advantage is you still have the chance to re-build it. If you do not do knowledge management like the basic thing as documentation, you really have to start from nothing. This is why we always think about how to make knowledge management do much deeper and wider. Again, take cooking as an example, we want to know how many movements you make and what kind of pan you use and the shape of it. With IT technologies, we can do it*

basically. Even now, we are able to use CDs to record it, and then do analysis digitally. Certainly, you have to get some experts to do it. If you don't, you probably just put everything there. Frankly speaking, without categorising, knowledge management is only about content management. You just put all the data together. Data has to be edited, then it can become useful information for decision making. That is important. Then, we have to work out how this knowledge can be shared quickly by everyone. Company is a kind of organisation that strives for team working. That is to say, if employees run at different speeds, their know-how is at different level, the company's competitiveness would be affected.

A: So, from your point of view as a manager in such special industry, you are saying that you or your company still hope that those key tacit stuffs can become explicit. Only through this, you can ... Otherwise, if someone leaves, ...

B: *For instance, someone's work is relevant to computers. Frankly speaking, I today do not have to pay much attention to telling you how to assemble a computer or set up Windows. The important thing is about some tacit stuff inside. What is the IP given by someone while assembling computers? Where do lines go? Only those who do the assembly know it. If it is not marked and the computer is down, we probably have to buy a new computer. Perhaps, we still have no idea of whether the new one is compatible with the old system. This is vital. So, basically in this industry we would also contact our so-called suppliers. Let them become a part of the knowledge circle since they can provide us with relevant knowledge. Relatively, we have to combine their know-how, knowledge with ours. This is about a kind of knowledge development. So, we are not doing it internally. For us, we have to put our suppliers, other competitors and the development of the industry together. Of course, it is easy to say. The most difficult part is how to do it. It is all about human being, isn't it? Rather than just making money from me by selling three million dollars devices, how to make my suppliers willing to tell me their know-how, their knowledge? For us, we want to know how to build up the system. It is certainly our responsibility. We have to build up a database for the supplier. What is the advantage for this particular supplier? What can that supplier offer? We have to figure it out. On the other hand, we have to set up some standards for the database. Otherwise, some people may use Excel but the others may use Words to deal with data. As a result, we can integrate all the stuff done by everyone. There are many IT products from Microsoft, IBM and SAP that can help you to do such kind of thing.*

A: In fact, what I am studying or what I want to understand at present is something we have discussed in the beginning as explicit stuff. You also mentioned about another kind. You think that knowledge management is about converting as much as tacit stuff into explicit. That is also a kind of knowledge conversion. That is from tacit to explicit. In the beginning, we mentioned about the explicit side. For me, I believe that they are different knowledge conversions since they possess different characteristics. So, today my research is about to know how do you look at these different stuffs. Would you have different management measures to these two? To this, how would you manage? And, to that, how would you manage? Whether they are different, or there is no difference between them.

B: *I think that all managers probably have the same goal. But, how to achieve this goal? From my*

personal experience, I think due to different managers' backgrounds, opinions and the training they got, they probably have different measures. For instance, some are more likely to talk to you about something they want you to do. It is like brainwashing. Some, however, may use rewards and punishments as a tool. If you do not do it, they beat you. They do not really beat you, they give you some punishments. Also, some may use considerate ways. For instance, they know that the target employee has good relations with colleague A, so they assign colleague A to talk to the target employee about the stuff. My way of doing is if this is something that has to be done, I would hold a meeting. In the meeting, I would tell everyone that this is what we are going to do. Also, I would set up several topics and then listen to their opinions about them. If my people have any problem, we figure that out right away. We have a solution for each thing. You cannot give me one hundred excuses, and then you tell me that you do not want to do it. So, I really cannot answer your question. In fact, about management, sometimes we would focus much on contingency. It is contingency management. If you do not do such thing at the right time, frankly speaking you waste the resources of the company. Therefore, for us, we do not hesitate about whether it should be done, instead we concern much about how big for the scope, how deep for the depth and how many stages for it. In addition, while doing knowledge management, you have to coordinate with HR departments. For some employees, they probably are not unwilling to do this, or rather they do not know how to do it. Hence, you have to train them in advance. If they are not trained but are asked to write down everything in their heads, it would be their nightmares. Some people may have excuses. But for some people, they really have no idea of what to do. So, this thing turns out to be something I said before as how big for the scope and how deep for the depth. They are further influenced by the quality of your people. How many years do you think you can do it? One year, two years or even three years. About knowledge management, we as managers are not in the position of whether it has to be done, but in the position of considering good timing, scope and depth. I think actually this has something to do with what I study. I studied industrial engineering in the college. Afterwards, I changed my area to this information stuff. Basically, we usually say that there is nothing that cannot be quantified. If you, however, ask some other people, they say that some things really cannot be quantified. So, it is what we talked about converting tacit things into explicit. You say that some tacit things cannot be quantified. I think it is the matter of whether it is necessary to go that far. For instance, we talked about cooking. I can make cooks become electronic books. Besides the materials, recipes they use, I can also figure out the pan brand they use, the element of the pan and the shape and angle of their cooking shovel. Theoretically, you can then duplicate it. It is like the case in McDonald's where everything is documented and standardised. So, the point is how to pass on the managers and employees' existing knowledge. In addition to passing on the existing knowledge, the more important thing is how to create more useful knowledge to let the company become more competitive. For a company, selling what kind of product sometimes is not so important. If you can reach this level, whatever you sell today you would be successful since you have the people willing to learn, you have such know-how so that you can enter any industry that you want to enter. Yet, to say is one thing, to do is another. Do you think that success

can be duplicated? I do not think so. If someone succeeds, they would write a book telling about their stories. Can you really duplicate it? I think that only 10% or 20% of the knowledge is written in the book. Also, you cannot own the person in the book. The biggest problem is you cannot copy the person in the book. My personal experience is no matter how willing and open you are to write down everything, knowledge still gets lost. This is inevitable, and you have to suffer. So, if you can do better knowledge management, your pain would be less; if you do nothing, you probably would collapse completely. In addition to dissemination, knowledge management also involves in protecting business confidentiality, isn't it? That is why we are talking about how knowledge needs to be managed. This has to be put into our consideration. Markets have been changing so that knowledge has been developing. Therefore, the process of collecting knowledge has no way to stop. To what extent you think it is completed, I think this thing is like education.

A: *To sum up, you think that from the manager's point of view the key word is contingency. But, it seems that for you the so-called contingency refers much to the difference between people. For instance, everyone has different requirements or everyone wants different things. As a result, you today as a leader would do some adjustments. Some people want this, but some people want that. So, it seems that your contingent management is not resulted from whether the process is tacit or explicit, but from different individuals.*

B: *For me, due to the prosperity of IT industry, many things can be brought. Suppose that two persons buy a package of knowledge management software from Microsoft. After three months, you can see that their content and the consequences of the development are different. It is easy to buy machines, this sort of stuff. But, to me as a person, can you buy me? Yes, You can. You can hire me with money. Today, I am hired as an IT manager in this company. There is no problem for you to hire another IT manager in the company. If so, under the circumstances that in this industry information is so open and every product is so standardised, is there any difference between me and that IT manager in terms of professional know-how? I think that the answer is negative. So, what is the difference between us? It is thought. If we have different thought, we have different measures, haven't we? I today as an IT manager think that we go for this direction, but that IT manager probably thinks that something can be outsourced. That manager may think that it is not necessary to pay so many people do certain things. How do you judge this? What do you judge? So, I think that in terms of device there are many. You can spend money on them. In knowledge management, however, how does a company manage, for instance, managers' knowledge? We usually say that knowledge management has to rely on IT to get realised. Without IT, you still can do knowledge management. It just takes ages. Every company says that they want to do knowledge management. Who is going to succeed? I think it still depends on the speeds of its usage and its expansion. That is to say, how fast can you expand it? The faster speed you expand it, the better result you can get. This has nothing to do with what kind of software is used or how many words are written down since it is hard to be judged. I can write down something irrelevant. But, how do you judge it? Unless, you know better than I do. So, I think that technology is all about human nature. If today things are still down by human being, this kind of stuff is a tool. You cannot say*

that you only want devices. I think that for knowledge management those which can be revealed on paper only occupy 20% or 30% of the whole knowledge. Something hidden inside is the most important stuff. So, how to pull it out? I think you have to depend on devices which are designed to guide them since some people need you to guide them.

A: OK. I understand.

INTERVIEW TRANSCRIPT – Combination 019

Note: "A" represents interviewer and "B" represents respondent.

A: Can you understand what this is talking about?

B: Yes, I can.

A: You roughly can understand it.

B: Yes, that's right.

A: I think that the area you have contacted generally belongs to this thing, doesn't it?

B: Yes, nearly.

A: Given that, what I want to ask you today is for you as a manager, leader, how do you manage this thing? That is to say, under the circumstances that the main working content of your people is much relevant to this or your people are considered as IT staffs, how do you as a manager manage these people? This so-called information processing is miscellaneous after all. Also, even though they are explicit, as it involves in processing massive information, efficiency and accuracy may need to be put into consideration. Under these circumstances, how do you manage these people to do such thing?

B: First of all, I will set up SOPs or something like ISO 9001. Through this, I can regulate what everyone has to do. This kind of stuff will regulate that whatever you do, you have to keep the record. Such record can be seen as a kind of standard. They just have to set up such operational procedure, set up such operational procedure in our management rules. Whatever happens, you have to follow this. If newcomers join our company, they also have to follow this. Besides, you may ... have the chance to do any change like design change or engineering change. If so, you may encounter the conflict between old edition and new edition. How can you overcome it? You have to have a system, a system platform to control it. It has to be new edition all the time. Everyone can have a look at it. In the aspect of staff management, it has to be followed by setting up a structure, then establishing operational standard and finally providing a platform. They can put the stuff of first edition, second edition and third edition and so on into it. This is just the action of putting things into it. Also, for process changing, it has to have work flows. It regulates that if I today add one more SOP or amend one SOP, I have to be approved by whom. About this kind of thing, I may need to be approved by section managers, department managers and division managers. It forms a flowchart. Mostly, we use such way of doing. This belongs much to explicit stuff, explicit KM.

A: So what you are emphasising is the whole structure has to be appeared. A so-called management

structure or control structure has to come out. However, more deeply, even though you have such structure, it still needs human being to run it, doesn't it? So are these people ...

B: *Do you mean are they doing it or not?*

A: Yes, that's right. How do you manage these people? Truly ... You can say that I would like to use the angle of your leadership style to look at this thing or knowledge management.

B: *I prefer not to be compelling, saying that you have to do this or you have to do that. I can use another way. I use systems to manage people. I use systems completely. About the way of, for instance, you definitely have to do this for me or something, I think that such way of managing people is a bit out of fashion. Right now, my way of doing is firstly, they have to follow ISO 9001. As to whether they have done it or not, I use two ways to check it. One is internal inspection and the other is KPI, key performance indicator. On average, I inspect them monthly. Also, we have annual plans. In the annual plan, there are several important, key performance indicators. Everyone just follow this.*

A: So what you are saying is you will not use your personal force to restrain them. You will use systems instead.

B: *That's right, using systems to manage people.*

A: You said that under the system, you have internal inspection and KPI. Does having systems mean that there are goals, standards over there?

B: *Yes, there are.*

A: So does having standards mean that there has the stuff of so-called performance appraisal?

B: *Yes, that's right.*

A: In consequence, the concept of rewards and punishments will be introduced ...

B: *Sure, of course. Such inspection will affect their performance and then the performance will affect their promotion. So nobody will make a joke about it. If they want to do the job, this is the way it is. All of the things have to be based on systems. What should operators be doing? They just need to follow various standards, including when they need to be on and off duty and how to ask for leave and so on. We have regulated relevant standards and norm. Everybody has to follow these systems to do things. Today, I am in this position as a manager. How about if I am not tomorrow? It does not matter. Everybody just follows the system. Whoever goes to be the manager, they just follow the system. This is basic explicit knowledge management. Everybody just follows this.*

A: So you mean that you will be using a so-called structural system to manage such visible stuff, won't you?

B: *Yes, that's right. And everything has to be clear. I can show you our overall plan for the next three years. In addition to this big plan, we have to set up plans for each year. In the annual plan, it includes strategic analysis and SWOT analysis. Having done relevant analysis, it will come out KPI. Having had KPI, everyone just concentrates on KPI. Each department has its own KPI. Each section also has its own KPI. For the KPI in each section, it has to be followed by the staff. Besides, we have to set up different stages for the plan and when each stage has to be finished. All of which must be so clear. The department has to integrate all of the stuff every month and report to our chairman. The*

whole enterprise has to follow such kind of system. No one is excluded.

A: So to this thing, your attitude as a manager is very clear of using system to manage such explicit stuff, isn't it?

B: *That's right.*

A: This is so-called the explicit stuff. From our point of view, there is another part so-called tacit stuff. In our definition or opinion, it probably happens to some production or practical units.

B: *That's right. Absolutely.*

A: It certainly has some so-called operational procedures. But after a long period of time, experience will be accumulated. Some invisible stuff like what people say as tricks will be generated.

B: *Yes, that's right.*

A: By doing the same thing, some people are better than the others. So it involves in something tacit. However, how does such tacit stuff communicate to another person? It is through observation and learning. It is like apprenticeship in old times.

B: *That's right. It also applies to modern times.*

A: You just stand next to someone and watch. After one or two years ...

B: *You mentioned personnel. Like here as an information unit, when someone is just new here, they will be unable to get on well. I have to let masters guide them. Probably after half a year or one year, they will be capable of performing well. It is impossible for them to read some explicit stuff and then they can know how to do it. So in this aspect, we still keep the way of using staff to guide staff.*

A: Okay. Using staff to guide staff means that you use old one to guide new one, doesn't it?

B: *That's right. Also, before they enter into this department, we will let them practice in other departments. For instance, if one of the job descriptions of some people is assisting production units to collect data and build up systems, they have to practice in the production unit. Whilst they are practicing, they will be guided by old masters.*

A: So the situation of staff guiding staff to a certain extent involves in experience getting communicated, shared to another person through observation, learning and imitation, doesn't it?

B: *Absolutely right.*

A: Given that, the same problem to this situation is for you as a manager, how do you look at this situation? How do you manage this situation?

B: *This will be much difficult in terms of managing it.*

A: You do not need to use this serious term of management. You can ...

B: *It cannot be quantified.*

A: That's right. It cannot get quantified. However, the problem is this thing is extremely important. Also it is inevitable to have such thing ...

B: *Yes, that's right.*

A: Regardless of using the term of management, how do you do some guidance to let this situation ...

B: *Basically, there are three kinds of guidance. The first one is when the master wants to ask for leave of absence, the apprentice must be able to act for him/her. Otherwise, I will not let the master have*

leave of absence. So if the master wants to have leave of absence, he/she has to teach the apprentice as good as he/she is. In this case, the master must be dedicated to teaching the apprentice. Second, if the master wants to get promoted, he/she has to teach the apprentice well. Otherwise, if the master gets promoted, no one can take his/her place.

A: The master must train the apprentice well.

B: That's right. Otherwise, how can the master get promoted? If the master does not train the apprentice well, there is no place in which the master can go. So I can use other ways to ... even if they are much tacit and cannot be written. If the master wants to have leave of absence and/or get promoted, he/she has to let the apprentice become as good as he/she is. The third one is everybody's performance in the unit or team is tied up. Their performance is tied up. If the master is good, the apprentice also has to be good. In consequence, the master has to do his/her best to bring up the apprentice. So there is no need for me to worry about this aspect.

A: Hence you mean that even though this is something hard to be measured, quantified, you still will design something visible to control it. That is to say, this visible thing is ...

B: This is what I can see.

A: Also it can be measured.

B: For instance, I only had one person taking care of the website. He had to stand by 24 hours a day in case something went wrong. In that case, he could not ask for leave of absence. After I got him a junior colleague, he can now have leave of absence as he has already trained that colleague to reach his level.

A: So it means that if you can control this side, for instance, to make sure that the master can teach the apprentice to reach certain level within three months, it will mean that they do interact with each other in this period.

B: They have to get interacted. This is about forcing them to interact with each other.

A: Alright, I understand.

B: Even though you are a newcomer or something today ... you have to be able to act for someone's work in a sense.

A: Perhaps, such thing may be hard to get measured or let its effect be seen ...

B: If it is like this, I will not worry about it. We are an information department, a supporting unit. Suppose that we are going to support production units. I always tell my people that if we can support them, help them to do system planning, they may use the system to make more profits and to increase the satisfaction from the client. As long as they can make more profits, we will be able to get more pay. So to my people, they do not dare to be loose when other people are dedicated to their work. It becomes the issue of responsibility. They need to be educated ordinarily. In our company, we have another system. Under this system, the company can even run by itself. Why? We put everything in this system. Everything can be controlled by this system. The only job of the top management is to set up targets. The system will do the rest. I nearly do not need to guide them.

A: So it seems to me that you will be using such way of doing to control the invisible stuff. In fact,

this means and what we talked about previously all belong to the issue of system.

B: *Yes, that's right.*

A: So it means that, whatever tacit or explicit, your personal means of controlling will be through so-called system to ...

B: *It has to get something quantified. It has to be transferred. It needs to be transferred. There is no way to speak out directly. Of course, you can do training. You can set up something. For instance, in McDonald's, they set up every condition like oil temperature and time and so on for fries cooking. However, it may not be necessarily so. With different places of origin for potatoes, you may need different oil temperature or time to cook them. It has to rely on the old master to see whether ... There is no way to set up everything in great details. You just need to give them the target, they spontaneously will do it so well.*

A: If so, you seem to believe that you can use some visible systems to control and manage explicit stuff as well as tacit stuff.

B: *Can do. However, you cannot do it by holding several training lessons or making a loud appeal to everybody for it. You still have to lead their hearts. You have to let them have the desire to work. You have to encourage them timely and then let them feel that you stand in with them. At last you let them elaborate. For instance, today I am a manager. I will authorise my section leaders to be fully in charge of their members' leave of absence and training and so on. They can take the full responsibility. They do not need to ask me. So what is their responsibility for me? They have to be responsible for what I assign to them. If they do not achieve it, I may get rid of them next year. So in fact, you are not responsible for me. You are responsible for yourself. If you have any problem, I can do my best to assist you. I can give you power as well as people. You just go to elaborate. So to me, I think that management is quite easy. It is not difficult. I was in production line before. I once led one hundred and two people or so. They were so lovely. They all dedicated to their work. The more you encourage them, the harder they work.*

A: If so, can I say that your personal leadership style towards these two different things in terms of their characters will be the same? You do not think that as one is explicit and the other is tacit, so ...

B: *I will get them quantified at last. After they are quantified, there is no need to worry about too many details. For instance, it says here that "You cannot eat any snack whilst you are in office hours". However, you need to use something to buy their hearts. Does it really matter if I let them eat something in office hours? After they eat something, they may have more energy to work. So regarding to what you just asked, I have to say that there is a bit difference. We also divide staffs into direct staffs and indirect staffs. Each group applies to its own way of management. For instance, for those who are doing the job of screwing, I may not be able to let them have high degree of freedom. It is regulated that whilst assembling motorbikes, nobody is allowed to eat things. They can eat things during the break. They are direct staffs. For that kind of people, I cannot give them freedom. For indirect staffs, I will give them some adequate freedom. In general computer companies, they have to use their brain to write programmes. You cannot set up strict rules. You have to stimulate their brains. So to indirect*

staffs, perhaps I will do some adequate adjustments. To manage R&D as well as IT staffs, I will manage them with more freedom. However, to manage on-site staffs, I will require them to follow what they have to follow.

A: Under these circumstances, can I say that these so-called direct staffs are much belonging to this side?

B: Yes, you can.

A: That is, direct staffs are much ...

B: That's right. They just do what they are regulated. Also, you will find that these people's productivity or efficiency can be directly calculated. For instance, you can calculate how much profit each person can make for the company or how many motorbikes each person can assemble within one hour. My standard is set up over there. Everybody just follows this. There is no flexibility. In fact, there are indirect staffs among direct staffs. For instance, those are the staffs who arrange procedures. For those people, they need to have some flexibility, space.

A: So it should be saying that your personal character will not be different as a result of tacit or explicit stuff. Rather, it is because ...

B: That's right. I think that the discrimination between direct staffs and indirect staffs is more obviously. I will not use tacit and explicit to be ... perhaps they are not so absolute.

A: Okay, I understand. It means that you think direct staffs are much belonging to explicit side, but sometimes they may contain other elements ...

B: Yes, that's right.

A: Relatively, it applies to indirect staffs.

B: That's right. It is just the matter of proportion.

A: So you think that direct staffs belong much to the explicit category and indirect staffs belong much to the tacit category.

B: That's right. Like R&D staffs, you have to use the strength in their brains. You have to stimulate them to produce more patents or new designs. You have to utilise something in their heads. You cannot give them too many regulations.

A: So your opinion is staffs like R&D engineers will be much using tacit stuff.

B: Of course.

A: Alright, I understand. If you now get rid of the tacit or explicit stuff, from your experience, what do you think as knowledge management?

B: Knowledge management.

A: How do you look at this thing ...

B: Knowledge management is junior staffs can reach the level of senior staffs by following certain set of standard. The set of standard is something we need to manage. With this standard, anybody can reach the same effect. Of course, it contains something tacit as well as explicit. The effect is about to achieve the organisational performance.

A: If so, you think that knowledge and what it stands for behind like some systems or norm have to be

consistent in an organisation.

B: *Of course.*

A: That is to say, anyone in certain position will have ...

B: *It may be changed. However, when it needs to be changed, it has to be approved by several people. After it is approved, it can then be put into the system. Everybody still has to follow the system.*

A: So to a company or organisation, the most important thing is something has to be consistent. Otherwise, if new persons come, it may be changed to another shape.

B: *That's right. For instance, if R&D develops a product even if the product is different from the others, under the same kind of system, I think the overall strength can be increased up to 80% or 90%. If a company has no establishment of explicit KM database, staff management or much tacit stuff, it will be restricted. For instance, if you run a family factory in which only few masters know how to do CNC, you definitely have to rely on them. You may not be able to handle them. However, when I today use this system, I can ... As long as your staffs can act for you, you can have leave of absence. If you want to get promoted, you have to make sure that your people will be able to ... If the masters can regard developing newcomers as their performance, they will be dedicated to developing them. They will reveal everything they know to the newcomers. In consequence, it turns out that your family factory does not need to completely rely on those few masters.*

A: So if there is no such way of staff guiding staff or apprenticeship, it will be ...

B: *Useless.*

A: Besides useless, it puts the company at big risk.

B: *The risk will be huge. One the one hand, there is no apprentice developed. On the other hand, something is still sealed by the masters. You are still held up by them. If accidents or something happen to them ... What I am saying is like here, we have some computers, programmes written by old language. Those who wrote these programmes have stayed here for twenty years or so. I make a joke about them that they cannot retire as they have not taught other people how to write those programmes. They just laugh. So what am I going to do? I think that we may have to assign someone to study it. Or perhaps, I can assign someone to use new language like Java to overwrite it. Now more and more people know the language of Java. So to this aspect, I do not see any difficulty.*

A: In fact, for the masters, they possess something much tacit like experience or something. Perhaps, it will be difficult for them to reveal everything clearly. So the only thing they can do is to impart things through apprenticeship. Through it, apprentices have to string along with their masters to observe and learn. In fact, different industries have different tacit stuff.

B: *That's right. Their characters are different.*

A: So the only thing you can do is to influence those people and to make them reveal it.

B: *Look at what I have done. No one taught me before. I transferred from tacit to system and then use the system to manage people. No masters have taught me that. It has been naturally evolved. I will not regulate what you have to do. I will give power and manpower to my people. They have their own responsibility. Of course, I will evaluate their performance. I think that they will not make a joke*

about their own performance.

A: What you have been saying is quite interesting. To this part, some people may think that they cannot do anything about it.

B: *I do not think so. I think that I can handle it quite well.*

A: As this part belongs to something tacit, it may be hard to get controlled. Once it is hard to get quantified, it is hard to get controlled.

B: *At most you just hold few more training lessons.*

A: Or you more or less to persuade them ...

B: *First, someone must be able to act for you. Second, if you want to get promoted, you just have to have this. Third, masters must be able to quantify things. What can they quantify? They cannot quantify how many newcomers go to the lesson. Instead, they have to quantify how many lecturers or newcomers they have trained. You have to tell masters that if they want to get promoted, they have to get certain amount of people trained. If so, masters will do their best to work for it.*

A: So it turns out that the meaning behind this way of doing is you connect the interests of masters with the interests of apprentices.

B: *Totally connected.*

A: As you said, if you do not teach your people well, you cannot have leave of absence.

B: *You cannot have leave of absence and get promoted. If your apprentices are stupid, it means that you are also stupid.*

A: Under these circumstances, it will influence them imperceptibly, won't it? Masters will be more willing to teach their apprentices. Quite interesting, quite interesting.

B: *So you do not need to pay much attention to them. They know how to do it by themselves.*

A: That's right. For some people or even industries, on the one hand they realise the existence of this part. On the other hand, they know that they need to have something to control, manage it. However, they may not be able to know how to design something visible to take control of something invisible.

B: *In fact, it depends on the wisdom of manager. It has nothing to do with which kind of industry. My management style is like this. Other managers may have never considered this aspect before. Another situation is managers do not authorise their people. They grasp everything on the hand. They want their people to report everything to them. That will be so exhausting to managers as well as their people. Basically, you just have to categorise your people. You have to assign someone to do things which are harmonious with their characters. If so, they will be responsible for themselves. Everybody will be responsible for their own work.*

A: That is brilliant. Of course, to different industries, this kind of stuff is different. But the only thing that is not changed is you have to work out a system associated with their interests to restrain them.

B: *That's right. The only problem goes to how to link.*

A: That's right. If you can interfere in it by this way of doing, you can take control of it, can't you?

B: *I think it is quite easy. You just trust them. They will do everything for you. They think that they just need to work hard, you will take care of the rest.*

A: In fact, my study is about to examine leadership style. Of course, everyone's leadership style is different.

B: *My leadership style is ... We have seventeen departmental managers in the factory. My leadership style is a bit different from the others. Basically, I see my people as my brothers. I am in charge of taking care of them. I do not think that because I am their boss and I have the right to decide their promotion, so I can do whatever I like to them. No. Absolutely not.*

A: Sure. You just mentioned that it is also important to trust, authorise subordinates, especially whilst you take control of this thing. Of course, it also applies to taking control of that explicit thing.

B: *I think that conflict may not be inevitable between people in the same environment. Take sales and R&D staffs as an example, they sometimes have contradictory positions. For instance, R&D people want to do new things. They want to put many new mechanisms, new engine on it, but the cost will be increased. However, from the sales' point of view, they hope that the price can be cheaper. They always have such conflict. It is inevitable. We usually have such arguments. However, we gradually have made some adjustments. In fact, I have been trying to find something in common from the contradiction. I usually look at things further. What do I mean by looking at things further? I try to think about the purpose of doing it. Are we having the purpose of selling more motorbikes and then making more money? Making no profit is a kind of guilt to enterprises. After having some profits, enterprises can help communities, provide more job opportunities and assist disadvantaged. First, you have to make money from domestic markets. Second, you have to make money from international markets. To have competitiveness, what are we going to do? We have to cooperate. We have to clear about our destination. Once the destination is clear, their conflict will disappear as they have the same target. If you can sometimes raise such target issue, there will be no conflict between departments. Besides, I think that if someone has strong leadership style, they will be not suitable to lead indirect units. Those who have strong leadership style are suitable to lead direct units, production departments. If you are violent and cruel to people who are in charge of information system or salary system, you have to be very careful about their revenge of inserting bugs into the system. Yet if you trust them and then give them continuous encouragement, I think that they will work for you to death. Therefore, I have kept using some techniques to let my people be solely responsible for certain job and then to let them have better fame. I think many people do appreciate me. Of course, I also appreciate those who ever promoted me. I think this is a kind of gain. I have led the R&D department and the Quality department. Although I do not lead them anymore, the staffs in those two departments are still my friends.*

A: Alright, I understand. What I am going to look at is quite simple that from your personal point of view, whether your attitude will be different to explicit part as well as tacit part? Will your management means be different?

B: *I will depend on working contents. If it is much close to apprenticeship, you cannot be too hard. However, if it is much about staffs in direct units, you must do what you have to do.*

A: So basically, there are some differences.

B: *Yes, That's right. There are some differences.*

A: *Okay, I understand. Thank you very much.*

INTERVIEW TRANSCRIPT – Combination 020

Note: "A" represents interviewer and "B" represents respondent.

A: After reading the Description, can you understand what it is talking about?

B: *Yes.*

A: You understand it. Alright. What I am doing is something about knowledge management. We divide knowledge into two kinds, one is tacit and the other is explicit. This belongs to the explicit part which is something like numbers, data. They are some information and data which can be seen. So, what is so-called combination? That is to say, as it says here that through editing, categorising and adding by computers or even by hands, at last something you want like information or reports is produced. They are also explicit stuff. Hence, the so-called combination is a kind of process in which one explicit thing is converted into another explicit one through such processing procedures. This is a fact that the working content of the most people in your IT department is more relevant to such information processing, editing. Today, what I want to understand is as a manager in that situation what your leadership style is? How do you look at such process? How do you look at your people doing such stuff? How do you lead them? What are your leading measures? What is your leadership character? That is to say, if their working characters are mainly relevant to such situation, what can you do in order to make this combination process complete as smooth as possible? How do you lead these people to do such knowledge conversion?

B: *I think that in order to achieve the combination, first you have to let them get used to several things. For instance, you have to let them get used to recording everything happened in the company all the time. I think that is the basic element of combination. Whatever things are right or wrong, they all have to be recorded. Then, I think there must have somewhere for them to do recording in the department. In other words, there must have an appropriate place in which their records can be saved. So, I think that the first thing is to let them develop a habit of recording everything. Suppose that everyone has the habit of recording things. Further, there must have another mechanism. Because some information is repeated and some information may not be right, so there must have a mechanism in which someone is responsible to deleting repeated and irrelevant information. In fact, one thing is very important in the company. That is sometimes it is so difficult to find something I want. If the data is too much, it would be more difficult. So, repeated stuff must first be got rid of. Otherwise, it would be difficult to search for something you want. The second thing is there is no way for wrong data to appear in our organisation. Certainly, previous wrong ways of doing have to be appeared. But, wrong solutions cannot be shown in our database. There must have someone or some mechanisms which can delete wrong data and keep right data. I think this is something that has to be done.*

A: So, the first point you just mentioned is you would provide them with a platform to do such thing ...

B: *Also habit. I think that habit has to be developed.*

A: About developing this habit, how do you let them develop this habit? That is to say, as a manager, you have to let them ... For such process especially in medium or large size companies, the data processed by the employees is plenty and miscellaneous. Also, such processing probably has requirements of efficiency and accuracy. As you said, it is important to develop the habit. But, how can you make them have such thing?

B: *Actually, one thing is usually happened in an organisation. For instance, if I do not understand something, I often ask the others. If this is the mechanism of the interaction between people, information would get lost imperceptibly. Because, first, if I ask someone, the process of reviewing is disappeared. Second, it is possible that when I obtain the information I need, I may not have time or am unwilling to share it with the others. Such rare information is also disappeared. I think that the best way to keep information is to encourage them to use, for instance, as many as IT devices while making discussion or sharing knowledge. That IT mechanism must be capable of recording any information they discuss. While everyone is at a meeting, how does the manager know who is doing what in a certain period? The first way of doing is to read everyone's reports for that certain period. The second way of knowing what they are doing is to raise several questions to see how they answer these questions. Their opinions can then be recorded in the meeting minutes. I think these are good ways of keeping things. The first kind is when they make sharing, the process of sharing must be recorded through IT mechanisms. The second one is managers can use the concept of problem solving. Raise some questions and see how they respond. By this way, they probably tell you what happened during that certain period. Then, you can record what they say and put it in IT. I think this is a good way.*

A: So, it means that as you said you would provide them with a so-called IT platform, letting them have such medium for recording things. Secondly, as a manager, to a certain extent, you would build up a control mechanism. That includes not only regular reports, but some evaluation stuff. About the evaluation, for instance, it is like the question raised by you in the meeting. Through it, you realise what kind of level is reached by them in the process.

B: *That's right. I think that if managers really bear in mind the interest of the company, this is something they have to do. By the way of raising questions, you know what they are doing in a certain period. There are two advantages for it. The first one is many people can get shared, and the second one is it becomes explicit knowledge and gets recorded.*

A: If so, given the control mechanism, does it mean that on the other hand you would do performance appraisal?

B: *You are right.*

A: That is to say, to this kind of process or to such working content by your people, you would set up a much clearer target to measure what they do, wouldn't you?

B: *Yes, I would.*

A: About the target, it is like, for instance, something you would do regularly whatever weekly, monthly or quarterly ...

B: *Perhaps. Of course, rewarding system is also a good way. For instance, while certain problems are actually happened in the company, you can use the way of rewarding to let everyone provide their own opinions. I think that probably a person's opinion may not be able to solve the problem, but the combination of many people's opinions may generate a good solution.*

A: You mentioned about the rewarding stuff. Does it mean that to this kind of thing it is necessary to provide a rewarding or substantial incentive over there first? Do you think that this is something for them to contribute additional efforts to achieve the target you set before? If so, you would think that it is an essential manner.

B: *That's right. This is essential. In addition, some other things are also essential. First, for instance, we surely must have formal, regular meetings. I, however, think that if you want to combine different stuff in everyone's head, the best way is through the kind of group-discussion meeting, informal group-discussion meeting. Nevertheless, there must have someone to record the whole process. This is also a good way, a good way of integrating different kinds of knowledge into new knowledge.*

A: OK. If so, does it mean that as a manager your hands would be much in, into such kind of process? You would create something like what you say as providing them with rewards and substantial stuff or holding a group meeting as you just mentioned.

B: *I think that if managers do not intervene it is a pity that many valuable knowledge may not be saved. There are many. Some people think that lounges are a good place in which knowledge can be generating. But, it is a shame that when new knowledge is generated there, it is not sure that whether it can be saved. It is because in that considerably informal occasion, this stuff may be occupied by individuals. If individual knowledge cannot integrate with organisational knowledge, it still belongs to individuals, not organisations. Furthermore, I think that at present we are in the time of a very high turnover of staff. When valuable knowledge is brought away by employees, that is the loss of the company. So, I think that managers have to intervene in all such rare opportunities. Besides, I think that we should transfer something happened in lounges to a relaxed meeting. Perhaps, this kind of meeting can be held every one week or month. Everyone just comes in for a chat and share their ideas with the others. It is better to have someone or devices recording the whole process. Apart from this, I would encourage my employees to use as much as IT devices to have a chat, for instance. But, the computer must have a mechanism that can record the whole process. I think that it is better to have someone who is particularly assigned to collecting such knowledge in the organisation.*

A: Alright. In fact, in an organisation things are happened in different places, between groups or even at different time. You just mentioned about the place of lounge. I think it is quite interesting. People say that to a certain extent plenty of creation, ideas or knowledge interaction whatever tacit or explicit take place over there. But, for you, you probably think that only few people would know what is going on in the lounge at that specific time. It means that no public knowledge is generated after all. If so,

you instead prefer to simulate or create such occasion though it is also a casual occasion. At least, from your point of view as a manager or from the position of the company, this is an occasion where everything can be monitored.

B: Yes, that's right. On the other hand, I think that the communication content between people mostly would be appeared over and over again. While a particular occasion is created, those which are revealed in the lounge may again get revealed here. I therefore think that it is necessary to create such occasion. Alternatively, I would encourage everyone to have a chat through IT. Something can then be saved. We cannot sure that we can catch employees' knowledge by 100%. But, at least, we sure that certain extent of knowledge can be saved.

A: OK. If so, from what I hear, you think that under this kind of situation managers have to have two characters simultaneously. One is that they must set up a goal. As a result, there would have performances for them to appraise. You also mentioned that the provision of relative rewards should be welcomed in this case.

B: That's right.

A: But, on the other hand, as a manager, you believe that to a certain extent the construction of atmosphere or much softer manner would also be used.

B: That's right. In fact, different managers have different characters. Suppose you realise that you are a type of severe manager. When you are present, for instance, at the meeting, the employee would be scared of talking too much. In this case, you can assign someone to be a team leader or a representative. This person probably has the same rank as the others. This person is a temporary manager whose assignment is to do recording in an informal meeting. If you are a manager who primarily has no distance with your people, you can participate in such meeting on your own.

A: If so, under these circumstances, you think which kind of manager's character or style would be much more effective to such knowledge regeneration or rebuilding though it is explicit to explicit?

B: I think that firstly managers cannot be too strict with their employees. They cannot be over strict. If employees have a manager who is over strict, they only do one thing. They would conceal wrong things as much as possible. Such concealing actually is a great disadvantage to knowledge conveyance. It is because when, for instance, I today do something wrong and I am willing to share it with other team members, the mistake would not happen again. If I conceal it, the mistake may happen to the others. If everyone conceals it, it may become a big problem while it explodes out. If it is the case that Chinese have a character of much unwilling to face things, I think that too strictness is not a good thing. Secondly, I think that managers must have high rate of participation. That is to say, they have to participate in activities held by the employee as much as possible. They also have to be generous in sharing their ideas with the employee. Some managers are unwilling to share their ideas with their people. When their employees propose some ideas, they take them as their own ideas and then give them to the top. They take credit for other people's achievement. As a result, employees would become unwilling to share their own ideas with their managers. So, I think managers' characters are, first, they cannot be too strict; second, they have to set a good example with their own

conduct by sharing out their ideas. I think this is a best situation for employees to combine their explicit knowledge. Of course, I think there are many kinds of explicit knowledge. For instance, as we said that something spoken out is explicit, but it is temporarily explicit. If it is not recorded, it becomes tacit again. Another kind of explicit thing refers to regular reports or operation manuals. I think they are important.

A: It is quite interesting. As we talked about in the beginning, this is the stuff involved in dealing with massive information. It probably has an IT or machine platform in the middle of it. But, the problem is such platform or process is handled by mankind after all. It is mankind to do data entry. It is mankind to deal with such thing. In consequence, mistakes become inevitable. Moreover, while you deal with massive stuff, mistakes do take place. You said that, however, in this case managers instead cannot be too strict. Otherwise, things would be concealed from managers.

B: *You are right.*

A: So, it means that although the target can be achieved on the surface by managers' strictness, in practice there are some potential problems.

B: *That's right.*

A: So, you prefer that managers should not be so ... strict. Yet, you still believe that from your point of view as a manager your hands still have to be in. It is just a matter that the feeling brought to the others is not so severe.

B: *That's right. I think there are many ways to get your hands in. Making request is not a good way in my opinion. The employee may not realise what they are requested for. I think that raising question is the best one. The only thing you have to do is to raise some questions. They would answer your questions spontaneously. I think this is the best way. They would not think that you are gathering their knowledge.*

A: What I want to understand is in this case how do you manage such process? Even, how do you manage the people involved in this process? This process is dealt with by people after all. Information would not change to another kind of information by itself. It must be mankind doing processing. Therefore, today I want to much understand that from your point of view as a manager how do you look at knowledge management? Alternatively, how do you look at such kind of knowledge conversion?

B: *I think that in my department I would not use the concept of "management" to manage their sharing. I would consider several best ways of doing in advance. Then, I would use something like rules or working procedures to let them share spontaneously in their daily work. If you want to force them or use management methods to manage it, I think that contrarily they would have protection over it. I would let them develop a spontaneous habit of sharing through some working procedures or rules.*

A: It means that though your attitude is much softer, you still have some rules. That is to say, whether the rule is detailed or not at least there is something you can follow. So, you hope that through such rule they can build up such habit or even behaviour pattern without being asked. Your attitude is not just so strict.

B: *Like President Enterprise, the company I worked for. It is a very big company. Every manager has*

their own styles in that company. I saw the best one is owned by a manager in the milk department. He is willing to bring his people to go on holiday, for instance, every quarter for a domestic tour and every six months for an international tour. It is free for his people. After having dinner at night of those days, he would hold some gatherings. I think this is the best opportunity for everyone to share what they have learned recently with the others. There are several advantages for this. Firstly, everybody knows what happened. Secondly, their manager knows what happened. And, thirdly, it can be recorded if the manager wants. Long time ago, one thing occurred in our company. I think this is the thing that we all need to do self-criticism. One day, we invited a person to do consultation for us. The first sentence asked by him was "What is the way of success of the product Mei-Shone Red Tea since it has been so successful". No one was able to answer that question. Really, no one answered that question. No one has ever seriously looked at this question. No one has recorded the way it succeeds. That is to say, no one has ever analysed why it succeeds. If we have no idea of how certain products succeed, we then would have no idea of how certain products fail. We cannot duplicate its success since we do not know how it succeeds. Hence, I think that firstly every product has its way of success, it has to be recorded and analysed. Secondly, every product has its way of failure, it also has to be recorded and analysed. Our way of doing was while certain products were off the shelf, we then created something new. Of course, you could keep saying that we always have products shown in the market. But, the problem is the profit would be hard to increase. In fact, every product has its way of success as well as its way of failure. I think they have to be combined. President Enterprise is a large food company with so many products. I think each product has to be recorded.

A: So, given what we have talked about and from your experience and opinions, what is knowledge management from your point of view as a manager?

B: *I think that knowledge management has many definitions. For managers, the only thing they have to do is to let everyone reveal their knowledge. Knowledge can then be managed. Otherwise, how to you manage? So, how do you induce their knowledge which certainly is beneficial to the company? You first have to have a clear idea of what do you want from them. Then, you get them to speak out. When something is spoken out, it must be shared with the others in the department. When it is disseminated, I hope that new knowledge can again be created and then shared. I think this is a kind of circle. This is knowledge management in the department.*

A: So, from what you say, it seems to me that the most important part of knowledge management is about the willingness of everyone to share out their own knowledge and experience.

B: *I think that before sharing there must have a process of inducing. In my opinion, the most important thing is how to induce their knowledge which is good to the company. While things get induced, sharing becomes easier. You can create certain occasions for everyone to share. I think it becomes easy. So, the first important thing is how to induce them to make knowledge explicit.*

A: Right. Apart from what have been discussed as converting explicit knowledge to another explicit knowledge through editing and combining, what you just talked about is another kind. In my opinion, it is another kind of knowledge conversion, converting tacit to explicit. No matter how much time

people stay in this or previous companies, there must have something in their heads.

B: *So, I think that explicit comes from tacit. I think there are many ways of inducement. Firstly, let them write, for instance, weekly reports. Secondly, let them write their own working diaries or manuals. I think these are good methods. Afterwards, about how to do sharing, I think this is the time for managers. If they are willing to turn tacit into explicit, there is no problem for the other things. Of course, it is also important to combine explicit things. But, I think that it is much easier than inducing tacit to explicit.*

A: It is because once being induced from tacit to explicit, it would be easy to do the rest of the work. No matter being recorded by tapes or written on paper, it becomes explicit and requires further analysis and editing.

B: *It is easy to do it. It can be achieved by mankind.*

A: So, you mean that the point relies on how to make it explicit from tacit.

B: *That's right.*

A: That is about the problem of willingness, for instance, the willingness of speaking out and writing down.

B: *That's right. One more thing. This is a topic that talks about combination, isn't it? I think that combination should have a premise that tacit is already induced to explicit. Otherwise, tacit cannot do combination by itself. So, I think the most important thing for knowledge management in the whole department is knowledge inducement. It is the most important.*

A: In the beginning, I said that knowledge has two kinds as tacit and explicit. Something that we have talked about is so-called combination by which explicit knowledge is converted to another explicit knowledge. There is another conversion called externalisation, referring to changing tacit to explicit, making something externalised. In fact, there is another conversion called internalisation. This involves in a process in which explicit stuff becomes tacit. What does it mean by converting explicit to tacit? Take book or report as an example. Books or reports are objective facts. They are explicit. While a book is read by ten persons, everyone gets different stuff from it. The stuff they got becomes unique and tacit to them. Probably, the stuff is like idea or concept. So, this is the process of converting explicit to tacit. We divide knowledge conversion into these kinds. In normal business environment, these processes probably occur continuously.

B: *Jumpily. I think they occur jumpily. If you just simply combine explicit stuff, I think it is easy to do it. But, I think the usual situation in a company is things are done jumpily. For instance, things are changed from tacit to explicit and then get combined. That is to say, knowledge management is normally like this in a company. If we purely deal with explicit stuff, I think it would be much easier. The process would be much easier.*

A: If it only involves in explicit stuff, because they are existent and objective facts, it is easy to deal with them. Of course, nowadays, a much more difficult and complicated part goes to tacit stuff, no matter tacit to explicit, explicit to tacit or even tacit to tacit. What does it mean by tacit to tacit? It is like the process of influencing unobtrusively and imperceptibly. Through probably some feeling or

observation, people learn so-called knack from the others invisibly. No explicit stuff is possibly involved in this case since it is obtained through observation, imitation or even being together in the same environment. It is like apprenticeship in old times. In fact, knowledge conversion has many kinds, and they are different after all and they have different situations. For instance, we started with the combination which is much easier to be dealt with. We also talked about your understanding of knowledge management as inducing employees to speak out their tacit stuff. That is so-called tacit to explicit. If we today compare these two, one is explicit to explicit and the other is tacit to explicit, my interest in this comparison is as a manager would you have different attitudes towards them?

B: *Yes, I would.*

A: How? Would you have different attitudes due to different characters of them?

B: *Certainly would be different. I think it would be totally different. I give you an example. How to combine with explicit stuff? Firstly, we take how to do learning in an organisation into consideration. There are many ways of learning. I can imitate the advantage of other competitors. Alternatively, I can learn something from a book. Suppose that I want a person or a team to combine with explicit things. I actually have many simply ways. For instance, I want this team develop a system. Perhaps, similar systems have already been developed by other companies. I therefore would give the development results done by other companies to my team to let them do comparison and combine them. I think that this is a good method. Alternatively, if I know that some books in the bookshop are relevant to their product development, I would recommend them those books. Let them do comparison, combine with other people's advantages and get rid of other people's disadvantages. I also think that this is a good way. So, to this stuff, I think that as a manager, I would manage this by playing the role of an assistant. But, if it is about changing tacit to explicit, as a manager I would not play such role as an assistant. It is very difficult. Whilst someone is induced to say something, they would think that they rather than their managers play the leading role. They are the one who give the solution. Yet, whilst combining explicit with explicit stuff, managers are the one who provide the solution. Managers have different roles in these different circumstances. Also, they have different difficulties. If managers are solution providers, the subordinates would think their managers are helping them so that they have to totally cooperate with their managers. They would think that their managers are really good to them. Nevertheless, if managers are not in the position of helping the subordinates but in the position of inducing the subordinates to reveal their knowledge, they would think that they are the one who has the solution. So, they are the boss.*

A: So, you mean that essentially these two different knowledge conversions have different levels of importance. Or, they are important to different people.

B: *Right, totally different.*

A: About changing tacit to explicit, those who own tacit stuff are important, not managers.

B: *That's right.*

A: Managers might need to fawn on them.

B: *Since they think that they are the one who owns tacit stuff.*

A: They have something considerable in their heads.

B: *That's right.*

A: In another case, it is managers who have plenty of resources to support the subordinates to do what they ought to do.

B: *I think in this case managers should play the role of an assistant.*

A: So, from what you say you think that managers' attitudes should be different since the relationship in each case is different.

B: *That's right. Whilst I want them to combine explicit knowledge, I have to be a manager who is much stricter. For instance, I can ask my subordinates to read three books within certain period of time. In this case, you can play the role of a requester. However, whilst I want to induce their tacit stuff, I become a weakling. I have to keep my body as soft as possible.*

A: So, basically, as a manager your attitudes towards them are different so that the measures you use would also be different.

B: *Totally different.*

A: As a whole, my research is about this knowledge management stuff. I just use the angle of organisational behaviour to look at this thing. That is to say, I look at this thing from a leader's point of view. How does a leader look at this thing? How does a leader manager this thing? To us, whatever raw knowledge is tacit or explicit, without that kind of conversion, knowledge would not be re-generated. Therefore, management is involved in the conversion process to make it efficient and productive. From this perspective, I want to know what should be done by managers. Also, I want to whether they have different attitudes whilst they face different conversions. Mainly, I want to see whether there exist differences. I look at knowledge management much from this angle.

B: *Actually, I think mankind has emotions of love, hatred and grief. It applies to managers. I think that managers should transfer these emotions into their management means. That is to say, their management means sometimes can be full of love. Or, sometimes their means can be strict. I think that managers have to fully control their means.*

A: I realise that managers have to play different roles in different occasions. But, in the case of knowledge management, ...

B: *It is also applicable to knowledge management. There are many stages in knowledge management. You have to consider what kind of role you should play at certain stage. Sometimes you become a friend; sometimes you are back to a manager. I think you have to adjust yourself by different assignments.*

A: OK. I understand.

APPENDIX H Comments on Socialisation and Combination from the perspective of L-TF-II

Examples	Comments on Socialisation	Comments on Combination
The subject talks about being a role model.	<ul style="list-style-type: none"> ➤ In my own experience, I probably will set a good example with my own conduct. (S-004) ➤ I will be much setting a good example with my own conduct. (S-004) ➤ It is not necessarily to be an example. It is just that they can follow my pattern in the beginning. (S-004) ➤ For me, I will set a good example with my own conduct. Even for tiny things, I will do it by myself. So, the whole team will follow your steps. (S-004) ➤ I intend to know the potential problem which may be faced by other people. I will go trying first. I will try to solve the likely problem and build up my own way of solving it. (S-004) ➤ It becomes much like a kind of setting a good example with your own conduct. (S-008) 	<ul style="list-style-type: none"> ➤ It is very important for a manager to set a good example with his/her own conduct. If managers take things seriously, their subordinates will take things seriously as well. (C-016) ➤ (Managers) have to set a good example with their own conduct by sharing out their ideas. I think this is the best situation for employees to combine their explicit knowledge. (C-020)
The subjects talks about trust	<ul style="list-style-type: none"> ➤ You have to let them know that you as a manager can be trusted. (S-006) ➤ If you talk about production line in general, there have many groups. The trust between group leaders and group members will be much important. (C-010) 	<ul style="list-style-type: none"> ➤ ... for this kind of technical staffs, you have to fully trust them. (S-006) ➤ ... about this kind of thing, I think that everybody has their own basic abilities. So you have to trust them. (C-003) ➤ ... my management is I will not pay much attention to their personal techniques or something as they have reached a basic level. (C-003)

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ ... since everyone is a mature person so they must know what they ought to do in their work. (C-004)</p> <p>➤ How do leaders make them to generate much explicit knowledge? I think it has to depend on the unspoken consensus between the leader and his/her team. This is about trust. (C-010)</p> <p>➤ I think that we have to trust each other. (C-010)</p> <p>➤ You have to have trust between you and your members. (C-010)</p> <p>➤ As a leader of the department or team, if you do not let your people ... have trust in you, you may not be able to grasp a lot of knowledge from their heads. (C-010)</p> <p>➤ I will try to think about how to keep or gain more trust from them. (C-010)</p> <p>➤ You have to make them trust you that you are the one who is suitable for them to get along with. (C-010)</p> <p>➤ You have to make them trust you that you are the one who is suitable to tell them something. (C-010)</p> <p>➤ It in fact is a kind of building up trust. (C-010)</p> <p>➤ If there is no trust in the department, the team members at most follow what the system tells them to follow, do what the document wants them to do. (C-010)</p> <p>➤ ... if you have no trust between you and your leader, you probably would only follow the SOP or job description to do what you ought</p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>to do. (C-010)</i></p> <ul style="list-style-type: none"> ➤ <i>Trust is only assistant power. It can only let people be more comfortable before participating in anything, including combining all of the knowledge ... (C-010)</i> ➤ <i>... the most important thing is your people must have trust in your style. It is quite important. (C-016)</i> ➤ <i>... you do not need to pay much attention to them. They know how to do it by themselves. (C-019)</i> ➤ <i>You just trust them. They will do everything for you. (C-019)</i> ➤ <i>... if you trust them and then give them continuous encouragement, I think that they will work for you to death. (C-019)</i>
<p><i>The subject talks about displaying a sense of power and confidence.</i></p>	<ul style="list-style-type: none"> ➤ <i>It means that you have to push them. (S-001)</i> ➤ <i>As a manager, you have to group your people together and make them heading to the same direction. (S-003)</i> ➤ <i>... you have to have appropriate degree of authority to let them follow you. (S-006)</i> ➤ <i>Authority still needs to be implemented. (S-008)</i> ➤ <i>I will start to push the team leaders and want them to make an improvement plan for next month. (S-010)</i> ➤ <i>If it needs to be strict, I will be strict. (S-010)</i> ➤ <i>... we have to let them know our requests. (S-014)</i> 	<ul style="list-style-type: none"> ➤ <i>As a manager, I certainly have some power so the employee must be able to ... no matter they are happy or not, they must obey my instructions. (C-003)</i> ➤ <i>... when I make some decisions or give some orders, they have to obey me. (C-003)</i> ➤ <i>From my point of view as a manager, I am in charge of the project. No matter it is done well or badly, I will take the full responsibility of it ... If it is done badly, the top management will come to me, not to my people ... Everything stops on me. (C-005)</i> ➤ <i>There are probably four or five solutions, but one has to be chosen.</i>

Examples	Comments on Socialisation	Comments on Combination
	<p>➤ <i>I usually tell my people that though I am a female, I know everything and I am capable of doing everything. I send this message out. (S-015)</i></p> <p>➤ <i>I think that you still have to give them some pressure. (S-017)</i></p>	<p><i>In that time, how to decide which is good and which is bad? It has to depend on a leader saying that whatever good or bad, whatever the decision is right or wrong, this is the way we have to go. (C-009)</i></p> <p>➤ <i>I have to take the full responsibility of the success of this Division. They have to obey me. (C-016)</i></p> <p>➤ <i>My way of doing is if this is something that has to be done, I would hold a meeting. In the meeting, I would tell everyone that this is what we are going to do. (C-018)</i></p> <p>➤ <i>Whilst I want them to combine explicit knowledge, I have to be a manager who is much stricter. (C-020)</i></p>
<p><i>The subject talks about the importance of having a strong sense of purpose.</i></p>		<p>➤ <i>... before doing a certain thing, we roughly have to know the purpose of doing it. (C-008)</i></p> <p>➤ <i>In the process of our leading, we first have to let them know what the project they are doing is all about ... (C-011)</i></p> <p>➤ <i>... as our job is to develop the system of the convenient store, we have to realise why we need to develop certain system. (C-011)</i></p> <p>➤ <i>... you have to understand what it is for in the future. (C-012)</i></p> <p>➤ <i>You have to ask why we should do this. (C-012)</i></p> <p>➤ <i>I will tell them to deeply understand what they are doing is all about. (C-012)</i></p> <p>➤ <i>... you have to let them realise the reason of doing it. (C-018)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ ... you have to let them know ... what it stands for behind it. (C-018)</p> <p>➤ I try to think about the purpose of doing it. (C-019)</p>
<p>The subject talks about capturing hearts and minds.</p>	<p>➤ If you want to lead them, you first have to lead their hearts. (S-005)</p> <p>➤ It is not easy to lead every employee. You have to lead their hearts. (S-005)</p> <p>➤ This is not about their know-how; this is about their hearts. You have to control their hearts. (S-008)</p> <p>➤ Hearts. Identification and attitudes are all about hearts. (S-008)</p> <p>➤ I believe that heart is very important. Without heart, it is useless to talk about something else. (S-008)</p> <p>➤ If you want to lead people, you have to lead their hearts. (S-008)</p> <p>➤ ... before leading people, you have to lead their hearts first. (S-010)</p> <p>➤ Being soft is to lead their hearts. (S-010)</p> <p>➤ Everyone's heart is different. You have to catch their hearts ... (S-010)</p> <p>➤ It is heart. How to change their thought and let them be willing to contribute. This kind of power must be greater than that. (S-018)</p>	<p>➤ Every office worker's style, conception and loyalty to the company are different. Hence if you attempt to lead them, you better win their hearts first. (S-005)</p> <p>➤ You have to lead their hearts. (C-014)</p> <p>➤ ... you need to use something to buy their hearts. (C-019)</p> <p>➤ You still have to lead their hearts. (C-019)</p>
<p>The subject talks about influencing the mindset of subordinates.</p>	<p>➤ In fact, I have not thought about how to help new engineers understand. I just tell them my thoughts constantly, everyday. (S-002)</p> <p>➤ Usually, I intervene in an idea itself. (S-003)</p>	<p>➤ ... as it says here that explicit knowledge may need to be processed, categorised, edited and combined. If you and your members have consensus about it and feel that it is right to do that, it seems that you can get better results. (C-010)</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>➤ <i>I will do my best not to get involved, but I will step in their ideas. (S-003)</i></p> <p>➤ <i>I only step in their ideas. (S-003)</i></p> <p>➤ <i>This is your basic requirement. You have to achieve it. If not, that is your problem. This is an idea. (S-003)</i></p> <p>➤ <i>I think it should be an ... idea. An idea-leading manager. (S-003)</i></p> <p>➤ <i>... the most important thing for you is to change the ideas of your people ... (S-003)</i></p> <p>➤ <i>I only intervene in their ideas. (S-003)</i></p> <p>➤ <i>Whatever the means may be, just to form their identification with the company ... (S-008)</i></p> <p>➤ <i>During the process of accomplishing the assignment, there must have some conflicts between them. Through dealing with the conflict, they can develop the common feeling of working together. After a while, they can have consensus about everything. Everyone will have the same mind. (S-009)</i></p> <p>➤ <i>... my attitude is consistent. My attitude of getting consensus is consistent. (S-009)</i></p> <p>➤ <i>I think some people or most people have religious belief. We can use such power to change people's attitudes. (S-018)</i></p> <p>➤ <i>Religion is so powerful to make people change completely. It can change a person's attitude and behaviour totally. If you can lead</i></p>	<p>➤ <i>You just need to tell them what your idea is and why constantly. (C-017)</i></p> <p>➤ <i>It is true that you face different thoughts by different employees. Therefore, we actually emphasise something called mindset. (C-018)</i></p> <p>➤ <i>... when new members are just recruited, you cannot use them right away. You have to shape them. (C-018)</i></p>

Examples	Comments on Socialisation	Comments on Combination
	<p><i>your group with more kindness and care, like the atmosphere in religious groups, your members will be willing to do anything, including revealing what you want them to reveal. (S-018)</i></p> <p>➤ <i>I think that religion always has great power. So when people are gathered together for meeting, chatting or something like that, you can introduce such idea into them. Then, you can gradually change their attitudes and let them be more willing to contribute it to everybody. (S-018)</i></p> <p>➤ <i>Like many emperors, they introduced religion into their countries. This way of doing was about to change the atmosphere of their societies. Besides, it was also helpful to the stability of their governance. (S-018)</i></p> <p>➤ <i>... for invisible one, like religion, you cannot imagine its potential effect on human being. (S-018)</i></p>	
<p><i>The subject talks about his/her most important values and beliefs.</i></p>	<p>➤ <i>... in the long run, I still like the way of having middle-of-the-road policy. (S-006)</i></p>	<p>➤ <i>Only fairness can get rid of side effects. (C-001)</i></p> <p>➤ <i>To carry out knowledge management or knowledge sharing, I think an important thing is fairness. (C-001)</i></p> <p>➤ <i>We just want to provide the employee with an idea that it will be amended anytime and the purpose of doing so is to make it become better, not fairer. (C-003)</i></p> <p>➤ <i>Here, there is no such thing that everyone is equal or something like</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>that. This environment itself is full of competition. There is nothing fair or unfair. (C-003)</i></p> <p>➤ <i>... you have to let the employee know that there is no so-called fairness. (C-003)</i></p> <p>➤ <i>... I will tell my people that I am unfair to everyone. (C-003)</i></p> <p>➤ <i>... the incentive is I let you feel fair ... (C-016)</i></p> <p>➤ <i>You have to let your colleagues feel that everything is fair. This is the most important thing. (C-016)</i></p>

APPENDIX I Comments on Socialisation and Combination from the perspective of L-TF-IM

Examples	Comments on Socialisation	Comments on Combination
The subject talks about creating an internal culture.	<ul style="list-style-type: none"> ➤ I think it has to be open. (S-001) ➤ Have to give them environment to create. (S-007) ➤ ... open environment. (S-007) ➤ Do not let them have the feeling of impatience and impetuosity. Let them feel that if they enter this environment, they will have a target, direction to follow. (S-014) ➤ Do not let them float around and have no idea of where to go. If they do not know where to go, they will be in the situation of floating. (S-014) ➤ You must let them have the feeling of stability. (S-014) ➤ After they enter into the company, you must let them have the feeling of stability. (S-014) ➤ Basically, you have to give them stability. (S-014) ➤ ... you have to give them stability first ... (S-014) ➤ About human nature management and letting them have no fear of disturbance in the rear, this is for those who are willing to dedicate to the company. (S-014) ➤ ... the company has to provide them with an environment in which they can have the feeling of stability and the future. (S-014) ➤ ... it is about creating an environment that makes the employees 	<ul style="list-style-type: none"> ➤ You only need to create a great environment in which they can conduct their affairs. (C-003) ➤ being a manager, a leader, as your subordinates' knowledge perhaps is different from yours, so it turns out that everyone has to compete and cooperate with each other. They have to make progress and you also have to make progress. (C-006) ➤ Here in the Computer Division, the environment is much free so it is not so solid in management. (C-006) ➤ We are free here. (C-006) ➤ We do not have the notion of class. (C-006) ➤ We are much free in the Computer Division. (C-006) ➤ It is much free and flexible in terms of time. (C-006) ➤ It is much fun and free. (C-006) ➤ In the Computer Division, it is much open. (C-006) ➤ You have to create a competitive environment. You have to let everyone has competitors. (C-007) ➤ You have to let them feel that this is the only place in which they can make progress, have the future and increase their ability. (C-007) ➤ You can read many reports that salary is not the best way of promotion. Especially for those youngsters nowadays, they probably

Examples	Comments on Socialisation	Comments on Combination
	<p><i>think that this place has hope. (S-015)</i></p> <p>➤ <i>Let them enter into that kind of situation. Let them have some space of imagination and innovation. You have to provide them with the environment. (S-016)</i></p>	<p><i>care much about whether this work can make them feel more comfortable. (C-011)</i></p> <p>➤ <i>In fact, you should let a unit generate some kind of so-called positive competition. (C-014)</i></p> <p>➤ <i>You have to let the member of a unit feel that they are the most important people in their managers' eyes. (C-014)</i></p> <p>➤ <i>... it is about to create an environment in which nobody intrigues against each other. (C-016)</i></p> <p>➤ <i>It is certain that a unit manager or the company has to create such environment. After having such environment, you then can ask something from the employee. I think this kind of thing is reciprocal. (C-018)</i></p> <p>➤ <i>You have to let them have the desire to work. (C-019)</i></p>
<p><i>The subject talks about a compelling vision of the future.</i></p>		<p>➤ <i>Let them feel that they have future. I think this is more important than giving them high pay or good welfare. (C-007)</i></p> <p>➤ <i>... for those engineers ... they want to have the sense of belongingness ... they want to feel that this place has the future. (C-007)</i></p> <p>➤ <i>The vision at the level of department must be clearer than the vision at the level of whole company. (C-010)</i></p> <p>➤ <i>... you have to let your people have some idea and feeling about the</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>vision. After that, the subsequent missions, strategies, procedures and actions can be identified by them and be conducted smoothly. (C-010)</p> <p>➤ Like here, the vision I set up is quite clear but it still consists of some tacit components. (C-010)</p> <p>➤ I told them that they had to be very clear about their visions for next ten years. (C-012)</p> <p>➤ ... somebody likes to work in a company which has the future. If so, we have to plan for the future direction of the company and announce it in the company meeting. (C-013)</p> <p>➤ You have to let them know that the company not only involves in what we are currently doing, but also will do some other things someday. (C-013)</p> <p>➤ You have to let them know that the company will be led to another world. (C-013)</p> <p>➤ ... You have to let your people feel that if they work in this place, they can have challenges and the future. (C-014)</p> <p>➤ You have to give them not only schedules, but also hope. (C-014)</p> <p>➤ ... you have to tell them what kind of thing they should be learning and how it can bring them a better future, including the increase in salary. (C-014)</p>

Examples	Comments on Socialisation	Comments on Combination
<i>The subject talks about the need for long-termism.</i>	<p>➤ <i>If you want to experience this process and gain something from it, long-term and continuous implementation is required. Without long-term and continuous implementation, I think it becomes temporary and meaningless. (S-008)</i></p>	<p>➤ <i>... you have to see things far. (C-009)</i></p> <p>➤ <i>... As a leader, while making some decisions, you cannot rely on current situation to make decisions; you have to rely on situations in five years ahead to make decisions. (C-009)</i></p> <p>➤ <i>... you have to look far, not look near. (C-009)</i></p> <p>➤ <i>You have to look far. (C-009)</i></p> <p>➤ <i>As a leader, you have to see things which may take place after five or ten years. (C-009)</i></p> <p>➤ <i>When you do development, research development, you have to think deeply. (C-009)</i></p> <p>➤ <i>I sometimes stimulated my team to do something long-term. (C-012)</i></p> <p>➤ <i>I usually look at things further. (C-019)</i></p>

APPENDIX J Comments on Socialisation and Combination from the perspective of L-TF-IC

Examples	Comments on Socialisation	Comments on Combination
The subject talks about an individual as having different needs, abilities, and aspirations from others.	➤ As a manager, you better have certain understanding about them in advance ... (S-004)	➤ Normally, we will have different ways of managing them. It depends on people. (C-005)
	➤ For some people, you have to pay much attention to them. For some people, you have to keep on explaining to them until they totally understand what they are asked to do. For some people, you really have to condemn them. For some people, they only need your care. (S-005)	➤ As a matter of fact, there are many kinds of people. It has to depend on different people. (C-005)
	➤ So, how do you lead these people? You cannot use the same heart or manners to treat them. (S-005)	➤ Usually, for most of people ... especially females, I nearly do not blame them. Usually, I use the way of encouragement. For females, really it is hard to ... since they are quite emotional after all or ... (C-005)
	➤ If you want to lead the employees in a company, you have to consider what they really want. (S-005)	➤ Everyone is different in terms of character, ability and working attitude ... if you want to consider it much reasonably, you have to know what everyone's requirement is ... (C-006)
	➤ ... you say you want to use the same principles and moods to teach them. It really cannot work. Everyone's thinking, manner and comprehension are actually different from others. (S-005)	➤ I just said that you have to explore ... their potential. What are their characters? Where are they suitable to go? This is something you have to find out. (C-007)
	➤ ... you have to lead them in accordance with their aptitudes. (S-005)	➤ I have to realise where the strongest part in each of my members is in advance. (C-009)
	➤ Nowadays in Taiwan, leading pattern also has to depend on different ages. (S-006)	➤ Everyone has their strongest parts; also they have their weakest parts. I must realise where the strongest and weakest parts of each of my members are. (C-009)
	➤ ... with different ages, you still have to have different management patterns. (S-006)	
	➤ Do you know what the most popular management for those who are	➤ If I am just graduated from the college, my way of doing would be

Examples	Comments on Socialisation	Comments on Combination
	<p>twenty years old is? Horoscope. With different horoscopes, you have to use different management means. (S-006)</p> <p>➤ ... people have to be treated individually. After being treated individually and put in the right place, they would enjoy their works at last. (S-008)</p> <p>➤ For me, the spirit and style of doing things are constant, but sometimes ways of doing things would depend on ... different people. (S-008)</p> <p>➤ My experience is it has to depend on the people you are leading. (S-009)</p> <p>➤ Usually, with different people having different requests, we will treat them differently. (S-009)</p> <p>➤ For some people, they just do not like to talk about production stuff. In this case, you have to ask about their families, their children. Some people like to hear this. When they hear you asking this, they will be in good mood. Some people like to talk about politics. So you have to talk about politics with them. (S-010)</p> <p>➤ Here, you further have to consider different ages. What do those who between 20 and 30 want? They want growth. People between 30 and 50 want stability. So, our management is differentiated from different ages. (S-015)</p> <p>➤ Your question is about the manager's attitude, isn't it? So, I tell you</p>	<p>different from the others. Because of just graduating from the college, I have nothing and do not know anything, so I just want to learn, learn as much as I can. I would not care so much about money. However, if you today have children, house(s) and wife, I tell you what your biggest requirement is. It is money. Only money can make you secure and stable. (C-009)</p> <p>➤ Everyone has different backgrounds. Everyone has different thoughts. Everyone has different growing directions. So, everyone has different requirements. (C-009)</p> <p>➤ I personally think that good leaders must be able to adopt different ways of doing by different circumstances ... With different people in different personalities, you may need to lead them with different ways. (C-010)</p> <p>➤ I think that my first way of doing will be to observe his/her personality ... You have to spend some time to understand what each of your members wants. (C-010)</p> <p>➤ After knowing what they want, you then can realise what kind of action should be taken. (C-010)</p> <p>➤ I will first observe them or get along with them to see what they really want. (C-010)</p> <p>➤ I will see whether I can sense what they really want from their behaviour. (C-010)</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>➤ <i>that it depends on different circumstances. (S-015)</i></p> <p>➤ <i>... it has to depend on different circumstances. (S-015)</i></p> <p>➤ <i>I usually say that it has to depend on different circumstances. Management itself should be live. (S-015)</i></p>	<p>➤ <i>To humans, as I said, you just go to understand their characters. (C-010)</i></p> <p>➤ <i>... you have to understand who your target is. Take programme design engineers as an example, you have to understand what they want from doing this job. What do they love to do? (C-010)</i></p> <p>➤ <i>I have to understand everybody's specialities as well as characters. (C-012)</i></p> <p>➤ <i>... to different people, you need to have different ways of rewarding. (C-013)</i></p> <p>➤ <i>Everyone's requirement is essentially different. Somebody wants money, somebody wants stability and somebody wants the future and so on. (C-013)</i></p> <p>➤ <i>As I said, there are many different people with different requirements in a company. Somebody wants money, but somebody wants a sense of achievement. (C-013)</i></p> <p>➤ <i>... first of all, you have to see what your people want, the type of your people ... (C-014)</i></p> <p>➤ <i>Of course, it depends on different people. Some people are very strong in desiring knowledge. If you give specific assignments to those who show great interests in them, they will think that they are highlighted. If some people care much about salary, you just give them more. (C-014)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<ul style="list-style-type: none"> ➤ <i>As I said, it has to depend on different people. (C-014)</i> ➤ <i>... if someone are not so in need of money and they are very good in technical skill, you have to match up their characters. (C-014)</i> ➤ <i>They must be different as people are different and everyone's characters, habits and opinions are all different. (C-014)</i> ➤ <i>... if some of your people are not so familiar with computers, you probably will assign them to deal with some basic work. However, if some other people are quite familiar with computers, you probably will let them manage something like electronic media ... for the work like personnel stuff, as the format is quite fixed, you may assign those who are not familiar with computers to take care of that stuff. However, if the work involves doing programming, you will get some people having such kind of idea to do it. There must have some separation. (C-014)</i> ➤ <i>... you have to base on the character of the staff to do division. (C-014)</i> ➤ <i>I will put much emphasis on what certain person's advantages are and where I am going to use them. (C-016)</i> ➤ <i>While you talk to them, stimulate them, you have to depend on different people. (C-018)</i> ➤ <i>Some people do not care about money. They just hope that, for instance, they can learn more. For this kind of people, you just give</i>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>them this kind of incentive. For some people, however, you know in the beginning that you can only use something much tangible, material to attract them to do that. (C-018)</i></p> <p>➤ <i>... you still have to depend on different employees. (C-018)</i></p> <p>➤ <i>You have to assign someone to do things which are harmonious with their characters. If so, they will be responsible for themselves. (C-019)</i></p>
<p><i>The subject talks about caring or treating subordinates as families.</i></p>	<p>➤ <i>If you want to lead these people, you certainly have to concern about them. (S-005)</i></p> <p>➤ <i>It would be better if you can also concern about their families and their living habits. (S-005)</i></p> <p>➤ <i>You have to care about them. Sometimes, you even need to pacify their emotions. (S-005)</i></p> <p>➤ <i>... you have to care about them. (S-005)</i></p> <p>➤ <i>I will let them know that their supervisor ... really cares about what they are doing. (S-009)</i></p> <p>➤ <i>... you still have to keep good relationship with other people. (S-010)</i></p>	<p>➤ <i>Mainly, what we are doing as a little manager is to get along well with our people. (C-005)</i></p> <p>➤ <i>When I am off duty and take off the manager clothing, I am their friend. That's right. In my opinion, I treat them as my brothers. (C-005)</i></p> <p>➤ <i>I do not see my people as my subordinates. I see them as my brothers and sisters. (C-012)</i></p> <p>➤ <i>You have to love and take care of them. If you do that, they will do anything for you. (C-012)</i></p> <p>➤ <i>I did care about them. I even cared about my colleagues' families. When their husbands/wives or children were ill, I asked them whether they needed any help. (C-012)</i></p> <p>➤ <i>I did care about them. (C-012)</i></p> <p>➤ <i>Basically, I see my people as my brothers. (C-019)</i></p>

Examples	Comments on Socialisation	Comments on Combination
<p>The subject talks about supporting or satisfying subordinates.</p>	<p>➤ They should have opportunities to express their own opinions. (S-001)</p> <p>➤ ... even give them more time. (S-001)</p> <p>➤ If they have problems, I will give them the best support, let them have the strongest power to do what they should do. (S-003)</p> <p>➤ ... you have to respect other people. (S-004)</p> <p>➤ You cannot say that your ideas are ideas but other people's ideas are not ideas. (S-004)</p> <p>➤ I will not be saying that since I am here for quite a long time so I know better and much than my people. I can also learn from their experience. (S-004)</p> <p>➤ I think that I will give my people space, rather than ask them to follow my way. (S-004)</p> <p>➤ ... you have to encourage and praise them. (S-005)</p> <p>➤ Human being really lives on encouragement and praise. If you do not praise them, you will be terrifying to be a manager. (S-005)</p> <p>➤ ... respect (S-007)</p> <p>➤ I will not regulate relevant rules. I will give them space to develop. (S-010)</p> <p>➤ Give them space. (S-010)</p>	<p>➤ I am in charge of taking care of them. (C-019)</p> <p>➤ ... for people who are involved in technical jobs, you probably need to give them more space, more independence. (S-006)</p> <p>➤ Instead of paying too much attention to it, I will be using much so-called tacit, invisible skills. About so-called invisible skills, for instance, they are like giving a facial expression, using my eyes or even adopting different tones while speaking. If you use this manner to ask your people something, they will feel differently. (C-003)</p> <p>➤ To require more, it has to depend on mutual stimulation between people. (C-003)</p> <p>➤ Here, our workload is not so heavy that someone has to do something within certain period of time and after it is down they are forced right away to do another thing. We will not do that. We probably will let them judge and do what they have to do. (C-004)</p> <p>➤ ... if talking about something explicit as the schedule you just mentioned, if a week is given to them to finish it, usually I will not pay my attention to it for the first three days or so. I will let my people to elaborate it freely. (C-005)</p> <p>➤ I am not being laissez-faire all the time. Sometimes, I will pay attention to them and help them. (C-005)</p> <p>➤ If a project needs three days to be finished, I will give them one week</p>

Examples	Comments on Socialisation	Comments on Combination
	<ul style="list-style-type: none"> ➤ <i>On the other hand, you have to be soft. (S-010)</i> ➤ <i>If it needs to be soft, I will be soft. (S-010)</i> ➤ <i>If you are really in trouble, you have to raise your problems. We then can have a discussion about them. (S-010)</i> ➤ <i>As I said that this is something in people's mind. It is something like techniques. So you cannot use the way of enforcement to want them to tell something. (S-013)</i> ➤ <i>I will not order them to do something. (S-013)</i> ➤ <i>I think that companies have to take care of employees' basic requirements. (S-015)</i> 	<p><i>to do it. Given that, if the first three days of the week are really wasted, it will not cause any effect to the whole project. (C-005)</i></p> <ul style="list-style-type: none"> ➤ <i>I will give my people double time to do what they ought to do. (C-005)</i> ➤ <i>You have to do your best to arrange suitable jobs for them. (C-007)</i> ➤ <i>... you have to search for help or listen to their opinions. (C-008)</i> ➤ <i>If you talk about the problem of style, I much tend to cooperate with the employee. (C-008)</i> ➤ <i>To cooperate with the employee to finish the assigned mission. (C-008)</i> ➤ <i>If they have any problem or difficulty in the middle of doing it, we will try to help them to solve the problem and not to exceed the deadline. (C-008)</i> ➤ <i>I would encourage my subordinates to do what they want to do. (C-009)</i> ➤ <i>... what is the basic requirement for everyone? You have to fill their requirements. (C-009)</i> ➤ <i>Sometimes, I will ask them to take a break. I will tell them to take a rest or have a nice sleep. (C-012)</i> ➤ <i>... at that time of doing the programming, as we cared about this kind of situation, we had to leave some space for the future flexibility. (C-012)</i>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>If there are some problems, we have to have a discussion and come out some conclusions. (C-012)</i></p> <p>➤ <i>They hope that other people can pay attention to their techniques. Given that, if you have some work involving in advanced technologies, you can assign it to them. For instance, you can give them some assignments like website design or something. (C-014)</i></p> <p>➤ <i>If you want to manage them or build up certain relationship with relevant people, you must have some common language with them. You must have some common perception. (C-014)</i></p> <p>➤ <i>... for those who are in the information department, as I said, some of them have Master or even PhD degrees. Their quality is quite high and their autonomy is quite strong. You have to respect them. (C-015)</i></p> <p>➤ <i>You have to pay much, cautious and careful attention to them. (C-016)</i></p> <p>➤ <i>Besides salary, people also need respect. You cannot just give them salary and then tell them to do what you want them to do. (C-018)</i></p> <p>➤ <i>... someone may still not be willing to do it. If so, we would give them more opportunities to try. (C-018)</i></p> <p>➤ <i>I would set up several topics and then listen to their opinions about them. (C-018)</i></p> <p>➤ <i>To manage R&D and IT staff, I will manage them with more</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>freedom. (C-019)</i></p> <ul style="list-style-type: none"> ➤ <i>You have to utilise something in their heads. You cannot give them too many regulations. (C-019)</i> ➤ <i>I will not regulate what you have to do. (C-019)</i> ➤ <i>You have to encourage them timely and then let them feel that you stand in with them. (C-019)</i> ➤ <i>You cannot set up strict rules. (C-019)</i> ➤ <i>I think managers' characters are, first, they cannot be too strict... (C-020)</i> ➤ <i>I think that firstly managers cannot be too strict with their employees. (C-020)</i>
<p><i>The subject talks about helping subordinates to develop their strengths.</i></p>	<ul style="list-style-type: none"> ➤ <i>If everyone can ... grow technically or even can get trained, they would think that the company really take care of them. (S-001)</i> ➤ <i>Assign something to them and see how they do it. (S-001)</i> ➤ <i>It seems to me that I will use training and education to strengthen such stuff. (S-001)</i> ➤ <i>If they are not clear about certain things, we will want them to study harder. We make them familiar with something through this way. (S-001)</i> ➤ <i>You have to give them some pressure, some incentive. There must have such arrangement. This can remind them that they have to</i> 	<ul style="list-style-type: none"> ➤ <i>... if we have newcomers coming, we definitely will arrange appropriate training courses for them. (C-002)</i> ➤ <i>We will assign suitable persons to train them. (C-002)</i> ➤ <i>In the beginning, we will plan what kind of thing they should learn and when. (C-002)</i> ➤ <i>... we will be examining the whole situation of their learning. (C-002)</i> ➤ <i>We will guide them continuously. (C-002)</i> ➤ <i>... sometimes we will assemble those who are experienced as well as novices to discuss something. Everyone can share their experience</i>

Examples	Comments on Socialisation	Comments on Combination
	<p>grow ... (S-001)</p> <p>➤ ... you can ask them to do this or to do that. I think this request can also be seen as the impartation of experience. (S-001)</p> <p>➤ ... you have to do something to guide them ... (S-001)</p> <p>➤ ... you have to guide them to do something. (S-001)</p> <p>➤ When you become a manager, you must report regularly. You can impart the experience of reporting to them. (S-001)</p> <p>➤ You also need to choose someone who can take over your job. You have to do some training. (S-001)</p> <p>➤ Some people may not be familiar with this skill even if they are knowledgeable. No one can understand what they are reporting. So, we will tell them how to perform to make it clearer. (S-001)</p> <p>➤ As our department now is a small department, usually our way of doing is through training. (S-002)</p> <p>➤ ... we have some training programmes for newcomers. Some programmes can be conducted in the class room, but some have to be done in a site. (S-002)</p> <p>➤ There is not just one way of doing things. (S-002)</p> <p>➤ My suggestion to them is based on my opinion of dealing with this particular thing. But, in reality my opinion may not be right. Their own ways probably can approach the same result. (S-002)</p> <p>➤ About how to do it, I will give this question to them. They have to</p>	<p>with the others. They can discuss why they can do this or why they cannot do that. (C-002)</p> <p>➤ In general, we first will try things in small scale. We will do them from beginning to end. If we feel that by this way of doing or process the final result is good and has no big problems, we will then assemble everybody and tell them that this is what we are going to do. After that, we will tell them how to do it and what will be expected at last. (C-002)</p> <p>➤ Whilst we are in meeting, we are not only to let them report their working progress or whether they have any problem, but also to let them practice how to do things by making presentation. Some people think that this kind of thing wastes time. But I think that when you present your ideas and something involved from beginning to end, for those who are new in the company, they will learn something from it and for those who are senior in the company, they will provide you with their previous experience. Under these circumstances, everybody's experience can communicate constantly. (C-002)</p> <p>➤ Take training abroad as an example, some people are offered this kind of opportunity every year but some are not. (C-003)</p> <p>➤ If you want them to become more efficient, you just create demands for them. As long as you create demands for them, they will try to</p>

Examples	Comments on Socialisation	Comments on Combination
	<p><i>figure it out. This is the problem which involves in their specialities. (S-003)</i></p> <p>➤ <i>You have to use training and education to make them believe that the technique or trick possessed by them cannot last forever ... The purpose of this doing is to let them know that they are not possible to hold the technique forever. (S-006)</i></p> <p>➤ <i>... we have to use education and training to let them release their stuff as early as possible. Otherwise, after a while, the tacit knowledge possessed by them may become valueless. (S-006)</i></p> <p>➤ <i>... your leadership must have the character of teaching. (S-008)</i></p> <p>➤ <i>In general, teaching is based on a set of SOP. (S-008)</i></p> <p>➤ <i>I think it is important to do teaching through SOP. (S-008)</i></p> <p>➤ <i>This kind of leadership style has to do with teaching ... (S-008)</i></p> <p>➤ <i>I will give them assignments. (S-009)</i></p> <p>➤ <i>... they can directly come to ask us. Then, we will teach them. (S-010)</i></p> <p>➤ <i>If they are not doing well, I will tell them and teach them how to do it. (S-010)</i></p> <p>➤ <i>If they keep asking why, we as experienced staffs will tell them where should be paid attention to. (S-010)</i></p> <p>➤ <i>Mainly, we teach them how to make judgement and deal with particular situations. (S-010)</i></p>	<p><i>satisfy them. In the process of satisfying the demand, they will try to consider how to make it better and more efficient. (C-003)</i></p> <p>➤ <i>We will not leave someone behind and teach them nothing. We will assign someone to them. (C-004)</i></p> <p>➤ <i>In the beginning, they may not have any idea of what is going on. So we provide them with some training and assign someone to teach them, letting them have time to learn. (C-004)</i></p> <p>➤ <i>... you just have to let them participate, let them do it by themselves. Let them overcome the difficulty if they really face it. (C-005)</i></p> <p>➤ <i>... if I teach someone, someone's ability will be increasing. You can recognise it by the speed they write programmes. (C-005)</i></p> <p>➤ <i>If I teach someone two times for the same thing and they still do not get it, I will not teach them again. (C-005)</i></p> <p>➤ <i>I will ask them to learn something new, to attend lessons and to study on their own. (C-006)</i></p> <p>➤ <i>If you do not know how to do it, I will do my best to lead you so that you can grow. (C-006)</i></p> <p>➤ <i>I distribute the work to my people. If they do not know how to do it, we then have a discussion. (C-006)</i></p> <p>➤ <i>... for the new people, you have to ... lead them. You lead them to see which part is more important. (C-006)</i></p> <p>➤ <i>You have to let them have opportunity to make progress. (C-006)</i></p>

Examples	Comments on Socialisation	Comments on Combination
<ul style="list-style-type: none"> ➤ <i>I will also educate them by chance. (S-011)</i> ➤ <i>... we sometimes will educate them by chance. (S-011)</i> ➤ <i>My attitude is I will do my best to tell you anything I know. This is my responsibility. (S-011)</i> ➤ <i>We just educate them by chance. (S-011)</i> ➤ <i>Few people will do their best to teach everything they know. (S-012)</i> ➤ <i>Actually, the most important one is the site training through which techniques can be transferred directly. (S-012)</i> ➤ <i>You also have to give them challenges. (S-014)</i> ➤ <i>... stimulate their innovation. (S-014)</i> ➤ <i>If you want to learn how to operate it, you have to experience it, learn it and test it by yourself. Given that, your memory can then be strengthened. (S-014)</i> ➤ <i>... we have to stimulate the employees' initiative. (S-015)</i> ➤ <i>Let them head to that direction and stimulate their ideas. (S-016)</i> ➤ <i>You have to let them contact something outside. (S-016)</i> ➤ <i>Let them have chance to view and emulate other people. (S-016)</i> ➤ <i>I think you have to use training or some innovation lessons to let them accept this kind of concept. (S-016)</i> ➤ <i>They must have that kind of knowledge or training before accepting the kind of concept. (S-016)</i> ➤ <i>Whatever for the basic level operation or front-line supervisors, we</i> 		<ul style="list-style-type: none"> ➤ <i>You have to stimulate them. (C-007)</i> ➤ <i>... you have to let them have element of progress. Let them feel that they can make progress every day. (C-007)</i> ➤ <i>It is like sparkling fireworks, you have to let them elaborate splendidly. (C-007)</i> ➤ <i>Let them grow in terms of techniques and general knowledge. (C-007)</i> ➤ <i>What I do much emphasise is to let them feel that they can make progress in technique ... (C-007)</i> ➤ <i>... to make them feel that in their current positions, they can increase their technical know-how every day. (C-007)</i> ➤ <i>You have to do your best to explore where their potential is. (C-007)</i> ➤ <i>You have to do your best to find the way suitable for their potential. (C-007)</i> ➤ <i>The biggest responsibility for managers is they have to find where their people's potential is, arrange suitable work for them and then let them elaborate themselves in the selected area. (C-007)</i> ➤ <i>If you want to manage them with long-term leadership, you just have to explore where these employees' potential is. (C-007)</i> ➤ <i>In fact, I like to make them feel that they make progress from zero point to sixty points, rather than from ninety points to one hundred points. If they can jump from zero point to sixty points, it is huge</i>

Examples	Comments on Socialisation	Comments on Combination
	<p><i>have so-called the stage of practical training in the beginning. That is, someone will guide them. (S-017)</i></p> <p>➤ <i>So when those who have less experience do not know how to make a working report or have bottleneck, they can ask their managers or supervisors and their bosses will tell them how to do it. It can then be seen as a kind of experience impartation. (S-017)</i></p> <p>➤ <i>We ... hold some regular training courses. That is everyone comes together to study previous experience. (S-018)</i></p> <p>➤ <i>In my experience, I will give them a problem to solve after knowing everyone's specialties. (S-019)</i></p> <p>➤ <i>I sent my people to other factories since they had their own training programmes even if we all belonged to the same company. I wanted them to compare and compete with other people ... For the young staff, if they really learned something from this opportunity, I can feel it. (S-019)</i></p> <p>➤ <i>I will give them more opportunities to learn. (S-019)</i></p> <p>➤ <i>I will let everyone elaborate their specialties. (S-019)</i></p> <p>➤ <i>This is a good way of selecting people. With the same resources, who can make the best of it? Or, by giving you a project, we see how you can make it. (S-020)</i></p>	<p><i>progress, stimulation to them. (C-007)</i></p> <p>➤ <i>... you have to let them feel that they can make progress all the time and they can learn more advanced technology. (C-007)</i></p> <p>➤ <i>I would sit down and have a discussion with him. Once you start to discuss with him, you probably find that if he does one more or one less action, plenty of time could be saved. (C-009)</i></p> <p>➤ <i>I will do lots of cross-training. (C-009)</i></p> <p>➤ <i>If I today have four subordinates, my biggest target is to make them good at something which is not good before. (C-009)</i></p> <p>➤ <i>... my way of doing is to ask them what they want to do. After five years, would you like to do something which is the same as you do right now? Or, after five years, you want to learn more such as in networking. If so, you can start to move to that direction gradually, start to do cross-training with another network team. (C-009)</i></p> <p>➤ <i>For me, I probably have my own thought. You probably have your own thought. You write down what your thought would become after five years. We can then have a discussion. Once you have a discussion with five or six people, you will find that you can supplement something that has not thought before. Then, you know the right way to go. (C-009)</i></p> <p>➤ <i>... if you are to manage people, you have to let them understand that while doing one thing there is not just one way of doing it. You can</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>have different ways of doing, but you have to reach the maximum efficiency. (C-009)</i></p> <p>➤ <i>As a team leader, you have to share your experience with the others. (C-010)</i></p> <p>➤ <i>You have to let them know that you have your own value and you can share it with them. (C-010)</i></p> <p>➤ <i>I think that you still have to let someone teach them as everybody sees things differently after all. (C-011)</i></p> <p>➤ <i>Even though managers are quite strong, they still have to spend some time on developing their people. (C-011)</i></p> <p>➤ <i>... you also have to do education and training, letting your employees have opportunities to grow. (C-013)</i></p> <p>➤ <i>Especially for technical staff, to cope with their work they have to learn constantly. (C-013)</i></p> <p>➤ <i>... you have to give them complete training programmes to let them grow. (C-013)</i></p> <p>➤ <i>... technical staffs sometimes concentrate much on techniques. But you have to know that they finally will get into the management level. When they become managers, besides their original technical skills, they have to have some management skills. So are you helping them to develop certain kind of management skill? Are you planning this kind of programme for them? (C-013)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ ... you have to give them that kind of training programme before they get into that position. (C-013)</p> <p>➤ ... if someone needs something special like going to attend certain training lessons, I will do my best to make arrangements for them or use the budget to open some lessons for them. (C-013)</p> <p>➤ What are we going to do as managers? We have to force them to think. We have to remind them something that they have not thought of. (C-013)</p> <p>➤ The easiest way is to do testing. (C-014)</p> <p>➤ There are many aspects of testing. For instance, you can test their work or language. It is quite easy to test their abilities in language. Or you can assign some projects to them. (C-014)</p> <p>➤ The easiest way is to do some tests. (C-014)</p> <p>➤ Alternatively, you can use the way of job rotation. (C-014)</p> <p>➤ You have to let them generate some sparkles by themselves. (C-014)</p> <p>➤ Or you give them some guidelines, telling them how to do it. (C-014)</p> <p>➤ As to what you asked as how to manage these people, the easiest was of doing is to guide them how to do it. (C-014)</p> <p>➤ ... you have to tell them what they have to learn, what kind of potential thing they have to learn. I think such way of doing will be better for IT staff. (C-014)</p> <p>➤ ... some people like to do thing which are more challenged, in this</p>

Examples	Comments on Socialisation	Comments on Combination
		<p>case, you just have to give them this kind. (C-014)</p> <p>➤ <i>I will tell them their weaknesses and what should be reinforced. (C-014)</i></p> <p>➤ <i>To cope with the change of the whole information environment, I let them to attend many training lessons as knowledge management, data warehouse and data mining and so on. (C-015)</i></p> <p>➤ <i>... in public sector, you are free to attend any lesson if you like. (C-015)</i></p> <p>➤ <i>In fact, with regard to change in environment, if something new comes out like knowledge management or data mining, I plan lessons for them and look for lecturers for them. (C-015)</i></p> <p>➤ <i>I plan everything for them. (C-015)</i></p> <p>➤ <i>... sometimes, I will introduce the outside resources to my people, letting the outside resources support my people. I will allow my outside friends to do presentation and introduce some new ideas to my colleagues. (C-015)</i></p> <p>➤ <i>I always encourage them to learn things. I even go to find lessons for them. (C-015)</i></p> <p>➤ <i>Through this way of doing, outside resources can be introduced and my people can have the chance to learn something new. (C-015)</i></p> <p>➤ <i>... sometimes, I will stimulate them. (C-015)</i></p> <p>➤ <i>In my department, if I see someone has learned enough, I will</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>suggest them to transfer to other posts. I will make suggestion. I will tell them that if you can learn something you do not know before, that would be better. (C-016)</i></p> <p>➤ <i>... the incentive is I let you ... learn things in this working environment. (C-016)</i></p> <p>➤ <i>In the Legal Division, resources will be in better ... Compared with other divisions, more things can be learned here. (C-016)</i></p> <p>➤ <i>As we have to do with law and law can be quite dynamic, they have to go to find some relevant cases and study how to do defence. From such process, they can learn many things imperceptibly. So in the Legal Division ... they only care about whether they can learn things. (C-016)</i></p> <p>➤ <i>No matter what the situation might be, you just need to do constant training, constant training. (C-017)</i></p> <p>➤ <i>We need to develop the employee's career after all. (C-018)</i></p> <p>➤ <i>This is about how to stimulate your employees, how to naturally make them more creative. (C-018)</i></p> <p>➤ <i>I have to stimulate them, develop them. (C-018)</i></p> <p>➤ <i>... you guide them, make them consider more. (C-018)</i></p> <p>➤ <i>In general computer companies, they have to use their brain to write programmes ... You have to stimulate their brains. (C-019)</i></p> <p>➤ <i>Like R&D staffs, you have to use the strength in their brains. You</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>have to stimulate them to produce more patents or new designs. (C-019)</i></p> <ul style="list-style-type: none"> ➤ <i>Also, before they enter into this department, we will let them practice in other departments. (C-019)</i> ➤ <i>They need to be educated ordinarily. (C-019)</i> ➤ <i>I think there are many ways to get your hands in ... I think that raising question is the best one. The only thing you have to do is to raise some questions. (C-020)</i> ➤ <i>They also have to be generous in sharing their ideas with the employee. (C-020)</i>
<p><i>The subject talks about apprenticeship.</i></p>	<ul style="list-style-type: none"> ➤ <i>We still have this kind of thing in the company. Senior engineers have to lead junior engineers. It is like masters leading apprentices. (S-002)</i> ➤ <i>Like newcomers, we will assign experienced masters to guide them. (S-010)</i> ➤ <i>... we will assign people who have eight or ten years of experience to lead them. (S-010)</i> ➤ <i>The manufacturing we belong to is at much lower level. So we still largely rely on apprenticeship. (S-012)</i> ➤ <i>It must have the kind of apprenticeship ... No matter how powerful the machine tool is, you still need that system of impartation.</i> 	<ul style="list-style-type: none"> ➤ <i>... we also have the way of masters leading apprentices. We have this kind of system as many things cannot be learned by instant training. (C-004)</i> ➤ <i>We still have the notion of masters leading apprentices. (C-004)</i> ➤ <i>Usually, to us, the stuff of information is imparted by apprenticeship. (C-005)</i> ➤ <i>IT work more or less has the taste of apprenticeship. (C-008)</i> ➤ <i>... to our current working condition, we prefer to have the way of something like apprenticeship to lead them to do projects and to make the skill and knowledge imparted. (C-011)</i> ➤ <i>Of course, in my position, I will make a request that tutors have to</i>

Examples	Comments on Socialisation	Comments on Combination
	<p>(S-014)</p> <ul style="list-style-type: none"> ➤ ... we still agree on the system of apprenticeship since newcomers still need to be guided. (S-015) ➤ I think that apprenticeship is a good thing, so we try to carry it out. (S-015) ➤ ... sometimes apprenticeship is a kind of resistance in the company. It is not always good. It depends. (S-015) ➤ I apply this to our work. I do not know how to say ... Probably for the way of masters leading apprentices ... (S-017) 	<p>be assigned to support newcomers. (C-011)</p> <ul style="list-style-type: none"> ➤ Apprenticeship becomes very important. (C-016) ➤ The reason why apprenticeship is important refers to a fact that if you want to do something and you do not understand its cause and effect, you will be wasting a lot of time. (C-016) ➤ Due to the characteristics of our industry, another important element is senior employees must lead new employees to get familiar with the new working environment. (C-018) ➤ Like here as an information unit, when someone is just new here, they will be unable to get on well. I have to let masters guide them. (C-019) ➤ ... we still keep the way of using staff to guide staff. (C-019)

APPENDIX K Comments on Socialisation and Combination from the perspective of L-PTF

Examples	Comments on Socialisation	Comments on Combination
<p>The subject talks about a sense of achievement.</p>		<ul style="list-style-type: none"> ➤ You have to let them perform well and let them have a sense of achievement. (C-007) ➤ I think that the biggest character of managing IT staff is that you have to let them have a sense of achievement. (C-007) ➤ With regard to happiness, it is not about paying them so much money or allowing them not to work everyday. The so-called happiness is about letting them have a sense of achievement on the work. (C-007) ➤ ... for those engineers ... they want to have a sense of achievement. (C-007) ➤ ... you have to let them gain a sense of achievement. (C-007) ➤ Let them have a sense of achievement. (C-012) ➤ For some colleagues, they pay attention to ... a sense of achievement they can get. (C-012) ➤ ... a sense of achievement. (C-014)
<p>The subject talks about empowering.</p>	<ul style="list-style-type: none"> ➤ I will empower the team leaders. Let them observe which one is more flexible. If someone is more flexible, they can learn more techniques. (S-010) ➤ I do not manage the masters. I only manage the team leaders. So I will tell my team leaders that as you have been empowered, you can 	<ul style="list-style-type: none"> ➤ If the system required is small and does not need my participation, I will assign someone to be in charge of it. (C-012)

Examples	Comments on Socialisation	Comments on Combination
	<p><i>make the best of your resources. I have already given my power to you. (S-010)</i></p> <p>➤ <i>Sometimes, you have to ... empower them. (S-010)</i></p> <p>➤ <i>We have some budgets in the factory. I will empower team leaders to exercise small amount of money without reporting to me. (S-010)</i></p> <p>➤ <i>I only empower the team leaders and condemn the team leaders. I just empower them. (S-010)</i></p>	<p>§</p>

APPENDIX L Comments on Socialisation and Combination from the perspective of L-TA-CR

Examples	Comments on Socialisation	Comments on Combination
The subject talks about positive rewards.	➤ If you have large output, you relatively will have more bonuses. (S-001)	➤ We have rewards for this case ... for explicit part, it is much easier to see the effect. (S-002)
	➤ ... Money, promotion. This kind of stuff will also be provided since it equals to your performance. (S-001)	➤ ... if things involved can easily be judged, you can use rewards. (S-002)
	➤ ... If things are improved very well, perhaps I can fight for their bonuses. (S-001)	➤ I am now leading engineers. Basically, the largest difference between engineers and line workers is ... the former certainly wants more. (S-009)
	➤ We have rewards for this case. It also applies to tacit part. (S-002)	➤ In Evergreen, unit managers or even the highest managers in the departments have no power of rewarding someone. Only personnel departments have the right to decide. (C-001)
	➤ Sometimes, I provide them with some rewards. (S-003)	➤ About substantial rewards, in our culture we do not have the power to do this kind of thing unless the managers use their own money to do that. (C-001)
	➤ If all working stations are performed well, everyone will get rewarded. However, if one of which is failed, no one get rewarded. (S-003)	➤ I do not think that I will provide them with any reward if they accomplish the project with the generation of additional project documents. However, if they really put a lot of effort to building up a platform for knowledge sharing, encourage everybody to share their knowledge and come out some ways of measuring or quantifying it, I probably will reward them. (C-001)
	➤ They have already got paid for doing this. (S-003)	➤ I will reward them as they are excellent knowledge sharers. (C-001)
	➤ If they do something extra, they will get something extra. (S-003)	
	➤ ... If you work overtime, the company will pay you double so that you have to do something additional. (S-003)	
	➤ Only by the end of every year, we will do some appraisal which may affect the adjustment of salary next year. (S-004)	
	➤ ... We only have yearly-based performance that may bring some influence on salary adjustment. (S-004)	
	➤ I think mostly the first wants is still money. For the second one, they	

Examples	Comments on Socialisation	Comments on Combination
	<p>➤ want position. (S-005)</p> <p>➤ If they are doing extremely well, perhaps the company will provide them additional bonuses. (S-005)</p> <p>➤ ... you can say that they also work for gains but their gains are quite small. For instance, if they can do 10% extra work, they will get 1% extra increase in salary. This 1% is the bonus. (S-005)</p> <p>➤ They only care about how their efficiency can be increased and if being increased whether they can get rewards. This is what they want and this is what you have to give them. If you can satisfy them with these requests, they will be so happy to do the job. (S-005)</p> <p>➤ ... you have to have appropriate rewards so that they can be willing to tell you their knack. (S-006)</p> <p>➤ Rewarding ... (S-007)</p> <p>➤ Rewards are also important. (S-007)</p> <p>➤ After appraisals, I issue bonuses ... (S-008)</p> <p>➤ For them, they only work for money. (S-009)</p> <p>➤ I will also strive for substantial stuff but I will do it privately rather than publicly ... (S-009)</p> <p>➤ Basically, the largest difference between engineers and line workers is the latter only works for money ... (S-009)</p> <p>➤ We can only encourage them by saying that if they work hard and exert themselves, they can take over our positions when we are</p>	<p>➤ If it only refers to a single project, I do not think that it can result in a cause for me to reward them substantially. (C-001)</p> <p>➤ ... you have to build up a fair mechanism as a basis for rewarding. (C-001)</p> <p>➤ ... if the employees are very good at so-called explicit knowledge like the skill of project management ... they certainly will have more opportunities to get promoted since they can be regarded as good employees in the company. (C-001)</p> <p>➤ ... all I can do is to transfer those who perform well to more important positions ... (C-001)</p> <p>➤ ... what a unit manager can do is to transfer those who are good and full of potential to better positions and let them have much space to elaborate themselves and to influence more people ... I think that this is the reward from the unit manager to the good employee. (C-001)</p> <p>➤ ... we will put those who have good performance in more important positions ... (C-001)</p> <p>➤ ... if someone's behaviour pattern is good, you have to ... let them have the effect of popularisation. (C-001)</p> <p>➤ ... in general if you do things well, I will use many ways to encourage or praise you. (C-002)</p> <p>➤ If you perform well, I definitely will tell you that you have done quite</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>retired. (S-010)</p> <p>➤ If they discover problems about materials or packaging early in the site, we will give them some gifts. (S-010)</p> <p>➤ Besides production gifts, we also provide them with quality gifts. We will strive for this kind of thing for them. The gifts are like a pack of instant noodles or canned juice. (S-010)</p> <p>➤ We will reward them publicly rather than privately. (S-010)</p> <p>➤ When they are rewarded publicly, they will be in good moods. This is the way to encourage them. (S-010)</p> <p>➤ I will authorise team leader to give gifts if necessary. If the amount is not big, they do not have to report me. If the amount is quite big, I will judge whether they are worthy of this big prize encouragement. (S-010)</p> <p>➤ ... we will adopt something like promotion. (S-013)</p> <p>➤ ... if you are doing good, performing well, you will be getting promoted. (S-013)</p> <p>➤ I would tell my people that if you attempt to pay more, you would get more. (S-015)</p> <p>➤ You have to tell them that if you do something you can get a better life. There is incentive over there. It has to be direct. (S-015)</p> <p>➤ ... if someone is willing to learn, cooperate with you and do more things which are out of their job descriptions, they are the one that</p>	<p>well and will encourage you. (C-002)</p> <p>➤ For those who perform well, I will provide them with more opportunities ... Particularly for those who are doing IT work, they like to try new technologies and play new stuff. (C-002)</p> <p>➤ ... if they can perform well, I will do my best to let them try new stuff. (C-002)</p> <p>➤ ... at last we will be rewarding them as long as they dedicate to the work and get every single achievement accumulated. (C-002)</p> <p>➤ I will examine overall performance to see whether someone is worthy of being rewarded. (C-002)</p> <p>➤ Rewarding must be dependent on continuous efforts and overall performance. If some staff perform perfectly well but some are not willing to cooperate with the others, it is not acceptable by me. I will be examining it as a whole. (C-002)</p> <p>➤ I will examine overall performance to see whether someone is worthy of being rewarded. (C-002)</p> <p>➤ ... if you tell those who do programming that they can get additional pay of NT\$1,000 or NT\$2,000 by working harder, it means nothing to them. If you really want to stimulate those software engineers by prices, the amount has to be higher. (C-002)</p> <p>➤ ... if you really want to judge our work by money, I think that we at least have to get extra pay of NT\$10,000 or even NT\$20,000 every</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>needs to be promoted. (S-015)</p> <p>➤ If someone is willing to do more, relatively the company has to pay them more or do something like that. (S-015)</p> <p>➤ If they are positive to the company's development, we would advocate them. (S-015)</p> <p>➤ ... if you see something good to the company, you have to encourage it continuously. (S-015)</p> <p>➤ ... if we see this master's behaviour and advantages are good to the company, we would advocate them. (S-015)</p> <p>➤ In fact, there is another ... rewarding is another way. (S-018)</p> <p>➤ ... you have to reward them. Besides rewarding them, you can also promote them. (S-018)</p> <p>➤ ... if they perform well and reveal much stuff, you can encourage them by increasing their salaries or promoting them. (S-018)</p> <p>➤ Wealth. Human being always loves wealth. (S-018)</p> <p>➤ If you use visible methods like increasing their salaries, they may feel satisfied with it today, but perhaps not tomorrow. By tomorrow, they may want more ... It is also a method and it is still needed. (S-018)</p> <p>➤ As we have high-level and low-level machines, being able to handling high-level machines means that you can get higher pay. If you only can deal with the basic one, you get that level of pay.</p>	<p>month. You cannot just give us extra NT\$1,000 or NT\$2,000 every month and say "Well done". Basically, it will not generate any effect on us. If you really do that, to a certain extent we will regard it as compensation rather than stimulation. (C-002)</p> <p>➤ In my department, not everyone can get this (training abroad) opportunity unless they perform extremely well. (C-003)</p> <p>➤ If they can fulfil the request asked by the company and the result is fairly acceptable, I think that I will be quite happy about this. (C-003)</p> <p>➤ If you perform well, I will know it. I will give you good score in your annual performance appraisal and in consequence you will have much year-end bonuses. (C-004)</p> <p>➤ Normally, I will not do that. If we adopt this method, it will be endless since we have cases to deal with nearly every week ... It is happened only when the time of year-end performance appraisal comes. Generally, we will have such ... unless the case is really big and lasts for half or one year. In this case, when it is completed, we will, as you said, go to a restaurant to celebrate and of course I will pay the bill. (C-005)</p> <p>➤ If they have to overtime on Saturday, Sunday, usually I will buy them some meals. (C-005)</p> <p>➤ If it is like what they ought to do in normal working hours, I think</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>(S-020)</p> <p>➤ ... if it is for front-line employees who work in production lines, things will be different. If they are informed that they can get additional pay of NT\$1,000 or NT\$2,000 by working harder every month, they will be very happy to do so. (C-002)</p>	<p>that there should have no rewards as I think that they are under obligation to finish the work unless as I said that they work overtime or work on something particular. (C-005)</p> <p>➤ To us, there is no problem to buy them some food or drink when they work together. (C-006)</p> <p>➤ As to rewards, someone at the middle level like me does not have the right to ... It must go to the top level. (C-006)</p> <p>➤ For those who are not fallen behind, you cannot take carrots out every day, you have to do it occasionally. (C-007)</p> <p>➤ You do not need to take carrots out all the time. It is not the point. You just need to do it occasionally, don't you? (C-007)</p> <p>➤ It is about letting everyone feel that they can get satisfied with their work, not their pay. You have to let them feel happy about their work. (C-007)</p> <p>➤ ... their future opportunity of the increase in salary will be based on their yearly performance. (C-008)</p> <p>➤ What do people work for? Only money. I do not believe that people in my age do not work for money. Without money, why do you work? (C-009)</p> <p>➤ I would encourage my people to take what they deserve right now. I would give rewards, bonuses to them. (C-009)</p> <p>➤ I totally agree with giving people bonuses. (C-009)</p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>I would tell you that this is the goal we want to achieve and while it is achieved, what kind of reward you can get. (C-009)</i></p> <p>➤ <i>I sometime agree that for rewards cash or increase in salary is much more realistic. It is a much more reasonable and practical way. (C-009)</i></p> <p>➤ <i>To be honest, it is all about exchange. I give you something and you give me something. If today I do not give you anything but want you to work for me, would it be possible? Human being just lives for money. (C-009)</i></p> <p>➤ <i>You ask me whether I will introduce rewards and punishments. It has to depend on their yearly performance of, for instance, whether there is any delay or the quality is fairly good. (C-011)</i></p> <p>➤ <i>If you regard your people as assets and you want to keep them, I think that you have to combine the stuff of salary with the whole organisational culture and a sense of working achievement. (C-011)</i></p> <p>➤ <i>Of course, you can set up a target that if someone achieves it, their performance is excellent and they can get the performance bonus. (C-011)</i></p> <p>➤ <i>We regard rewards and punishments as a kind of ... I emphasise this thing. (C-012)</i></p> <p>➤ <i>... if I were a boss in the private sector, using rewards and punishments will make me do things quickly and easily. But in the</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>government organisation, it has to involve in the problem of budget. So in that time, I usually budgeted more money. (C-012)</p> <p>➤ When a project was finished, I would reward my people. (C-012)</p> <p>➤ ... in that time I put their names in the operation manual of the system. Everyone would know who did which part. It was an approval to them. Let them know that they really did something extraordinary. (C-012)</p> <p>➤ ... emotions are also important to human being. (C-012)</p> <p>➤ ... on the other hand, emotions are also important. (C-012)</p> <p>➤ ... when that project was accepted by the government and then was introduced into other counties, I would reward my people again. (C-012)</p> <p>➤ If my people performed extremely well, they could get many bonuses in just one year. (C-012)</p> <p>➤ Bonus is only one of them. (C-012)</p> <p>➤ On the one hand, bonuses are needed ... (C-012)</p> <p>➤ For some colleagues, they pay attention to ... bonuses they can earn ... (C-012)</p> <p>➤ ... if they can do the project with forty persons per month rather than fifty persons per month, they save the cost of ten persons per month for the company. I can therefore take the cost of three persons per month out of ten persons per month to be their bonuses. (C-013)</p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>If you solve a problem which is important but has not been encountered by other people, I will reward you. (C-013)</i></p> <p>➤ <i>We on the other hand have the reward, incentive payment system for those who put emphasis on money. (C-013)</i></p> <p>➤ <i>Generally speaking, I will be using ... the way of salary to interfere. (C-014)</i></p> <p>➤ <i>There are many ways of encouragement. One refers to ... substantial encouragement. (C-014)</i></p> <p>➤ <i>I think at present the effect of reward should be better. (C-014)</i></p> <p>➤ <i>Sometimes, you can use your own money, manager subsidies to buy them something. You can buy some foods to have fun together. (C-014)</i></p> <p>➤ <i>There are many ways of encouragement. One refers to colloquial encouragement ... (C-014)</i></p> <p>➤ <i>About incentive, I cannot give them any substantial reward. I can only give them "A", "B" or "C" in their year-end performance appraisals. (C-015)</i></p> <p>➤ <i>If they really perform very well, they certainly will have that chance to ... I will reward them. (C-015)</i></p> <p>➤ <i>I will reward them spiritually instead. It means that I will give them a merit. Receiving merit means that they can get bonus on their way to get promoted. (C-015)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>About rewarding, in fact I nearly have nothing to reward them.</i></p> <p><i>About promotion, I cannot guarantee that certain people must get promoted. I can only say that I will do my best to promote them.</i></p> <p><i>(C-015)</i></p> <p>➤ <i>If they really pay attention to writing official documents, I will praise them publicly. (C-016)</i></p> <p>➤ <i>If they do particular things right and make our direction correct, I will praise them. (C-016)</i></p> <p>➤ <i>... if you can perform extremely well every year, I will give you "Distinction" every year. (C-016)</i></p> <p>➤ <i>In the company, in fact it is like ... what we called as carrots and sticks. In fact, such things always exist. (C-017)</i></p> <p>➤ <i>To my team, I will tell them that if you do well by the end of this year, you will get some carrots. (C-017)</i></p> <p>➤ <i>In fact, we rather think that giving carrots is a good thing. (C-017)</i></p> <p>➤ <i>... in management, I still think that giving carrots will be better than giving sticks. (C-017)</i></p> <p>➤ <i>... some people would do what they are asked to do. We therefore would put them in a good position of the future promotion or increase in salary. (C-018)</i></p> <p>➤ <i>... as a manager the incentive I can offer to them is taking their performance as an indicator for the future promotion or adjustment</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>in salary. (C-018)</i></p> <ul style="list-style-type: none"> ➤ ... from human nature's point of view, everyone certainly hopes that they can have better income ... (C-018) ➤ ... the performance will affect their promotion. (C-019) ➤ ... rewarding system is also a good way. (C-020) ➤ ... while certain problems are actually happened in the company, you can use the way of rewarding to let everyone provide their own opinions. (C-020)
<p>The subject talks about negative rewards.</p>	<ul style="list-style-type: none"> ➤ If their performance is not good at all, I will give them appropriate warnings or tell them about it on annual performance appraisal. (S-001) ➤ If ... things always go wrong, they may need to get punished. (S-001) ➤ If I see some problems which are going to happen or have already happened, I will make some suggestions or even warnings. (S-002) ➤ If you are so passive and bad at performance, it is time for you to leave. (S-008) ➤ After appraisals, I ... give penalty. (S-008) ➤ If they are not doing well, you have to condemn them. This is the way to keep them moving on. (S-010) ➤ If they are not doing good, I will want them to do some amendments 	<ul style="list-style-type: none"> ➤ ... if someone's behaviour pattern is bad, they have to be warned. (C-001) ➤ If a certain person is a senior staff, he/she will be regarded as so-called the upper beam. So when the upper beam cannot be corrected and becomes a good example, I will transfer him/her to another unimportant post. This way of doing is to keep that person's behaviour from influencing other junior staffs. (C-001) ➤ ... we will remind senior staffs not to bring wrong behaviour into the office. Junior staffs may imitate it. (C-001) ➤ If I find that senior staffs bring inappropriate behaviour into the office, I will choose the tool of email to announce that senior staffs should not have such inappropriate demonstration. (C-001) ➤ ... all I can do is to transfer ... those who perform badly to less

Examples	Comments on Socialisation	Comments on Combination
	<p>or adjustments. (S-010)</p> <p>➤ It does not mean that those who perform not very well have to get fired. We think that there must have some work suitable for them. They may need to do some basic work or may not be able to get as much promotion as the other colleagues. (S-020)</p>	<p>important positions. (C-001)</p> <p>➤ ... we will put those who ... have bad performance in less important positions. (C-001)</p> <p>➤ If we find that their direction was partial in the beginning or it has been wrong, we will correct it or even suspend it. (C-002)</p> <p>➤ ... if you do worse, you will get worse treatment. (C-002)</p> <p>➤ ... if you perform badly, I will also blame you and let you know that I am not satisfied with what you have done. (C-002)</p> <p>➤ ... if their performance is not considerably good, I will not ... since you may not come out any result. In his case, I will let them do some routine jobs. (C-002)</p> <p>➤ As long as programmes can work ... If they don't, someone will be in trouble. (C-004)</p> <p>➤ ... if things go wrong seriously, I will report them to the top management and transfer relevant staff to other posts since they may be unsuitable for this department. (C-004)</p> <p>➤ ... if there is something wrong with their processes or something wrong happens to them, there must have warnings or something coming out. (C-007)</p> <p>➤ You have to push people who are fallen behind. (C-007)</p> <p>➤ Sometimes, you have to take sticks out as someone may fall behind. (C-007)</p>

Examples	Comments on Socialisation	Comments on Combination
		<ul style="list-style-type: none"> ➤ <i>If someone is not suitable, I will get rid of them. (C-012)</i> ➤ <i>If someone is not suitable for certain job, I will transfer them to another post. (C-012)</i> ➤ <i>... if they perform badly, I will also be hard on them. (C-012)</i> ➤ <i>... if you perform extremely bad every year, I will give you "Fail" every year. (C-016)</i> ➤ <i>If not, you will get some sticks. (C-017)</i> ➤ <i>If they really show no willingness to do that, we finally would decide to make replacement. (C-018)</i> ➤ <i>They have to be responsible for what I assign to them. If they do not achieve it, I may get rid of them next year. (C-019)</i>
<p><i>The subject talks about providing subordinates with assistance in exchange for their efforts.</i></p>	<ul style="list-style-type: none"> ➤ <i>Stay behind them to provide them ... with basic equipment. (S-002)</i> ➤ <i>If having tools, we basically will let tools help them. Or, give them the tool in advance and let them do it. (S-002)</i> ➤ <i>... you have to use something technical to help them ... (S-006)</i> 	<ul style="list-style-type: none"> ➤ <i>With regard to fixed amount of data, usually it is much easier to obtain some tools to help you to deal with them. (S-002)</i> ➤ <i>It is much easier to have a tool for this explicit converting to explicit. (S-002)</i> ➤ <i>They are always busy. So if you want them to do something additional, it is not difficult to imagine that they will not do it because they have no time ... That is to say, you have to find appropriate resources in advance and put it in the right place. I think that this is the first key point. If the resources are not appropriately allocated in the first place, it will be difficult to make</i>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>progress the subsequent stuff. (C-002)</i></p> <p>➤ <i>... they attempt to do something and they think that they can do it. But the reality is they lack certain knowledge to do what they want to do. Given that, we will seek some resources or something to solve this problem. (C-008)</i></p> <p>➤ <i>... take those staff into consideration, they have already possessed of a certain level of knowledge and ability to do their work. Now, what we may encounter is the problem they are unable to deal with. We will search for some assistance to help them to finish their mission. (C-008)</i></p> <p>➤ <i>I will be using the way of personal involvement. (C-008)</i></p> <p>➤ <i>Suppose that we have a new project. It has many things that we have already had. However, the problem is in addition to the existing stuff, to make the project succeed, we may still need some ... knowledge or probably tools. So we will go to include or recruit those stuffs. (C-008)</i></p> <p>➤ <i>... we will first decide what kind of resources needs to be introduced. Afterwards, we will find out who might have the channels to the resources. Finally, we can go for the resources we want. (C-008)</i></p> <p>➤ <i>... the whole movement may have certain bottleneck and it refers to the problem of knowledge. So it is possible that those who are involved do not know how to do it. In this case, we will go to find out</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p><i>the way of doing it. Sometimes, it is not about the problem of hardware, but about the problem of software or the lack of certain knowledge. (C-008)</i></p> <p>➤ <i>If you want to be a leader in this kind of field, you at least have to involve in everything from the beginning to the end ... you have to understand the stuff happened while conducting the process. (C-009)</i></p> <p>➤ <i>If you are unable to handle the case, you have to tell me. You cannot just leave it there. You have to tell me and I will see how to solve it. (C-015)</i></p> <p>➤ <i>A main principle of mine is if I plan to solve a particular problem, I will work out a plan in advance and let everybody know all the details. (C-016)</i></p> <p>➤ <i>I will give them resources and budgets. They have to tell me when they can finish it in return. (C-017)</i></p> <p>➤ <i>I hope that the period of each of the tasks should be between three days and two weeks. That is because when they encounter problems, I can jump into it and help them right away to see whether they are lack of resources or whether their knowledge is not enough. (C-017)</i></p> <p>➤ <i>... it is also necessary to provide employees with appropriate devices. If today they have appropriate devices, they probably could do it more smoothly. (C-018)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ ... as a supervisor you must give them reasonable support. (C-018)</p> <p>➤ If the employee tells you that they are quite busy today so that they are unable to do such thing, you must dispatch someone to help them rather than ignoring something that needs to be done. (C-018)</p> <p>➤ Of course, there are some situations that they really have no time to do it. If so, we would give them more time. (C-018)</p> <p>➤ ... managers must have high rates of participation ... they have to participate in activities held by the employees as many as possible. (C-020)</p>

APPENDIX M Comments on Socialisation and Combination from the perspective of L-TA-ME

Examples	Comments on Socialisation	Comments on Combination
The subject talks about monitoring or appraising.	➤ If we give them one month, we will review them every week in this month. (S-001)	➤ As a manager, you have to pay attention to the output of project document. (C-001)
	➤ I think it always needs some time to do comparison. (S-001)	➤ You have to tell your employees that you will pay much attention to the proportion of project document in the whole project. Naturally, it will induce them to concentrate on the importance of project document. (C-001)
	➤ ... you do some appraisal and evaluation. (S-001)	
	➤ I think you just need some time to do observation. (S-001)	
	➤ It is much passive in this aspect. Monitoring behind it. (S-002)	
	➤ ... in this part, I usually step backward to monitor and to follow up. (S-002)	➤ We may set up a schedule for everyone. In the middle of it, we will try to find time to monitor everyone's status to see whether they are coincident with what we told them before. (C-002)
	➤ Stay behind and monitor it. (S-002)	
	➤ On every Friday, we will check how many cases have been dealt with. We will do such control. (S-004)	➤ If it has to do with quality, we will figure out where the problem is. We will try to sort it out. (C-002)
	➤ We will check the report on every Monday. Why you only dealt with two cases out of ten? Do you have any problem? We basically will do such check. (S-004)	➤ ... as many things are short-term and do not require much time to deal with, I may not have enough power or ways to give them substantial feedback. (C-002)
	➤ As to performance, we still will appraise it, perhaps twice a year. (S-004)	➤ Generally speaking, we will have a time or checking point for everything and make a request in terms of quality. (C-002)
	➤ You have to give them quota of work for the day. If they cannot make it, you have to evaluate them. (S-005)	➤ We hope that everyone can do things in accordance with the timetable. On the other hand, we will monitor whether its quality is what we expect. (C-002)
	➤ ... for those management staffs like general staffs and line staffs, strictly speaking they have to be evaluated by performance and	➤ ... you have to monitor this thing. (C-002)

Examples	Comments on Socialisation	Comments on Combination
	<p>numbers. (S-006)</p> <p>➤ Then, I appraise the targets each quarter. (S-008)</p> <p>➤ I will let them know that their supervisor will keep the eyes on what they are doing ... (S-009)</p> <p>➤ If what they are doing this month is not better than last month, I will start to keep my eyes on them. (S-010)</p> <p>➤ I will check whether the plan is carried out. If you do not do that, they will become slack. So I will check out the plan every week. (S-010)</p> <p>➤ If something goes wrong, it has to be checked and solved. (S-010)</p> <p>➤ My objective is annually based. It will be given to the team leaders. I only review it monthly. (S-010)</p> <p>➤ ... you have to be strict ... Being strict is to examine their reports. (S-010)</p> <p>➤ Once the plan is getting done, there will be a relevant report. I will go to check the report. (S-010)</p> <p>➤ ... you have to review randomly. (S-011)</p> <p>➤ You have to review the control form randomly. (S-011)</p> <p>➤ ... we will appraise their performance. (S-011)</p> <p>➤ If the client does not satisfy with our service, we will start to check the data to see whether we need to do some improvements. (S-013)</p> <p>➤ ... we only see whether they really take good care of their territories.</p>	<p>➤ ... you have to monitor them in the first place to see whether their way of doing is the same as what you thought. (C-002)</p> <p>➤ If there is no problem with that, you just need to monitor this thing regularly to see whether it is in progress. (C-002)</p> <p>➤ We will let them have practical experience and will assign someone to watch or monitor them to see whether they are doing well. (C-002)</p> <p>➤ It is just that by the end of the year, I will make a judgement of your performance over the year. (C-004)</p> <p>➤ In ordinary days, I just watch them closely and keep them from making trouble. (C-004)</p> <p>➤ ... take amending programme as an example, we examine their results by how many have been amended. (C-005)</p> <p>➤ ... we will examine their demands and try to understand why their demands are so huge, for instance, or why they have to spend so much time to amend it. (C-005)</p> <p>➤ When half of the period is gone, I will go to check what have been done. (C-005)</p> <p>➤ When half of the time is gone, I will go to check their progress. (C-005)</p> <p>➤ ... for the new people, you have to watch them ... (C-006)</p> <p>➤ Take those programmers as an example, the programme modified by</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>(S-017)</p> <p>➤ ... we will see whether their production lines are working well, the maintenance frequency of the devices is reduced and the overall quality is enhanced. (S-017)</p> <p>➤ We only examine these aspects ... We use those dimensions that have just mentioned to examine their performance. (S-017)</p> <p>➤ I just examine the result. (S-019)</p> <p>➤ I would watch them. (S-020)</p> <p>➤ ... we have a ruler in our mind to evaluate everyone's performance. (S-020)</p> <p>➤ ... in production line in which hierarchy is a big, severe issue. That is the place in which layers have to be monitored by layers so that everyone can move towards a common target. (C-017)</p>	<p>them will be monitored by security control. (C-007)</p> <p>➤ ... for some stuff, you cannot say that quantity means quality, so we have to check the quality, error rates. (C-007)</p> <p>➤ ... my mission is to oversee and urge them to finish what they are assigned on time. (C-008)</p> <p>➤ Actually, for us in such conversion process, we probably will much focus on whether something is conducted by someone and whether it is well conducted. (C-008)</p> <p>➤ The first important thing is the document and their results. We will QC (quality control) their results. (C-008)</p> <p>➤ With regard to much routine stuff, generally speaking, we will be much paying attention to whether they can finish it before the deadline. (C-008)</p> <p>➤ ... Regarding to routine work, the situation will be more or less like this, roughly like this. It is all about whether they can deliver their results on time. (C-008)</p> <p>➤ ... we have to concern about its quality and the feedback from our clients. To us, these are important measuring indicators. (C-008)</p> <p>➤ ... we will review and revise (the targets) in the middle of the year. (C-008)</p> <p>➤ At last, we will take (the targets) as the indicator of performance evaluation by the end of the year. (C-008)</p>

Examples	Comments on Socialisation	Comments on Combination
		<ul style="list-style-type: none">➤ <i>If everyone agrees on everything ... we will examine whether they can achieve it before the deadline. (C-008)</i>➤ <i>... we focus on something which might go wrong. (C-008)</i>➤ <i>... we will be focusing on dealing with the unpredictable situation to let them carry on what they are doing. (C-008)</i>➤ <i>I would start from realising his current procedures to see whether there is any defect. (C-009)</i>➤ <i>Like database. Here, it mentions about database. About the management of database, it probably needs to do double-checking everyday to see whether data is back-up. (C-009)</i>➤ <i>We at least have one time of review every week. We have one every week. (C-012)</i>➤ <i>... how can you force them to give some descriptions? First, we make it become a routine job. Their managers have to take the responsibility of watching them. (C-013)</i>➤ <i>As we were not possible to manage all of the stuff, we had to do something like exception management ... (C-013)</i>➤ <i>If they are complained by the client, you will know where their problems are. You will be easy to identify whether the problem belongs to the client or your people. (C-014)</i>➤ <i>If you are a manager, you will go to review their work. (C-014)</i>➤ <i>Then, you just do some double-checking. (C-014)</i>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>It certainly has to monitor their schedules. (C-014)</i></p> <p>➤ <i>You must be examining whether they are doing well or not. (C-014)</i></p> <p>➤ <i>As to those who perform badly, all I can do is to pay much attention to them and to keep them from becoming worse and worse. (C-016)</i></p> <p>➤ <i>I only pay attention to those who are much easier to become slack and careless. (C-016)</i></p> <p>➤ <i>For those who are always negligent, I pay much attention to every single case they handle. (C-016)</i></p> <p>➤ <i>I ask my section leaders to provide me with some statistics every week ... So I am aware of who is and is not doing what every week. (C-016)</i></p> <p>➤ <i>To the part of people, in fact, I am much adopting exception management. (C-016)</i></p> <p>➤ <i>In fact, they are not reviewed by the end of the year. I will review them regularly, say every month or every quarter in the earlier time. (C-017)</i></p> <p>➤ <i>I hope that you can give me a report every week, say that what have been done, what should be done but not yet been done last month, what are being done this month and what will be done next month. (C-017)</i></p> <p>➤ <i>You have to give this report to me. I can see your progress and compare it with the others. (C-017)</i></p>

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ <i>I use two ways to check it. One is internal inspection and the other is KPI, key performance indicator. (C-019)</i></p> <p>➤ <i>On average, I inspect them monthly. (C-019)</i></p>

APPENDIX N Comments on Socialisation and Combination from the perspective of L-PTA

Examples	Comments on Socialisation	Comments on Combination
The subject talks about giving targets.	➤ Finding a direction for a certain team is a much important thing to do. (S-003)	➤ ... in principle, we mostly will set up a clear objective ... (C-002)
	➤ ... you still need to make some requests. You still want them to achieve your target. (S-004)	➤ ... if the pattern has already been established, there should be no problem for everyone that it must have objectives and time limit. (C-002)
	➤ No matter what kind of knowledge management you are doing, you just want the result reaching your target. (S-004)	➤ As a matter of fact, we will set up targets at the beginning of the year. (C-008)
	➤ I start with setting up targets. (S-008)	➤ ... for the routine work, we can base on the previous experience to set up the target, including, for instance, how much time is required. (C-008)
	➤ If it has to be strict, I still will give them some directions. The direction will be flexible. It has to depend on circumstances. (S-010)	➤ Everyone must be given targets. Without targets, someone would quit in half way through or get tired of it. (C-009)
	➤ If they do not know how to do it, I will guide them, give them a direction. (S-010)	➤ So, everyone has to have a target. (C-009)
	➤ I still will give them some directions. (S-010)	➤ I think that for a good leader or departmental manager, he/she will think over what kind of thing should be done in this department, how many things should be done in total and what kind of thing should be in charge of. He/she must set up the target and then divide it ... I think it happens not only to production units, but to R&D, design or software engineering units. (C-010)
	➤ I want to see the result. (S-010)	
	➤ Basically, I just give them a target and see whether they can produce certain amount of output within certain period of time. (S-012)	
	➤ Each unit in the site has its own objective that ought to be achieved. (S-012)	➤ ... in our leadership we examine their performance by target, by project. (C-011)

Examples	Comments on Socialisation	Comments on Combination
		<p>➤ ... for us as project owners, we will set up the scope and target of a certain project and say what should be achieved at the first stage, second stage and so on. (C-011)</p> <p>➤ ... you ask me whether I will set up targets for them. Yes, I will. (C-011)</p> <p>➤ ... you have to be aggressive, you have to focus on execution, you have to be clear about numbers and you have to have a clear target. (C-011)</p> <p>➤ As we were not possible to manage all of the stuff, we had to do something like ... target management. (C-013)</p> <p>➤ ... when a project comes out, we will set up a target of, for instance, fifty persons per month to do this project. (C-013)</p> <p>➤ ... you have to give them some targets. (C-014)</p> <p>➤ You also have to give them directions. (C-014)</p> <p>➤ To me as the head of an information department, it is impossible for me to sit here and wait for opportunities to happen. So basically, we have our plans every year. (C-017)</p> <p>➤ ... to the management of IT people, we will be much organisational, systematic. That is to say, to every single person in the department we will define his/her responsibility very clear. (C-017)</p> <p>➤ ... in the beginning of the year, I will give them their objectives. (C-017)</p>

Examples	Comments on Socialisation	Comments on Combination
		<ul style="list-style-type: none"> ➤ <i>If a certain goal needs three years to accomplish, we will work out its short-term, mid-term and long-term plans every year. (C-017)</i> ➤ <i>I will tell them clearly that what kind of thing they should do and what kind of role they should play in the organisation. (C-017)</i> ➤ <i>... you first have to give them a direction ... (C-018)</i> ➤ <i>... we have annual plans. In the annual plan, there are several important, key performance indicators. Everyone just follow this. (C-019)</i> ➤ <i>There is no way to set up everything in great details. You just need to give them the target, they spontaneously will do it so well. (C-019)</i> ➤ <i>In addition to this big plan, we have to set up plans for each year. (C-019)</i> ➤ <i>For the KPI in each section, it has to be followed by the staff. (C-019)</i> ➤ <i>The only job of the top management is to set up targets. The system will do the rest. (C-019)</i>
<p><i>The subject talks about using systems, procedures and rules to manage subordinates.</i></p>	<ul style="list-style-type: none"> ➤ <i>Set up some rules and make some requests. (S-001)</i> ➤ <i>We may give them guidelines, indicating the format or degree we request. (S-001)</i> ➤ <i>In fact, we set up timetables for them. (S-001)</i> ➤ <i>... to communicate knowledge, just write a SOP, assign someone</i> 	<ul style="list-style-type: none"> ➤ <i>... we have developed some systems. For instance, the accumulation amount of each case. That is, when a case is opened and when it is closed and by whom, something like that. (C-007)</i> ➤ <i>Whilst managing people, you only need to know that they do follow your procedures to do things. (C-014)</i>

Examples	Comments on Socialisation	Comments on Combination
	<p>experienced to write it down. It is written down roughly. Then, we make it become more detailed through discussion and illustration. (S-001)</p> <p>➤ In fact, SOP has a sample. If you want to get more detailed in some places, you have to do practical operation and illustration. For those practice learners, they have to adjust the SOP and make it suitable for them. Then, after one month, for instance, we will let learners reveal what they have learned from it. (S-001)</p> <p>➤ We only can give them some guidelines, regarding to the way we deal with particular situations. (S-002)</p> <p>➤ ... we are now trying to get things more organised. We set up deadlines for every case. (S-004)</p> <p>➤ We still explain to them the formal guidelines. (S-004)</p> <p>➤ I can only give you guidelines. You have to comprehend the rest by yourself. (S-004)</p> <p>➤ ... for those who are in production line, you just have to give them some rules to follow. (S-005)</p> <p>➤ ... you just let them follow the rule set by the company. (S-006)</p> <p>➤ It must have standard for performance measurement. (S-007)</p> <p>➤ I think it is important to do teaching through SOP. SOP itself is about setting basic rules. (S-008)</p> <p>➤ ... sometimes it needs guidance on the spot, for instance guidance or</p>	<p>➤ They have to set up something like rules. About the rule, it is like the stuff of SOP. They have to give me that kind of thing. They have to regulate many things like how to key in, what to key in and where to key in. They also have to set up some forms. When the rule and form are set up, they have to give them to those who are in charge of the system for confirmation. (C-015)</p> <p>➤ By the end of the year, they have to do a summary, indicating what has been happened and how they dealt with it or what kind of changes have been made for the system. In the summary, they have to reveal significant records, events and meetings. (C-015)</p> <p>➤ We have ISO standard books and a wide range of SOPs. We have kept updating them all the time. (C-016)</p> <p>➤ ... if you do not give them devices, systems or forms to fill in, some employees may have no idea about what they are going to write down, to record. (C-018)</p> <p>➤ ... at present, our way of doing is to build up foundation, meaning that every member is responsible for recording everything they involved. (C-018)</p> <p>➤ There must have something that anyone can follow up. There must have something that anyone can check up. Otherwise, no one knows how to do things. (C-018)</p> <p>➤ Basically, we ask the employee to record everything they do no</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>demonstration on the spot. (S-008)</p> <p>➤ To Production Department, however, I become scrupulous and methodical. For instance, everything has to follow SOP. Everyone has to obey rules. (S-008)</p> <p>➤ There must be setting some rules of rewards and punishments. There must have. As it is compelling, there must have these rules. (S-009)</p> <p>➤ For those who are newcomers, they have to comply with standards. (S-010)</p> <p>➤ We have control forms. (S-011)</p> <p>➤ We use forms to control. (S-011)</p> <p>➤ You have to give the line staff some simple rules and let them try thousands of times to get quality stable. This is the ways of our thinking and doing. (S-015)</p> <p>➤ In the aspect of management in Taiwan, if it is in a factory, mostly it involves in conducting ISO, systems. Conducting systems means that it has to have SOPs, operation guidelines and so on. (S-016)</p> <p>➤ In manufacturing sector, it has to be like this. You must have SOPs to follow in manufacturing sector. (S-016)</p> <p>➤ You just follow SOP to do it. This is how ISO system works. Before being manufactured, you have to have operation guidelines. Essentially, you have to do that. (S-016)</p> <p>➤ We only manage operators ... Their work is very simple and it is</p>	<p>matter repairing computers or installing software for the other departments. They have to record what and how the problem is solved. (C-018)</p> <p>➤ First of all, I will set up SOPs or something like ISO 9001. Through this, I can regulate what everyone has to do. This kind of stuff will regulate that whatever you do, you have to keep the record. (C-019)</p> <p>➤ I prefer not to be compelling, saying that you have to do this or you have to do that. I can use another way. I use systems to manage people. (C-019)</p> <p>➤ All of the things have to be based on systems. (C-019)</p> <p>➤ In the annual plan, it includes strategic analysis and SWOT analysis. Having done relevant analysis, it will come out KPI. Having had KPI, everyone just concentrates on KPI. Each department has its own KPI. Each section also has its own KPI. (C-019)</p> <p>➤ Right now, my way of doing is firstly, they have to follow ISO 9001. (C-019)</p> <p>➤ We put everything in this system. Everything can be controlled by this system. (C-019)</p> <p>➤ We have regulated relevant standards and norm. Everybody has to follow these systems to do things. (C-019)</p> <p>➤ ... using systems to manage people. (C-019)</p>

Examples	Comments on Socialisation	Comments on Combination
	<p>about implementation in accordance with the SOP. (S-016)</p> <p>➤ We have run a kind of system called proposal improvement. In this system, we will give them objectives. That is, every member in the factory has to have at least one case of proposal improvement every month. (S-017)</p>	<p>➤ I would use something like rules or working procedures to let them share spontaneously in their daily work. (C-020)</p> <p>➤ I would let them develop a spontaneous habit of sharing through some working procedures or rules. (C-020)</p>

APPENDIX O Comments on Knowledge Management from the Socialisation and Combination Groups

Examples	From the Socialisation Group	From the Combination Group
The subject talks about general knowledge or tacit/explicit knowledge.	➤ That's right. This is a trick. (S-002)	➤ For such kind of explicit stuff, we have to pay much attention to its accuracy, haven't we? Its accuracy. (S-009)
	➤ About what we discussed as tacit stuff, that cannot much be seen. Sometimes, you really have to comprehend it. I think this is really regarding to something called a trick or knack ... for that kind, you have to do a lot of thinking. And, I think it has to depend on people's experience and logic. (S-004)	➤ It sounds that tacit knowledge has much to do with people's characters. (C-001)
	➤ As to management of tacit stuff, it really involves more in ... a kind of ambiguous feeling. (S-004)	➤ About this kind of knowledge you are talking about, to us, in the aspect of programming, we seldom use the kind of report to do statistics. What you are talking about mostly refers to people who are doing market or stock analysis. (C-005)
	➤ I think it involves in something psychological. It is to understand the tacit meaning behind knowledge. (S-006)	➤ For the stuff like knowledge, it is hard to get quantified. Really, it is very hard unless you are doing cashiers' work so that you can count how much money you receive or loan. Such kind of thing can easily be quantified. For the stuff of knowledge, it is hard to obtain something quantified. (C-005)
	➤ I think that sometimes tacit and explicit stuff are not clearly distinguishable. It is not so meaningful if you really attempt to distinguish tacit from explicit. (S-008)	➤ Where does our knowledge come from? As I said, it is through impartation. It is generated by accumulating experience gradually. (C-005)
	➤ Something looks like being explicit, but in fact it is affected considerably by its tacit element. (S-008)	➤ About experience impartation, if it is tacit, it becomes humanity management. If something refers to tacitness, it has to be humanity management. (C-006)
	➤ About the so-called tacit knowledge you mentioned, I think that ... sometimes this kind of thing is mixed up. (S-008)	➤ My position should be there is no difference between tacit stuff and
	➤ I think it should be saying that some knowledge is tacit since it is not so systematic. (S-008)	
	➤ About the stuff of tacit knowledge, things you examine like targets or	

Examples	From the Socialisation Group	From the Combination Group
	<p><i>numbers are surface. Or, for instance, people go to work at nine o'clock. That is a formal request or rule. Yet, I think that there is something which is more difficult to grasp. That is attitude. (S-008)</i></p> <ul style="list-style-type: none"> ➤ <i>Culture itself is also a kind of tacit knowledge. (S-008)</i> ➤ <i>I think to tacit knowledge there is no such thing of target setting or target achieving. (S-008)</i> ➤ <i>The difference between information and knowledge is information is just information but knowledge is the processed information. (S-009)</i> ➤ <i>... first, knowledge is the processed information; second, it can be kept for reference and third, it must have a complete system to manage it. (S-009)</i> ➤ <i>For something invisible, it must rely on your brain to elaborate it. (S-010)</i> ➤ <i>About tacitness, it does not mean having no knowledge. Sometimes, it is presented by narration. Sometimes, it is revealed by craftsmanship. (S-014)</i> ➤ <i>To this (tacit) kind, the prerequisite is we have to explore it. It is simply in people's heads. It is saved in people's heads or hands. (S-014)</i> ➤ <i>I think that tacit knowledge is different from what we generally talk about as fixed working norm and documents that can be checked and seen. (S-018)</i> 	<p><i>explicit stuff ... If it is about something explicit, it should be ... consistent. As long as you are a manager, you should be consistent. (C-006)</i></p> <ul style="list-style-type: none"> ➤ <i>Generally speaking, we think that recording is one of the ways to introduce knowledge. (C-008)</i> ➤ <i>About tacit one, it is disseminated by colloquial language. In the process of being disseminated colloquially, it can be specified and become explicit. (C-011)</i> ➤ <i>The requirement of tacit one has to be decreased as much as possible. However, it cannot be 100% revealed as it has to do with personal characters, managers and organisational cultures. (C-011)</i> ➤ <i>With regard to tacit part, frankly speaking, the role of manager may not be so important. The reason of my announcement that managers may not be so important is it has to depend on whether the employee's desire to learn is high or not. (C-011)</i> ➤ <i>... to the explicit part, as it deals with something existent, you can use some good ways to guide it. (C-011)</i> ➤ <i>... to the tacit part, it is not necessarily to ... it involves in some experience. It will have experience values. (C-011)</i> ➤ <i>Basically, to the tacit part, perhaps managers may not know much about it. So if you want to involve in management, as I said, you have to through something to obtain that kind of technique or skill.</i>

Examples	From the Socialisation Group	From the Combination Group
	<ul style="list-style-type: none"> ➤ ... (tacit knowledge) is the knowledge which is owned privately and is not proclaimed in writing. (S-018) ➤ ... tacit knowledge can be seen as personal property. (S-018) ➤ Tacit stuff is about experience. (S-019) ➤ As it has already been tacit, it means that it certainly has some difficulty or is unable to get written or recorded. Sometimes, it is a concept or something like that. (S-020) ➤ As it is written as tacit, you cannot control it. (S-020) ➤ The only thing you can do is to possess those who own the tacit stuff. If you possess them, you will be controlling it. (S-020) ➤ About knowledge, it implicates firstly, creating; secondly, proceeding; thirdly, maintaining; and finally, imparting. (S-020) 	<p>(C-014)</p> <ul style="list-style-type: none"> ➤ I think that in a company, all of the knowledge is sometimes like information. It is just that compared with knowledge, the term of information is much raw and original. (C-017) ➤ Something useful can be called as knowledge. (C-016) ➤ I think there are many kinds of explicit knowledge. For instance, as we said that something spoken out is explicit, but it is temporarily explicit. If it is not recorded, it becomes tacit again. (C-020) ➤ Another kind of explicit thing refers to regular reports or operation manuals. (C-020)
The subject talks about knowledge management.	<ul style="list-style-type: none"> ➤ If you talk about knowledge management, this is something broad and various. (S-008) ➤ In fact, knowledge management is about giving lessons in technical management, on-site management or something like that ... I think it is all about training and education. (S-010) ➤ For the stuff like knowledge, it is very hard to say. Everyone's management is different. In my opinion, my way is much universal. That is everyone reveals the problem, discusses it and finally generates a common and appropriate consensus. We use this method 	<ul style="list-style-type: none"> ➤ If you can spend some time to think about how to keep and impart as it says oral and visual presentation such as documents, manuals and computer databases, you will be implementing the essential spirit of knowledge management. (C-001) ➤ ... if there are project documents produced and handed down to other colleagues in the IT department at last, it must be a plus for the project and it can be seen as so-called knowledge sharing. (C-001) ➤ ... we will put those who have good performance in more important

Examples	From the Socialisation Group	From the Combination Group
<p>➤ to communicate knowledge. (S-010)</p> <p>➤ I think the stuff of knowledge management is extremely broad. I think knowledge management is important to more popular industries rather than to our kind of industry having low-end manufacturing processes. (S-012)</p> <p>➤ In fact, knowledge management is something fashionable in Taiwan. It is mentioned in textbooks. You have to change the knowledge collected into something useful. You must get something narrated. You must be able to keep it. Then, other people can use it. Otherwise, it is saved in your head. No one can use it. (S-016)</p> <p>➤ ... knowledge management covers a wide range of areas. Instead of aiming at product, some refer to data ... Data have to be transferred to information. So it involves in searching, searching something required. Having found something required, we have to transfer them into artificial intelligence. They are not existent before. What we have talked about is something existent and we want to put it on mass production. However, there are many things we do not have. They also are involved in knowledge management. So how do we manage them? How do we transfer something elsewhere to something we need? It also involves in knowledge management. (S-016)</p> <p>➤ (for knowledge management), I can roughly say this way that for</p>	<p>positions and relatively put those who have bad performance in less important positions. I think that this way of doing should also be essential to the promotion of knowledge management. (C-001)</p> <p>➤ As to knowledge management you are talking about, it only has to rely on experience. (C-006)</p> <p>➤ As long as it is knowledge management, it has to be consistent. (C-006)</p> <p>➤ You say knowledge management. Sometimes, knowledge management is unseen. As a leader, you cannot see it, you just accumulate it. It is just experience accumulated by individuals. (C-009)</p> <p>➤ ... knowledge management is about concentrating on your core. (C-011)</p> <p>➤ ... how do I look at knowledge management? In my opinion, I will be much standing in the position of the company that it should be about building some mechanisms to impart knowledge even if we still have not assigned someone to do that. (C-011)</p> <p>➤ I think that the first step of doing knowledge management is to collect relevant core stuff. This is the most important thing to do. If you do not record every procedure of the project in the first place, you will face some problems if someone leaves. (C-011)</p> <p>➤ Everyone has been talking about knowledge management. I think</p>	

Examples	From the Socialisation Group	From the Combination Group
	<p><i>instance, collecting relevant knowledge and then making it becomes a database. (S-017)</i></p> <p>➤ <i>Knowledge management is the same as what I just mentioned. It is like what I said as visible channels. (S-018)</i></p>	<p><i>that it truly has to depend on how the atmosphere of learning is operated in the organisation. (C-011)</i></p> <p>➤ <i>About what you mentioned as knowledge management, I think it should be about absorbing the latest technology all the time. (C-014)</i></p> <p>➤ <i>... knowledge management is like what we had operational manuals in management. It is certainly good to have operational manuals. (C-016)</i></p> <p>➤ <i>Our only perception of knowledge management is knowledge has to be shared, has to be effectively shared. (C-017)</i></p> <p>➤ <i>To knowledge management, we have our own requests. The request is whenever you do anything, you have to finish it systematically. You have to produce documents in good quality. What you have behaved must be recorded. Besides, the way you do record has to be the same with others. You have to set up its attribute. (C-017)</i></p> <p>➤ <i>My perception of knowledge management is all of the knowledge should be categorised, analysed and stored efficiently and reasonably. After that, it has to be used. The point relies on how it can be used and how certain individuals or small groups of people's knowledge can become everybody's knowledge and can be obtained reasonably and quickly by everybody. (C-017)</i></p> <p>➤ <i>I think documentation is the most fundamental thing in knowledge</i></p>

Examples	From the Socialisation Group	From the Combination Group
		<p>management. (C-018)</p> <ul style="list-style-type: none"> ➤ ... without categorising, knowledge management is only about content management. You just put all the data together. Data has to be edited, then it can become useful information for decision making. (C-018) ➤ ... knowledge management also involves in protecting business confidentiality, isn't it? (C-018) ➤ Everybody just follows the system. Whoever goes to be the manager, they just follow the system. This is basic explicit knowledge management. (C-019) ➤ Knowledge management is junior staffs can reach the level of senior staffs by following certain set of standard. (C-019) ➤ I think that knowledge management has many definitions. For managers, the only thing they have to do is to let everyone reveal their knowledge. Knowledge can then be managed. (C-020) ➤ I think the most important thing for knowledge management in the whole department is knowledge inducement. (C-020) ➤ ... things are changed from tacit to explicit and then get combined. That is to say, knowledge management is normally like this in a company. (C-020)
The subject talks about	➤ Usually, it requires the accumulation of both time and experience.	

Examples	From the Socialisation Group	From the Combination Group
<p><i>the Socialisation process.</i></p>	<p>(S-002)</p> <p>➤ <i>It is about a process of influencing unobtrusively and imperceptibly. When you talk about tacit knowledge, you must experience this process. (S-008)</i></p>	
<p><i>The subject talks about the Combination process.</i></p>		<p>➤ <i>Under the circumstances of changing explicit knowledge to another explicit knowledge, everyone will be a bit different in judging the data unless it implicates mathematical or scientific formulas. If it has to do with mathematical or scientific formulas, the result will be much more accurate. If it is about the judgement of some information such as the trend of share price, different people will have different perspectives even with the same data. (S-002)</i></p> <p>➤ <i>In that time, the system mainly focused on data modelling. That's right, data modelling. Data modelling is a bit like this Combination. (C-001)</i></p> <p>➤ <i>About the part of Combination or data modelling, it is the work of planning units or so-called information management units. (C-001)</i></p> <p>➤ <i>So what you called as Combination is about first to take out explicit stuff. After it is taken out, we will quantify it. After it is quantified, we will look at its attribute. We have very strict definition for each attribute. After that, we can then do some analysis. (C-017)</i></p> <p>➤ <i>I think that in order to achieve the combination, first you have to let</i></p>

Examples	From the Socialisation Group	From the Combination Group
		<p><i>them get used to several things. For instance, you have to let them get used to recording everything happened in the company all the time. I think that is the basic element of combination. Further, there must have another mechanism ... in which someone is responsible to deleting repeated and irrelevant information. (C-020)</i></p> <p>➤ <i>I, however, think that if you want to combine different stuff in everyone's head, the best way is through the kind of group-discussion meeting, informal group-discussion meeting. Nevertheless, there must have someone to record the whole process. (C-020)</i></p> <p>➤ <i>(Managers) have to set a good example with their own conduct by sharing out their ideas. I think this is the best situation for employees to combine their explicit knowledge. (C-020)</i></p> <p>➤ <i>I think that combination should have a premise that tacit is already induced to explicit. Otherwise, tacit cannot do combination by itself. (C-020)</i></p> <p>➤ <i>Suppose that I want a person or a team to combine with explicit things. I actually have many simply ways. For instance, I want this team develop a system. Perhaps, similar systems have already been developed by other companies. I therefore would give the development results done by other companies to my team to let them do comparison and combine them. (C-020)</i></p>

Examples	From the Socialisation Group	From the Combination Group
		<div>➤ ... whilst combining explicit with explicit stuff, managers are the one who provide the solution. (C-020)</div> <div>➤ If employees have a manager who is over strict, they only do one thing. They would conceal wrong things as much as possible. Such concealing actually is a great disadvantage to knowledge conveyance. (C-020)</div>

APPENDIX P Comments on Socialisation and Combination from the perspective of TXT

Comments on Socialisation	Comments on Combination
<p>➤ <i>What I am doing right now is about the stuff of production or manufacturing. (S-001)</i></p> <p>➤ <i>... no matter old people or new people, their desire may not be so high. (S-001)</i></p> <p>➤ <i>You say production, it is about producing things on time. (S-001)</i></p> <p>➤ <i>For some old OPs, when you talk to them, they probably know what you mean very fast since they have had that kind of experience. They can make use of relevant stuff. For new OPs, it is hard to explain to them since linguistic interpretation can only have certain level of effect. If we go further, it requires their backgrounds and knowledge to comprehend it. (S-002)</i></p> <p>➤ <i>... in this company, senior staff tell you something that is not revealed in the SOP which is impossible to tell you all the details. They tell you something that you need to care about, which is no way to be written. (S-002)</i></p> <p>➤ <i>... in production line, things will be much simpler. Those who are senior and know some tricks can do things quicker and better, but those who are junior and do not know certain knack cannot. (S-002)</i></p> <p>➤ <i>If you talk about front-line employees, they are totally different. You can assign someone or low-level leaders to teach them how to assemble or operate machines. It only takes about three or five days. If it is a complicated machine, it takes one month at most. It should be pretty fast when you do assembling or something like that. (S-005)</i></p>	<p>➤ <i>Those targets are not suitable for those who in R&D departments. In this kind of department, people are examined by their originality, progress and capability in solving problems. (S-008)</i></p> <p>➤ <i>... if you are to manage those who do innovation work and are full of imagination, how are you going to manage them? It is much harder to manage them. How do you stimulate their creativity? For instance, for those who do programming, the management has to be quite different from the others. (S-016)</i></p> <p>➤ <i>... for those people, they do things much of their own accord, have good backgrounds in education and want to get respected. So you cannot manage them by traditional way. They do not belong to that kind of management. You have to collect as much as information for their reference. Even, you have to send them abroad to see the world. They have to use their brains to do things and what they have down is priceless. You have no idea of when their output values will be revealed. (S-016)</i></p> <p>➤ <i>... many big companies have R&D centres in which they have their own libraries, leisure centres and cafes for those who are seen as elites. (S-016)</i></p> <p>➤ <i>In our company, the MIS department is positioned as a department which only brings in computing devices. About what you say as combining the data, it is not managed by the MIS department. (C-001)</i></p> <p>➤ <i>... our work is still about introducing platforms which are suitable for the</i></p>

Comments on Socialisation	Comments on Combination
<p>➤ Generally speaking, leading line workers will be much easier. (S-005)</p> <p>➤ It will be much easier to lead line workers. (S-005)</p> <p>➤ Direct staff refers to those who work in production line ... For direct staff, however, they do settled and routine things everyday. (S-005)</p> <p>➤ They may not need college degrees to do this job. (S-005)</p> <p>➤ They only think about getting their jobs done as soon as possible. (S-005)</p> <p>➤ As to direct staff, do they have requests? Yes, they do, but their requests are much simpler. (S-005)</p> <p>➤ It is easy for you to deal with them. They only care about whether they can get new uniforms if they get dirty or whether they can get tool kit when they need it. (S-005)</p> <p>➤ For direct staff, they are quite routine. (S-005)</p> <p>➤ ... it is much easier to lead line workers in production lines since their requests will not be out of your control. They are much simpler. (S-005)</p> <p>➤ For direct staff in production line, they only care about output required, time needed and environment faced. These are their concerns. (S-005)</p> <p>➤ ... if you are a more authoritative leader, you will not get such knowledge. I think that authoritative leadership is not able to get such knowledge. Those who have knack or tacit knowledge and are under authoritative leadership may think that if they release their knack, they will lose their bargain power. They do not trust authoritative leaders. (S-006)</p> <p>➤ ... for leaders who are decent, can stand by their subordinates and regard their</p>	<p>company. They may not be the largest one, but have to be the most suitable one for the company's scale. (C-001)</p> <p>➤ ... our job is to introduce certain platform and maintain that platform. (C-001)</p> <p>➤ Like this company, Evergreen International, the work of Combination should go to inspection units since we do not have planning units. (C-001)</p> <p>➤ ... for the part of modelling, we are only in the position of assisting. (C-001)</p> <p>➤ We always think that MIS department will not be a leading unit for knowledge management. It just assists in introducing IT technologies. (C-001)</p> <p>➤ I think that for those who are doing IT work, money is not the only consideration. Their first priority will not always be money. (C-002)</p> <p>➤ It is about whether your company has given you the power to do such thing. In fact, this is a practical stuff to me. From my understanding of manufacturing, they will not allow departmental managers to have the kind of power to do such thing. (C-002)</p> <p>➤ ... for those who are doing IT work like us, we usually work until late night on weekdays and on weekends. (C-002)</p> <p>➤ Especially for the work like programming, when we are busy, we usually work until mid-night. (C-002)</p> <p>➤ In this environment ... they can just do what they have been told. However, when they are appraised, they will find that other people's performance is better than theirs. At that time, they have to accept that other people can get better bonuses or promoted than they can. As a result, they will adjust themselves. (C-003)</p>

Comments on Socialisation	Comments on Combination
<p>subordinates as their family, or you can say for those who are more democratic leaders, it seems that they are also not easy to get their subordinates' tacit knowledge. (S-006)</p> <p>➤ I take dyeing as an example. I think that dyeing is the most difficult part in Taiwan's textile industry. It involves in the judgement of colours. If you ask the master about how to dye something red, the master will tell how. But the colour you get will be less beautiful than that of the master. It means that something has not been released and still resides in the master's mind. (S-006)</p> <p>➤ I use computers to do dyeing. After I key in some data about particular colour, the computer can do some analysis and give suggestion. I can do the analysis again and again until I get satisfied with the colour. I can get the optimum colour by using computers. I can use this scientific way to establish the database. It only needs some time to do it ... So machines can overcome the problem of knack. (S-006)</p> <p>➤ In general, for those who have certain tricks, their knowledge or backgrounds are not so rich. (S-006)</p> <p>➤ ... the management style has to be hierarchical. It is managed layer by layer. (S-006)</p> <p>➤ For these people, to a certain extent, you have to be much autocratic since they involve in no tricks. (S-006)</p> <p>➤ No tacit knowledge in production line. (S-007)</p> <p>➤ Staff in production line has to be as fool as possible. (S-007)</p>	<p>➤ Like this kind of staff in particular, they are very strong in self-thinking. If you want them to do routine job, they will not accept it. Under these circumstances, you cannot use the way of managing production line in the factory to manage them. It does not work. Everyone will suffer from it. Even, it will make you lose your focus. (C-003)</p> <p>➤ ... our information processing is user has to key-in information which will be processed by computers and it results in the output or report required by other people. (C-004)</p> <p>➤ In our work, if it is about doing data key-in, it should be someone's responsibility. (C-004)</p> <p>➤ That is to say, if your job is about to key-in data or something like that, this is the job that you have to do. (C-004)</p> <p>➤ The Information Department is a place in which people write programmes. (C-004)</p> <p>➤ For rewards or punishments, it is unlikely to use them. As for this thing ... ordinarily there is nothing worthy of being rewarded. If it is the work that has to be done by someone, there is no need to mention it in particular. As to punishments, I do not think that it is a good idea. If they make mistakes but they do not do it on purpose, there is no need to ... (C-004)</p> <p>➤ Every manager will have their own way of doing ... The difference also relies on how many tools you have on hand. Today, if I have absolute power, I may be able to give someone rewards or punishments right away. So if you have different</p>

Comments on Socialisation	Comments on Combination
<p>➤ <i>The importance of team. (S-007)</i></p> <p>➤ <i>Usually, the operation of product lines is scrupulous and methodical since it is complicated. (S-008)</i></p> <p>➤ <i>The situation is different in production departments. Production requires accuracy, efficiency, cost down and consistency. (S-008)</i></p> <p>➤ <i>I think that nowadays leadership is quite different from the old times. I think that you cannot say leading, instead you have to say working together. (S-009)</i></p> <p>➤ <i>I led production line before. Basically, that was the place in which line workers were the majority. (S-009)</i></p> <p>➤ <i>To learn wisdom, techniques or something like experience. You have to rely on yourself rather than your masters. Masters only teach you concepts. You still have to count on yourself to explore, test and operate ... in order to get some experience. (S-010)</i></p> <p>➤ <i>Masters only observe you and give you a big direction. You have to explore by yourself. (S-010)</i></p> <p>➤ <i>Sometimes, they use their experience values to do things. These values are unable to be learned by other people. They are resulted from experience. (S-010)</i></p> <p>➤ <i>We have our own experience. They have to develop theirs. As time goes by, their experience may be better than ours. So they have to have willingness to learn and to ask. (S-010)</i></p> <p>➤ <i>... some people only want to do ordinary things. They only follow standards and are not willing to learn more. There are some people like this. (S-010)</i></p>	<p><i>power, your way of doing will also be different. (C-004)</i></p> <p>➤ <i>... like this Information Department, I think that ... incentives will be much less. (C-004)</i></p> <p>➤ <i>Like us, we produce many information forms every day. (C-005)</i></p> <p>➤ <i>Suppose information coming in ... In most of the time, it has to rely on the accumulation of experience to make judgement. For instance, we have to use the experience to judge when something can be done or why it takes so long. (C-005)</i></p> <p>➤ <i>Like the stuff we are writing, it depends on the accumulation of experience. It is hard to get quantified. (C-005)</i></p> <p>➤ <i>We quantify general things. For instance, why do we have more demands this month than the last month of ten programmes? Suppose we are in a bank and our work is to maintain its system. So if the demand is dramatically increased in a certain month, we have to find out why. (C-005)</i></p> <p>➤ <i>... to us, many things have to depend on our experience to judge. (C-005)</i></p> <p>➤ <i>In my work, explicit information is for reference. Mostly, it has to work with tacit information to make judgement. (C-005)</i></p> <p>➤ <i>About punishing people, we nearly have no such thing. We have not punished people over ten years or so. (C-005)</i></p> <p>➤ <i>... when we write programmes, we are so easy to make the same mistake as this kind of thing is not like doing something in production line ... what we are doing is diverse. (C-005)</i></p>

Comments on Socialisation	Comments on Combination
<p>➤ It is not possible for us to stay in the site twenty-four hours a day. We have lots of things to deal with. (S-010)</p> <p>➤ In the process of solving the problem, staffs can learn techniques and experience. If they have experience, they can lead their people. Gradually, things will be getting imparted and roots will be getting grounded. (S-010)</p> <p>➤ It is not the case that if you do not achieve the target I set, I will do something to you. I will not do that. That is too compelling and autocratic. Now, time has changed. It is different from our times. (S-010)</p> <p>➤ I just told you that we have already made things standardised. Like ISO. (S-011)</p> <p>➤ With the same machines, different units will have different output values. The variation relies on as I said that someone must be hiding something. I think they must be retaining something. So in the long run, you will find that some units are producing more but some are producing less. (S-012)</p> <p>➤ To us, the low-end manufacturing processes do not engage in so much tacit stuff. We do not engage in so much tacit stuff. (S-012)</p> <p>➤ As an operator who operates machines for seven or eight hours, they must have their own little techniques that may not be recognised by other people. (S-013)</p> <p>➤ If the operator does not voluntarily raise this issue or it does not cause any serious problem, no one will ever know it and it may be taken away by the operator. (S-013)</p> <p>➤ Since machine tools were replaced by CNC (computer numerical control) machines, many industrial appliances became digitalised. (S-014)</p>	<p>➤ We had a situation that for the same purpose, Staff A wrote ten programmes for it but Staff B only wrote one programme for it. The effect of that ONE programme was equivalent to the effect of those TEN programmes. If so, how can you say that the performance of Staff B is worse than Staff A? We cannot look at it this way. (C-005)</p> <p>➤ To our top management, they just want to see the result. They do not care about your processes. They just want to see something they want. As to how it is produced, it is hard for them to imagine. It is like going from Taipei to Kaohsiung. Some people will do it by bicycle but some will do it by plane. The situation is, for the top management, they only care about someone finally gets to the destination. They do not care about which way is used. (C-005)</p> <p>➤ ... Especially for those who are knowledge people, usually they do not like to be restricted. This is quite important. It is useless to use your title to force them to do things. (C-005)</p> <p>➤ ... my work is I just give what have been done to the supervisor. I have to collect everything done in this team and give it to the supervisor. (C-005)</p> <p>➤ As they are at the top level and have to do management, so they can only see results. They are result-oriented. But here, we belong to something technical. (C-005)</p> <p>➤ ... sometimes, (the outcome) is the result of the whole team's action. (C-005)</p> <p>➤ In the Computer Division, you have to use your brain to make yourself progress, accumulate knowledge all the time. (C-006)</p>

Comments on Socialisation	Comments on Combination
<p>➤ In previous times, masters were considered as treasure. Today's achievement is based on a fact that they first reveal their feeling and then other people use their feeling to build up a set of system, to do an overall improvement. (S-014)</p> <p>➤ The numerical system of CNC has to be based on the master's narration. Having had numerical data, the machine can then be adjusted. (S-014)</p> <p>➤ ... after the product is produced, we can then evaluate the numerical data to see whether they need amendments. We can amend again and again. (S-014)</p> <p>➤ The first thing is digitization. We just talked about that you have to make previous craftsmanship digitised. After being digitised, the subsequent management will generate less misunderstanding. (S-014)</p> <p>➤ Everything is managed digitally. (S-014)</p> <p>➤ In the time of machine tool, masters used their feeling to sense how far they should go and how accurate they should do. Now, everything is done by CNC and presented by figures. For masters, some are good at craftsmanship rather than knowledge but some are good at knowledge rather than craftsmanship. So there are two types. (S-014)</p> <p>➤ Take AutoCAD as an example ... before entering into the world of AutoCAD, we need to have someone to teach them. But now the situation is before entering into the company, the school and society will let them have some ideas of it. So after they enter into the company, they can pick up relevant skills very soon. (S-014)</p> <p>➤ ... they have to rely on senior site staffs. Senior site staffs are like their masters.</p>	<p>➤ There is no problem in management as this is a place in which everyone uses their brains to work. (C-006)</p> <p>➤ ... in the Computer Division, it is probably ... As its turnover is much higher, so you have to keep making progress otherwise you will be hard to write any programme. (C-006)</p> <p>➤ We are workers of middle level as we usually have had ten years of experience or so. About my people, they have three or four years of experience on average. (C-006)</p> <p>➤ Everything is moduled. (C-006)</p> <p>➤ Everyone has to use experience ... leaders have to use the experience to plan the requirement quite well. (C-006)</p> <p>➤ You should say that the Computer Division is very special. There is no serious problem in management. I have some friends who work in other companies' information departments. Their situations are more or less the same. It is much special. (C-006)</p> <p>➤ Information departments are much special ... as in the Computer Division everyone uses the brain to do things. (C-006)</p> <p>➤ If a youngster comes in, everyone will respect him/her. As that youngster is new, he/she may be very good at internet. For the old people, they may not have any idea of internet so they have to count on that youngster. (C-006)</p> <p>➤ Unlike the mainframe environment which is much complicated, here the environment is much simpler. Four or five persons can write programmes and</p>

Comments on Socialisation	Comments on Combination
<p><i>So they will teach them how to operate the machine. They will teach them how to examine wear and tear and to judge the accuracy. (S-014)</i></p> <p>➤ <i>If you set up the relation for them in the beginning, apprentices would think that their masters are always right so that they would imitate them spontaneously. Nevertheless, whilst they see their masters insufficient to providing something they want or they think they can be independent, they leave the company. (S-015)</i></p> <p>➤ <i>For newcomers without any experience, their salaries were NT\$24,000 which were ten percent higher than other companies. (S-015)</i></p> <p>➤ <i>Due to the feature of this industry, the temperature of our working environment is very hot. So ... the incentive to them was if they became supervisors within three years, their salaries would be raised up to NT\$40,000 or even NT\$50,000 which were at the level of managers. (S-015)</i></p> <p>➤ <i>In the circumstances of high turnover of staff, the only way for you to survive in this industry is to keep your own stuff. (S-015)</i></p> <p>➤ <i>... we, enterprises, now focus much on automation and fool-proof devices. (S-015)</i></p> <p>➤ <i>Our techniques are not so complicated. Though there is some experience value, once a new product is put on production for six months, it becomes a routine job. So, the technical level is not so high. (S-015)</i></p> <p>➤ <i>... we always have some problems. For instance, some masters are conceited, which are not accepted by their apprentices. In this case, it is impossible to make the masters change. (S-015)</i></p>	<p><i>start to do some research together. (C-006)</i></p> <p>➤ <i>The Computer Division is much like managing the status of being progressed since here we deal with new stuff. (C-006)</i></p> <p>➤ <i>Although it is quite mechanical in the Computer Division in which information transfers in and out, it is much free as you have to elaborate your imagination to solve problems. (C-006)</i></p> <p>➤ <i>In the Computer Division, if you string along with someone for a long time, you will know the principle of every time they handle things. (C-006)</i></p> <p>➤ <i>In the Computer Division, you have to write programmes, you have to have that ability. (C-006)</i></p> <p>➤ <i>... in the Computer Division, everyone is more or less the same. It is much free. (C-006)</i></p> <p>➤ <i>Here, everyone just write programmes. As time goes by, they will have experience and may not need your guidance anymore. At that time, you just distribute the work to them. (C-006)</i></p> <p>➤ <i>Comparing with other departments, here they have to use much brain but they are quite happy here. (C-006)</i></p> <p>➤ <i>... here, although everything is modulised, it is about scientific formulae and it is flexible. (C-006)</i></p> <p>➤ <i>Although it is also modulised, comparing with the situation in the counter or in the management department, its flexibility is bigger. (C-006)</i></p> <p>➤ <i>... if you look at the whole computer environment, it involves in several aspects</i></p>

Comments on Socialisation	Comments on Combination
<p>➤ You are right that the masters have accumulated years of experience. But I think that no matter how smart the apprentices are, they will not be as good as their masters. So the masters have to write something down for the apprentices to experience or learn. Then, the masters can check whether the apprentices are doing well or not. I think that the situation is almost like this. (S-016)</p> <p>➤ All products manufactured on production line must be following SOPs. (S-016)</p> <p>➤ ... in here, things are very easy and simple. As I mentioned, just get the SOP down well. (S-016)</p> <p>➤ Production is about conducting SOP well. It is about following it. (S-016)</p> <p>➤ For my people, they only have to achieve certain level of standard. (S-016)</p> <p>➤ Regarding to so-called experience impartation, in fact we have many mechanisms designed for this kind of thing. For instance, in our daily morning meetings, the front-line supervisors will report everything happened in the previous day, whatever referring to production or other stuffs. In this occasion, managers in every unit will show up and they will base on their specialities to bring up their opinions about everything. (S-017)</p> <p>➤ ... we have other regular and irregular meetings through which experience can be imparted by making discussions. (S-017)</p> <p>➤ There are many sections and units in the factory. Every section has a section manager and every unit has a unit supervisor. We therefore can regard those managers and supervisors as masters. And, our factory director is a manager at higher level. (S-017)</p>	<p>of people, events, time, places and stuff. (C-007)</p> <p>➤ I personally think that managing IT staff is different from managing staff in other departments. (C-007)</p> <p>➤ IT staff's thinking pattern does not follow the logic of ordinary people. (C-007)</p> <p>➤ As you are talking about IT staff right now, in fact it is very hard to manage IT people. (C-007)</p> <p>➤ IT ... or I should say engineers' characters. One of the engineer's characters is they think that they are the most brilliant people in the world. They have such kind of thought. (C-007)</p> <p>➤ They are the king. They have such character. So when you today manage such IT people, you cannot use the way of managing pupils to manage them. (C-007)</p> <p>➤ To be honest, the most terrible thing in the IT industry is the turnover of staff or something like the leave of the whole team. (C-007)</p> <p>➤ We can see that in Taiwan many companies are nearly dead as the leave of a certain group of people. If the R&D team in a certain company leaves, the company has to suffer more from it since it has one more competitor. There are many cases like this. (C-007)</p> <p>➤ I have led some people in a software company. Software companies have a very high turnover of staff. That is to say, when a person enters into a company, that person will leave the company approximately after three years as that person has already learned something. (C-007)</p> <p>➤ For IT staff, they are much easier to find new jobs. They have more</p>

Comments on Socialisation	Comments on Combination
<p>➤ ... we divide the whole production area into several sections. Each staff has to be in charge of each section. (S-017)</p> <p>➤ In our department, the crucial work is to balance pumps ... In previous times, when we had no measuring tools, we had to rely on our masters. But now, we are thinking about how to make the masters' ... We have to let them be willing to reveal it. In the past, our masters could easily make the pump balanced with little efforts. No one understood how they did it. (S-019)</p> <p>➤ We are in a traditional manufacturing industry. All the visual parts of a machine can certainly be made. The only thing you cannot see is the control of electronics. This is the only thing that is hard to handle. (S-020)</p> <p>➤ Here, it is not possible to expect your bosses to invest you in learning languages or technologies. They believe that if you want to get this job you should have these abilities before. They think that is your problem. (S-020)</p> <p>➤ In fact, the most important core in our industry is a person's soul ... it is not about how much you control, it is about how important you control. About the impartation of this thing, sometimes the company is not willing to give this to its employees, not even to other people. (S-020)</p> <p>➤ If you talk about sharing experience, it is impossible to share the experience with other competitors. Sharing experience with competitors means sharing profit with competitors. So, for companies, they would use any possible resources to keep their strongest competitiveness. (S-020)</p> <p>➤ If your people have new technology but do not attempt to reveal it, you still have</p>	<p>opportunities. Nowadays, nearly every kind of industry needs IT staff. (C-007)</p> <p>➤ ... we just make everything, including any procedure and programme, documented, indicating how certain work is done. (C-008)</p> <p>➤ In this Computing Room, the situation is most of the stuff is existent. There are some modules you can use. (C-008)</p> <p>➤ ... we may encounter a kind of bottleneck or difficulty. So we have to try to figure that out ... To solve it, we can change our current procedures. After something is changed, it will be applied to the current procedure. Therefore it means that the whole procedure has been changing all the time. We have to record what have been changed and keep relevant documents. (C-008)</p> <p>➤ ... according to the situation in the company, after data come in, you have to do the action of mapping. It is because our work is about producing information reports. (C-008)</p> <p>➤ After the information comes in, it will generate many routine jobs. I can say that about 80% of our work is routine. That is to say, it is about the action of how you map the oncoming information with our own resources ... For the rest of 20%, it probably has to do with the problem of data or its form needs to be changed or something. (C-008)</p> <p>➤ as I said that about 80% of the work is routine, so about this kind of work we will try to consider whether certain procedures can be shortened or whether certain sections can be assisted by computer programmes. (C-008)</p> <p>➤ ... we have many sources of information. If they are checked artificially, it will</p>

Comments on Socialisation	Comments on Combination
<p>no way to manage it since you have no idea of what technology they possess. (S-020)</p> <p>➤ For those who are in production line, they just go on duty and off duty on time. (C-002)</p> <p>➤ Unlike production line in which everything is well set ... (C-005)</p> <p>➤ However, if today it is about production, it would be different from development. Production is about maintaining current situations, not letting things go wrong. (C-009)</p> <p>➤ As a leader, I can only change the procedure in production. My way of doing is if I get A, B and C, I only make sure that they are working properly. Production is much different. (C-009)</p> <p>➤ I think for production, it is about putting current production on-line. Going through testing and training, they should achieve certain level. If not, I would train them to reach that level for production to run. It is a routine job for everyday. (C-009)</p> <p>➤ As a production leader, I only change my current situations. I probably shorten the time of doing one thing from ten minutes to five minutes. Or, I decrease the number of people required of doing one thing. I change the current situations so that it can be run smoothly, much easy to go. So, as a production leader, I just make sure that the time is scheduled and the procedure is arranged. If someone leaves, I can have someone for backup to do the same thing. (C-009)</p> <p>➤ In fact, I have been a production manager for one or two years since I feel that it</p>	<p>be so time-consuming. However, it seems to be inevitable. Therefore what we can do is to use procedures to do examination first. (C-008)</p> <p>➤ We encounter different cases every time. So we have developed some patterns. That is to say, under which kind of condition, you have to use which kind of way or standard to solve it. (C-008)</p> <p>➤ As I said that 80% of the work is routine, so basically there is no big problem. On the other hand, we will try to make the rest of 20% gradually become the part of 80% routine work. If so, the smoothness and progress of the entire work will become better. (C-008)</p> <p>➤ ... IT work needs a bit of technology to assist. That is to say, it is not all about general management. In other words, to let the work carry on, you have to not only manage these people, but sometimes manage ... for instance, the party who provides knowledge to you or something. (C-008)</p> <p>➤ ... for those who are senior, they have more resources, are familiar different situations and can handle much sudden circumstances with their accumulated knowledge. (C-008)</p> <p>➤ In fact, under the structure of our company, it is a bit like everyone does their own work. (C-008)</p> <p>➤ ... everyone takes full responsibility for their own projects and sometimes they communicate with each other. (C-008)</p> <p>➤ We produce reports not only for internal use but also for external use. (C-008)</p> <p>➤ ... we have developed some fixed patterns. If something new comes in, we will</p>

Comments on Socialisation	Comments on Combination
<p>is quite boring. Why? It is like doing the same thing. There is no any change. (C-009)</p> <ul style="list-style-type: none"> ➤ ... when you do production, your greatest importance is to do current things right. You have to make sure that production runs smoothly. (C-009) ➤ Before production, something like design, test and simulation have to go through. If these actions are okay, you can then go on production. You have to maintain it. But, after going on production, lots of things still need to be amended. (C-009) ➤ For production, I only have to make sure that my operation is okay since my job is to make the thing on production, without anything going wrong. (C-009) ➤ They just do what they are regulated. Also, you will find that these people's productivity or efficiency can be directly calculated. For instance, you can calculate how much profit each person can make for the company or how many motorbikes each person can assemble within one hour. (C-019) 	<p>update the entire schedule to see whether they have any opinion about it. (C-008)</p> <ul style="list-style-type: none"> ➤ ... what I am doing is for human resources department. They have to change some systems. Now, I just make some changes to satisfy their needs. (C-009) ➤ With regard to IT, everybody knows that IT has always been changing. It changes every one or two years; it changes every one or two years. (C-009) ➤ Most of our engineers are shy and quiet. They do not consider what to do in the future. They just do their jobs step by step. They are very happy about the work. However, I feel that some people are quite agile. Their brains are so active. They think much and want to make more money. This kind of people must be kept. Why? They have lots of ideas. They can help you in creation since they have many ideas. (C-009) ➤ Take the Information Division as an example, this is a small unit with about twenty members. For such small unit, we also divide it into several functions. We as the Information Division have to think about what IT can do in this company. We have to think about what basic operations are. We have to think about what strategic operations are. Then, you will try to do some division or distribution to your organisation. (C-010) ➤ If some software engineers are to do a project, the role of their project manager will be quite important. (C-010) ➤ To us, whose main work is to do programme development, every development engineer may have their own character. They may be more characteristic than

Comments on Socialisation	Comments on Combination
	<p>general operators. (C-010)</p> <p>➤ ... our department is in charge of developing machines of all our chain stores. Besides, we also develop some new stuff which can be used in our chain store. (C-011)</p> <p>➤ Frankly speaking, here we use project as a basis. So when we talk about project, we have to concentrate on its scope, target and requirement. So from the point of view of our whole organisational operation, we have to first examine the qualification of our people. Perhaps, they have to have certain degree of experience and quite understand the operation of our retailer. (C-011)</p> <p>➤ ... as the machine we develop includes some functions of finance, telecommunication and insurance, they have to know something about these. (C-011)</p> <p>➤ ... our projects have to coordinate with many other departments in the company. (C-011)</p> <p>➤ As we are in retailing, we first have to see what our customers want and then we can examine whether our projects meet their requirements. So our way of operation will be connected with user units. (C-011)</p> <p>➤ ... in our department, we are based by project. We are a bit like a matrix organisation. (C-011)</p> <p>➤ I should have clarified that our department is so-called intelligence system department. It is an IT department. (C-011)</p> <p>➤ The pattern of our internal operation may be different from many other</p>

Comments on Socialisation	Comments on Combination
	<p>companies. <i>Our internal situation is all of the members in the intelligence system department are planning staffs. They do not do any coding or any IT technology design. They do none of them. That is to say, we only deal with internal operation procedures like booking procedures and accounting procedures.</i> (C-011)</p> <p>➤ <i>Here, we plan how certain procedure is routed and then we outsource it for coding and maintaining the entire network system. So our role is to improve the operation procedure constantly.</i> (C-011)</p> <p>➤ <i>I think that for those kinds of visible stuff like salary or prizes ... Sometimes, those are associated with the organisation and you cannot do anything about them ... In local companies, managers do not have such authority.</i> (C-011)</p> <p>➤ <i>Before starting to do programming, I think that it is considerably important to do the analysis of the whole system and the integration of various businesses. If it is not perfectly done, you will not be able to design any system which can meet the future needs.</i> (C-012)</p> <p>➤ <i>I once told them to do the project all over again to see whether the problem could be found out. We had this kind of experience before.</i> (C-012)</p> <p>➤ <i>In my time, the computer disk was too big to carry and its capacity was too small. In that time, we had hundreds of millions of data. Especially when we had to do on-line operation, we need to put dozens of disks on the mainframe. That was so exhausting. So when we wanted to use it or find some information, we really felt so difficult.</i> (C-012)</p>

Comments on Socialisation	Comments on Combination
	<ul style="list-style-type: none">➤ <i>Suppose the engineer goes to the customer's place to repair something. When they come back, they have to report what the problem is, how they judge it and how they solve it. (C-013)</i>➤ <i>Basically, we are a bank. We just comply with our company's policy to carry out what should be done. What should be done includes what you just mentioned as some reports. (C-014)</i>➤ <i>Generally speaking, managing affairs finally turns out to be managing people as affairs are conducted by people. Even though it involves in managing information, originally it has to do with human problems. So managing affairs is like managing people. (C-014)</i>➤ <i>In fact, something is instant. In the bank, there is much stuff which is instant. They are not allowed to cause any trouble. Here, the most instant stuff is about stock business. Stock system does not allow having any trouble. (C-014)</i>➤ <i>... if you are in such industry and are those who do technology, you should know much of the newest stuff. So you also need to update, update your working experience and knowledge. (C-014)</i>➤ <i>About what kind of result or information form should be saved ... For instance, if we are going to save some information, we will save everyday working information in some media. (C-014)</i>➤ <i>... they ... think that staying in public sector can be so comfortable and as long as they do not do anything wrong, they can stay here for the rest of their lives. (C-015)</i>

Comments on Socialisation	Comments on Combination
	<p>➤ <i>In the past, we used centralised, closed mainframe. They just had to upgrade the machine. After the machine was upgraded, it probably could be used for ten years. However, in recent years, we have been through a huge change for the whole taxation information environment. Nearly all the concepts used in the outside such as client server, database or UNIX are introduced. (C-015)</i></p> <p>➤ <i>... such information department is only a supporting unit in the whole system. (C-015)</i></p> <p>➤ <i>Here, they have no pressure. If they are given "B" every year, they still get pay. As long as they do not cross the line of being laid off, they will be fine. As long as they do not make big mistakes, they will be fine. However, on the other hand, I have to say that they still do what they ought to do. It seems that I cannot ask so much from them. (C-015)</i></p> <p>➤ <i>... in the information department, as this place is self-contained, there is nowhere to get many people promoted. They have to fight for few section leaders. (C-015)</i></p> <p>➤ <i>I think that there are two extremes in our department. I mean that in our department there are two extremes. (C-015)</i></p> <p>➤ <i>There are hundred of people in the information department. Do you know that? We still have offices in the outside. (C-015)</i></p> <p>➤ <i>As a whole, we have hundred of people in seven different sections. These seven sections are not overlapped in terms of working content ... The first main job of our department is to take the responsibility of all the information, computer</i></p>

Comments on Socialisation	Comments on Combination
	<p>devices. Also, we have to be in charge of processing income tax data. (C-015)</p> <p>➤ ... they have to work out, for instance, how many data they have to key in, how many people they require and how many costs they have to spend. (C-015)</p> <p>➤ In here as Legal Division, our business has to do with providing legal service for taxation. It means that we are in the position of making judgement. Under these circumstances, we have to build up all of the cases. (C-016)</p> <p>➤ ... we have already keyed in all our cases into the computer. Through our intranet, everybody can check and further see the contents of the case. (C-016)</p> <p>➤ So the accuracy of information becomes extremely important. If the information is incorrect or biased, it becomes refuse and misleading. Therefore, our cases are examined by a committee of twenty-five members. After examining by those members and getting their approval, we can then key in those cases into the computer. The computer can therefore put them into the system. (C-016)</p> <p>➤ ... in our department, we do things openly and independently. Nothing has been done under the table. (C-016)</p> <p>➤ The work in one of our sections is to update the information in the website. If something new such as cases or new opinions comes out on internet, they have to email it to all of the members. For instance, if there are new regulations or interpretations from the Ministry of Finance, they have to pass them to every member in the bureau. (C-016)</p> <p>➤ As a fact that Information Department is a supporting unit, its users, we called internal users, are those departments other than Information Department.</p>

Comments on Socialisation	Comments on Combination
	<p>(C-017)</p> <p>➤ <i>The existence of Information Department is for the purpose of assisting other departments in the company, categorising what you called as explicit stuff but we called as attributes. (C-017)</i></p> <p>➤ <i>Basically to us as an Information Department, we roughly can be divided into two categories. One is about IT infrastructure. IT infrastructure contains all kinds of hardware, including networks, mainframe and storage media and so on. We just concentrate on building up such infrastructure. There is another group of people who belong much to the part of SA and whose work has much to do with system, software. They have to sit down and work with other departments.</i></p> <p>(C-017)</p> <p>➤ <i>When the plan is set up, we will announce that for instance, in this year we want to do what and we need the cooperation from which department. So in about July or August, we will start to do budgeting. After budgeting is done, we will propose our goal in the executive meeting, telling them that this is what we are going to do and what kind of advantage we can bring to them. This is the first thing. The second thing is if we do not do it or we do it late, what are we going to become? (C-017)</i></p> <p>➤ <i>... if we propose ten plans and they are all approved by the top management, I will then deploy those plans to my people. For instance, if you are in the hardware team, to accomplish this, you may need to expand the capacity of your database. So you have to tell me when it can be done. (C-017)</i></p>

Comments on Socialisation	Comments on Combination
	<p>➤ <i>As to the team of software, as their work is about SA, system analysis ... They have to cooperate with other departments. They have to attend the executive meeting and report to every department what they are going to do and what needs to be cooperated. After the presentation is done by our team, other departments will know what our goal is and what they need to do to cooperate with us. (C-017)</i></p> <p>➤ <i>... in IT organisations, right as well as duty are very important. Although IT only means two words as information technology, these two words contain plenty of things. From infrastructure's point of view, it contains OS. We have to study which OS is suitable for us. Are we going to use Linux, Windows or what? Or we just adopt IBM system. There is no right or wrong. There is only adequacy or inadequacy. Besides, we have to deal with security. About security, what does it contain? It contains Firewall. So what is our policy for it? Does security only contain Firewall? E-commerce is another issue. About its certification, how do you want to do it? So in fact, IT contains plenty of stuff and they are all very complicated. (C-017)</i></p> <p>➤ <i>... to me, IT in fact is like a symphony orchestra or something. Every one of them has to be professional. (C-017)</i></p> <p>➤ <i>in IT departments, everyone has to be professional. (C-017)</i></p> <p>➤ <i>Basically, we will not be so hierarchical. We will rather be flat. (C-017)</i></p> <p>➤ <i>... here, everyone is clear about their own job description. Their job descriptions are clearly written and they know better than others what they are going to do.</i></p>

Comments on Socialisation	Comments on Combination
	<p>(C-017)</p> <ul style="list-style-type: none"> ➤ ... we have to truly record the situation happened every time. Afterwards, what we can do is to use computers to do some statistical analysis, as you said, to re-combine, merge the data. (C-018) ➤ So, to us, we think that recording everything is a foundation. Everyone, including me, has to do that. (C-018) ➤ It should not be the case that because of a certain person the company can then work. (C-018) ➤ It has to be the case that without somebody the company can still work. (C-018) ➤ ... in this industry we would also contact our so-called suppliers. Let them become a part of the knowledge circle since they can provide us with relevant knowledge. (C-018) ➤ ... we have to put our suppliers, other competitors and the development of the industry together. (C-018) ➤ Basically, there are three kinds of guidance. The first one is when the master wants to ask for leave of absence, the apprentice must be able to act for him/her. Otherwise, I will not let the master have leave of absence. So if the master wants to have leave of absence, he/she has to teach the apprentice as good as he/she is. In this case, the master must be dedicated to teaching the apprentice. Second, if the master wants to get promoted, he/she has to teach the apprentice well. ➤ Otherwise, if the master gets promoted, no one can take his/her place. (C-019) ➤ If the master does not train the apprentice well, there is no place in which the

Comments on Socialisation	Comments on Combination
	<p><i>master can go ... If the master wants to have leave of absence and/or get promoted, he/she has to let the apprentice become as good as he/she is. The third one is everybody's performance in the unit or team is tied up ... If the master is good, the apprentice also has to be good. In consequence, the master has to do his/her best to bring up the apprentice. (C-019)</i></p> <p>➤ <i>We are an information department, a supporting unit. (C-019)</i></p> <p>➤ <i>Suppose that we are going to support production units. I always tell my people that if we can support them, help them to do system planning, they may use the system to make more profits and to increase the satisfaction from the client. As long as they can make more profits, we will be able to get more pay. (C-019)</i></p> <p>➤ <i>First, someone must be able to act for you. Second, if you want to get promoted, you just have to have this. Third, masters must be able to quantify things. What can they quantify? They cannot quantify how many newcomers go to the lesson. Instead, they have to quantify how many lecturers or newcomers they have trained. You have to tell masters that if they want to get promoted, they have to get certain amount of people trained. If so, masters will do their best to work for it. (C-019)</i></p> <p>➤ <i>I think that at present we are in the time of a very high turnover of staff. When valuable knowledge is brought away by employees, this is the loss of the company. (C-020)</i></p>

