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**Towards An Integrated Information System
For a Public Sector Organisation in Brunei Darussalam**

By

Haji Suhaimi bin Haji Abdul Karim

A Doctoral Thesis


Submitted in partial fulfillment of the requirement for the award of
the degree of Doctor of Philosophy
Loughborough University

February 2001

Supervisor

Professor Ron Summers BSc, MSc, PhD, CENG, M.InstMC, SMIEEE

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Dedications

To the loving memory of

my late grandfather

Allahyarham Penglima Asgar Dato Paduka Haji Abdullah

&

my late father in law

Allahyarham Pengiran Haji Sabtu bin Pengiran Linong

Abstract

Information systems, by nature, are open to interpretation from a number of viewpoints. This thesis emphasizes that information systems are not 'technical' systems that have behavioural and social consequences, they are 'social systems' that rely to an increasing extent on information technology for their functions. Hence any systems development methodologies used cannot deal simply with the problem of how one designs technically reliable and cost effective information systems. Instead it regards systems development as an example of multidimensional social change, the application of technology may not be a desirable solution to the situation. The choice of a development methodology should therefore take into account its sensitivity to the cultural, social, and political aspects of systems design.

The aims of the thesis are three-fold. The first aim is to transform an idea or perception of needs into actionable drivers for change in a public sector organisation in Brunei Darussalam. The second aim is to identify and diagnose the problems associated with the management of information. Finally, the study aims to identify a suitable methodology that can be used to investigate a number of organisational issues. This work incorporates a practical case study of a problem situation at the Ministry of Religious Affairs, the sole government agency responsible for perpetuating and disseminating Islamic teaching in Brunei Darussalam.

The methodology used to investigate the problem situation is Checkland's Soft System Methodology (SSM). This is well chosen as the case study deals with human activity systems that are not well defined. Systems intervention via a semi-structured and informal discussion interviews were used to identify the unstructured problem situation (stage 1) of the SSM. The SSM progressed through to the recommendation of actions that constitute culturally feasible and desirable change. In fact, although manual systems are less efficient and effective than their computer-based counterparts, they are preferred in the first instance. Only when the manual system has reached maturity should a computer-based replacement be considered.

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LIST OF ABBREVIATIONS

AO	Administrative Officer
CCITP	Committee which considers the In Service Training Program of the Ministry of Religious Affairs
DHA	Department of Haj Affairs
DIE	Department of Islamic Education
DMA	Department of Mosque Affairs
DOA	Department of Administration
DRL	Daily Rated List
DSA	Department of Syariah Affairs (Department of Islamic Law)
EL	Establishment Listing
ESL	Extension of Service List
HMPO	His Majesty's Public Office
HOA	Head of Administration
HOD	Head of Department
HOP	Head of Personnel
HOS	Head of Section
HRDC	Human Resource Development Committee
IPA	Institut Perkhidmatan Awam (Institute of Public Service)
IPI	Institut Pengajian Islam (Institute of Islamic Studies)
IRC	Islamic Religious Council
ITC	Information Technology Committee
ITD	Information Technology and State Store Department
JVL	Job Vacancy List
MBC	Ministerial Budget Committee
MBP	Muzakarah Bulanan Pengarah (Monthly Board of Directors Meeting)
MMPK	Muzakarah Mingguan Pentadbiran Kementerian (Weekly Ministerial Administrative Meeting)

MSD	Management Services Unit
PAR	Performance Appraisal Report
PDI	Pusat Dakwah Islamiah (Islamic Propagation Centre)
PMS	Personnel Management Section
PS	Permanent Secretary
PSC	Public Service Commission
PSD	Public Service Department
RL	Record of Leave
RS	Personal Record
RTPS	Research, Training and Planning Section
SIC	Staff Internal Correspondence
SOS	Scheme of Service
SRL	Staff Retirement List
UBD	University of Brunei Darussalam

Chapter One

Introduction

1.1 Background

This research study is concerned with information systems development and requirement methodology, with the main focus on human activity in a public sector organisation. It will define the information system requirements of a public sector organisation in Brunei Darussalam called the Ministry of Religious Affairs (MRA). This is the government ministry responsible for overseeing, integrating and perpetuating the proper practices of Islamic teaching in the government and for its dissemination throughout the whole spectrum of the Bruneian society.

Information systems, by nature, are open to interpretation from a number of viewpoints. The perspective taken in this research study is that an information system is the product of social interaction between human groups; it is a vehicle for communication, which enables and supports the management of an organisation. The main message of this work is that information systems development methodologies cannot deal simply with the problem of how one designs technically reliable and cost effective information systems. Instead it regards them as a multidimensional social change. The choice of a development methodology should therefore take into account its sensitivity to the cultural, social, political and, for this application, moral aspects of systems design.

What will be unravelled is that the correct place to start thinking about information systems is not with the information systems themselves, but with the organisational activity that they are meant to serve. This is a very basic principle, but one that has not always been followed in the past. Understanding information systems has, in the past, been too often equated with understanding the enabling technology, with the result that too much attention has been given to the technical issues and too little to the needs of the organisations and impacts upon those within them. As a result, analysis and design has been driven by what is technically possible rather than by what is organisationally desirable. According to Avgerou and Cornford ¹:

“Identifying the subject of an information system as being essentially to do with computers or the use of computers in support of individual tasks is wrong and leads at best to dangerous simplifications. Over concentration on computers and other technologies shifts attention away from the essential reason for which we undertake

information handling activities and the organisational context within which they are carried out”.

This wider perspective of information system design requires that a number of people within the organisation need to be identified. These include the individual or group who requests the new system, the senior executives, managers, clerical staff, technical personnel and external users of the system. Most information systems have three major information sources: the real world which may be inspected or observed; the designed information system which is intended to provide an exact image of the real world; and the informal (undesigned) information system which sometimes substitutes for the designed information system, and is often used to provide qualitative or evaluating information about the real world². How an individual uses information from these three major sources depends on a number of factors. Some of these are generic, whilst some are related to the particular environment or situation in which the information is received. Both the generic and specific factors will be explored in this study, as indicated in the aims and objectives below.

1.2 Aims and Objectives

The central theme of this work is to establish the intellectual basis and practical framework for guiding the personnel information systems design activities at the MRA; and to provide a set of representation techniques and support tools to improve the situation. Consequently the aims of the research are threefold:

- A1. To transform an idea or perception of needs into actionable drivers for change in a public sector organisation,
- A2. To identify and diagnose the problems associated with management and handling of information in the MRA, and,
- A3 To identify a suitable methodology that could bring about changes and improvement to a number of organisational issues.

To achieve these aims the following primary objectives can be addressed:

- O1 To define the information system requirements of the MRA (Aim 1 and 2),
- O2 To identify a suitable methodology which can address the information management issues faced by the public service management in Brunei Darussalam in general.(Aims 1 and 3),

- O3 To study the organisational information handling and information management activities of the public sector, particularly on matters relating to personnel information in the MRA (Aims 1 and 3),
- O4 To identify the possible areas and problems of introducing change into the information system of the MRA (Aim 2),
- O5 To provide a conceptual framework for the development and design of an integrated information system for the MRA with major emphasis on the improvement of information handling activities (Aim 2),
- O6 To identify the best system solution to issues faced by the management at the MRA associated with the personnel management information system. (Aims 2 and 3),
- O7 To highlight the information systems development discipline as multidimensional social change (Aim 3), and,
- O8 To identify the feasibility and the difficulty of analysing information systems in the changing nature of public sector administration with reference to personnel information systems (Aim 3).

1.3 Plan of Thesis

This study comprises the application of Soft System Methodology (SSM) to the MRA. It also outlines the utility of systems thinking and proposes a number of actions to be taken by the MRA to improve their information system. The study is divided into nine chapters, which describe the background of the research theory, and indicates how each stage of the methodology is undertaken. The way in which findings are to be used in the SSM study is highlighted, concluding with the design of a feasible and desirable information system for the MRA.

- Chapter 2 describes the methodology to be used in the study.
- Chapter 3 reviews the information systems literature to bring together the concept of information systems and its relevance to and application within the public sector organisation. This chapter also examines the contribution and use of the SSM in the organisational information systems design.
- Chapter 4 represents the findings for the initial stage of the use of SSM in relation to the problem situation at the MRA. This involves the description of the organisational background, structure, roles, location, and the disseminating processes of the MRA.

- Chapter 5 is a mixture of a representation of the findings as a rich picture (RP) that reflects the ‘complexity’ of the situation being examined. The RP is instrumental in highlighting issues that are relevant to the subsequent soft system model. This chapter also incorporates intermediate phases of SSM study: the root definitions (RDs) and conceptual modelling (CM). The RD defines what the desired system is and what it aims to achieve. The CM is then constructed based on the RD, which shows the minimum necessary activities that must exist for the system to achieve the stated transformation.
- Chapter 6 of the thesis is a comparison of the CM and the RP. The comparison process is undertaken by taking each of the elements or activities in the CM and using them to define a set of questions to be answered on the basis of knowledge of the real world derived in the RP. This stage will reveal possible areas for improvement in the system analysed.
- Chapter 7 will then concentrate on the design and implementation of culturally feasible and desirable change which is acceptable to the MRA.
- Chapter 8 discusses the various factors affecting organisational change including possible resistance and opportunities. This chapter offers appropriate strategies to prepare for the proposed design. In the second part of this chapter the significance of the findings to the achievement of research aims and objectives is highlighted. The chapter concludes with discussions on personal contribution to furthering knowledge and understanding.
- Chapter 9 provides concluding remarks on the research study and indicates a number of recommendations for further work.

References

- ¹ Avgerou, Chrisanthi and Cornford, Tony. *Developing Information Systems: Concepts, Issues and Practice*. London: Macmillan, 1993. p.2.
- ² Land, Frank. The Information System Domain. In: *Information Systems Research: Issues, Methods and Practical Guidelines*. Galliers, Robert (ed.). London: Blackwell Scientific Publications, 1992. p. 24

Chapter Two

Methodology

2.1 Introduction

This Chapter describes the methodology used in this research study. As will be shown, evidence was collected from primary and secondary data sources used in the problem structuring domain. The problem structure uses Mode 1 of Checkland's Soft Systems Methodology¹ for its derivation (see Chapter 3 for more detail).

Section 2.2 provides the literature review and Section 2.3 gives a short appreciation of SSM. Primary data collection was undertaken in Brunei; the underlying interview approach is detailed in Section 2.4. Secondary data collection via a documentation audit is demonstrated in Section 2.5. Finally, Flood and Jackson's Total Systems Intervention² framework is revealed as a mechanism, to test the applicability of SSM to the problem situation.

2.2 Literature Review

The main research objective of the thesis mentioned in Chapter 1, '*to identify a suitable methodology that could bring about changes and improvement to a number of organisational issues*' provides a major challenge. It is well known that one all-encompassing methodology probably does not exist. Checkland³ advocated that:

"The outcome of a research is not a method but a set of principles of methods which in any particular situation have to be reduced to a method uniquely suitable to that particular situation".

The failure to choose the right methodology or methodologies with a sound theoretical basis may result in deficiencies in the outcome of the research. The choice of a methodology or approach is one of the difficult parts of any academic or real world research. According to Checkland⁴ the decision on the choice of a methodology to be used in a system study of the problem situation in real word problem is *undecidable*. He goes on to say:

"The user of a methodology in a problem situation may feel that the methodology has proved itself, but cannot tell that some other approach would not have been better, or that the perceived success stemmed from the methodology – rather than from say, good interpersonal skills or political mechanisation. On the other hand, if

*the user feels that the methodology has failed, there is no way of telling whether or not the perceived failure was due to user incompetence rather than the methodology itself*⁵.

As a consequence, a decision on the methodological approach has been taken after careful consideration based on readings of suitable literature on management, management information, and information systems literature (see below). From an understanding of the wider aspects of information and information systems, the research moves to a number of potential issues on problem solving and information system methodologies. The literature search and reviews began to be more specialised in the information system developments and requirement methodologies, as it became clear that the Soft System approach was the best option for the research interventions.

A number of information system methodologies were investigated and compared before deciding on the methodology used for the research. These ranged from various Action Research or Interpretative approaches to conventional or positivist approaches of information systems development. Among the methodologies investigated were Mumford's Effective Technical and Human Implementation of Computer-based Systems (ETHICS), Information Engineering, Structure Systems Analysis and Design Methodology (SSADM), Jackson System Development (JSD), Multiview and Viable System Model approaches. The main characteristic of these approaches are summarised below:

- Structure System Analysis and Design Methodology⁶ (SSADM) attempts to encompass the use of process analysis techniques and the role of the users with data analysis in one unified framework. SSADM is a structured approach, which works by building several views of the system including the structure of data, the data flows into and out of the system and their transformation within the system.
- Jackson System Development Methodology⁷ (JSD) is an object oriented methodology concentrating on the entities existing in the situation and the actions they perform or suffer. It makes the time dimension more explicit by being structured around the life cycles of the entities. JSD began with the building of the model of the real situation in which the model processes, entities and action are selected and defined. This is

followed by a detailed specification including input and output functions and in which communication processes are designed. The implementation phase involves processes and data which are fitted onto the existing technology.

- Information Engineering⁸ is a data driven approach that is also process sensitive. It is top down, with more detail being derived as each step is carried out. Progress is measured by achievement of the objectives at each step, not by the amount of detail generated. It emphasises system planning which it defines as improvement of the organisation through technology. It is intended to be used to identify mission-critical data and functions that should be supported through technology. The central component of the information engineering approach is the data of the organisation.
- Object Oriented Analysis and Design⁹ is a way of thinking about information and systems that has emerged out of developments in programming practice and languages and out of extensions to the data modelling approach. The basic principle behind object oriented analysis and design is to set out to understand and model the world in terms of the items found therein, their attributes, their relationships and the action that they undertake. The methodology focuses on modelling of the world in terms hierarchies of object sharing general characteristics, but accommodating the particular.
- ETHICS¹⁰ (Effective Technical and Human Implementation of Computer-based Systems) adopts the socio-technical view that for a system to be effective technical and economic factors must be made compatible with social and organisational factors. ETHICS methodology has been developed by Enid Mumford based on the Participative approach. The objective of ETHICS is to design a new system with dual objectives of improving job satisfaction (the social system) and work efficiency (technical system). Mumford points to the failure of many traditionally-performed system implementations, where technical and economic factors objectives were the only consideration. ETHICS perceives the development of a computer system not as a technical issue but as an organisational issue which is fundamentally concerned with the process of change.

- Multiview¹¹ looks at both the human and technical aspects of information system development. The methodology has been influenced by Checkland's analysis of human activity systems and Mumford's socio-technical systems, and also incorporates structured analysis. The methodology aims to establish a theoretical framework and coordinates a variety of perspectives for tackling computer systems design which attempts to take account of the different points of view of all the people involved in using a computer system.
- The Viable System Model¹² approach draws upon the human brain as a model of organisation, namely, cybernetics. The model focuses upon the cybernetic principles of communication and control as a means of structuring and managing complex systems. The methodology aims to take a 'natural' model, which could be argued to behave in predictable way according to natural laws, and uses this model as a method of analysing organisations and highlighting necessary hierarchical, communication and control elements of the organisations. Two important applications of VSM in organisational analysis are:
 - To provide a well-defined framework around which to develop hierarchical communication and control structures within the organisation.
 - To use the model as a means of investigating the efficacy of the communication and control structures within the organisation.

From the above description of information systems development methodologies it is clear that most of the conventional methodologies are mainly oriented to representing existing processes in computed forms and thus assuming these processes are effective, or they assume that users know what they want and that eliciting user requirements is straightforward. However there are several problems with this assumption, as set out below:

- Users can describe what they currently do, but they find it difficult to visualise how they might use a computer and how the whole task might be engineered.
- The technical orientation often leads to a gap between 'what the user wants' and 'what the analyst thinks the user wants'.

In addition these methodologies have their roots in software engineering and life cycle concepts. Most of them rely heavily on a project management structure and can be very

rigid. Moreover, there is a tendency for the developer of the system to be biased towards a particular methodology and most often the outcome of any information systems study leads to the introduction of complex technical aspects of system design as the outcome focuses on modelling data, data flows and system functions or computer related solutions.

Most traditional approaches also assume a positivist (or objectivist) philosophy, which can be considered inappropriate for designing information systems, which are part of the whole process of communication. Human interaction inevitably involves understanding and meaning. That is, our actions and conversation are not open to simple, objective recording by an outside observer. Rather, an observer must come to understand and to interpret the meaning that social acts have on participants. The analyst's task is not simply the objective description of particular information flows and of data structures but the interpretation and elicitation of the socially constructed patterns of meaning which generate observed behaviour. According to Mingers¹³:

"Data by itself does nothing, it is only when a particular person interprets it in the light of his or her own context and meaning system that it becomes usable information".

Mingers and Stowell¹⁴ remark:

"Technology provides the infrastructure but it is the human that capitalises upon the data availability to make that data powerful tool. In the past many considered an information system as an exclusive province of technology but it has become clear that is not. The outcome of this is a growing realisation that those who develop information system should be capable of differentiating between processing data and providing information".

Finally most of these methodologies except for ETHICS pay little attention to the wider business and organisational settings within which the information system must operate.

The selection of the SSM as a framework for this research is due to the following factors:

- The proposed academic study about the MRA's information system starts with great uncertainties about the type of information system required to solve a number of perceived problems expressed by the organisation. Moreover, it is a personal belief of the researcher that an effective study of organisational information systems activities and processes can be achieved only through a holistic understanding of the organisation's management and strategy. Thus the information system objectives and boundaries are difficult to define.

- The MRA information system to be investigated consists of different sets of people or individuals that have different opinions or perceptions about the situation and there are always many possible versions of the events. These opinions and versions of events may come from various corners of the information community in the organisation, and they are directly or indirectly affected by them. Burk and Horton¹⁵ classified information community as users, handlers, managers, and suppliers of information. In the case of the MRA, it is difficult to quantify the extent of the problem as it is based on a small representative sampling. As a result, a quantitative research approach is considered inappropriate.
- System thinking or system enquiry concepts focus on the problem understanding and analysis of complex real world systems by methodological means, and emphasises the promotion of a holistic understanding rather than piecemeal solution. These were seen as a way of understanding the pattern of events and enable the research to provide truthful and defensible proposals for the strategic benefits of the organisation.
- The use of SSM offers the 'what' rather than the 'how' of information systems to the issues developed within the problematic information management system.
- An understanding that an application of SSM studies can be used to tackle issues in an environment where clients have no technical or computer science background.
- The attractiveness of the philosophical underpinning of the SSM. This will be investigated further in Section 3.3.3.

A number of paper-based and electronic forms of secondary sources will be used. These are in the form of monographs and academic journal articles. A number of Internet websites will be accessed. Academic libraries in the East Midlands, Sheffield and London will be used. Examples of academic journal referred to are the: Journal of the Operational Research Society, Journal of the American Society for Information Science, Journal of Systems Analysis, Systemist, Journal of Information Systems, Journal of Information Management and Public Administration Review. A number of public and academic libraries in Brunei Darussalam will also be visited to acquire local knowledge for the context of this work.

Although the field of information systems has been in existence for decades, the literature of information systems, particularly on development methodologies is difficult to acquire. A number of books and journals published on the subject are mainly restricted to the scientific, technical, or computer-science perspectives of information systems. These situations may signify that as yet, the status of information systems have not achieved that of a distinctive discipline in its own right.

2.3 Soft Systems Methodology

Soft System Methodology has been chosen as a suitable methodology for the purpose of the research as it provides a way to structure unclear problem situations, while acknowledging a deep understanding of the organisational culture. It also permits a defensible sequence of analysis, leading to the information that is required for the information system proposed. In addition, SSM is known to be used in the information systems development process by using it to investigate the human activity sub-systems involved in design. The SSM approach that is applied for this research is the Mode 1 or a seven-stage methodology (see Figure 3.6) comprising:

- Stage 1 problem situation unstructured,
- Stage 2 problem situation expressed,
- Stage 3 root definition of relevant system,
- Stage 4 conceptual model,
- Stage 5 comparison of Stage 2 with Stage 4,
- Stage 6 defining the feasible and desirable changes, and
- Stage 7 action to improve the problem situation.

Stage 1 and 2 of the SSM constitute a finding out stage, which aims to achieve a representation of the problem situation in as neutral way as possible. This stage avoids premature positions about the nature of any perceived problems. Many different viewpoints on the situations are gathered from different individuals, and a rich picture is drawn (see Figure 6.1), which is a graphical illustration of the problem situation. At this point problem themes, which are apparent problems, are identified and described succinctly in natural language. Stage 3 begins to propose problem themes. Each problem theme is taken and a relevant system is stated. This is a notional system which allow understanding to be gained of the problem or part of the problem. The relevant systems are

used to form one or more root definitions; these are concise descriptions of human activity systems that capture a particular view.

In Stage 4 a conceptual model of the activity system needed to achieve the *transformation* described in the root definition is implemented. This is an account of the activities that the system must do, and is process-oriented. The activities are ordered in time sequence and also include the flow of resources. Stage 5 then compares the conceptual model with parts of the problem situation in Stage 2, not to establish correctness but to highlight an agenda for possible changes to improve the problem situation. Stage 6 and 7 will indicate three types of possible change: structural, procedural and attitudinal, and action undertaken to improve the situation.

More details of the use of SSM are found in Chapters 3 to 7 inclusive.

2.4 Primary Data Collection

The aims of the study indicate significant emphasis on human activity systems; this makes qualitative research more suitable. According to Sherman and Webb¹⁶, 'qualitative' implies a direct concern with experience as it is 'lived' or 'felt' or undergone. Whilst according to Blaxter et al.,¹⁷

“Qualitative research is concerned with collecting and analysing information in as many forms, chiefly non numeric, as possible. It tends to focus on exploring, in as much detail as possible, smaller numbers of instances or examples, which are seen as being interesting or illuminating, and aims to achieve 'depth' rather than 'breadth'.

Adopting a qualitative approach essentially means transforming the nature of the data collected in order to:

- Comprehend and manage it,
- Merge related data drawn from different transcripts and notes,
- Identify key themes or pattern from it for further exploration,
- Develop hypotheses based on these apparent patterns or relationships, and,
- Draw and verify conclusions¹⁸.

The empirical research was undertaken in Brunei between 15th January and 25th August 1997. Qualitative research interviews techniques were undertaken. The sampling unit

identified can be categorised into Chief Executive; Senior Executive; Professional /Executives (Division II scale); Intermediate/Skilled Manual; and Semi-skilled Manual belonging to the MRA as defined in Section 2.7 of this Chapter.

In anticipation of the sensitivity of accessibility to certain people and the ethical issues associated with the research topics, careful planning was made at an early stage. The formal research arrangement with those concerned in the Ministry of Religious Affairs began in January 1996 through an informal discussion with its Director of Administration. This was then followed with a formal letter of applications to the Brunei High Commission in London and to the Permanent Secretary (PS) of the MRA, the chief executive of the MRA (see Appendix A2.1). A schedule for the empirical research in Brunei was also given (Appendix A2.2). Approval for the research was received in November 1996.

2.5 Research Interviews

An interview, according to Bogdan and Biklen as cited by Ely et al.¹⁹, is a purposeful conversation usually between two people (sometimes involving more) that is directed by one of them in order to get information. Interviews play a central role in any system investigation that can help gather together valid and reliable data, which are relevant to the research question(s) and objectives. When using Soft System Methodology in this study, interviews are a major technique used for collecting data that form the problem situation unstructured and would be unlikely to be gained using techniques such as observation or questionnaire survey. According to Avison and Fitzgerald²⁰

"There will be many different views as it is unlikely that the views of the problem owner, that is, the person or group on whose behalf the analysis has been commissioned, the other people taking part as 'actors' in the problem situation and other stake holders, will coincide. There will be different views that the analyst can take regarding the problem situation and at this stage it is important to reveal as wide a range of them as possible".

Thus, the interview is used in this study to gain views and opinions that form a deliverable describing the first phase of the SSM. According to Patching,²¹

"This stage (stage one) of a project is the initiation to find out about the study area – talking to the person involved and other interested parties, reading current and past reports, looking at relevant files, and other documents, generally trying to develop clearer picture of what is going on, and the factors that influence the situation".

This view is accentuated by Checkland²² who advocates:

"it will not be possible for any problem solver, whether an outsider or part of the problem situation, to simply find out about the situation in a neutral manner. The personality traits, experience, knowledge and interest of our investigator will affect what is noticed and what is taken to be significant. The finding out has to be done, seriously but lightly, with this is in mind".

Interviews may be highly formalised and structured using standardised questions for each respondent or they may be an informal and unstructured conversation. The research interview has been defined by Cannel and Kahn, as quoted by Cohen and Manion²³:

"...a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, or explanation".

According to Patton²⁴:

"The purpose of interviewing is to find out what is in and on someone else's mind. We interview people to find out from them those things we cannot directly observe".

A major advantage of the interview is its adaptability. A skillful interviewer can follow up ideas, probe responses and investigate motives and feelings, which the questionnaire can never do²⁵. Interviewing is always a group activity; even in one-to-one interviews the duo represent a small group, called together on a temporary basis, who will respond to each other in terms of group dynamics.

The research interview techniques adopted for this research consist of a cocktail of three popular interview techniques, namely; the semi-structured, unstructured, and the focused interview. Fundamentally, all the three interview techniques mentioned above are extensively used in the data collection of the research and these types of interviews were carried out with the same sample in the same time in order to elicit vital and relevant information for the research. These techniques are further described in Section 2.5.1 to Section 2.5.3 below.

2.5.1 Semi-structured Interview

In the semi-structured interview technique a list of themes is identified which are then followed by open-ended questions. These questions are targeted towards a particular group of people seeking to elicit useful information about the MRA and its departments. The

significance of the open-ended question is in its flexibility of allowing the interviewer to probe more deeply. According to Robson²⁶, a semi-structured interview is where;

“..the interviewer has worked out a set of questions in advance but is free to modify their order based upon her perception of what seems most appropriate in the context of the ‘conversation’, can change the way they are worded, give explanations, leave out particular questions which seem inappropriate with particular interviewee or include additional one”.

Four types of open-ended questions were prepared for the interviews with different groups of stakeholders, which vary according to the characteristics of the organisation and the position of the individuals in the organisational hierarchy:

- Director of Administration (See Appendix A2.3),
- Other departmental directors and their deputies (See Appendix A2.4),
- Head of Section/ middle managers/senior executives (See Appendix A2.5),
- Clerical and operational staff (See Appendix A2.6)

The objectives of this analysis are as follows:

- To learn about the structure, entities and activities within the problem situation of the MRA and to develop models as a prerequisite for analysing the situation,
- To analyse gathered information and models of the situation as a means of determining feasible and desirable changes to the system under investigation,
- To understand the implications of such changes on organisation and social aspects;
- To predict the relative benefits (disbenefits) which would come about through the implementation of various suggested ‘options for change’,
- To extract relevant information that sufficiently describes the Personnel Information System requirements.

Each of the questionnaires prepared varies according to what is required of a particular group of individuals and was designed to elicit the following information:

- The existence and achievement of departmental and sub-sectional objectives,
- The role and responsibility of each department and section within the area of the research study,
- The adequacies of human resources in the departments and sections of the MRA,
- The presence and effectiveness of job descriptions,
- Decision making activities,

- The type and effectiveness of communication channels used in the MRA,
- The problems faced when undertaking each task,
- The level of usage of information technology in each individual's task,
- Personal opinions about the delegated task including suggestions to improve the situation.

In addition to the above, a set of questions was used to elicit specific staff roles (Appendix A2.6 (B)). Questions were based on relevancy of the situation and were dependent on the extent of types of issues being raised by the interviewees. On certain occasions, questions were not asked if relevant points had been covered by the interviewee in responses to earlier questions. It has to be said that these interview questions were not meant to be exhaustive but as a means of structuring the interview processes and to facilitate its flow.

It is anticipated that the above types of questions will give an insight into the relevant aspects of personnel management and enable knowledge about the structure, entities and activities within the problem situation of the MRA to be elicited. This will enable further phases of the SSM to be developed as a prerequisite for analysing the situation. Moreover, the gathered data of the situation can be analysed systemically as a means of determining the feasible and desirable changes in the organisation.

The various questions on departmental objectives can be found in Appendices A2.3, A2.4, A2.5 and A2.6. They aim to identify the purpose or mission of the organisation. Objectives express the direction and level of achievement expected from the organisation at all levels of resolution. The objective carried out functions which are the manifestation of the organisation. In addition, aspects of constraints and limitations, which apply to the objectives are incorporated as part of the question. Constraints represent 'issues' that management has to overcome, or learn to live with, if the organisation is to operate successfully.

The semi-structured interview is also concerned with departmental activities. The emphasis is on functionality and the way communication is handled. This includes the various aspects of information handling such as information modelling (structures and operations), information filing and distribution, retrieval, and the confidentiality of information. The

analysis reveals that one main relationship between the MRA, departments, or section is established via information flow.

The resource implications associated with functionality are an important aspect of the semi-structured interview. Resources may include human resources, technical resources, financial, material and non-tangible properties. Resource is a vital area to information system design as indicated by Wilson²⁷:

“In order to achieve the objective defined for the system for resources need to be available within the system boundary and needs to be appropriate for activities to be undertaken. It is these resources that are under the control of the decision taking procedure and which can be acquired and deployed to achieve the objective of the system. Hence activities must be included in model of the human activity system which perform that acquisition and deployment”.

Investigating the social context of the organisation can help determine appropriate work design. This perspective of the analysis addresses issues related to job satisfaction and work efficiency. This involves both a consideration of what employees seek from their work and what they are required to do and identifies the kind of ‘fit’ that exists between these perspectives.

The semi-structured interview attempts to gauge management style throughout the MRA, including its application to planning, co-ordination and control. Planning refers to the management of organised change. Co-ordination is a primary management function and can be defined as the process of integrating the work of the individual, sections and department towards the effective achievement of the organisation’s role²⁸. Control is a process of ensuring that operations proceed according to plan. At a fundamental level this is achieved by comparing actual results (output) against a target, with any discrepancy used to adjust input parameters. In practice, the target is a budget or other benchmark, and input parameters are the efficiency, effectiveness and efficacious nature of work processes²⁹.

2.5.2 Unstructured Interview

In contrast, unstructured interviews are informal interactions characterised by a situation in which the respondent is responsible for the course of the encounter (interview) and for the attitudes that are expressed in it. The unstructured interview process is used as the interaction gains momentum and the surrounding environments are clearly understood.

This interview approach proved to be very valuable because it probes deeper attitudes and perceptions of the person being interviewed in such a way as to leave them free from interviewer bias³⁰. The techniques are also referred to as an 'in-depth interviews' as the interviewee is given the opportunity to talk freely about events, activities, behaviour and belief in relation to the topic of discussion³¹. No predetermined lists of questions were prepared as it was entirely based on the context of the moment.

The use of an unstructured interview technique provides an additional means of collecting important data that were not covered by the semi-structured questions. Moreover, a focus or in depth interview technique was also used as part of data collection effort for the research.

2.5.3 Focused Interview

The focused interview is conversational or casual interviewing technique in that there is no set of questions and most questions are open ones, designed to encourage the respondent to talk freely. The focused interview was used to elicit task analysis descriptions within the defined area of personnel management. Focused interviews also play a major part to supplement the primary data collection. They are used for those who are involved in a particular task within the domain of the research. The actual interview itself is focused on the subjective experiences of the employees that are exposed or accountable to the situation or task. Focused interviews are undertaken based on the earlier knowledge gained from the initial interviews using semi-structured and unstructured interviews. Performance appraisal reports were consulted in situations where job descriptions were unavailable. This form of interview has four characteristics:

- It takes place with respondents who are experienced in the designated task,
- It refers to situations that have been analysed prior to the interview,
- It proceeds on the basis of the interview guide specifying topics related to research hypotheses, and,
- It focuses on subject experiences regarding the situations of interest to this research study³².

2.6 Aspects of Interviewing

The interviews were undertaken based on the schedule prepared, preceding the empirical research in Brunei. This schedule can be found in Appendix A2.2. The interviews took place at the participants' respective work places and offices, each interview lasted more than an hour depending on the kind of response and extent of issues being raised during the interview. The interview also took into account the willingness of the respondents to talk about the issues affecting their work. Some of the participants were willing to be interviewed in two separate one-hour sessions. In certain circumstances, the stakeholders were not comfortable being interviewed using scripts and preferred to be interviewed informally.

The majority of the interviewees, once they learned of the purpose of the research, the neutrality of the interviewee (the author) and the assurance of anonymity, were very cooperative and openly expressed their opinion about their experiences and perceptions of the situation. Judging from the reception and statements expressed and points of view raised during the interview most interviewees demonstrated their trust in the confidentiality of the research, though a handful of staff had some reservations about some sensitive issues of the organisation.

In order to obtain richness of data and facilitate effective reflection on the interview situation, each interview was tape-recorded.

Important information was collected and transcripts of the interview were written down and then arranged according to the groups interviewed (as in Appendix A2.7). The problem statements were then aggregated into specific subjects of the discussion based on the categories of staff available in the MRA (See Appendix A2.8).

Not all of the qualitative research interviews were conducted in a favourable climate. Among the problems faced by the author during data collection were:

- Some individuals for the interview were on vacation/leave,
- Some official duties and responsibilities took precedence,
- Some interviewees had other personal commitments,
- Some interviewees were reluctant to co-operate,

- Some interviewing usually took place not according to at other than the scheduled time,
- Some interviewees were unfamiliar with new tasks due to recent reshuffling of duties.

In order to avoid any false impression of the real situation and to validate the data collection, the working methods of the staff were also investigated. This involved observing the MRA's and departmental collective decision making mechanism and work shadowing of selected employees.

With the flexible timeframe schedule for each visit to departments and section of the MRA, the above factors were overcome by rescheduling the time for the interview or going back at a later date. These were particularly possible for the first three of the problems mentioned above. The reluctance to co-operate emanated from individual inflexibility towards certain aspects of information and misunderstanding related to the level of information access granted by the Permanent Secretary of the MRA. The reshuffling of personnel reflected the organisation culture and norms of the public sector in Brunei Darussalam. For certain departments, punctuality is not really an issue of great concern.

2.7 Sampling

The geographical location of the interview sample was taken into consideration in selecting the samples for the study. These samples were selected from seven different settings or organisations that make up the Ministry of Religious Affairs. A judgemental or purposive sampling technique was chosen to avoid bias. Judgmental sampling recognises that there may be inherent variation in the population of interest. It attempts to control the variation by using subjective judgement to select a sample, which is believed to be representative of the population. In other words, the sampling is selected for the sample based on subjective judgement of the researcher.

The geographical locations of these samples were situated in 5 different areas within the municipal district of Bandar Seri Begawan, the capital city of Brunei Darussalam. The geographical locations of the sample are distributed in the following areas:

- a. Bandar Seri Begawan

- Ministry of Religious Affairs (the head office)
- b. Kampong Pulaie
 - Pusat Dakwah Islamiah (PDI)
- c. Jalan Tutong
 - Institute of Islamic Studies (IPI)
- d. Jalan Kubah Makam DiRaja.
 - Department Haj Affairs (DHA)
 - Department of Mosques Affairs (DMA)
 - Department of Syariah Affairs (DSA)
- e) Jalan Kota Batu,
 - Department of Islamic Education (DIE)

In addition to these departments the MRA has branches in the other districts and there is another section called the Special Duties Section of the MRA. It is an autonomous section headed by the Senior Special Duties Officer. It has not been possible to examine all these branches for a number of reasons. Therefore, certain restrictions on the number of samples were felt to be necessary. These branches are called the Jabatan Hal Ehwal Ugama Daerah (Districts Religious Department). There are a number of circumstances for the study to omit these parts of the organisation, namely:

- These organisations are already represented in the population sample.
- The respective directors (DOA, DMA, PDI, IPI, DSA, DMA and DIE) undertake decision making process on Personnel Management matters. The head of Administration is the District *Kadhi* (Religious Officer). District *Kadi* has a limited authority in terms of decision making on personnel, their major role is mainly co-ordinating each section which represents the district office of each department under the MRA. Basically, all decisions with regards to grievances, benefits and leave entitlements, etc are handled by Department of Administration or by respective head of department.

The sample frame for this qualitative approach is the departmental administrative lists and job descriptions of each department. As a consequence of this, representative samples of 121 staff out of 135 possible staff from the following organisation in the MRA were chosen for the research interviews:

- Personnel Management Section of the MRA (PMS),
- Research , Training and Planning Section (RTPS),
- Administrative Sections of :
 - The Department of Haj Affairs (DHA),
 - Department of Islamic Education (DIE)
 - Department of Mosques Affairs (DMA),
 - Department of Syariah (Islamic Law) Affairs (DSA),
 - Institute of Islamic Studies (IPI),
 - Islamic Dakwah Centre (PDI),

The sampling unit identified (in Table 2.1) for identifying the problem situation can be categorised into Chief Executives; Senior Executives (Division II); Professional/Executives (Division II scale); Intermediate/Skilled Manual (Division III scale); Semi-skilled operational (Division IV and below).

Respondents	DOA	DOE	DMA	IIS	DSA	PDI	
Chief Executives	3	1	2	2	1	1	
Senior Executives	3	4	2	1	1	1	
Professional/ Executives (Division II scale)	4	4	2	1	2	-	
Intermediate/Skilled manual (Division III scale)	7	11	3	1	2	3	
Semi-skilled/operational (Division 4 and below)	22	14	6	5	5	7	
Total	39	34	15	10	11	12	Total 121

Table 2.1: Total Number of Interviews

- a. **Chief Executives:** are the highest level decision-makers in the departments of the MRA. These include the Directors and Deputy Directors including those appointed in a temporary acting post capacity. The Director of the DOA or his deputy usually acts on behalf of the Permanent Secretary of the MRA for the management of personnel. The

Head of Research, Training, and Planning Section (RTPS) and the Head of Personnel (HOP) are categorised under this category.

- b. **Senior Executives:** are heads of administrative divisions that handle human resource management. These also include other Heads of Sections within Departments that directly handle personnel affairs. The Senior Executives in this context do not necessarily mean individuals holding higher divisional status but can include those that hold a key post in human resource management.
- c. **Professional/Executives:** This category comprises the junior management level staff who are responsible for a certain level of decision making on personnel management of the MRA. These categories of professional/executives are classified by their divisional status and are on the Division II salary scale. These include the Senior Religious Officers, Senior Religious Education Officers, Religious Education Officers and Islamic Propagation Officer.
- d. **Intermediate/Skilled Manual:** This population sample comprises individuals or groups that have a certain level of knowledge regarding the government human resource management policy and procedures, and undertake tasks or duties related to this. Personnel in this sample can be classified as an assistant manager. Examples of these categories are the Assistant Administrative Officer, Clerk Grade 2, Chief Clerk, and Assistant Religious Officer and Assistant Mosques Officer. The Intermediate or Skilled Manual positions are selected from those in the Division III scales.
- e. **Semiskilled Operational:** This population sample consists of the lower operational level staff in the Division IV salary scale and below. These personnel perform the clerical and operational tasks in personnel management of the organisation as a whole. This sample includes clerks, assistant clerks, daily rated staff, office assistants and receptionists who undertake clerical jobs at the organisation. The two laboratory assistants who are part of the filing staff are categorised in this group of staff.

2.8 Documentation

In addition to primary data, collecting secondary data via a documentation audit was considered, as “this can provide a useful source from which to answer, or begin to answer,

your research question”³³. Secondary data includes both raw data and published summaries on and about the organisation. These may include personnel lists/Establishment Listings (EL), copies of memorandum, minutes of meetings, annual reports, departmental reports, forms and job descriptions etc. These types of data are only available from the organisation, departments and sections of the MRA and other government departments such as the National Museum and the National Archive. These data were collected in order to supplement the interview process and understand the organisational activity. These documents were obtained during and after each interview undertaken with stakeholders of various levels.

The Permanent Secretary of the MRA granted full accessibility to any of these documentary secondary data in all departments and sections of the MRA. There were few difficulties in accessing information at the departmental level, although on a few occasions some gatekeepers were reluctant to grant access. The secondary data that has been collected can be classified into the following categories:

- Documentary Secondary data which include notices and circulars, correspondence, memoranda, minutes of meetings, minutes, notes, diaries, transcripts of speeches, administrative and personal files, personal and leave records, job descriptions, reports of committees, performance appraisal reports, books and pamphlets published by the Ministry and the department under the MRA,
- Survey-based secondary data were also collected through the following surveys that are usually undertaken by the MRA or for the Public Service Department, etc.,
- Continuous and regular survey, and
- Ad hoc surveys.

This documentation was obtained mainly during and after each empirical interview was undertaken. Documents such as reports, introductory literature about the MRA and pamphlets were obtained during the earlier stages of the research study from the Research, Training and Planning Section (RTPS) of the MRA. These documentary data prove invaluable in supplementing the primary data collection since it provides:

- Background information about the organisational aims, objectives, structures and functions of the organisation,

- Documentary proof of the types and perspective of operational decision making issues faced by the MRA,
- Documentary evidence of the organisational planning and projects undertaken by the MRA,
- An invaluable information source reflecting the 'in' and 'out' flows of organisational communication. It also provides evidence of the 'speed' of communication system between departments,
- Written formulas and official guidelines towards understanding the decision making activities,
- Understanding towards the organisation's human resource management policy,
- Documentary proof of the kind of information required for supporting management decisions,
- A sample of the problems or issues faced by the organisation on their information resources,
- A sampling frame for the research through staff listings, job descriptions and performance appraisal reports,
- An example of the communication issues affecting top management, and
- Documentary evidence about organisational studies undertaken by the MRA on problem solving efforts towards various personnel management issues.

2.9 Total Systems Intervention

The Total Systems Intervention (TSI) approach of Flood and Jackson³⁴ is a methodology that can be used as an organising framework for a systems study. It can also identify one or more approaches for study, as a way of matching specific methodologies and problems. In the perspective of this research, the TSI framework is to be used as a way of testing SSM applicability.

The three stages of TSI are creativity, choice, and implementation. The creativity stage involves identification of relevant metaphors to assist thinking about the problem. These metaphors may include a closed system view, a cultural system, a political system, an economic system or a meta-system. The second stage of the methodology is 'choice' where an appropriate system-based intervention methodology to suit the MRA situation is chosen. Flood and Jackson provide a classification of system methodologies to help this

process (Figure 3.9). Methodologies are identified as the product of two types of distinction, simple/complex and unitary/pluralist/coercive. The third stage of the TSI is 'implementation', where the chosen methodology/methodologies are applied to the problem. In this study, SSM was applied to the MRA situation before investigation into its suitability to the situation was undertaken. Stages 1 and 2 were undertaken to test the appropriateness of SSM to the MRA situation.

Detailed descriptions of TSI and its application to the situation in the MRA are described in Chapters 3 and 8 of the thesis respectively.

2.10 Summary

This Chapter has indicated the way in which the research study was investigated. The problem issues at the MRA are complex and no one methodological approach was rich enough to cover all of the activities. Thus, the main thrust of the work will be implemented using SSM, but supplemented with interviews (semi-structured, unstructured, and focused interviews), and investigations of secondary data sources. These primary and secondary data form the basis of the problem situation unstructured, that is, Stage 1 of the SSM. The use of the Total System Intervention (TSI) methodology is a means of evaluating the suitability of applying the SSM into the problem situation of the MRA. The SSM is basically used as framework into which to place the purposeful activity for the research. The descriptions and justifications of the system approach can be found in the next chapter, the informing Literature Review. In particular, the SSM is the focus of a critical review, which will then be followed by reviewing the concepts and applications of the information system in the public sector organisation.

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Chapter Three

Literature Review

3.1 Introduction

This chapter is based on the reviews of academic literature relevant to the current area of study. It begins with various definitions of the term 'information system' within the various perspectives of the term in the management and computing disciplines. This is then followed by definitions of the terms 'information' and 'systems' respectively. The origins and thinking behind the 'systems approach', which is the primary methodological approach of this research, is reviewed. This chapter also discusses Mumford's Socio Technical Approach¹, another methodology that can be categorized under the soft systems approach. In the second part of the chapter, the concepts and applications of information systems in public sector organisations are also reviewed.

3.2 Information Systems

Information systems play a vital role in operation, management and the strategic success of a business and other organisational tasks, and have become a major functional area of business². An information system can be a manual system or computer-based. It may be something that is less formalized such as the office gossip network, rumour, business discussion and ideas. These informal information systems, according to Avison and Fitzgerald³:

"..are also valid information systems and tend to be intuitive or qualitative".

Buckland⁴ describes computer databases, archives, libraries, museums, and record management as other examples of information systems.

According to Mingers and Stowell⁵:

"..Information systems existed before the computer and do not require the computer to operate. However, the advent of the powerful and simple-to-use computer means that large amounts of data can be represented to the human as an aid to decision-making and in that sense information itself has become a tangible resource. Technology provides the infrastructure but it is a human that capitalises upon the data availability to make that data a powerful tool. In the past many considered an information system as the exclusive province of technology but it has become clear that it is not. The outcome of this is a growing realisation that those who develop information systems should be capable of differentiating between processing data and providing information".

An information system can be defined technically as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organisation⁶. In addition to supporting decision making, co-ordination, and control, information systems may also help managers and workers analyse problems, visualise complex subjects, and create new products. From a business and management perspective, an information system is an organisational and management solution, based on information technology, to a challenge posed by the environment. Stowell and West⁷ defined information systems in the following way:

"An Information system can be taken to be notional through which the provision, manipulation and use of appropriate data to enable decision-making to take place is managed".

While Lucey⁸ defined information systems or management information systems as the combination of human and computer-based resources that results in the collection, storage, retrieval, communication and use of data for the purpose of efficient management of operations and for business planning. Another definition is given by Lucas⁹ ;

"A set of organised procedures that, when executed, provides information to support the organisation".

Senn¹⁰ offers a definition of an information system as an integrated system for providing information to support the planning, control and operation of an organisation. It aids operations management and decision making by providing past-, present- and future-oriented information about internal operations' external intelligence. It provides information in a timely fashion. The functions of information systems according O'Brien¹¹ are as follows:

- A major functional area of business that is as important to business success as the functions of accounting, finance, operations management, marketing, and human resource management;
- An important contributor to operational efficiency, employee productivity and morale, and customer service and satisfaction;
- A major source of information and support needed to promote effective decision making by managers;
- An important ingredient in developing competitive products and services that give an organisation a strategic advantage in the global marketplace;

- A major part of the resources of an enterprise and its costs, thus posing major resource management challenges.

Lewis¹² describes an information system as a socially constructed system of managing information when he stresses:

"When one understands information to be socially constructed artefacts, which merely happen to be implemented through a novel technology, that of the computer, the subject of information system and their use appears in different light. Rather than problems of data processing or information technology one must instead address complex of organisational management, begin to think, not of developing computer systems but managing information".

Avison and Shah¹³ classified information systems into three types, namely the informal information system; manual information and the computer-based information (see Figure 3.1):

- Informal information system: these are the evolving patterns of behaviour within the organisation, which are never formulated, but need to be understood by those involved with the organisation. This information system includes informal communication systems through tea break, a game of golf, and other social types of interaction.
- Manual information systems: these are formalised procedures that are not computer-based, for producing information within an organisation. These may include a manual filing system, a manual personal record system
- Computer-based information systems: these are automated procedures for producing information using information technology.

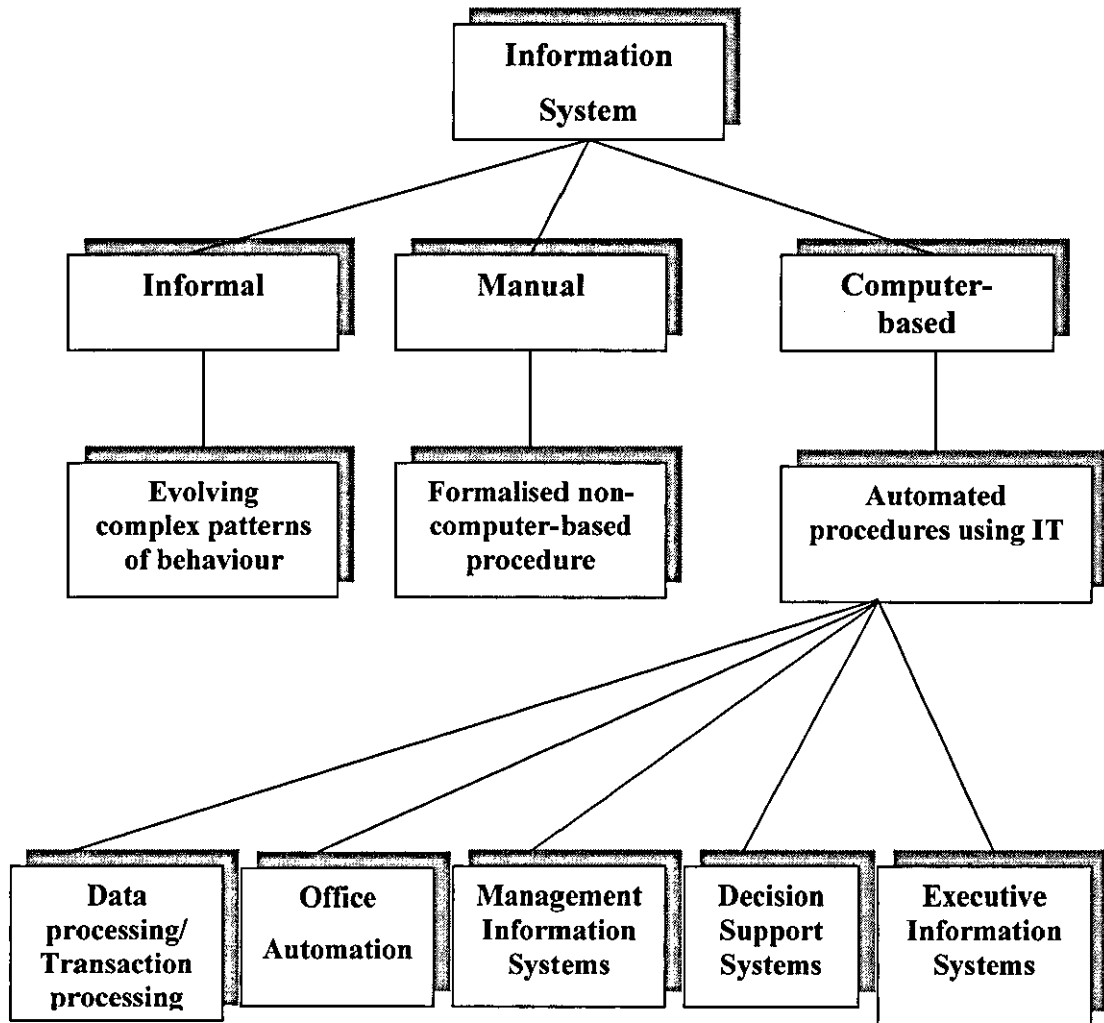


Figure 3.1: Taxonomy of Information Systems¹⁴

In general, formal information systems are based on structured administrative procedures that can be explicitly set down and which capture, store and process essential data that an organisation needs in order to be able to operate. Computers provide a clear and obvious role in supporting this type of information handling activity. The informal handling activities, on the other hand, are probably the ones that rely on people making decision and inferences, and using and exchanging information in the course of more *ad hoc*, intuitive and sense making activities.

3.2.1 Information

It is generally known among researchers that the term 'information' is ambiguous and can be used in different ways depending on the situation. The definitions are also known to be problematic and contradict one another. According to Lucey ¹⁵;

"The concept of information in an organisational sense is more complex and difficult than the frequent use of this common word suggest. Information is data that have been interpreted and understood by the recipient of the message. Information is knowledge and understanding that is usable by the recipient. It reduces uncertainty and it has a surprise value. It must tell the recipient something not already known which could not be predicted. If a message or report does not have these attributes, as far as the recipient is concerned, it contains merely data not information".

Some definitions regard information as something that is measurable, others link it to something which is done to data. Still others regard it as something, which can be patterned, or something related to uncertainty. According to Liebenau and Backhouse¹⁶

"Information cannot exist independently of the receiving person who gives it meaning and somehow acts upon it. That action usually includes analysis or at least interpretation, and the differences between data and information must be preserved, at least in so far as information is data arranged in a meaningful way for some perceived purpose".

Summers et al.¹⁷ consider information as a:

".. diffuse concept because it plays a fundamental role across a wide range of activities and disciplines".

Buckland¹⁸ identifies three principal uses of the word 'information' namely;

- **Information as a process.** What someone knows is changed when he or she is informed.
- **Information as knowledge.** The notion of Information as that which reduces uncertainty could be viewed as a special case of information as knowledge. In certain situations information increases uncertainty.
- **Information as things.** It is also used attributively for objects, such as data and documents that are referred to as information because they are regarded as being informative.

Over the last three decades there has been an increasing literature on Information Systems, Management Information Systems, Marketing, Personnel Information, and Library and

Information Science. Each has provided different definitions of the term 'information'. Blumenthal¹⁹ defined Information as;

"Data recorded, classified, organized, related or interpreted within context to convey meaning."

Frank²⁰ indicated that the term 'information' and 'data' are sometimes used synonymously with 'information', supplanting 'data' in contexts where the emphasis is on the broad, grand or useful aspects: 'information processing', 'information network', 'Information interchange'. According to Buckland²¹

"Information is commonly used in a narrowly limited sense to denote data of relatively straightforward, instrumental nature: fact texts of literal significance".

Laudon and Laudon²² define information as data that has been shaped into a form that is meaningful and useful to human beings. Curtis²³ sees information as a data processed for a purpose. The purpose is to aid some kind of decision. Another definition of information is given by Lucas²⁴ :

"..as a tangible or intangible entity that serves to reduce uncertainty about some state or event".

Figure 3.2 shows the four aspects of the concept information.

ENTITY	<p>INTANGIBLE</p> <p>Information-as-knowledge Knowledge</p>	<p>TANGIBLE</p> <p>Information-as-thing Data, document recorded knowledge</p>
PROCESS	<p>Information-as-process Becoming informed</p>	<p>Information Processing Data processing, document processing, knowledge engineering</p>

Figure 3.2: The Four Aspects of Information²⁵

3.2.2 Information Management Aspects

Information is vital to both private and public sector organisations. More and more managers recognise that access to accurate information, available in a timely fashion, can influence decisions and, in turn, can affect the efficacy of the overall organisation. Information is now referred to as the fourth resource, after people, money and physical resources²⁶. Information is a vital resource that is as fundamental as energy, time, money, land and labour. It is a new concept that is rapidly gaining ground. However, despite this developing awareness, it is evident that it has not been universally recognised as such with the result that in some places it is consciously collected, organised and distributed and in others it is largely unharnessed, unused, and disregarded. From an organisational point of view, information is just as much an asset as its buildings, staff, money, materials and machines.

Good business information is without doubt one of the most important assets that an organisation may possess. Itami²⁷ endorses the significance of information in the modern organisation when he commented

"The real competitive edge does not come from the physical and visible resources. It comes from those things we cluster together as intangible resources or invisible assets. They are information-based assets and this why a small but growing number of managers are adding information to the economists list of the capital inputs to the productive process".

According to Keen²⁸

"As the use of information becomes an ever important business tool, competitive advantage accrues to the firm with an IT platform that allows information to be captured, combined, organised, moved and displayed across locations, level of staff and managers, and functional areas".

Information has competitive and strategic value. Of all the assets of the organisation (personnel, financial, plant, equipment) information is by far the most valuable, because it describes these physical resources and the environment in which these assets exist. The possession of physical resources without information about them is of little use. Information about resources is essential if these resources are to be used effectively. In many organisations there is a shift in the role of information systems from that of supporting the business to being the business. Increasingly managers will seek business value from the investment in information

Supplementary to the general function of improving knowledge, information assists management in several ways including:

- *The reduction of uncertainty:* uncertainty exists where there is less than perfect knowledge. Rarely if ever is there perfect knowledge, but relevant information helps to reduce the unknown. This is particularly relevant in planning and decision making.
- *As an aid to monitoring and control:* by providing information about performance and the extent of deviations from planned levels of performance, management is better able to control operation.
- *As a means of communication:* managers need to know about developments, plans, forecasts, impending changes and so on.
- *As a memory supplement:* by having historical information about performance, transactions, results of past actions and decisions available for reference, personal memories are supplemented.
- *As an aid to simplification* by reducing uncertainty and enhancing understanding, problems and situations are simplified and become more manageable.

According to Buckland²⁹:

"Information has paradoxical properties. If it is useful, it is worth paying for and worth supplying to other. But unlike other commodities, you can share information with other and yet still have as much as you did before. Scarcity is a determinant of price, but since information can be disseminated indefinitely it is not obvious how ordinary notions of scarcity and price apply to information".

However, information produced for business has a cost. The costs are associated with collection, processing and storage. These are present whether the information is communicated manually or via a computer system. In order to justify this cost the information must also have some value. The value is generally to be found in better decision making, whether this be in area of control, planning or in some other area.

Lucey³⁰ advocates:

"Information has no value in itself; its value derives from the value of change in decision behaviour caused by the information being available minus the cost of producing the information. There is the tendency to assume that more information, earlier or more up to date information, more accurate information etc. is all better information. It may be better information but only if it improves the resulting decisions, otherwise it has no value".

Curtis³¹ described the value of information as quantifiable and non quantifiable:

- *Quantifiable value*: Information generated within an organization or produced for business purposes has measurable benefits in monetary terms. These benefits result from two factors: firstly, the information may reduce uncertainty surrounding the making of decisions; secondly, a decision may be taken more quickly, and therefore be more timely, in the presence of the faster provision of information.
- *Non-quantifiable value*. Information can provide benefits that are not strictly measurable. Better information provided to customers on available products and current prices is liable to increase customers confidence, attract new customers, prevent existing customers from moving elsewhere. However it is difficult to put figures on this value. In addition, many other changes occur to alter consumer preferences: advertising by the company, competitors, responses, changes in consumer expenditure patterns and so on.

Other observations apply to information provided for internal decisions. It may be thought that the provision of information improves a type of decision, but it is difficult to separate the effect of this information on the decision from all other influences. Occasionally, information has other uses than to aid decision-making. Performance information on clerical staff in a government department, for instance, motivate them to achieve a greater level of productivity and job promotion. Sometimes information is collected without any clear purpose in mind, but merely to build up a background understanding of an area.

3.2.3 Systems

'System' is another difficult term to define and it has a variety of meanings depending upon the context in which the term is used. In reality, people are constantly surrounded by systems, belong to a system and create new systems, e.g. solar system, social systems, political systems, central nervous system. For the purpose of this study, a system is defined as a description of a situation, as an assembly of elements related in an organisational whole. It virtually encompasses a wide variety of situations and conditions that are around us. It is an interrelated concept, with the term itself covering a range of man made devices, or work processes, that occur naturally in the world around us, and formal or informal arrangements of human beings including education systems, religious

systems, social, political, and economic systems etc. There are many definitions of the term 'system'. Checkland³² defined a system as:

"A model of a whole entity; when applied to human activity, the model is characterised fundamentally in terms of hierarchical structure, emergent properties, communication, and control. An observer may choose to relate this model to real-world activity. When applied to natural or man-made entities, the crucial characteristic is the emergent properties of the whole".

Another comprehensive definition is given by Naughton and Peters³³:

- *"A system is an assembly of parts where the parts or components are connected together in an organised way.*
- *The parts or components are affected by being in the system and are changed if they leave it.*
- *The assembly does something.*
- *The particular assembly has been identified by a person or human being as being of special interest".*

According to O'Connor and McDermot³⁴:

"A system is something that maintains its existence and functions as a whole through the interaction of its part. The behaviour of different systems depends on how the parts are related, rather than on the parts themselves".

A further perspective on systems has been provided by Churchman³⁵ in which, according to him, the characteristics of a system are as follows:

- It is teleological (purposeful);
- Its performance can be determined;
- It has a user or users;
- It has parts (components) that in and of themselves have purpose;
- It is embedded in an environment;
- It includes a decision-maker who is internal to the systems and who can change the performance of the parts;
- There is a designer who is concerned with the structure of the system and whose conceptualisation of the system can direct the action of the decision-maker and ultimately affect the end result of the actions of the entire system;
- The designer's purpose is to change a system so as to maximise its value to the user;
- The designer ensures that the system is stable to the extent that he or she knows its structure and function.

Daellenbach³⁶ gave the following broad definition of the concept 'system':

- a) A system is an organised assembly of components. 'Organised' means that there is a special relationship between components.
- b) The system does something, i.e. it exhibits a type of behaviour unique to the system.
- c) Each component contributes towards the behaviour of the system and is affected by being in the system. No component has an independent effect on the system. The behaviour of the systems is changed if any component is removed or leaves.
- d) Groups of components within the system may by themselves have properties (a), (b), and (c) i.e. they form subsystems.
- e) The system has an outside environment, which provides inputs into the system and receives outputs from the system.
- f) The system has been identified by someone as being of special interest.

From these definitions it can be seen that the central concept of a 'system' embodies the idea of a set of elements connected together, which form a whole, this shows properties which are properties of the whole rather than properties of its component parts. They can be abstract things, such as information, and numerical variables that measure things. In fact it is such an ubiquitous word that almost anything could be described as a 'system'.

Five major types of system are often identified:

- Natural systems: which consist of things created or happening by the act of God, the creator of the universe e.g. molecule, the universe, human being.
- Designed physical systems: which consist of things created by people, which can be concrete, such as machines, motor vehicles, or include abstract ideas, such as index languages.
- Social systems: which consist of collections of people interacting in some way, such as work groups, families, social groups.
- Human activity systems: which consist of humans engaging in some purposeful activity, such as reading, discussion and sport.³⁷
- Transcendental systems: e.g. God, Angels³⁸

All five types may be present in one circumstance but it is impossible for one system to be independent of the other systems.

3.2.4 Dynamic Systems

A basic system or dynamic system has three basic interacting components or functions:

- **Input** involves capturing and assembling elements that enter the system to be processed for example data, energy, raw material and human effort must be organised for processing .
- **Processing** involves a transformation process that converts input into output.
- **Output** involves transferring elements that have been produced by a transformation process to their ultimate destination. For example, finished products, human services, management information must be transmitted to their human users.

This concept of input, processing and output are illustrated in Figure 3. 3.

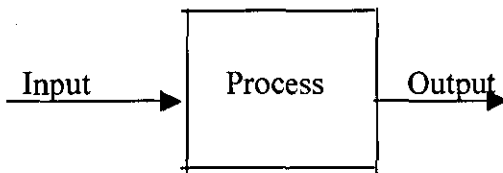


Figure 3.3 The Basic System Concept

The systems concept can be made even more useful by including two additional components: *feedback* and *control*. A system with feedback and control components is sometimes called a ‘cybernetic’ system, that is a self-monitoring, self-regulating system. *Feedback* is data about the performance of the systems. For example, data about sales performance is feedback to a sales manager. *Control* involves monitoring and evaluating feedback to determine whether a system is moving towards the achievement of its goal or not. The control function then makes necessary adjustments to a system's input and processing component to ensure that it produces proper output.

Another system characteristic which is as important as the above, and important to a proper understanding of information systems is the *environment*. A system does not exist in a vacuum; rather it exists and functions in an environment containing other systems. If a system is one of the components of a larger system, it is a subsystem, and the larger system is the environment. Also, a system is separated from its environment and other

systems by its system boundary. Several systems may share the same environment. Some of these systems may be connected to one another by means of a shared boundary, or interface. The concept of open system is a system that interacts with other systems environment. If a system has the ability to change itself or its environment in order to survive, it is known as an adaptive system.

3.3 Systems Thinking and the Systems Theory Approach

Due to the wider usage of the word 'system', the implication on its scope and its undertaking has been affected and undermined. It is not the purpose of this chapter to debate about the narrow definitions of the words, but to identify the relevance of the systems thinking concept in this research. In the systems thinking concept, a system is used not to refer to things in the world, but to a particular way of organising our thoughts of the world, and the notion of a system can be referred to as an organising concept before looking for detail at the various systemic metaphors that may be used as a basis for structuring thinking about organisation and problem situations³⁹. Systems thinking is the way we make out some rules, some sense of patterns and events, so we can prepare for the future and gain some influence over it. It gives us some measure of control. In other words it is about a particular way of thinking about the world using a particular set of ideas, system ideas, in trying to understand the world of complexity. The benefit of systems thinking according to O'Connor and McDermot⁴⁰ are:

- It helps us to see and understand the pattern of events that enable prediction of events and preparations for its wake;
- It provides an effective way of dealing with problems, better thinking strategies and helps to change the thinking
- It provides the right direction for solving the problem.
- It is a basis for clear thought and communication, a way of seeing the situation better.
- It is an essential tool in helping to manage oneself and others more effectively.

Systems thinking, when used in the real world application improves the effectiveness of problem management, which promotes systems thinking⁴¹. It is a framework of thought that helps us to deal with complexity in a holistic way. Systems thinking may lead to systems enquiry. Woltensholme⁴² defined systems enquiry as:

"A term to describe a rapidly emerging field, which focuses on problem solving and analysis of complex real world systems by methodological means, where the emphasis

is on promoting holistic understanding rather than piecemeal solutions. It is also alternatively known as that of large-scale system analysis".

The integration and recognition of cybernetic science and formalised system thinking (systems theory) is an important threshold of this important worldly knowledge. Cybernetics is defined as a science of communication and control in the animal and the machine. Their role within organisational analysis is a very different system theory which is to focus more on the structures of systems, whereas cybernetics theories focus more on how the systems function. These theories will be used as a source of concepts for understanding the action of individuals and organisations.

3.3.1 The Origin and Evolution of System Thinking

The existence of a systems concept or systems thinking is due to the inexistence of a satisfactory concept for understanding phenomena except those employed by physicists, and their concepts seemed unable to explain the behaviour of complex phenomena⁴³. Mechanist thinking advocates that everything that occurs is completely determined by something that preceded it. It adheres to analysis and reductionism, claiming that all objects and events, and their properties, can be understood in terms of ultimate elements. This thinking adheres to a belief that 'a system' is an aggregate of the parts in which the whole is equal to the sum of the parts. In the 1940s Bertalanffy brought about new changes due to the failure of mechanistic thinking to explain biological phenomena. "Organisms were now to be treated as whole entities or systems whose identity and integrity had to be respected. They had 'emergent' properties peculiar to themselves, which could not be derived from their parts. They were open rather than closed to their environments"⁴⁴. The post-mechanistic thinking in relation to the systems concept is that a system is highly complex and highly inter-linked network of parts exhibiting synergistic properties- the whole is greater than the sum of its parts.

System theory developed, therefore, as an alternative to mechanistic thinking, and proved to be more satisfactory for explaining not only complex biological but also social phenomena. It has been used and applied with particular research approaches and methods. These research approaches keep increasing in numbers over a period of time and these approaches can be termed as Hard versus Soft approaches, and more recently they have been termed by Burrell and Morgan⁴⁵ as Positivist versus Interpretivist traditions. They see each embodying a particular set of beliefs about relationships between an

observer and the 'world out' there. Their simple classification has now been commonly used in a number of textbooks^{46 47}.

The 'hard' or systems engineering approaches are those applied in situations which are taken to be well defined and which can be described quantitatively, but 'hard' approaches are inadequate in 'soft' situations, particularly those involving human activity systems. The essence of the approaches is the selection of an appropriate means to achieve an end which is defined at the start and thereafter taken as given. The basic idea of the hard approaches is to identify the purpose or object of the system. It starts by defining the needs to be met and the objectives of the system which will meet them. Alternative systems are appraised in the light of the objectives and the most promising alternative is selected for development. The criteria for 'promising' include such considerations as fitness for purpose, and economic aspects. Finally, the selected system is realised, operated and maintained. Many techniques exist to help each stage of this process. Hard systems have the task of conceiving, designing, evaluating, and implementing a system to meet some defined need.

Interpretivism is an epistemology, concerned with approaches to the understanding of reality and asserting that such knowledge is necessarily a social construction and thus subjective. Interpretive methods of research start from the position that our knowledge of reality, including the domain of human action, is a social construction by human actors and that it applies equally to researchers. There is no objective reality which can be discovered by a researcher and replicated by others in contrast to the assumptions of positivist science. A notion central to positivist empiricism is that situations are 'set up' and an attempt is made to objectively manipulate the variable. Maturana⁴⁸ offers a useful summary of positivist thinking which he describes as being concerned with following points:

- observation of phenomenon that, henceforth, is taken as a problem to be explained;
- proposition of an explanatory hypothesis in the form of a deterministic system that can generate a phenomenon isomorphic with the one observed;
- proposition of a computer state or process in the system specified by the hypothesis as a predicted phenomenon to be observed; and
- observation of the predicted phenomenon.

An important approach in a positivist systems engineering category is the quantitative statistical based Operational Research (OR) approaches which grew out of the application of scientific methods, not to unchanging nature but war time military operations. Traditionally the approach seeks to apply the empirical method of natural science to real world operations. It does this by defining the objective to be achieved in a real world activity, and then by exploring how the objective might be achieved by manipulating the model. Another methodology which brings together Systems Engineering and ideas from economics and seeks to help a real world decision-maker faced with carrying out a major project. This is known as Systems Analysis. Systems Analysis is an approach pioneered by the RAND Corporation, and its work for the US Department of Defence. It is an investigation of business or information systems processes, including investigation into input and output, in order to find better, more economical, and more efficient means of processing. The application of System Analysis techniques from the point of information processing has many benefits:

- Systems Analysis helps to develop and maintain an organisational structure and operating procedure for maximum efficiency,
- An organisation or business firm that operates efficiently and systematically is likely to generate greater profits,
- Systems Analysis aids an organisation in achieving high quality output with the least investment of time, material, and other resources,
- Systems Analysis encourages the best utilisation and allocation of human effort and labour. The analyst attempts to cover duplication, redundancy, and wasted effort and to automate procedures whenever practical,
- Efficiently organised procedures and operations make it possible to reach goals faster,
- Systems analysis helps to reduce or eliminate errors in data and information. An important goal of the Systems Analyst is to increase the accuracy of data generated and processed by an organisation, and
- The approach gives clear written policy statements, diagrams, flowcharts and, as such, makes it more likely that organisations, procedures and practices will be followed and maintained in a consistent manner. These also serve as a guideline for changes or modifications.

After all the talk of its success, the systems analysis and design approach has failed in its attempt to deal with soft or fuzzy⁴⁹ unstructured problem situations where values and objectives are multiple and conflicting. An important prerequisite of the systems analysis approach is that a problem has been defined which will be tackled by the proposed system(s) and organisational and cultural context within which the problem is understood and agreed. Kirkham⁵⁰ argued that:

“..such an approach may be based upon preconception about organisational environment in which the systems will operate (or more specifically, the problem or tasks that it should address) which represent institutionally enforced rather than actual views. Its design may be based for example, on the view and perceptions about the organisation, which are held by a particular group such as managers, which are not widely shared by eventual users of the systems”.

3.3.2 Soft Systems versus Hard Systems Approaches

Hard systems thinking and analysis is essentially concerned with the question of how to achieve a predetermined aim. While soft approaches are concerned with defining options for improvement, in other words, addressing the ‘what’ to do question. A number of perspectives can be identified when comparing the two approaches:

- **Temporal Relationship.** The hard system approach evolved rapidly to meet the needs of modern engineering and industrial systems. As the range of applications steadily widened, the approach ran into trouble in cases where its implicit pre-requirements could not be met.
- **Similarities.** The two approaches have some similarities in that both are firmly rooted in a pragmatic tradition which values real world applicability rather than theoretical development. Both approaches are geared towards largely practical ends, and, in this sense, are classically technological in orientation.
- **Differences.** The fundamental differences between the two approaches evolved from conflicting assumptions about the nature of social (organisational) reality. The hard system approach identifies an organisational world in which goals and objectives can be clearly specified, where relevant data for any particular problem can realistically be quantified, where hierarchies of power and authority have legitimacy and muscle. The soft approach, in contrast, maintains that social reality is essentially an intellectual construct, the outcome of an ongoing debate between rival (and sometimes conflicting) perceptions. The hard approach sees organisation as social entities describable in terms of hierarchical, functional and other components; the soft approach sees them as social

systems perceived in subjectively different ways by their individual members and concedes some legitimacy to these different ways.

- **Dominance.** Because of its historical 'head start' and also because of the enormous range of its applications hard systems methodologies are established as dominant in the field, with the result that most references to the 'system approach' are in fact references to the hard tradition.

The attractiveness of soft system approaches is that they recognise that different people have different perceptions of problems and of the systems within which they lie. The approach has an underlying theme which is that reality is socially constructed by humans and is not a 'given'. The soft system philosophy is highly participative and would encourage users to be fully involved in all stages. Mumford ⁵¹ advocates that the full participation of the user group is essential in information systems design.

3.3.3 Soft System Methodology

The failure and inadequacy of the hard systems engineering methodology to be applied to ill defined 'soft' and 'messy' problem situations led to another strand of thinking called soft systems thinking. The proponent of this strand of thinking is Professor Peter Checkland of the University of Lancaster, who developed Soft System Methodology (SSM). Checkland⁵² argues that we perceive the world through a filter, using a framework of ideas that are internal to us. However, the source of many (most) of those ideas is from the perceived world external to us. Thus, the world is continually interpreted using ideas the source of which is ultimately the perceived world itself. This is illustrated in Figure 3.4 below:

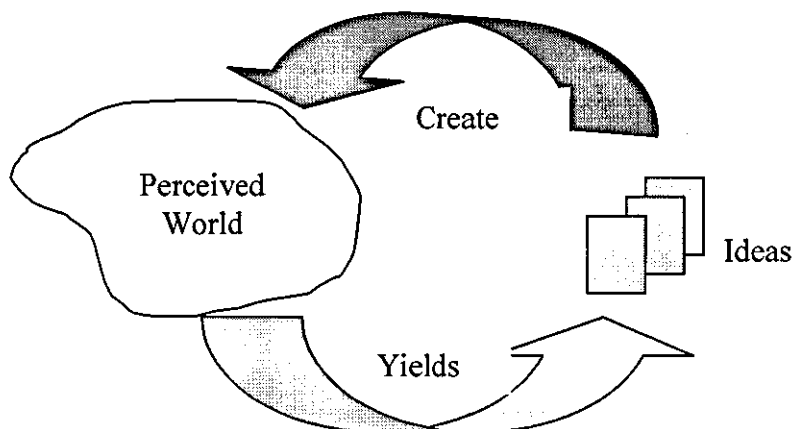


Figure 3.4: An Individual Perception of the World

Understanding of the perceived world would be more effective if an appropriate methodology 'M' were applied⁵³ as illustrated in Figure 3.5 below. This figure manifests that in system thinking the idea of 'system' is explicitly used; there are formally defined methodologies such as system engineering or soft system analysis. Checkland and Scholes⁵⁴ argued that the soft system thinking takes the stance that methodology *M*, *the process of enquiry*, can itself be created as a holon. In the case of SSM we have cyclic methodology which itself is a systemic (or holonic) process, one which within its procedures happen to make use of human activity system models.

Checkland⁵⁵ advocates that SSM can be used to tackle problems which involve human activity systems. It starts from the realist position that 'there does exist a real world of which we are a part'. Though we have no direct access to reality, we know about the world in the form of perceived reality (PR) by some mental processes or methodology (M). The soft systems view is distinguished from the hard systems view as follows:

Hard: PR is systemic, while M can be systematic.

Soft: PR is problematical, while M can be systemic.

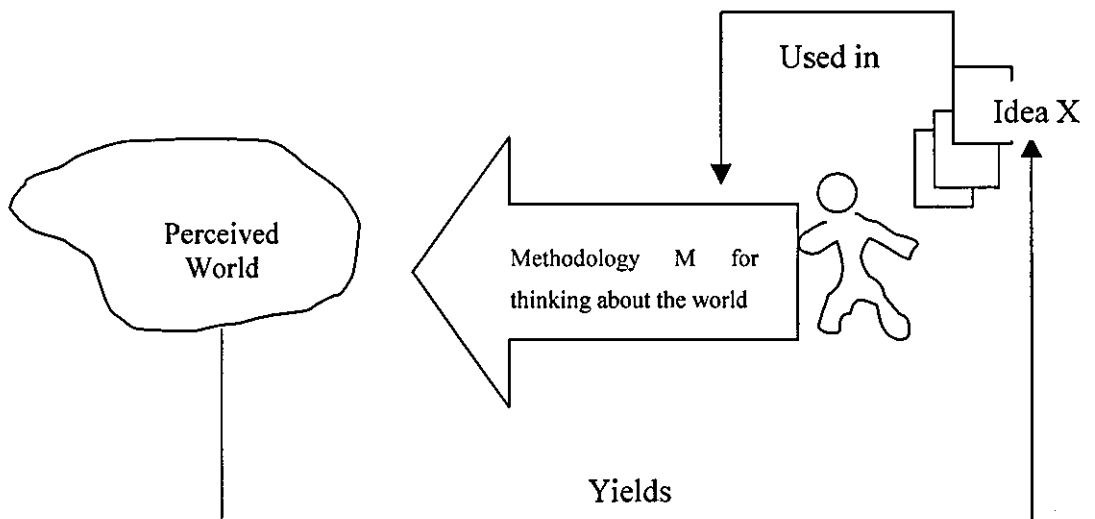


Figure 3.5: The Interpretation of the Perceived World Through Ideas with the Help of a Methodology⁵⁶

Checkland also stresses the point that the problem situation in a perceived world is a construct and not an objective reality peered at. SSM is a cyclic process for enquiring and learning. It makes use of systems models to study a purposeful human activity system. Concepts that bind the world into single systems do not have an independent existence, but rather are useful conceptual devices for linking otherwise diffuse observation.

In system thinking, accounts of the wholes are formulated as 'holons' and these can be set against the perceived world in order to learn about it. To avoid confusion with everyday use of the word 'system', the term 'holon' is sometimes referred to. We think about the world in terms of holons i.e. constructed abstract wholes. It is thus necessary to declare an explicit *weltanschauung* which makes the description meaningful. The conventional form of SSM is often presented in the seven-stage model (Figure 3.6), but a more mature form is shown in Figure 3.7. The overall process is seen as series of learning systems geared towards fostering greater understanding and involvement among all concerned. In order to understand the rationale for Soft Systems Methodology, it is important to look at some of the underlying philosophical assumptions made:

- The assumption that problems are not regarded as being 'out there' in a realist sense. There are no objectively given problems. Different people may see different problems in the 'same' situation,
- Just as problems are intellectual constructs so are the solutions. Two people may agree on a problem and yet cannot constitute a solution.
- Problems very rarely come singly, neatly packaged and ready for a solution. It is more likely that there are several interlocking problems. Moreover, if one problem is solved this may generate a problem elsewhere. Problems are often messy and not amenable to a simple solution such as the installation of computerized information systems. This is another reason why the term 'problem situation' rather than 'problem' is used to describe what confronts the analyst.
- It is obvious from these points that it is important that the problem area is investigated and analysed prior to any decision on the desirability of computer systems. The role of the systems analyst is seen, at least initially, as much more akin to a therapist than a technical computer expert. The analyst encourages participants in the existing system to examine their own perceptions of the system and its interconnections with others, its objectives, their role within it and the role of others. This learning process is an

essential prerequisite to development. It is recognised at the outset that a computer system may not be suitable for the organisation or, at least, not a total solution.

- The final assumption implies that the analyst cannot be divorced from the system and the participants involved in it owing to the early therapeutic role of the analyst.

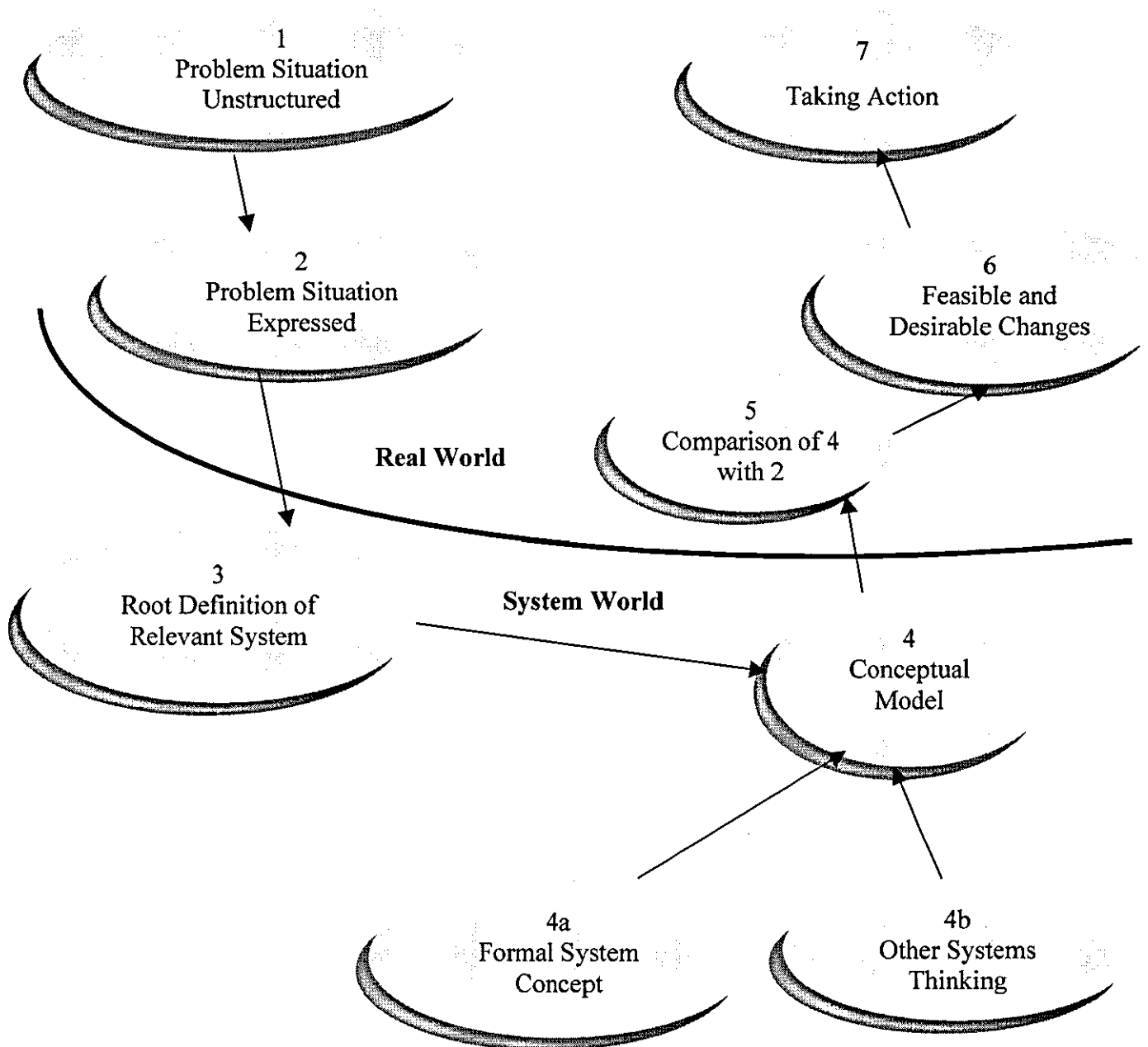


Figure 3.6: Mode 1 Inquiry Cycle of the Soft System Methodology Approach⁵⁷

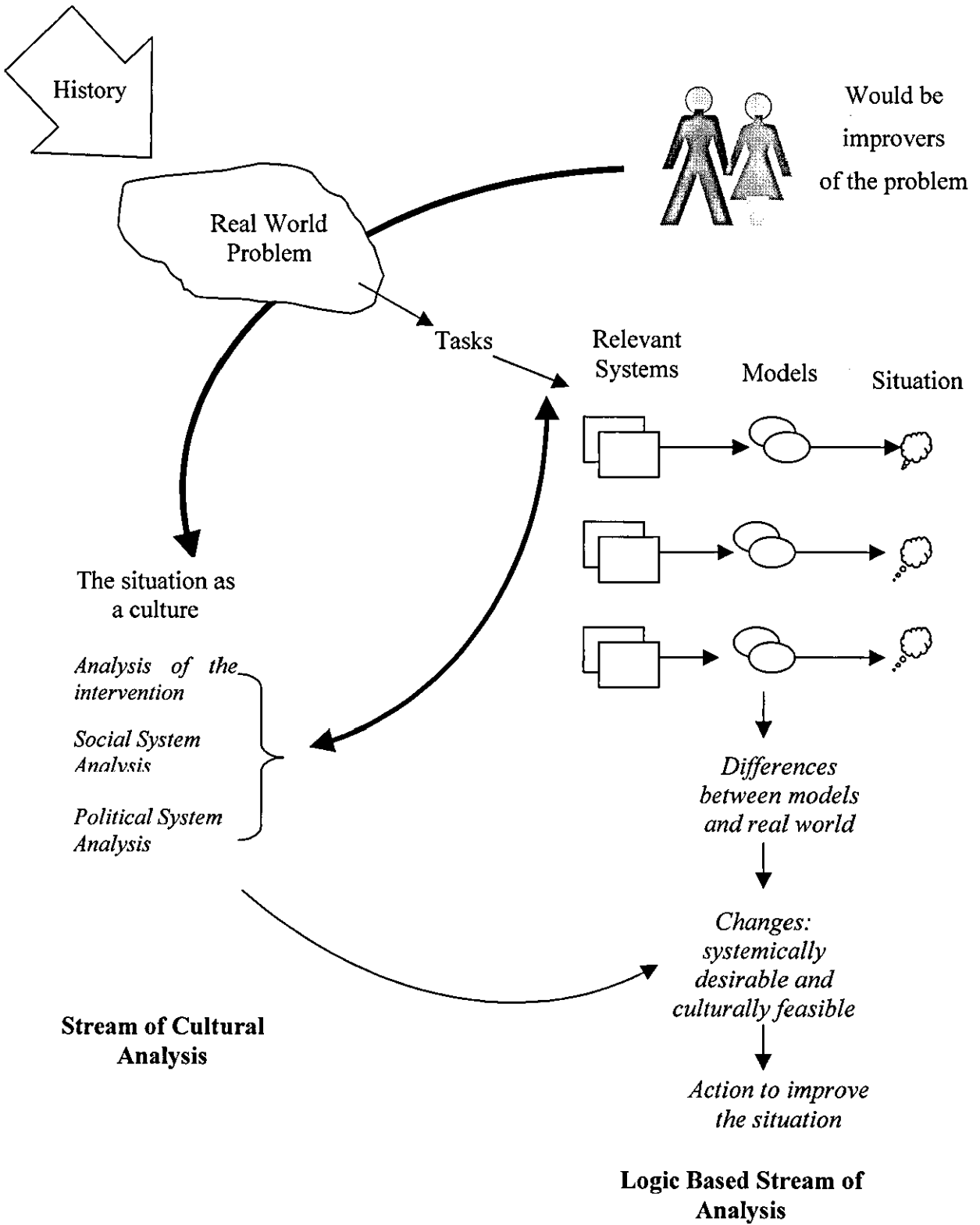


Figure 3.7: Mode 2 of Checkland's Soft Systems Methodology Approach⁵⁸

Soft systems methodology is defined by Von Burlow, as quoted by Checkland⁵⁹, as:

“a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is ideally never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world, and again reflecting on the happenings using a systems concept. The reflection and debate is structured by a number of systemic models. These are conceived as holistic ideal types relevant to certain aspects of the problem situation rather than accounts of it. It is taken as given that no objective and complete account of problem situation can be provided”.

The attractiveness of SSM is centred on several key ideas as described by Naughton⁶⁰. Firstly, there is the idea that a ‘problem’ which arises in government and organisations does not have an existence independent of the human beings involved with them. On the contrary, ‘problems’ are constructs of the concerned mind defined by perceptions of the individuals who are troubled or intrigued by them. This implies that a crucial stage in the problem-solving process is the answering of questions; What shall the situation be deemed to be, not ‘what is the problem’.

Secondly, people have a different appreciation of the situations because they see them in genuinely different ways. Each of us looks at, and interprets, the world through a kind of personal prism, which refracts the light of experience and gives us a unique picture of ‘reality’. This prism is clearly very complex but it includes two kinds of beliefs: belief about what is and belief about what ought to be. The first sort are really about facts and what we take to be true facts, for example that the real world is round, and that motorcars are propelled by engines rather than by supernatural forces. The second sorts of beliefs are often called ‘values’ and are really beliefs about what is ‘right and proper; good or bad, appropriate or inappropriate and so on’.

A third key idea of the SSM is this: if we accept that problems are intellectual constructs which are determined by the perceptions of concerned actors then we have to accept the corollary of the proposition, namely that ideas of what might constitute ‘solutions’ are intellectual constructs. Moreover, in a fourth key point of the methodology, it compels practitioners to scrutinise the whole concept of what constitutes ‘a problem’. A problem is a perceived discrepancy between an actual state and a desired state. This implies that: one knows what the actual state of affairs is, and one knows what the desired state is. This follows the fifth idea that we come to reflect about the change process in organisations. A

central tenet of the SSM approach is that improvements in the complex problem situations are most likely to be brought about through the sharing of perceptions and through persuasion and debate.

Finally, an important principle of SSM is the abandonment of the idea that the analyst can be divorced or detached from the analysis. Instead, he or she is assumed to be part of the problem situation or 'mess'. Much SSM is thus close to what is known as 'action research', in that the analyst is attempting not only to understand the situation but also to help to decide on the changes.

3.3.4 Soft System Methodology Applied to Information Systems

Looking at the historical development of information system design, the field has long been dominated by technical concerns since the early application of computing in business. This accounts for the hard tradition of information system practice, with the correct design and efficient production of software according to well defined specifications. This tradition results in the conservative approach of information systems designers and poor participation of information systems users in the design processes.

Hard approaches to information systems analysis and design have been very successful at developing computer systems that, viewed from a technical perspective, are efficient and effective information providers. However, there have been cases when new information systems have not had user acceptance or seem to be misplaced as a solution to a spurious problem. Recent examples of the failure of computer-based information systems are the Taurus project of the London Stock Exchange in 1993 which costs £75 million and the UK government systems for the unemployed. The problem behind this failure is an inadequate match between the needs of the user communities and the proposed systems solutions, combined with project resources. Harrington⁶¹ described a research study in companies situated in North East of England, where 60 percent of firms had major problems within two years of a computer-induced change in their structure. Winter et al.⁶² advocates:

"..deciding on which systems should be built out of many possible systems remains problematic and is an analytical challenge ill-served by current methodologies".

Flynn⁶³ provide two main significant causes of the problem of the unsuccessful information systems namely:

- Wrong problem: the wrong activities are chosen, as the problem is not defined correctly or the system may conflict with organisational aims or strategies.
- Neglect of wider organisation. Wider social or psychological factors may be neglected, such as a degree of decentralisation and centralisation or the factors of accessibility and usability.

Methods that do not address these problems are characteristic of the hard approach to systems development. The first assumption made by the hard approach is that the problem to be solved is logically based and has a computer solution. This assumption thus limits the range of problems that can be solved to those that possess a mathematical or logical solution. The second assumption is that the computer solution may be placed in the organisation without taking account of the wider social or psychological factors with which the system will interact. In addition, many methods emphasise the functional computer system; that is, they concentrate on the tasks of technical systems, expressible in such forms as flowcharts, data flows and so on. The hard approach, then, neglects the important issues of defining the right problem and wider organisational factors. Requirements are thus drawn too narrowly. Miles⁶⁴ argues that the hard systems tradition provides little support for handling the political or social dimension of an enlarged problem situation.

These difficulties have led to developments of a 'soft approach' which challenges the assumptions made by approaches deriving from a 'hard approaches'. With regard to the first problem, the soft approach allows for a situation that may be investigated by a variety of problem definition techniques and emphasises the determination of the key organisational activities and strategies. As for the second problem, the soft approach focuses on wider issues that may be concerned with employee job satisfaction. It also allows the factors of usability and acceptability, which are perhaps equally as important as functionality, although less explicit, and which should also be taken into account when determining quality.

The emergence of soft systems approaches has given an impetus to the information system researchers to treat the discipline as more of social sciences or socio-technical⁶⁵ subject not simply a technical one. This approach perceives different weakness in the hard

approaches and so each has a different remedy. It identifies the presence of people in a system, as leading to complications not acknowledged by proponents of hard approaches. The soft system approach recognises that different people have different perceptions of problems and of the systems within which they lie. The approach has an underlying theme which is that 'reality' is constructed by humans and is not a 'given'. According to Galliers⁶⁶:

Information system is best research using two pairs of system thinking principles of emergence and hierarchy, and of communication and control.

He went on to say:

"Formal designed [information] systems must be viewed in the context of the individual who attributes meaning to the data being output from the systems with view to taking a purposive action or decision, and of the informal (as well as formal) sources of data on which they are dependent and of which they choose to notice".

The soft system philosophy is highly participative and encourages users to be fully involved in all stages. Mumford⁶⁷ advocates that the full participation of the user group is essential in the information systems design. The thinking appreciates the richness of real-world problem situations involving human actors, and the fact that the social-world differs radically from the physical world. While models (purposeful holons) are pure intellectual constructions for further investigation, we must recognise that the world is always richer and messier than the pure concept. Therefore, the conceptual models being constructed are not strictly models of real-world activities; rather they are models relevant to debating about them.

Two most popular examples of soft approaches to information systems analysis and design are Mumford's Participation Socio-technical approach⁶⁸ and Checkland's or the Soft Systems Methodology approach. Each perceives different weakness in the hard approaches and so each has a different remedy. They both identify the presence of people in a system as leading to complications not acknowledged by proponents of hard approaches. The socio-technical approach stresses the recognition that computerised information systems are part of interacting social and technical systems. If one part is changed, for example the technical system, by means of computerisation, then the other will be affected. It is important to realise that the social and technical systems (the socio-technical system) cannot be designed independently of each another. One way to ensure that sufficient weight is given to the social aspects of the system is to involve users in the

process of analysis and design. This undercuts the assumption of 'hard' approaches that the end product of design is a purely technical system. It also challenges the assumption of the necessity or desirability of the expert/user division.

SSM has been used as the very first steps to be taken prior to deciding on whether or not to proceed with an information system development. Alternatively, it may be used to establish the appropriate information system that best suits the requirement and can help to solve problems. It has also been used to analyse specific requirements of an information system. It is a problem solving approach and a learning process which looks at the objective definition of the problem rather than solving the problem. SSM focuses on the human activity system which dictates the needs for information. The approach is to build a conceptual model or picture of what has been done in terms of management activity to achieve objective, and to compare, identified information systems requirement with the output of existing information systems. The comparison forms the basis of ideas for the identification of information system requirement. Checkland and Scholes⁶⁹ indicates:

"SSM could enrich those poverty stricken stages of systems analysis and design methodologies in which information requirements analysis is assumed to be a straightforward, or organisations are naively documented as a set of unproblematical entities and function".

It is widely perceived by many within the information system domain that the failure of many information system application is mainly due to the failure to fully recognise significance of people, who take purposeful action, during the information requirement analysis. They consist of human beings with ambiguous characteristics, different or conflicting objectives, perceptions and attitudes. Checkland⁷⁰ suggests:

" Thus if we wish to create an 'information system' in the exact sense of the phrase, we must first understand how the people in the situation conceptualise their world. We must find out the meanings they attribute to their perception of the world and understand which action in the world they regard as sensible purposeful action and why".

Mingers and Taylor⁷¹ stresses the disadvantaged feature of the conventional system analysis and design approach in that :

"System Analysis remains tied to the sphere of technical rationality from which it derived - the domain of control and manipulation of non-human objects and processes based on the rules of economic and analytic rationality. System analysis fails to recognise the distinctive character of its subjects-purposeful self defining, reflexive human beings and the context within which the creation and agreement of objectives and values takes place".

SSM, used in a particular situation, needs to be tailored to that situation. There is not a single methodology within SSM, but a variety to cope with the variety of situations themselves. With its emphasis upon investigating different views of the organisation, of what the organisation might aim to achieve and how it might seek to achieve those aims, SSM has tackled the real-life concerns of managers and achieved much success as a means of re-engineering organisational activities. It is not surprising, then, that recent years have seen much interest, from both academics and practitioners, in using SSM in their information system works. The most obvious way of doing so is to use SSM as a 'front-end' to the activities demanded by the conventional life cycle (hard approach) of development.

Checkland and Holwell⁷² provide the following sequence of considerations in an SSM-based approach to the working of information systems, each point being dependent on the preceding ones:

- meanings attributed to their world by the people concerned;
- purposeful activity, in the light of those meanings;
- information support which is relevant to the people carrying out the activities;
- data structures in which they could be manipulated to yield appropriate categories of information

SSM provides a way of identifying and building relevant purposeful activity models (Stage 1 and 2, above) from which the information requirement (Stage 3) can be richly debated.

Fundamentally, the SSM based approach to information requirement analysis is interpretivist and accepts a clear distinction between data and information, in which the latter is described as data plus the meaning attributed to it in a particular context. According to Lewis⁷³:

"The task assigned to SSM is, is to use the popular phrase, ensure that they are 'Doing the right thing' (deciding which information systems to be built) before turning to traditional way of 'Doing the thing right' (building the information -systems) as well as possible)".

Interest in SSM in the context of computer based systems development has been widespread during the past 15 years. It is now one of the major topics described in many

SSM to existing structured design methods. Examples of attempts to use SSM in this way include works by Wilson⁷⁴; the Multiview methodology of Avison and Wood-Harper⁷⁵ and the most important recognition is the proposal to use SSM in the feasibility stage of Structured System Analysis and Design (SSADM) by the Central Computing and Telecommunication Agency (CCTA)⁷⁶. Miles⁷⁷ characterises this type of approach as being a 'grafting' approach for the soft systems thinking is grafted onto conventional information system design approach. Some may go all the way in linking SSM and Structured Systems Design in a mechanistic way. This alternative approach is called an embedded⁷⁸ approach whereby the whole study, from start to finish, is controlled through SSM, but hard design elements from traditional Structured Systems Design methods are incorporated within SSM as appropriate. These are mainly favourites among those SSM analysts who have a technology (computer) background. Miles⁷⁹ argues that most of the benefits of the SSM study will be lost in the technical design of the systems although he accepts that the grafting approach has the virtues of simplicity. Lewis⁸⁰ sees that any meta-level use of SSM would require significant changes to the views taken of the nature of organisations, of information systems and of the relationship between the two. It would, require that organisations be treated not as goal seeking mechanisms, but as ever-changing social constructs, with the recognition that the introduction of a new information-system, or even the prospect of such, generates changes to work practices, to power relationships and to the total experience of those who work in the organisation.

Furthermore, it would require that information be understood as data that has been given a meaning by a particular set of individual or groups of individuals or organisations as whole. Information is thus seen as an abstract concept and the product of individual or group perceptions, and we move closer to that which Harrington⁸¹ describes as a 'perception-driven paradigm of information', and away from the more conventional 'resource-driven' view where information is treated as a commodity of the organisation that uses it. With this comes the need for greater consideration to be given to understanding the different ideas that may exist of the organisation and its needs.

However, criticism has been made of the ideas linking or embedding SSM and Structured System Design method as advocated by many information systems researcher. Mingers quoted an objection Doyle and Wood⁸²:

"the main point was that SSM and IS embodied different and conflicting epistemology and that there was no simple way to link them. A second concern is that in linking SSM to traditional methodologies much of the richness of the SSM analysis will be lost".

On a practical level, the SSM approach tends to generate an enormous amount of varied information particularly concerning different viewpoints and possible activities. Most of this will be lost in the need to fix on a single activity model and then convert this into a particular narrow representation such as data flow diagramming. Finally, at the philosophical level, it appears that this particular way of using SSM contradicts its own premises. The whole philosophical thrust of SSM and interpretivism is to recognise the different meanings and interpretations that may be given validly to the world and information within it. Indeed, SSM starts with the proposition that information only comes into being when data is interpreted in the light of particular meanings. Yet this recognition is suppressed in the interests of developing a single hegemonic information system.

The overall philosophy of the SSM approach for designing an organisational information system is that, it is necessary to start not with the information systems but with the system served by it, that is to say with the primary activities of the organisation, such as selling products, services etc., rather than with the secondary activities such as keeping records, producing reports. Fundamentally, a general study to identify a set of activities that must be carried out by the organisation (or department). These activities will be independent of any particular organisational structure and will not, in general, be simply a description of what actually happens. In Checkland's methodology, the analyst is not an expert in any particular area, so is therefore not employed to give technical advice. Rather, the analyst should be thought as a change agent or therapist who is able to stimulate others to a new perception of the problem situation.

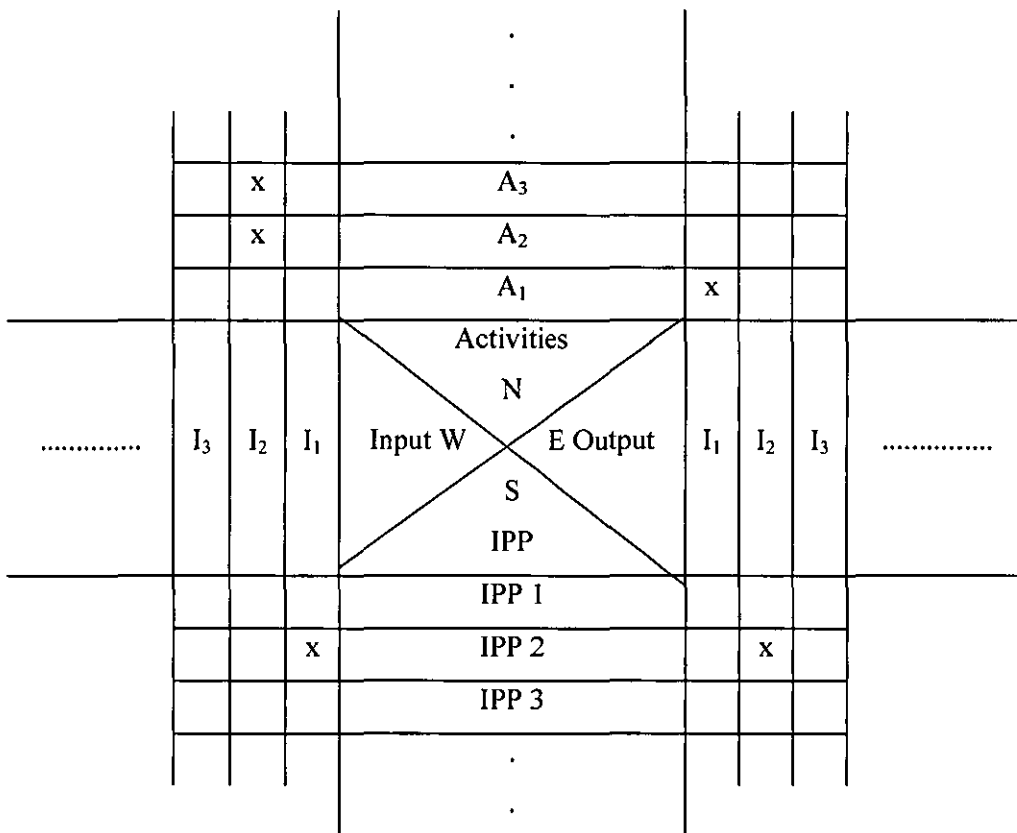
Since the essence of the approach is to make sense of purposeful human action in organisations (prior to IS design etc.) through the use of the human activity system concept, the following fundamental principles arise. Firstly, it is necessary to establish the views of the organisation and its purposes which are relevant and meaningful to the people in the organisation. In SSM, the recommendation is that this description can be expressed as a rich picture containing symbols to represent relevant components of the situation and arrows to illustrate relationships. It is then necessary to conceptualise the activities necessary to pursue these purposes and to debate these (served system) activities with the

people in the organisation, comparing them with current action. Of course, in any real-world organisation, such a debate would take place in a 'political' arena in which many different interests are being pursued. It is unlikely that the debate will be characterised by consensus. The normal outcome is accommodation between conflicting interests rather than a consensus - accommodation within which action can occur.

The required outcome of this debate is a set of meaningful conceptualisations of action relevant to the organisation, to which information analysis can be applied (Stage 5 and 6). More specifically, these conceptualisations can take the form of human activity system models of information support which people would like to see exist in the organisation. The activities in the models are examined to help derive the information requirements of anyone carrying out the activities. Operational information requirements will be requirements for information needed by people to do the activities while strategic requirements for information are needed by people to control the doing of the activities. For each activity three things are specified:

- The information input that the activity requires;
- The information output relevant to other activities that the activities produce;
- The monitoring and control information necessary to allow the measures of performance defined for the activity to be checked.

Wilson⁸³ provides an approach within SSM study by integrating an information flow study using Maltese Cross. The purpose of this analysis is to identify the 'who' on terms of role, needs what information for 'what' purpose. The table in which the information categories are listed corresponds to the input, the output and measures of performance related to each activity, as shown in Figure 3.8. The process of constructing this table is to complete the input row first, i.e. define all of the support information categories. This is preceded by derivation of the output of each activity plus all the support information. This is done by focusing attention on the information categories themselves and asking which one of the activities would generate this information as output (it may also be the case of course that some of the information input is derived externally to the system and hence cannot be located as an output from an activity). Thus in completing this process, one is only identifying the information which actually gets used.



Keys:

- A- Activities
- I – Information Category
- IPP – Information Processing Procedure
- North axis (N): Listing of Activities
- South axis (S): Listing of Information Processing Procedure
- West axis (W): Input
- East axis (E): Output
- X : Data input and Output.

Figure 3.8: The Maltese Cross

In addition to the SSM, there are other systems methodologies that can be considered as soft system methodologies. Some are true methodologies, others are more like a method. Daellenbach⁸⁴ identifies 7 types namely the Strategic Assumption Surfacing And Testing Methods (SAST), the Viable System Model (VSM), the Social Science, Robustness Analysis, Strategic Choice Approach, Strategic Option Development and Analysis, and the Total System Intervention (TSI). Another methodology that can be categorised under the 'soft system' approach to computer-based information systems analysis and design is the Mumford's Participation Socio-technical approach⁸⁵. As with SSM it perceives different weaknesses in the hard approaches and it has a different remedy to sort out problematic areas. They both identify the presence of people in a system as leading to complications

not acknowledged by proponents of hard approaches. For example, the Socio-technical approach stresses the recognition that computerised information systems are part of interacting, social and technical systems. If one part is changed, for example the technical system by means of computerisation, then the other will be affected. It is important to realise that the social and technical systems (the socio-technical system) cannot be designed independently of each another. One way to ensure that sufficient weight is given to the social aspects of the system is to involve users in the process of analysis and design. This undercuts the assumption of 'hard' approaches that the end product of design is a purely technical system. It also challenges the assumption of the necessity or desirability of the expert/user division.

3.3.5 Socio-Technical Approach

The ETHICS Methodology, was introduced by the socio-technical theorist Enid Mumford. This approach is based upon the tradition of the socio-technical approach of the Tavistock Group. ETHICS is an acronym for Effective Technical and Human Implementation of Computer-based Systems. It attempts to reconcile multiple interpretations by helping to form collective groups and extracting consensus viewpoints about their psychological needs. The philosophy of ETHICS evolves from organisational behaviour and perceives the development of a computer system as not a technical issue, but an organisational issue, which is fundamentally concerned with the process of change. The process of change involving the computer-based system is likely to involve conflicts of interest between all participants or actors in the process. These conflicts are not simply between management and staff, but often between staff and managers. According to Mumford, as quoted by Avison and Fitzgerald⁸⁶:

“To be resolved, these conflicts need to be recognised, brought into the open, negotiated and a solution arrived at which largely meets the interests of all parties in the situation”.

The successful implementation of a new system is therefore a process of negotiation between the affected and interested parties. This will include the users themselves and if these people are left out of the decision-making process, the process of change is likely to fail. Thus, the contribution of all stakeholders is vital and the methodology considers them to be most knowledgeable about the work environment and its future requirements.

The methodology is known to be very tough and time-consuming as there are a lot of stages (17 stages) to be undertaken. It is also argued that unskilled users cannot make the designs properly without the help of a computer or a technical background. In addition, the methodology identifies technology as the outright answer to the problems without having to consider other non-technologically based solutions. The major focus of the methodology is on the process of design and implementation of organisational change based on the technology. ETHICS provides a framework for the participation of organisational employees whose lives may be affected by the design, management and implementation of change. By focusing on human needs, it alerts designers to the practical implication of their designs on people working on the situation. Although the approach is purely participative on an organisation's part (staff and personnel), the change process is led by a technologist whose views are paramount in the design of the system. This may result in the technologically feasible rather than the organisationally desirable.

3.4 Total System Intervention

The Total System Intervention (TSI) approach of Flood and Jackson⁸⁷ can be used as an organising framework for a systems study and it can also be used to identify one or more approaches for study, as way of matching specific methodologies and problems. The process employs a range of system metaphors to encourage understanding about the organisation and the complexity that managers have to confront. These metaphors are linked through a framework, the 'system of systems methodologies', to various systems approaches, and highlights appropriate systems-based methodology (set of methodologies) that can be employed to confront the organisation's concerns. The seven principles embedded in this methodology are;

- Organisation are too complicated to understand and their problems too complex to tackle with the 'quick fix',
- Organisations, their strategies and the difficulties they face should be investigated using a range of system metaphors,
- System metaphors, which seem appropriate for highlighting organisational strategies and problem, can be linked to appropriate systems methodologies,
- Different systems metaphors and methodologies can be used in a complementary way to address different aspect of organisations and the difficulties they confront,

- It is possible to appreciate the strengths and weaknesses of different systems methodologies and to relate each to organisational and different business concerns'
- TSI set out a systemic cycle of enquiry with iteration back and forth between the stages: creativity, choice, and implementation,
- Facilitators, clients and others are involved at all stages of the TSI⁸⁸

The TSI is considered as an iterative and interactive methodology which consists of three phases. The first phase is Creativity and involves identification of relevant metaphors to help people think about a problem. The sorts of questions asked are:

- "Which metaphors reflect current thinking about organisational strategies, structures, and control and information systems (including past, present and future concerns)?"
- "Which alternative metaphors might capture better what more desirably could be achieved within this organisation?"
- "Which metaphors make sense of this organisation's difficulties and concerns?"

The tools provided to assist this process are the following systems metaphors:

- The machine or product line metaphors (closed system view)
- The organic metaphors (open system view)
- The cultures metaphors (concerned with norms and values)
- Neurocybernetic metaphors (viable system view)
- The coalition (a pluralist political system);
- The economic system;
- The domain as a metasytem (a synthesis of different metaphors)

The second phase of TSI is 'choice', that is to choose an appropriate system-based intervention methodology. The classification that assists in identifying the right methodology is illustrated in Figure 3.9 System methodologies are classified into Simple Unitary; Complex Unitary; Simple Pluralist; Complex Pluralist; Simple Coercive and Complex Coercive.

	UNITARY	PLURALIST	COERCIVE
SIMPLE	S-U <ul style="list-style-type: none"> • Operational Research (OR) • System Analysis (SA) • System Engineering (SE) • System Dynamics (SD) 	S-P <ul style="list-style-type: none"> • Social System Design (SSD) • Strategic Assumption Surfacing and Testing (SAST) 	S-C <ul style="list-style-type: none"> • Critical Systems Heuristics (CSH)
	C-U <ul style="list-style-type: none"> • Viable System Dynamics (VSD) • General System Theory (GSH) • Socio-technical system Thinking • Contingency Theory 	C-P <ul style="list-style-type: none"> • Interactive Planning (IP) • Soft System Methodology (SSM) 	C-C
COMPLEX			

Figure 3.9: A Classification of Systems Methodologies⁸⁹.

The third phase is the implementation phase. The task during the implementation phase is to employ a particular system methodology (system methodologies) to translate the dominant vision of the organisation, its structure, and the general orientation adopted to concerns and problems into specific problem or change. The implementation phase is an extension of the second phase, where chosen methodologies and methods are applied to the problem. It can employ one or more metaphors and tools.

Among the criticisms of the TSI are:

- The choice of tools for any system intervention must depend on the observers' perception of the problem situations, rather than any presumed objective properties it may have. TSI therefore seems to fail to take into account the prejudices of the analyst or investigator. The methodology only views the 'problem context' as being simple (unitary, pluralist, coercive) or complex (unitary, pluralist, coercive).

- A system or problem situation may be viewed as complex by one observer but simple by others. It takes a particular researcher's standpoint and defines a domain as simple or complex as viewed from there, rather than looking from a number of perspectives and choosing the 'best'-perhaps simplest-or perhaps most politically astute-way in. As a result the TSI can cause managerial or analyst bias towards a particular methodology.
- The TSI has a strong positivist way of system thinking, in that it does not allow for alternative interpretations of whether a system is simple or complex, unitary or pluralist. As a result TSI itself can be categorised as more unitary than pluralist.

3.5 Information Systems in Public Sector Organisations

The public sector, like its counterparts in the private sector, performs many functions that can be classified as decision making or, when planning for the future, may be called strategy or strategic planning. However, the classical approaches to public sector management are summarised by Stevens and McGowan⁹⁰ under an acronym POSDCRB which addresses the common processes or functions that managers typically perform. It is probably the most common and easily understood model of public management. This acronym stands for Planning, Organising, Staffing, Directing, Co-ordination/controlling, Reporting, Budgeting.

- **Planning:** this is the most important managerial function supposedly based on organisational analysis and forecasts which precede and structure the other managerial activities.
- **Organising:** this function is based on the definition of actions and tasks derived from the plan which involves the selection of organisational forms in terms of centralisation or decentralisation of authority and responsibility among the subordinates, and functions within the agency, programme, or organisation.
- **Staffing:** this managerial activity follows and implements the plan and operationalises the distribution of authority and responsibility by defining personnel requirements.
- **Directing:** it is the vehicle by which instructions, regulations, guide lines, and orders are formalised into organisational procedures and operations.
- **Co-ordinating / controlling:** are the managerial functions that affect all parts of the organisation by setting standards for performance that correspond to the objectives, evaluating actual performance in terms of the standards, and taking action to deal with

the discrepancy between standards and performance across all organisational functions.

- **Reporting:** integrates information and performance, and its purpose is to inform management about critical operations.
- **Budgeting:** matching resources with objectives through a plan of programmes, activities, and expenditures for a given time period. If used correctly, the budget becomes a key method of implementing and integrating plans and programmes with the current allocation of revenues of resources.

However as time has passed, this classical model has undergone severe criticism and review because it offers what most critics called a 'closed-systems' perspective. Current models of management still observe the utility of the traditional processes associated with classical approaches; however, the focus has shifted to more comprehensive views that incorporate not only internal focal points, but also more complex interaction with the critical component of the environment. Such an 'open system' focuses more on the interdependence of functions and structure within the organisation and the internal subsystems in the organisation with the relevant parts of the environment or task environment outside the boundary. Figure 3.10 gives an overview of this 'open model' and incorporates the managerial functions that require information and resources from both outside and inside an organisation.

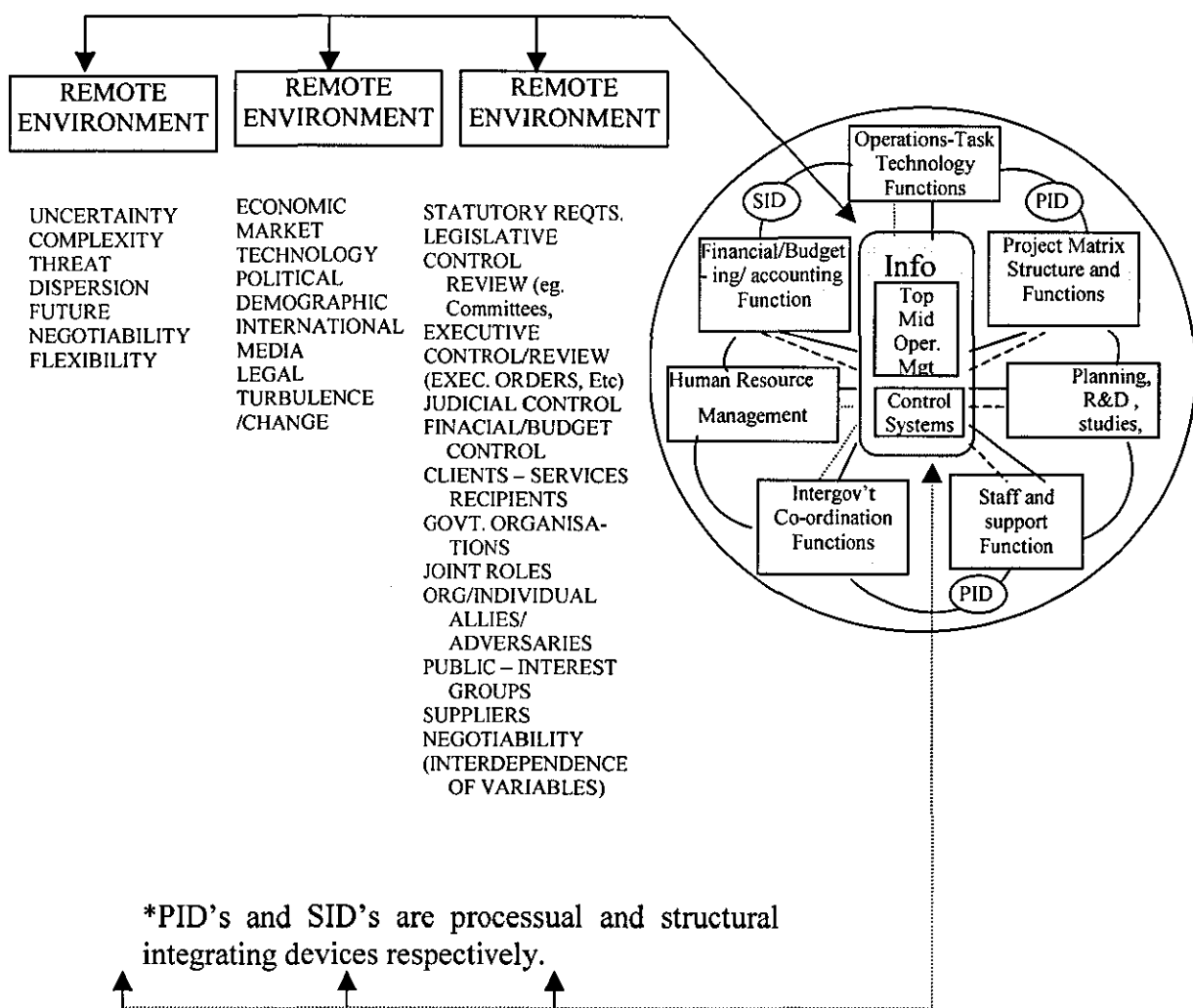


Figure 3.10: System and Contingency Perspective on a Public Sector Organization⁹¹

Gathering and processing information is known to be a major part of public sector administration and, by definition, public services are not subject to commercial pressures as experienced by private or manufacturing organisations. According to Cleveland⁹², government and information are synonymous. He states that the raw material of government is information and the product of government is transformed into information.

*"Its employees are nearly all information workers, its raw material is information inputs, Its product is those inputs transformed policies, which are simply an authoritative form of information"*⁹³.

According to Caudle⁹⁴

"Information is the fuel in the government business".

The public sector is a vast amorphous entity with divergent goals and available resources and a multitude of activities, which can be divided into two broad groups. The first group is the public administration group involving administrative and clerical work across many different areas, in which the information content of work is very high, as it is in the finance and insurance sector. The second group covers the delivery of services such as welfare, health and education in which the most important contact is person-to-person, even though the management of these services includes formalised information activities.

Public organisations do not exist in a vacuum because their management requires resources to perform the functions and arrive at decisions that are linked to organisational or statutory objectives. Information, then, is both a resource, because it has an acquisition cost and is required to make a decision, and an essential element of the managerial process. Without information, plans cannot be achieved, nor performance be assessed. Managerial processes and decisions are not ends in themselves but rather a means to public ends. Information is required for the decision and evaluation of the decision's effectiveness to provide feedback or a steering and correction function to adjust the performance of the top, mid, and operational managers who guide the organisation.

According to Mansour and Watson⁹⁵

"Government organisation functions in an environment that is much different from that faced by the private business organisation".

How then are public sector managers ways different from the ways private managers operate? The study of the varying factors in the public and the private sector are often used as a prescriptive proposition for public sector information systems. This comparative study between the public and private organisation often reflects the important external and operational environment to the public sector organisation in addition to the classical internal environment described above. The external environment will consist of political variables; market or economic influences; demographic, cultural and ecological issues; media turbulence, contingencies. While the operational environment will include Statutory authority and legislative, executive, judicial, and financial/budgetary controllers; Service recipients/clients; organisational allies and adversaries; constituencies; inter-organisational relations; and finally there are members of the public⁹⁶.

There have been a number of studies on the differences between the public sector and private sector administration which is considered to be significant in introducing public management information systems. According to Swiss⁹⁷:

"Private organisation has more freedom to set unambiguous goals; they have better information about how well they are achieving goals; and reacting to shortfalls, they have better controls over their own direction and that of their employees. Moreover, these differences are intrinsic; they cannot be changed or corrected because they are built into the very nature of government institutions. These barriers make the generally fine performance of many government organisations all the more commendable. These barriers also suggest that management systems, which attempt to increase organisational information and control, are much more hostile environment than this or private sector".

One vital difference between public organisations and private organisations is in relation to attitude and incentive in that public sector employees, on the whole have different attitudes about their work and somewhat different incentive structures. Those differences may result from self-selection processes, socialisation or personnel systems. The attitudes that are most interesting when comparing public and private organisations are those related to job satisfaction, organisation commitment and more generally, motivation. More positive attitudes about organisations especially among managers can be found. Rainey⁹⁸ indicated that government managers perceived a weaker relationship between performance and such incentives as pay, promotion, and job security. The government managers also scored lower on satisfaction with co-workers and with promotion and felt that personnel procedures should be flexible.

Another important factor, which differentiates public from private organisations, is red tape where government agencies suffer more than private agencies. Red tape is defined by Bozeman, as quoted by Rainey et al.⁹⁹ as:

"Rules, regulations and procedures that remain in force and entail compliance burden for the organisation but have no efficacy for rules' functional object".

Essentially, the existence of red tape reflects a greater level of interdependence and accountability in public organisations which often leads to more procedural steps for a specific management organisation. This is evidently true in many comparative studies of public and private sectors from which we can find such quotations as 'excessive formalism of government agencies is chiefly attributable to diminished authority'. "Public administrators have less autonomy and flexibility in making their own decisions than their

private sector counterparts”¹⁰⁰. Several studies have also examined red tape or accountability in organisations and found that public organisations tend to have more layers of supervision and take longer to accomplish similar procedures. Tasks such as creating a new position, hiring or dismissing staff, purchasing low-cost items or high priced ones, and changing existing procedure are not seen as flexible in the public sector.

The abundant literature suggests that in the information system framework, the public sector is different from that of conventional private sector frameworks by emphasising environmental factors rather than internal characteristics of the organisation. Although all organisations, private or public, are affected by their external environments. The information systems in the public sector seek to go beyond this perhaps trivial observation of environmental significance to distinguish between ‘proximate’ and ‘distal’ environments and to suggest the rudimentary mechanics by which environmental differences affect managerial behaviour. On the other hand, the public sector typically ignores environmental variables and focuses almost exclusively on intra-organisational or individual behaviour¹⁰¹.

With all the shortcomings and the increasing demand for accountability, sceptical attitudes towards government effectiveness, the general cutback management approach to most government functions, public managers at all levels must be able to meet their objectives or goals and fulfil their responsibilities. Usually this means that more, or better, or faster delivery of public services is needed; the capability and productivity of the public workforce must be improved; the size of the workforce must be reduced; programme and agency management must be improved; waste and fraud must be reduced; financial management and operational functions have to be controlled and made efficient. Public managers have to be controlled and made to be efficient; public managers have to upgrade their knowledge to acquire control by establishing standards. All of these public managerial functions require significant improvements at all levels of government. One of the possible solutions to all these problems is to apply properly planned computer-based information systems to government administration which consists of the following subsystems:

- Transaction Processing Systems
- Management Information Systems

- Decision Support Systems
- Expert Systems
- Executive Information Systems

3.5.1 Transaction Processing Systems

The lowest level information system, which is most widely used for structured decision problems and operational control functions, is a transaction processing system (TPS). A TPS is primarily a record keeping system that collects and stores large amounts of data on specific activities for which the organisation is responsible. Much of the work in relation to these systems focuses on validating data such as checking for errors, missing data, and valid transactions. These systems must also be able to easily summarise data in ways that are useful to operational managers and report this as information. Examples of areas of government where a TPS is especially useful are accounting and expenditure transactions, personnel and payroll, procurement and inventory, budgeting and programme records (e.g., client information).

3.5.2 Management Information Systems

Another type of information system is a management information system (MIS), which is appropriate for management control functions within an organisation. Compared to a TPS, an MIS is less concerned with data accuracy and more concerned with summarising, condensing, or manipulating data and providing a broad range of information to managers. The MIS has a more sophisticated method of linking or relating data than a TPS. An MIS should link relevant activities in different operational areas or different components of the same operational areas. It should also allow comparisons of past and present activities in relation to organisational goals and management expectations. An MIS might even provide projections of future conditions, some monitoring of external conditions that could affect management control activities, and a means of signaling current or future problems. An example of information provided by an MIS in a school district might be: average standardised test scores and average grades of students in different schools compared to the average salaries or the average number of year's teaching experience of teachers in each school. In contrast, the information supplied by TPS in the same schools district would be much more detailed and simplistic, such as the frequency distribution of the grades received by all students in each school for the previous grade-reporting period.

3.5.3 Decision Support Systems

The third type of information system is a decision support system (DSS), which is used to support unstructured problems and planning functions within an organisation. A DSS allows more sophisticated analysis and is often performed using statistical techniques or models that are supplied by the system or built by the user as needed. Sensitivity testing or 'what if' analysis of the models is also available and the results of such analyses can be graphed. A DSS may enlist and network different media, telecommunications, computers, software, and databases that are inside and outside an organisation.. Although a few true decision support systems exist in government (but more in the private sector currently), they are likely to become much more prevalent in the future given the trends in information system development.

DSS are suited to problems where part of the analysis can be computerised, but a decision maker's judgement and insight needed to control the process. The computer provides support but is no substitute for the manager's judgement, and it does not provide a pre-determined solution. Decision support systems evolved due to distinct advances in software development, hardware technology, telecommunications technology and the increased computer expertise of managers. While the goal of Management Information Systems (MIS) is to increase clerical efficiency for structured decisions, the goal of Decision Support Systems is to increase managerial effectiveness in a semi-structured situation. The structure and form of decision support systems differ from management information systems.

DSS are supportive tools under manager's control; they are not replacements for managers. An important point to remember is that the managers working with decision support systems represent a condition of higher effectiveness than if either the manager or the system is used individually. In the public sector, decision support systems may be applied to a policy making approach which may include problem finding, problem definition, providing information regarding alternatives, selecting among alternatives, and policy argument.

3.5.4 Expert Systems

Expert systems are computer systems which embody some of the experience and specialised knowledge of an expert, and thereby mimic the expert and act as a consultant

in a particular knowledge area or domain. The term expert systems is considered to be a branch of decision support systems^{102 103}. Rowley¹⁰⁴ gives a more formal definition

"An expert system is a computer-based system that uses knowledge, facts and reasoning techniques to solve problems that normally require the abilities of human experts".

In other words, Expert systems use specialised knowledge about a particular problem area (such as geological analysis) rather than just general purposes knowledge that would apply to all problems. Secondly, it uses symbolic (often qualitative) reasoning rather than just numerical calculations, and thirdly, performs at a level of competence that is better than that of non-expert humans.

In public sector administration, decision making is diffused throughout an organisation, occurring at all levels. Decisions on implementing and applying policies and guidelines are made at the client/customer interface by the on site administrator or bureaucrats. These individuals must make decisions that in many instances are based on incomplete information and inadequate or non-existent decision models. Their decision and subsequent action determines the effectiveness of a given policy or directives. However, these professionals often base decisions on their own expertise which, depending upon the issue, may be incomplete and may not incorporate the most recent knowledge.

Expert systems technology is applicable to all the myriad levels of decision makers from the planner, designer to the implementer, whether segregated by level or by role (managerial, professional staff, street level bureaucrat, desk top bureaucrat). An expert system can aid the decision maker in coping with infrequently used but critical issues. The type of information provided to the decision maker or implementers must be of a form that is similar to the information that he or she already uses. In other words, expert systems may be utilised in any situation where human expert advice is necessary, but may be scarce or difficult to access. However according to Parker and Case¹⁰⁵ :

"One of the major challenges faced by knowledge engineers during expert systems development is the acquisition of knowledge from a human expert. A human expert is developed over many years, and it is often difficult for an expert to explain the reasoning processes that they used to attack and solve complex problems".

3.5.5 Executive Information Systems

Another important branch of computerised information systems delivery in the public sector administration is Executive Information Systems. Some people term it as Executive Support Systems or Enterprise Information Systems. EIS is defined as a software product which is used to develop a computer-based system that senior management use in an intuitive manner to access, manipulate, and present information needed to support their decision making process¹⁰⁶. In other words, it refers to computer-based systems specifically designed to meet the needs of top executives and eliminate the need for intermediaries between executives and computers.

It has been recognised that the vigorous development of information systems is being used to support all aspects of the organisation, and managers have taken full advantage of the accuracy, timelines and volume of the subsequent reports generated by these systems. This has generated its own set of problems, but two are of particular concern. The first relates to volume. Managers know only too well that 'more' does not mean 'better'. Information is being presented faster than it can be analysed: the weekly information pack is growing in size, and key pieces of the jigsaw are being hidden within a mountain of print outs which analyse data in a variety of clever ways, few of which may be required.

The second concern is related to the information being presented. Systems developers have made an assumption that 'if this is the process, this is what you need to know about it'. They produce reports which present 'summaries' of the process being monitored. Often, these summaries go into too much detail, making it difficult for the manager to see the general picture. At worst, they may not provide information which is needed but instead present information the system designers assumed a manager would want to know. As a result, management information is not focused on needs, and thus, can be of little value to the manager. If the information is of little value to the manager, it is of even less value to the executive: information needed to manage the process is not necessarily the information needed to manage the organisation.

These problems apply to almost all organisations, be they Government bodies or commercial organisations. Many of these organisations are beginning to look towards EIS as a possible solution to the information problem. There are several key reasons:

- information can be structured to meet the needs of the senior manager, across all areas of responsibility,
- information can be presented at the right level of detail, so that all areas can be reviewed sensibly by the senior manager,
- the senior manager can 'drill down' for more detail if necessary,
- information from many different sources (both within and outside the organisation) can be presented together, to obtain a more complete picture of any issue,
- the developed executive information system offers a very flexible approach to presenting data from different standpoints: for example regional areas, industry sectors, products, etc.

3.6 Summary

Information Systems are of key concern among researchers and managers in public and private sector organizations. The terms 'information' and 'systems' are very broad with varying definition. A combination of the two words provides various definitions from manual to automated information systems and from informal to formal systems. The reviews and insights about the system thinking concepts and approaches in this Chapter, coupled with the in depth exploration of the information systems concepts provides a good basis for the empirical studies of the following Chapters.

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- ¹⁰⁵ Parker, Charles and Case, Thomas. *Management Information System: Strategy and Action*. 2nd. ed. Watsonville, CA.: Mc Graw Hill, 1993. p. 493.
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Chapter Four

The Ministry of Religious Affairs Brunei Darussalam

4.1 Introduction

This Chapter describes the problem situation of the organisation to be studied: the Ministry of Religious Affairs of Brunei Darussalam (MRA). It begins with the background to the organisation, the roles and responsibilities of the whole department towards Bruneian Society. A systematic description of personnel management tasks, which is the crux of the research, is described in some detail. These include the recognised procedure of strategic and operational decision making activities and the way official communication channel and procedures should be set out.

4.2 Background of the MRA

The Ministry of Religious Affairs (MRA) is a government ministry which has a major role in perpetuating Islamic teaching and values in Brunei Darussalam. The ministry's roles are diverse and multidisciplinary, from Islamic spiritual, legal and judicial support to educational and financial institutional roles. It is responsible for overseeing the proper practice of Islam and fulfilling the spiritual needs of Muslims in Brunei. The MRA also administers a number of educational institutions and institutions of higher learning. The MRA also has a supporting role in other government agencies and private sector organisations.

The role of Islam in the government and social life of Bruneian people is extremely significant. It plays an important part in the country's constitution. It is the official religion of the country. In addition to the Council of Cabinet Ministers, His Majesty the Sultan is assisted and advised by the Religious Council, which is constituted under the Religious Council and *Kadi's* Courts Act. The council is the supreme body governing the MRA's activities. It is the most dominant and influential institution in the country's administration. The establishment of the MRA is aimed towards implementing the teaching values and laws of Islam in Brunei. The official MRA mission statement are as follows:

"Advocating the officialdom of the Islamic religion so as to ensure that it is correctly and widely practised in government and its administration as stipulated in the Brunei Constitution and upholding the nation's aspiration of promoting Islam as a way of life" ¹.

4.3 Administrative Structure

The MRA is headed by the Minister of Religious Affairs and deputised by the Deputy Minister. The most senior civil servant and head of the administration of the Ministry is the Permanent Secretary. The Permanent Secretary is in charge of the general administration, personnel, and finance matters of the MRA as a whole. The organisational structure of the MRA is illustrated in Figure 4.1. The MRA comprises seven departments, each of these departments is headed by a Director and Deputy Director. These departments are as follows:

- Department of Administration (DOA) (Figure 4.2);
- Department of Syariah (Islamic Law and Jurisprudence) Affairs (DSA) (Figure 4.3)
- Department of Islamic Education (DIE) (Figure 4.4)
- Department of Haj (Pilgrimage) Affairs (DHA) (Figure 4.5)
- Department of Mosque Affairs (DMA) (Figure 4.6)
- Islamic Dakwah (Islamic Propagation) Centre (PDI) (Figure 4.7)
- The Institute of Islamic Studies (IPI) (Figure 4.8)

These departments reflect the functions of the MRA, which oversees and perpetuates Islamic teaching based on the five important elements of Islam. These are the Islamic Education, Dakwah (Propagation), Syariah (Islamic Law and Jurisprudence), Haj (pilgrimage), and Mosques Affairs. It also highlights the diversity of the MRA's role within the broad spectrum of the political, economic and social life of the country. Naturally, the Department of Administration represents elements or supports functions that are concerned with personnel, finance, development and management of the MRA. In addition, each department within the MRA has its own administrative section that acts as a local support for each respective department. The Special Duties section (Figure 4.9) acts as a co-ordinator to various national religious activities and, it also acts as local intermediary between the MRA and other international bodies to which MRA is affiliated.

Each department within the MRA has a Head of Section who is responsible for overseeing departmental activities related to service or directed towards specific and definable task functions of each department. It is the Head of Administration (HOA) who is usually responsible for the function of personnel, finance, and human resource development. At the District Office level, which is referred to as the District Religious Department, the District *Kadi* administers and heads affairs. All departments under the MRA except for the IPI and the DHA are represented in the districts religious offices.

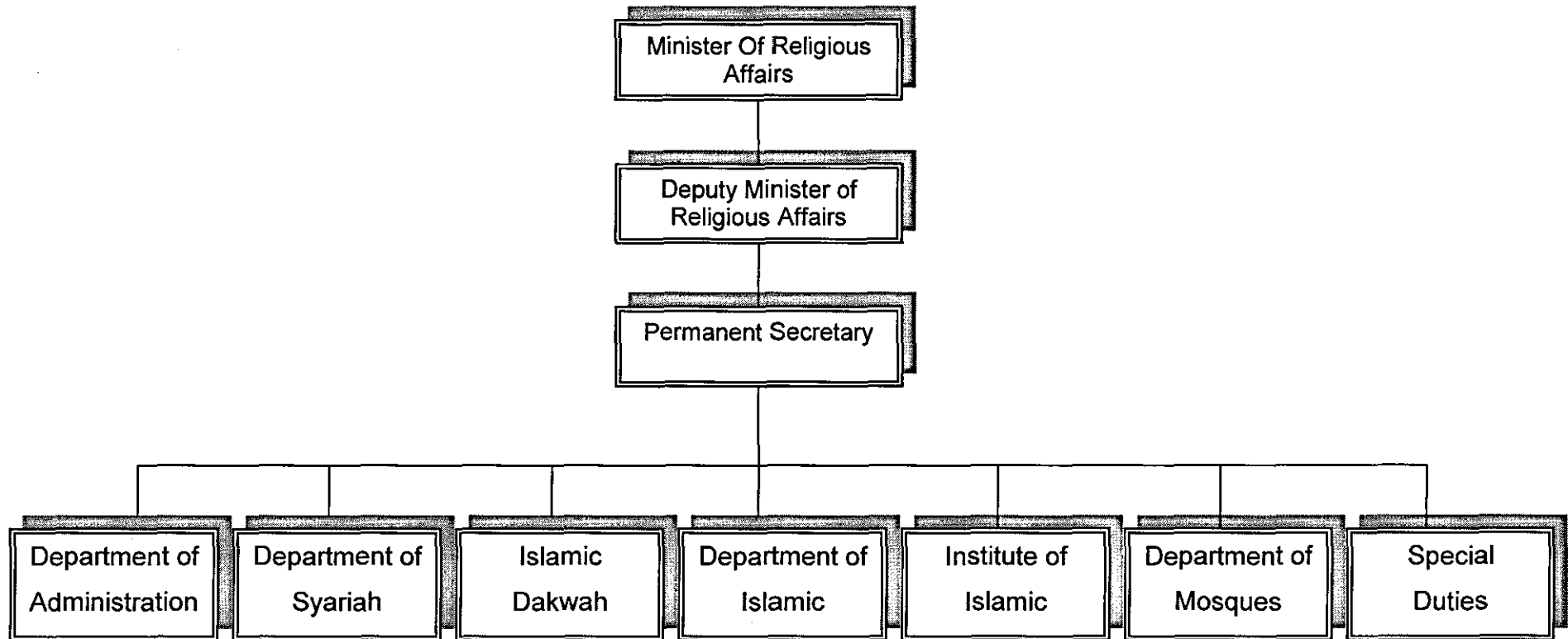


Figure 4.1: The Organisational Structure of the Ministry of Religious Affairs

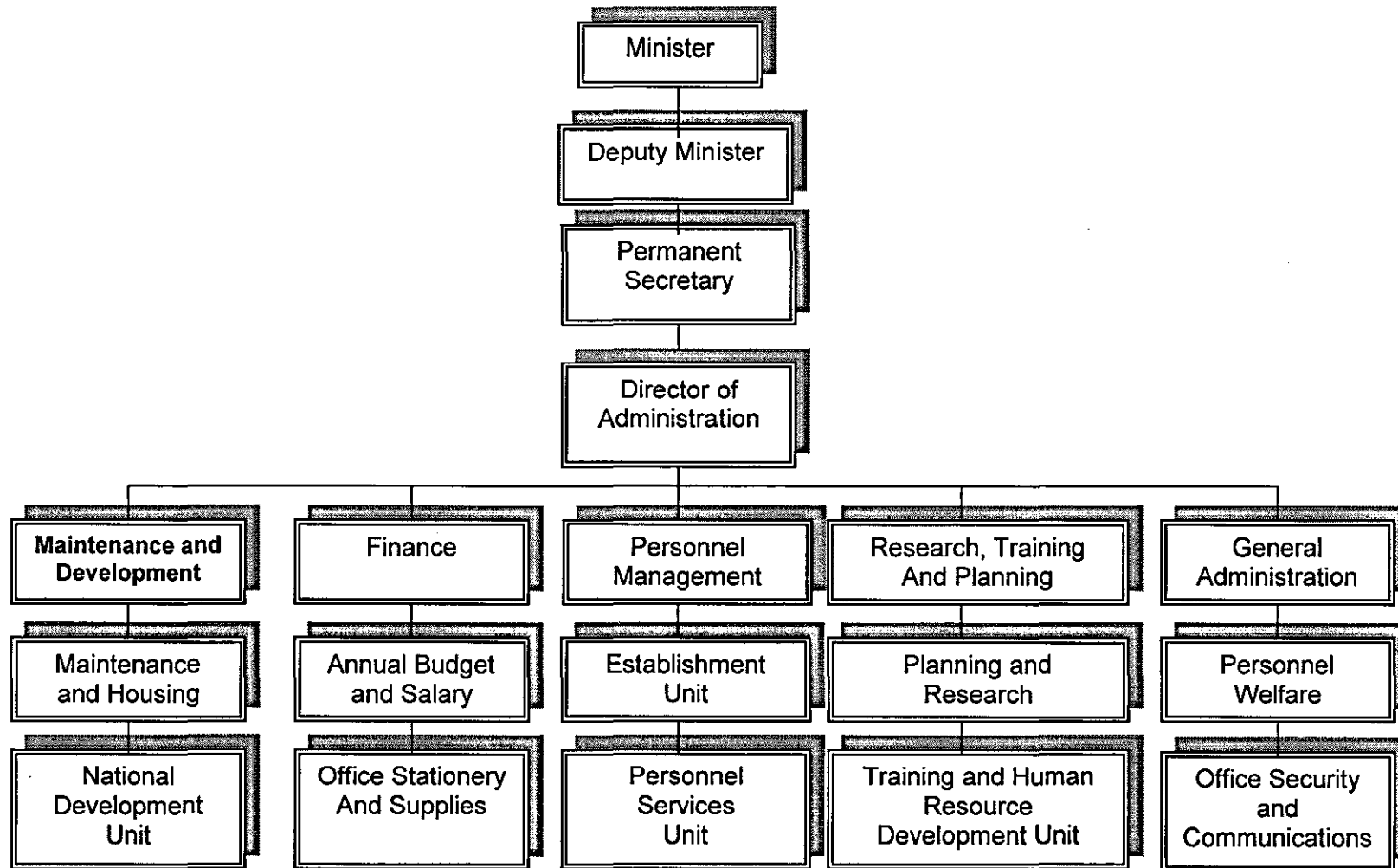


Figure 4.2 the Organisational Structure of the Department of Administration (DOA)

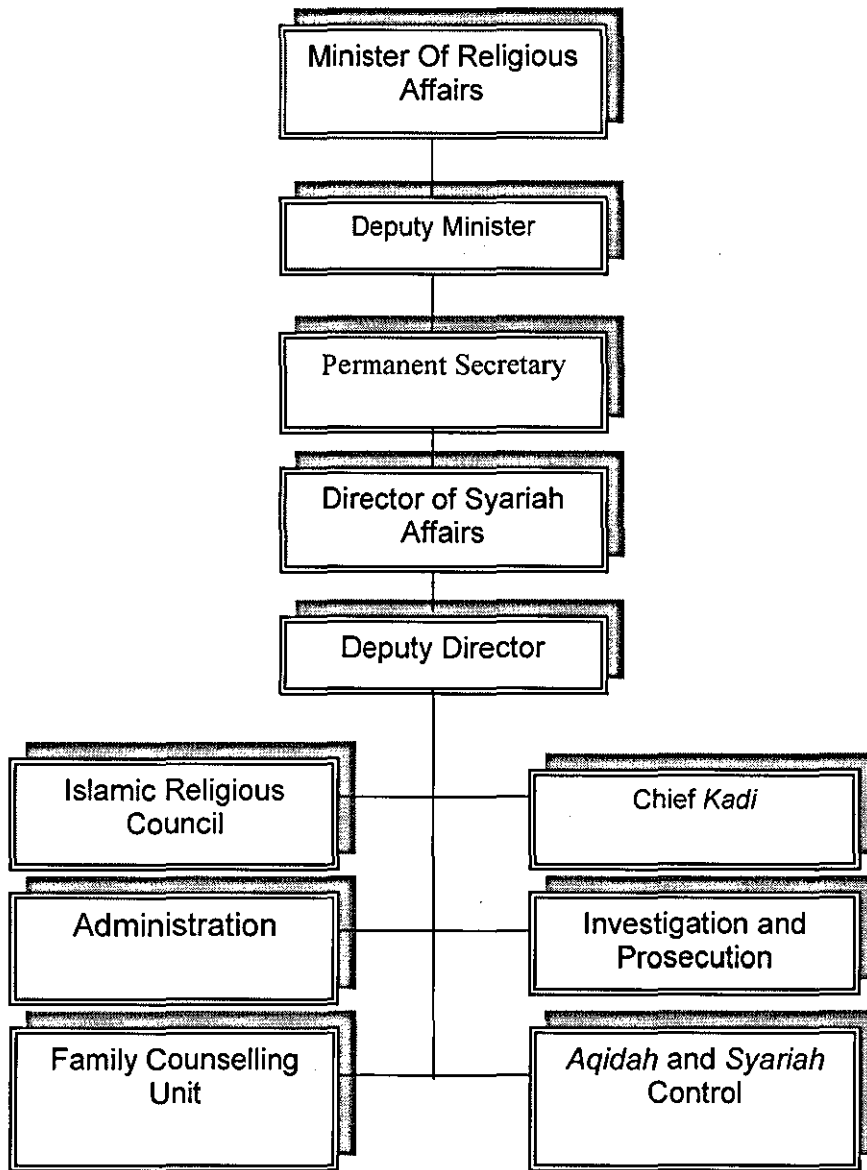
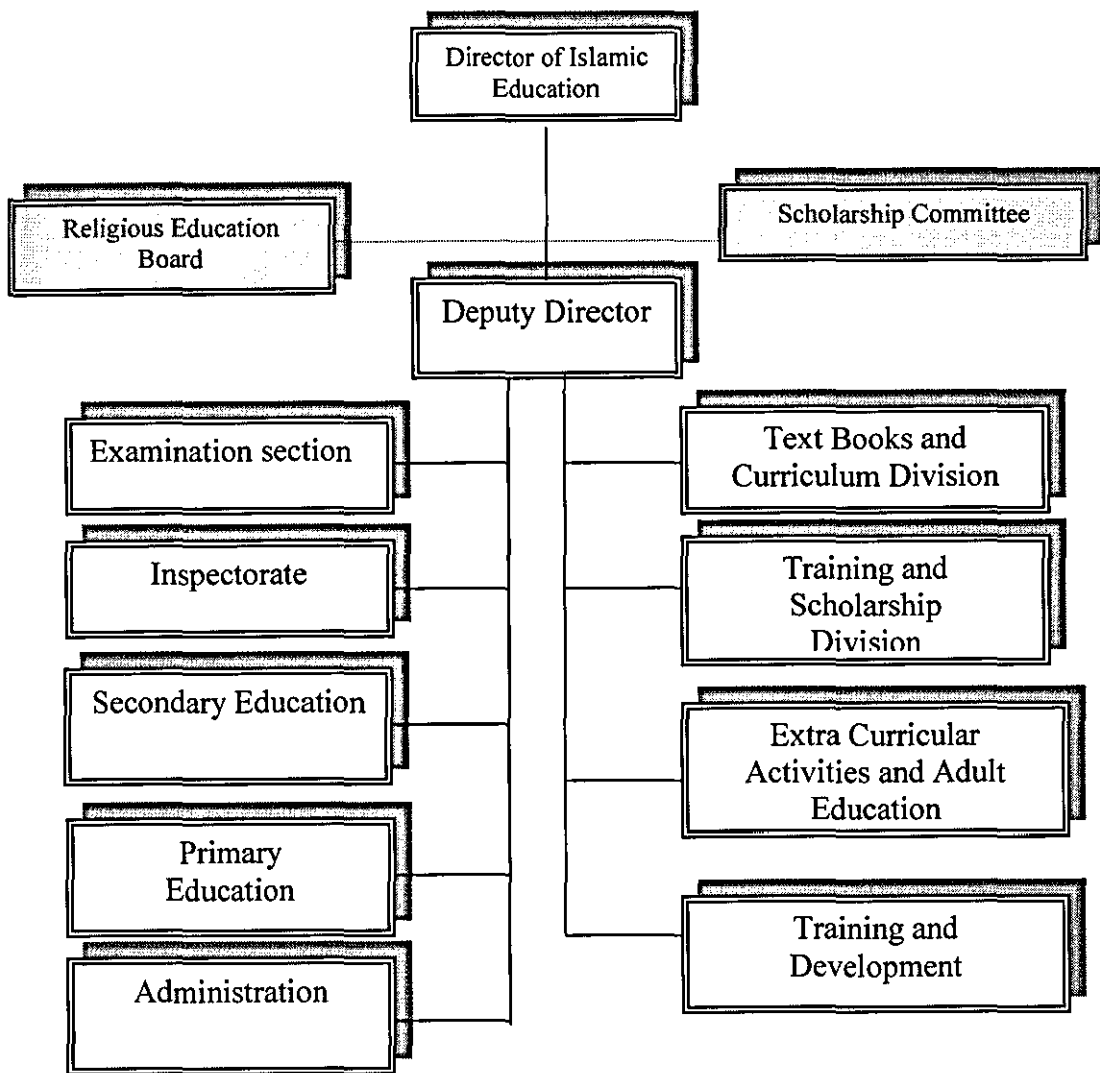


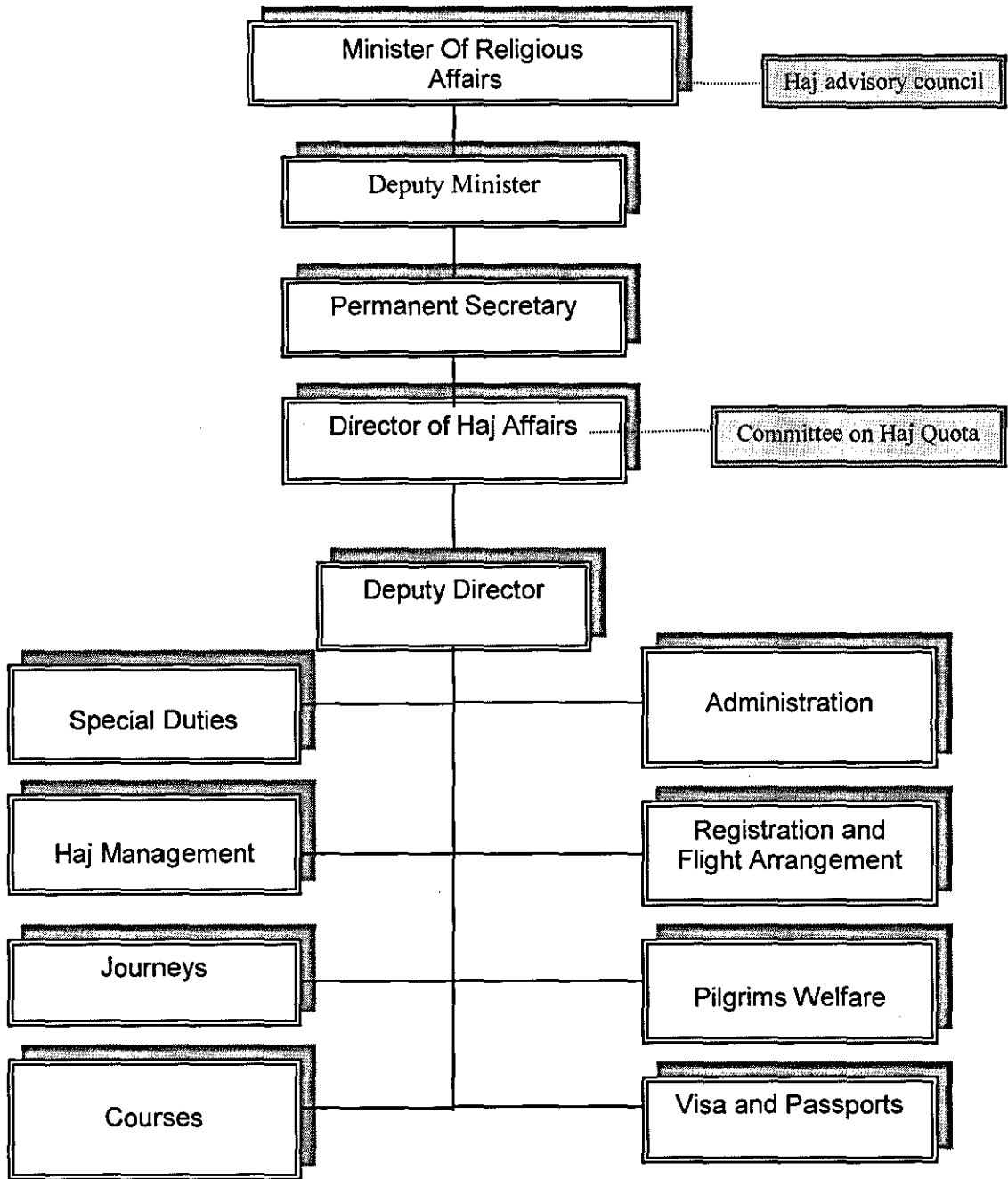
Figure 4.3: Organisational Structure of the Department of Syariah Affairs²



Key:

 Governing Committee

Figure 4.4: Organisational Structure of the Department of Islamic Education



Key

 Governing Committee

Figure 4.5: The Organisational Structure of the Department of Haj Affairs³

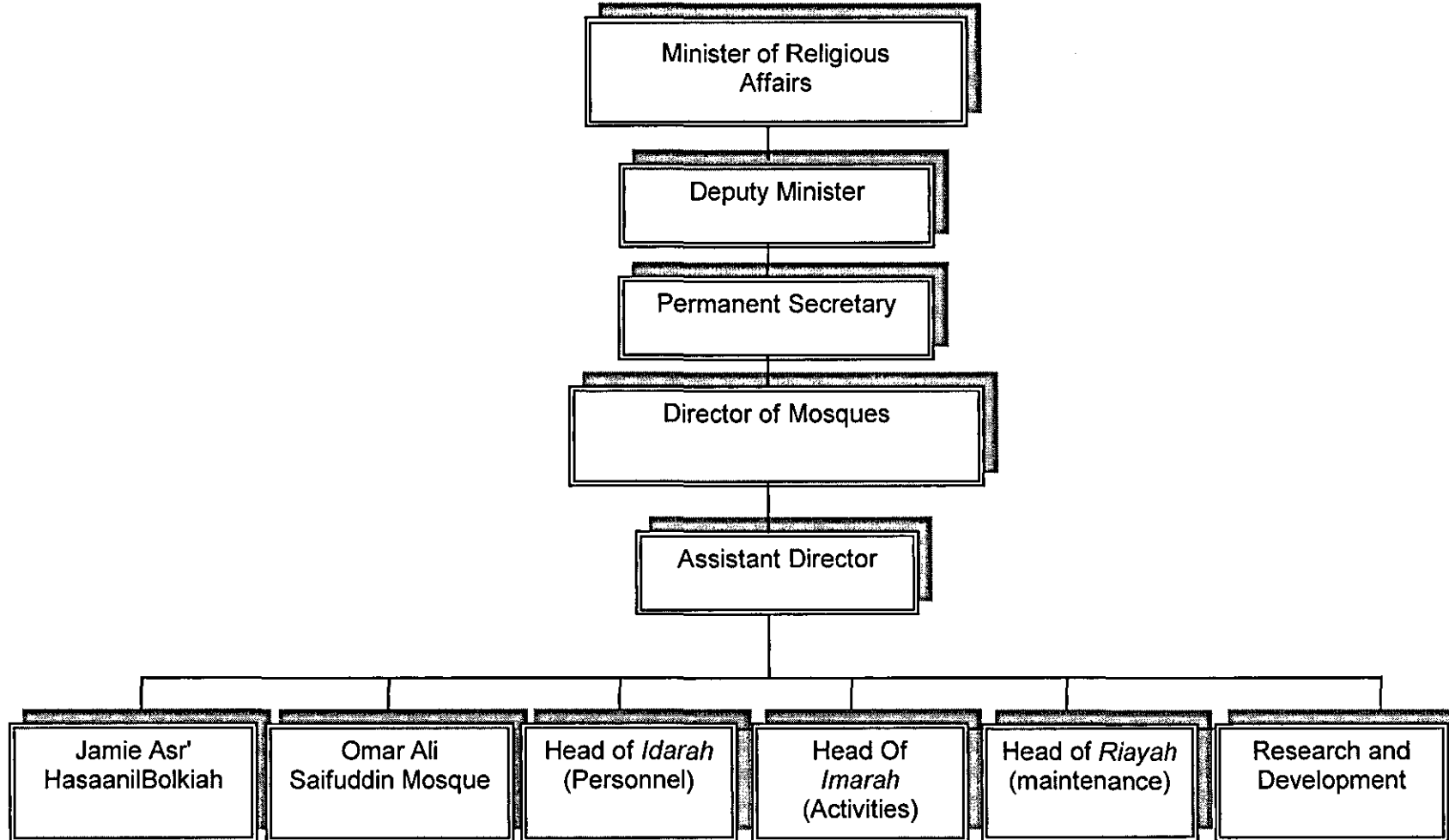


Figure 4.6: Organisational Structure of the Department of Mosque Affairs

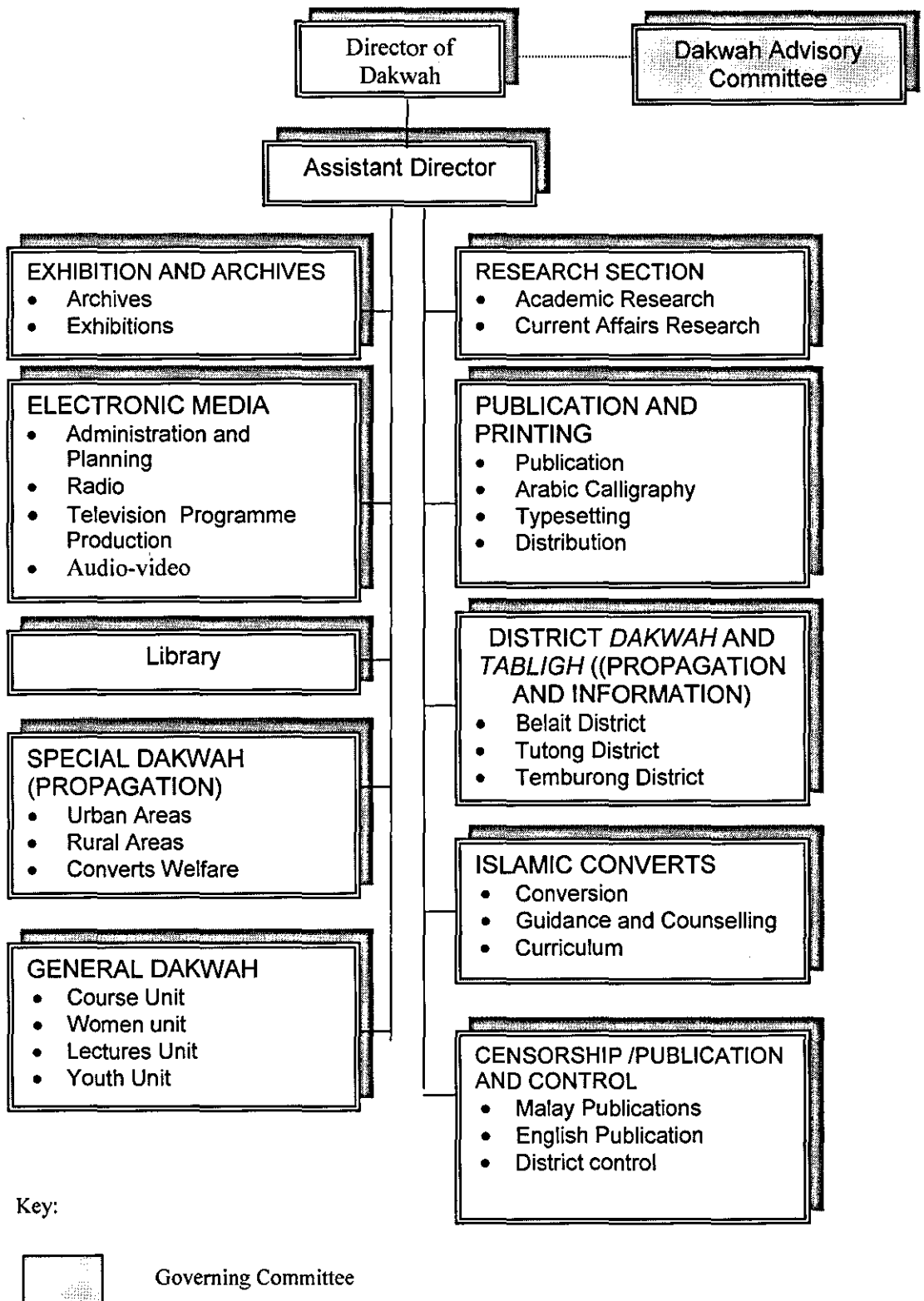


Figure 4.7: The Organisational Structure of the Islamic Dakwah Centre (PDI)

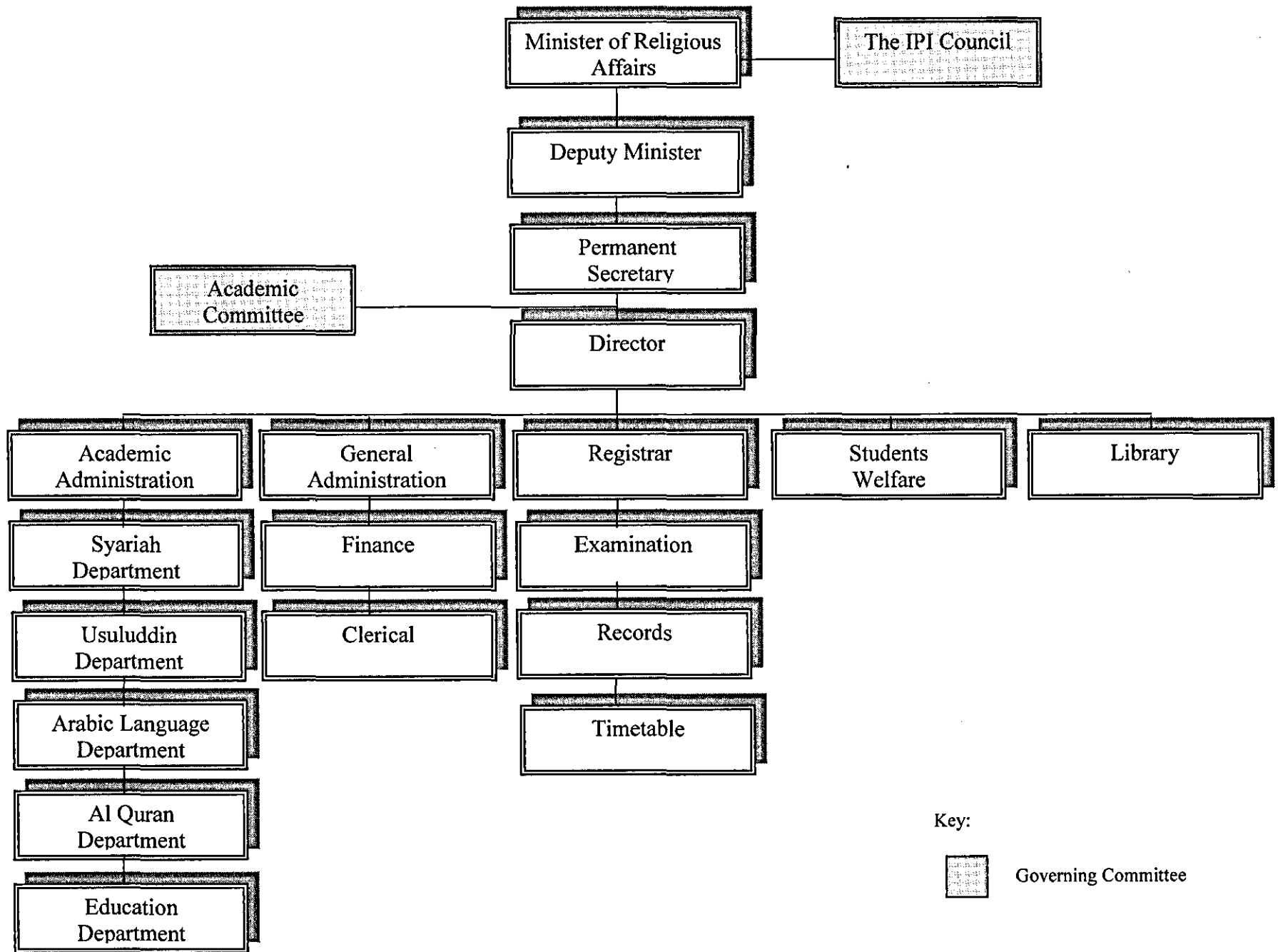


Figure 4.8 The Organisational Structure of the Institute of Islamic Studies (IPI)

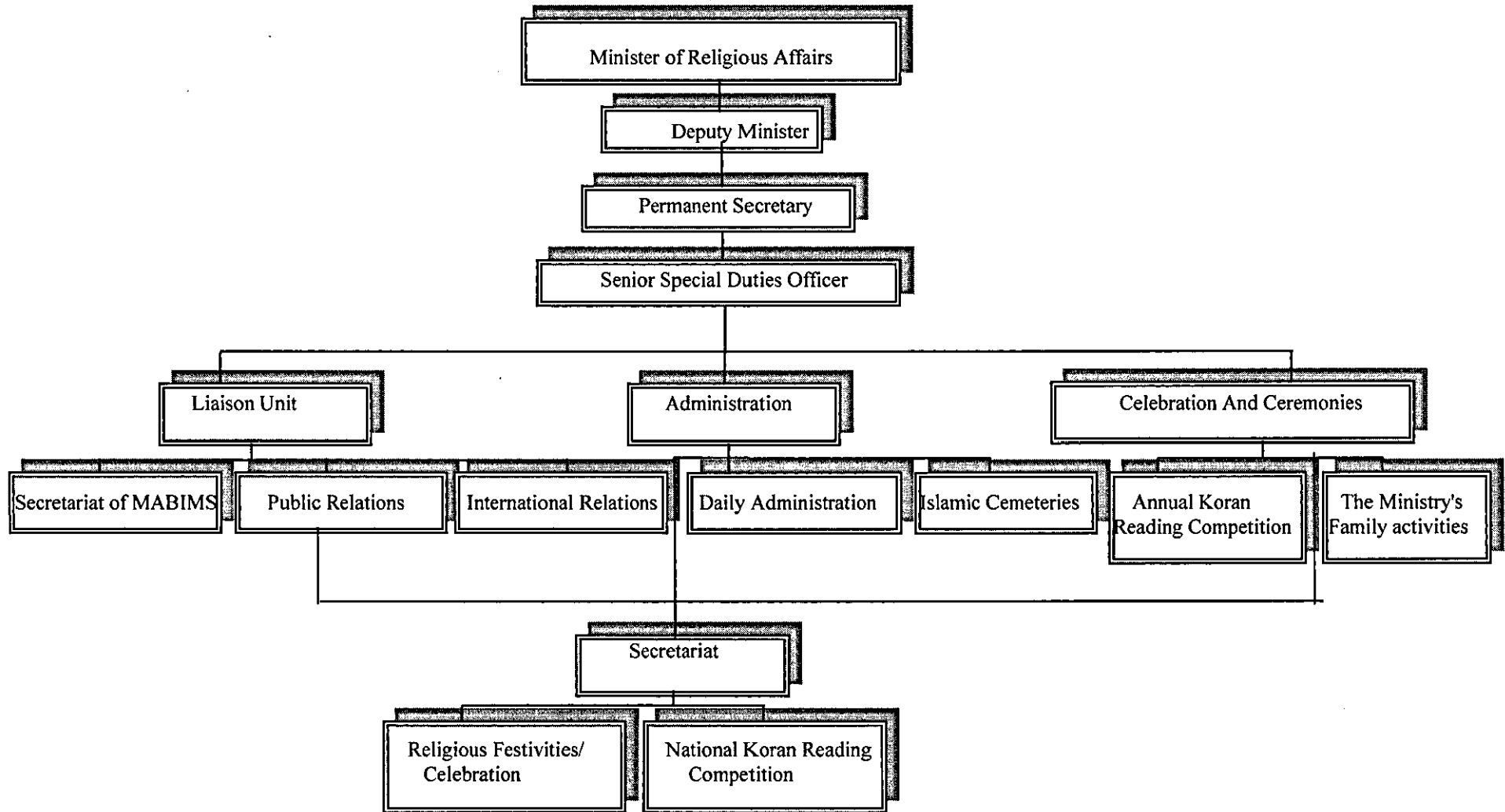


Figure 4.9 Special Duties Section of Ministry of Religious Affairs

The MRA staff reflects the multi-functional role of the departments. The staff of DIE and IPI comprise academics such as lecturers, teachers and religious education officers. The DMA has Mosque Officers, *Imam* and *Bilal*. While the DSA has its own specialised scheme of appointments that consists of Prosecutor of Syariah Court and Religious Inspectors. The PDI has its own Propagation Officers. Appointments such as the Religious Officials, Religious Education Officer, and administrative appointments such as clerks, and assistant administrators are universal and can be found in most departments. In addition there is the 'daily rated employee' who is appointed using a special departmental budget. The appointment is non-permanent and outside the jurisdiction of the PSC. Staff appointed in this category can be considered as utility staff that are available in all departments within the MRA.

Currently, the MRA staff comprises of 4383 personnel⁴, who are distributed unevenly across departments. The staff of the MRA can be divided into four types of appointments, namely the Permanent Appointment, Contract Appointment, Open Vote Appointment and the Daily Rated Appointment. The appointment distribution of the MRA is illustrated in Table 4.1. Table 4.2 shows the distribution of staff in the MRA who are in Permanent Appointments.

Permanent Appointment	Daily Rated Appointment	Open Vote Appointment	Contract Appointment
3656	366	189	172

Table 4.1: The Overall Staffing Distribution in the MRA⁵

Department	Ministerial	DOA	PDI	DSA	DHA	IPI	DMA
No. Staff	40	229	152	172	17	28	354

Table 4.2 Distribution of the Permanent Appointments in the MRA⁶

Most of the responsibilities in managing personnel are undertaken by specialist staff, although not exclusively. They are responsible for implementing key personnel/human resource objectives of the organisation⁷. In most government departments, the managers

and staff who deal directly with personnel are usually those who have attained qualification in the Brunei Government Administrative Examination namely:

- Brunei Administrative Service (BAS) examination: intended for all Grade I Administrative Officers who are required to sit for this examination under their scheme of service, in order to be 'permanently' confirmed in their position. Other Division Two scale officers may also take this examination but it is not compulsory.
- Brunei Darussalam Clerical Examinations which consists of various examinations for clerical staff in the government service:
 - Lower Grade Clerical Examination
 - Grade II Clerical Examination
 - Grade I Clerical Examination

4.4 Departmental Functions

As with other organisations either public or private sector organisation, the MRA consists of a number of functions as implied by its purpose, aims and objectives of its formation. The main functions of the MRA, as listed in its official documents⁸ are as follows:

- To manage, maintain, promote and monitor all matters relating to the Islamic Religion in Brunei Darussalam,
- To control and lead the people (Muslims) towards proper practices and the greater understanding of Islam based on the *Ahli Sunnah Wal Jamaah* (Sunni practices),
- To integrate and adopt Islamic law into the state law and jurisprudence,
- To maintain and protect the purity of Islam from undesirable forces and influences,
- To inform and transmit the true teaching of the Islamic religion to the people of Brunei Darussalam, and
- To be involved in creating a strong and united community under the teaching of Islam led by His Majesty the Sultan.

4.4.1 Department of Administration

The Department of Administration (DOA) represents an intrinsic part of the organisation that provides support activities to the main functions of the management of the MRA as a whole. It is the central focus of finance, personnel and developmental project management of the MRA and its departments. Fundamentally, the DOA is the secretariat of the administrative, finance and human resource management functions of the MRA. The role

and function of the DOA within the wide spectrum of the organisation is vital. This is clearly set out in the department's mission statement where its main role is

"to provide an efficient and effective service and assistance to matters relating to human resource management; finance and the management maintenance of buildings and vehicles; management and co-ordination of planning and development projects; management research; planning and human resource development and general administration" ⁹.

The DOA is also the source of organisational policy making and strategic planning body for all departments representing the MRA. It is responsible for drafting and implementing all personnel policy of the ministry, and monitoring its implementation.

The DOA intends to accomplish the above mission statement through its long term objective of:

"Upgrading and improving the capability of the MRA through the management of human resources; maintenance of buildings; and effective and efficient office management" ¹⁰.

4.4.2 Department of Syariah (Law and Jurisprudence) Affairs

The main responsibility of the Department of Syariah Affairs (DSA) is to ensure the strength and stability of Islam, the state official religion as stipulated in the 1959 Brunei Constitution¹¹. Basically the role of the DSA within the broad function of the MRA is mainly concerned with the implementation or execution of the Islamic Law and Jurisprudence in the country with regard to family, finance, inheritance and property matters. The long-term objective of the DSA is:

"To produce citizens who practice righteousness and avoid evil deeds" ¹².

While the official mission statement of the DSA is to

"To improve and strengthen the practices of the religion (Islam) based on the Ahli Sunnah Wal Jamaah (Sunni Sect) as stipulated by the State Constitution, and to make sure the strength and stability of Islamic Religion is in conjunction with the State Constitution which proclaimed Islam as the Official Religion of the country based on the Ahli Sunnah Wal Jammah" ¹³.

The DSA's main responsibilities are as follows:

- To preserve *aqidah* (faith), Syariah (Law and Jurisprudence) and *akhlak* (ethics) of the Islamic *Ummah* (believers);
- To provide an administrative service to the Chief *Kadi* Courts, District *Kadi* courts including officials and other personnel;

- To provide an administrative service for the prosecution and investigative Sections and their staff;
- To administer the Islamic Religious Council Secretariat and its personnel;
- To administer the marriage, divorce and family advisory and counselling, and Inheritance;
- To monitor the *halal* and *haram* (inhibitions and prohibitions)¹⁴.

The Islamic Religious Council (IRC) which is the highest and most important religious body in the land is administered under the MRA. The council itself is totally independent and is not subject to the influence of anyone. The IRC plays an influential role in the community and has contributed a great deal to the well being of Muslims in Brunei. Its income is derived from the general administration of effects, which includes fines from the *Syariah* court fines, bank interests handed over by individuals, *Zakat Fitrah* (personal tithes) and *Zakat Harta* (wealth and property tithes). Every year the organisation gives out millions of Brunei dollars to the poor, the needy, Islamic converts, travellers on long journeys, pilgrims and victims of man-made or natural disasters.

The Registrar of the Islamic Courts section is responsible for gathering and preparing statistical information, and annual reports in relation to religious complaints and investigation; adultery and crimes; marriages, divorces, and reconciliation; new converts. While the Family Affairs Unit is responsible for marriages, divorce counselling, and reconciliation (after annulable divorce). This section also provides a number of services to the community, such as registration of marriages; provision of courses for couples who intend to get married; advisory and counselling services for problematic couples; registration of marriages and divorces.

The general administration, personnel and finance are directly handled by the director and co-ordinated by the head of administration. This section is headed by a Religious Education Officer and is supported by two officers who have the same appointment. While each section within the DSA is headed by the Senior Religious Officer.

4.4.3 Department of Islamic Education

The Department of Islamic Education (DIE) is entrusted with the responsibility of giving young Bruneians the correct Islamic values through systematic religious education; and

providing a foundation for the strong spiritual being of the nation. This is clearly stated in the department's mission statement ¹⁵:

"To produce a knowledgeable society that possesses a good Islamic education and practices religion based on the al Quran (Koran)".

The importance of religious education has been recognised since 1955 with the appointment of Co-ordinating Officer for Religious Education. The responsibility of co-ordinating and managing religious education has been largely redefined. In 1967 the position of the Superintendent of Religious Education was introduced. He was responsible for the Religious Education Section within the then Department of Religious Affairs. This position was then upgraded in 1971 with the appointment of the Head of Religious Education. When the organisation was transformed into a full fledged government Ministry in 1986, whereby the overall organisation was overhauled to suit the transition, the responsibility of the new Department of Islamic Education was shouldered by a Director and an Assistant Director of Islamic Education.

The main functions of the DIE are as follows:

- To provide a strong foundation in understanding the Islamic faith and to be able to properly practice the teaching without any doubts whatsoever,
- To teach religious education to the younger generation in order to implant an awareness of the monotheism of God,
- To provide religious guidance and prepare the younger generation to shoulder the full responsibility of practising the religion in adult life,
- To teach and create an awareness on what is good and what is evil in order to make people as useful individuals in the future adhering to the teaching of Islam, and
- To make the younger generation accountable in the society to serve the religion, country and race, based on the teaching of the holy Koran and the Hadith (traditions of the Prophet)¹⁶.

The department acts as an important source for the human resources needs of the MRA as a whole. Some of its personnel, especially religious teachers are seconded to other departments to cover any shortages in departments (DOA, DSA, DMA, PDI, IPI). Significantly, the government through DIE, provides scholarships to students to pursue their studies in Islamic knowledge. In 1998 a total of 130 government scholarship holders (40 males and 90 females) were studying at the al Azhar University in Cairo, Egypt¹⁷ and recently about 40 students were sent to Malaysia to undertake pre- university and

undergraduate courses in Islamic Studies. Efforts are now being undertaken to send students to the Kingdom of Jordan.

The long-term objectives of the DIE are as follows:

- To widen and promote religious education system,
- To arrange a systematic religious education curricula,
- To build more religious schools; colleges and institutions of higher learning, and
- To provide effective training of religious officers, teachers and other support personnel.

4.4.4 Institute of Islamic Studies

The Institute of Islamic Studies Brunei Darussalam is popularly known by its Malay abbreviation I.P.I which stands for Institut Pengajian Islam. IPI was set up with the main aims of “producing an Islamic intellectual scholar of high calibre in order to adhere and fulfil the country's aspirations and development needs; and to become an important centre of Islamic research in the country”. His Majesty the Sultan consented to the formation of IPI in 1988. His Majesty consented that the "Institute of Islamic Studies, will only offer certificate and diploma level courses in Islamic Studies. The Islamic studies institute will not be offering degree courses at this stage unless there is a future need to undertake more research in this field"¹⁸. The main objectives of the formation of the Institute:

- To produce knowledgeable individuals capable in various fields of Islamic Studies,
- To improve the quality of religious education in the country in conjunction with the government aims of shaping the society and people to practice and absorb the teaching of Islam based on the *Aqidah Ahli Sunnah Wal Jamaah* (Sunni Sect) and the Shafie School of thought, as well as making Islam a way of life, and upholding the national concept of 'Malay Islamic Monarchy',
- To produce students who are capable and strong in the Islamic faith to meet the needs of the country and improve their knowledge in the fields of Islamic Knowledge, Education, Dakwah (Propagation) etc, to become knowledgeable in the practices of Islam, showing complete obedience to the precepts of Islam and guard themselves against undesirable forces and to be people with high morals,
- To encourage and provide appropriate facilities in research particularly in relation to Islam as the official religion of Brunei and other related research in Islamic Studies for the purpose of furthering one's knowledge¹⁹.

4.4.5 Pusat Dakwah Islamiah

The Pusat Dakwah Islamiah (PDI) was established in 1984. It is an institution of Islamic propagation with the aims of contributing more effectively and meaningfully to the development of Islam and Muslims in Brunei Darussalam. PDI also has a responsibility for introducing the basic concept of Islamic teaching to non-Muslims to facilitate understanding and appreciation of the belief of the majority. PDI also acts as a link between Muslims in the country and those in the other parts of the world through exchange of information and knowledge through various activities organised by the organisation. It is a repository centre for information and evidence of Islamic history and propagation in Brunei and other Asian Countries. It has a good collection of Islamic reference books and archival material about Islam and its significance in the country's history. These important sources of information are kept and displayed to enable studies and research in Islam and related fields to be conducted.

The Head of Administration holds the appointment of Senior Religious Propagation Officer. The Head of Administration is in turn assisted by an Assistant Propagation Officer and Religious Teacher to co-ordinate its support function to the organisation as a whole. The official role of the Administrative section is to manage, plan, improve, and co-ordinate the daily administrative function; and to monitor and assess the human resource management function and performance of the section. The strategic objective of the Administration section of the PDI is as follows:

- To achieve effectiveness and high productivity of the administrative section,
- To achieve efficient and vigorous administrative work either on a daily or seasonal basis,
- To ensure the effectiveness, efficiency and efficacy of administrative work, so as to support the overall organisation, and
- To transform the available workforce into an enterprising, energetic, and dedicated team who are trustworthy and honest, able and willing to work diligently in their profession/work based on the philosophy of 'work to earn a living', nation building and for the sake of Allah the almighty ²⁰.

4.4.6 Department of Haj Affairs

The Department of Haj Affairs (DHA) is a government department under the MRA responsible for implementing all policies and regulations certified and approved by an

independent Advisory Committee on Haj Affairs and the Committees on His Majesty's Government Haj Passage Award"²¹. The number of people who perform the Haj (Pilgrimage to Mecca), which is the fifth pillar of Islam, increases year by year. It is one of the most important rituals and a compulsion to every able bodied Muslim, who can afford i to perform it at least once in a lifetime. The establishment of a government body to manage the affairs of the Pilgrims was first started in 1954. Prior to 1954 the management of haj matters was under the British Resident's Office. It was only in 1986 when the then Department of Religious Affairs was upgraded to a government Ministry that the DHA was established.

The Department of Haj Affairs acts as a go-between between the government of Brunei and the government of Saudi Arabia on matters relating to the annual Haj Pilgrimage. The DPA is also responsible for all pre flight arrangements which include registration, visas, medical check-ups, transportation of the pilgrims by a chartered airline to and from Saudi Arabia. It has a close working relationship with the Haj Authority of the Kingdom and liases with them in terms of Haj quota requirements enforced by the Kingdom of Saudi Government. Internally DHA is working closely with the Islamic Trust Fund (ITF) in making accommodation and transportation arrangements throughout the duration of the pilgrimage and the overall welfare of the pilgrims from their departure until their safe return home. Since 1994 ITF has taken over the overall responsibility of looking after the pilgrims affairs while they are in the holy land. The DHA also provides three months pre-departure pilgrimage courses before embarkation on these religious journeys in order to prepare them mentally and physically. Teams of experienced medical as well as welfare officers will accompany the pilgrims.

4.4.7 Department of Mosques Affairs

The Department of Mosques Affairs (DMA) is the newest department under the MRA. His Majesty the Sultan of Brunei consented to the formation of the DMA in his speech at the opening ceremony of the *Kampong Bunut* Mosque on the 16th July 1993. The DMA came into operation on the 1st of October 1993 following the appointment of the Director on the 1st of May 1994 . DMA is located on the sixth floor of the same building as the Department of Haj Affairs. Before its formation, matters dealing with mosques were handled by the Mosques Unit of the DSA. The formation of the DMA was in recognition of the position of the mosques in the community with the mission of "*transforming these*

in-service training into the centre for knowledge and guiding intellectual beings towards devoutness and piety". Moreover, it was formed with the following aims:

- To be innovative in the development and planning of Mosques and their activities,
- To guide the *Ummah* (believers) towards the stability of *akidah* (faith), adherence, and knowledge,
- To upgrade function and role of mosques to the community, and
- To update the administration, management and planning of mosques.

The department is headed by the Director and assisted by a Deputy Director. The director is assisted by a number of senior mosque officials who act as head of sections to administer the task function of Department. The Administrative Section is headed by a Senior Religious Officer and a Senior Mosques Officer who are responsible for Public Service Appointment personnel and the non public service appointment personnel respectively.

4.5 Strategic and Operational Decision Making

Basically, all administrative and strategic decisions pertaining to any management programme, projects and planning of the MRA is the authority of the Permanent Secretary (PS). However, to facilitate efficient workflow and compartmentalise many operational decisions and actions, decisions are delegated to senior executives on behalf of the PS. These senior executives and executives are given the authority to act on behalf of the chief executive. For example, the Director of Administration and the Head of Personnel (HOP) are delegated to manage and make certain decisions on Personnel on behalf of the PS, while the Head of Research, Training and Planning Section (RTPS) is responsible for an appropriate research, training, and planning tasks. Every ministerial correspondence is under the 'on behalf of the Permanent Secretary' signatory. These authorisations are given to a handful of executives who are empowered to use them. All correspondence from other departments to the Ministry and DOA are addressed to the PS, which will then be distributed to those responsible for the tasks.

Every Head of Department is empowered to make strategic plans and decision making on matters of vital importance to their department's specific tasks in the MRA. In some circumstances Directors and deputy directors have to refer to their superior in the Ministry before they embark on certain projects or programmes. They may also be required to put forward departmental projects and planning to various ministerial committees, designed to acquire consensus and make decisions collectively. In addition, departmental directors

work very closely with each other to implement projects collectively or assist in each other's needs. Currently, there are several types of committees that plan and decide the future direction of the MRA. Some decision-making and planning activities of strategic significance have to be forwarded to these committees for approval. These committees include the following :

- The Muzakarah Bulanan Pengarah-Pengarah (MBP).
- The Human Resource Development Committee (HRDC).
- The Muzakarah Mingguan Pentadbiran Kementerian (MMPK).
- The Ministerial Budget Committee (MBC)

In addition, the Housing Committee, and the Information Technology Committee which handles staff housing and the IT or computer needs of the organisation respectively. These committees are made up of representatives from all departments within the MRA.

The MRA's tasks, functions and activities as a whole, which is to perpetuate the Islamic teaching in the country, is governed and monitored by the powerful Islamic Religious Council. The activities of the Pusat Dakwah Islamiah are governed by the Islamic Dakwah Advisory Board. While the Department of Haj Affairs is currently under the scrutiny of Haj Advisory Committee. In the academic field, there is the Council of the Institute of Islamic Studies that is responsible for approving any new academic programmes and authenticating the diploma award and examination results of the IPI.

Most of the key decisions on human resource management are channelled through to the *Muzakarah Mingguan Pentadbiran Kementerian* (MMPK) Committee and the Human Resource Development Committee (HRDC) of the MRA. The MMPK is a top-level decision-making committee for the MRA. The committee is chaired by the Minister of Religious Affairs and comprises key personnel of the Ministry's Head Office. Departmental Directors are not represented in these committees. The Committee deals with many aspects of human resource management and development of the organisation as a whole before commending it to the higher authority of the Palace (His Majesty's Public Office) or the Public Service Department (PSD). These committees decide on senior appointments and promotions, reshuffling senior executives, contract appointments, human resource development (long term programme), contract extensions, disciplinary action, placement of new recruits at executive level and other decisions that are seen to be relevant to management.

4.5.1 Decision Making with Respect to Human Resource Development

Human resource development has been recognised as one of the vital elements in management. The success and failure of any organisation is dependent upon the quality of human resources. The MRA has for a long time been conscious of the significance of the development of its human resources and the need to have a committee on these matters to plan and decide the future direction of the MRA. In the 1980s there was a Committee to Consider the In-service Training Programme of the Ministry of Religious Affairs (CCITP). In April 1995 the CCITP was dissolved and replaced by the Human Resource Development Committee of the MRA. It was set up in response to a directive from the Prime Ministers Office's circular (reference number (27) JPM/J/E/5 part 12), dated 28th February 1995. The Ministers Office (PMO) instructed every government department to set up the Human Resource Development Committee (HRDC) with the following intentions:

- To identify the long and short term training needs of staff and personnel of the Ministry and departments under it,
- To identify the human resource needs and prepare the organisation succession planning to be consistent with the strategic training needs of the Ministry as a whole,
- To predetermine the long and short terms training needs 'quota' of staff and personnel of the Ministry and its departments,
- To ensure that staff and personnel who had attended any training programme submit a complete report detailing:
 - the suitability and usefulness in terms of content and presentation;
 - the quality of the place or institution of study²².

The written role and function of the HRDC for the MRA is more radical than that of its predecessor. Their main working objective is:

“To ensure that the MRA has an adequate number of personnel at the right time who are knowledgeable, skillful, have the right attitude so as to ensure that human resources are able and qualified to work with dedication, greater efficiency, effectiveness, productivity, honesty, and not for undesirable reasons²³”.

The aims of setting up this committee are as follows:

- To integrate any suitable systems relating to human resources such as the human resource planning, human resource development, human resource management, human resource information into the MRA administration,

- To become a consultative forum and decision making mechanism for matters relating to human resources management,
- To be directly involved in any human resource management businesses from planning, recruitment, placement, promotions, salary review and extension of services,
- To monitor any new development and knowledge in relation to human resource management in the MRA; to prepare a long and short term training programme for the MRA by emphasising the concept of 'training for all levels'²⁴.

The HRDC has so far not been able to achieve its aim as a top-level human resource development decision-maker for the MRA. It represents an intermediate level decision making mechanism in the MRA on human resource development before the MMPK. The committee comprises of all departmental directors and is chaired by the Director of Administration. The HOP and the Head of Research Training and Planning Section (RTPS) act as deputy chairman and secretary to the committee respectively. Currently only the human resource development programme has been co-ordinated by this committee. The RTPS as secretariat to this committee. They will decide and plan human resource development needs and programmes of the whole organisation, including the in-house training, before forwarding it to the MMPK. Departments are required to plan and make decisions on their training requirements before forwarding it to the committees. They are also required to process applications and shortlist those they think are eligible and fulfill the requirements for the In-service Training Programme.

4.5.2 Operational Decision Making

The main characteristics of human resource management and development at the departmental level are greater dependency on and co-ordination with the parent organisation on various matters of personnel management. All departments are subject to ministerial policies and organisational strategic planning. Directors basically have a limited authority on these subjects. Currently, they are in a position to approve leave application and application to leave the country during the period of leave or public holidays. However, other matters such as selecting executives for acting posts, internal promotion, and recruitment may still need to be forwarded to or require consultation from the Permanent Secretary for decision making. Departments are only put into a position to forward applications by providing necessary recommendations about its staff and the final say will only be made by the head office. In terms of the human resource development

programme, each director has every right to decide who should and should not be eligible to join the programme.

Matters pertaining to employee financial benefits such as passages, gratuity, loans, etc. have to be forwarded to the Department of Treasury, Ministry of Finance for approval. Whilst some aspects of employee relations such as retirement, unpaid leave, confirmation of appointment, extension of services for month to month appointments, contract extension, disciplinary action etc., had to be forwarded to PSD for appropriate action. Directors are only in a position to make recommendations in these cases. The information flows are either sent directly to the authority concerned or through the MRA's head office which will then pass it to the authority concerned. Departments are allowed to forward correspondence direct to these authoritative bodies for some straightforward matters such as extensions of service for women employees, leave without pay, contract leave application (copies only). Some important cases that require the knowledge of the chief executive in the MRA such as disciplinary actions, contracts extensions, appointments, gratuities, retirement, salary increments, have to be co-ordinated with the Department of Administration.

The DOA plays the part of co-ordinator and a facilitator for human resource management for the MRA as a whole. At the departmental level, personnel management is handled by the respective administrative section. The role and functions of the administrative section are wide ranging and multi-perspective supporting the task function of the organisation. In addition to personnel management and the management of training, this section also covers a diverse area of management responsibility from finance, organisational development and maintenance, and procurement, and housing. The principal officer is the Head of Administration. The head of administration is usually entrusted with the responsibility of handling and co-ordinating this section. He/she is assisted by a number of officers who are responsible for the general administrative tasks.

The decision-making activities are different from one department to another depending on the size of the organisation. In most departments decision making on personnel management is delegated on behalf of the director, to the Head of Administration or other senior officials in the department. In some organisations all actions and decisions have to have endorsement from the director or his deputy. The situation at the Department of Islamic Education, the largest and most 'populated' department under the MRA, is different

from other departments in that decisions are undertaken by senior officials delegated for particular tasks within the administrative section on behalf of Directors. On the other hand, in the Institute of Islamic Studies, one of the smallest departments under the MRA, all personnel matters are dealt with directly by the director.

4.6 Information Resources and Management

As with many aspects when managing organisations such as finance, human resources, logistics, etc., information plays a vital role in the day to day running of the organisation. The use of information in the MRA is very widespread for the operational and strategic management function of the organisation of the MRA. It is mostly communicative in nature in that information is the means for conveying objectives plans, policies and procedures to all segments of the organisation. In its operational control context, information serves both as a process activator by communicating requirements to each group and as a feedback mechanism by providing a basis upon which to determine whether requirements were received, understood, and carried out.

Different tasks require different sets of information, while in certain situations a particular category of information received or communicated may require a different kind of action. Information in the organisation is referred, updated, and communicated, processed and managed for it to be useful. This is a reflection of the situation in the MRA information is collected and transmitted within the organisation before action can be taken. This information is then communicated to an individual who may act as a facilitator who needs to be informed about any situation, decision making or action. Currently, there are various names of key information resources available, that are vital for a number of management tasks namely:

- Information Resources for Appointment and Recruitment
 - Job Vacancy Listing (JVL)
 - Establishment Listing (EL)
- Annual staff and development budgets (Recurrent)
- Information Resources for other supporting operational decision-making such as:
 - Personall Records
 - Leave Records
 - Performance Appraisal Report.
- Filing Systems
 - Personal File System

- Administrative File
- Staff Listings:
 - Departmental Staff Listing
 - Contract Staff Listing
- Circulars
- Policy Documents (rules and regulations)
- Retirement Information
- Extension of Services Information

This information is kept and updated by different individuals in the organisation depending on their task delegation.

4.7 Organisational Communications System

Communication is a central organisational process of information and influence. The exchanges of information between different participants links the various subsystems of the organisation. As a linking mechanism, communication is a central feature of the structure of groups and organisations; it builds and reinforces interdependence between the various parts of the organisation²⁵. It involves the interchange of facts, thought, value judgement and opinions. Communication can be divided into written: magazine, newsletters, reports, external mail by notice boards; and oral: meetings, briefing groups, informal contacts and telephone contact. The communication networks and the communication flows between administrative groups and subsystems within the organisation are called 'administrative communication' which means communication between individual in an organisational setting, particularly administrative in nature, such as between superior and subordinate²⁶. The process involves the sender initiating a communication sequence with the respondent and providing feedback to the originator.

The method of communication that occurs within the MRA includes:

- **Written.** The use of memoranda, letters, minutes and reports are the chief medium of communication in many government organisations in Brunei including the MRA. Memoranda are used to communicate laterally between departmental directors or heads of department (HOD) and communication upward between the Directors with the Permanent Secretary (PS) of the MRA. Formal letters, better known as letterhead, is a formal communication of the MRA and its department, with other Ministries, departments, non-governmental organisations and individuals within and outside the

organisation. Memoranda are official documents used as a mechanism to communicate decision or needs, between the heads of department, the PS and the Head of Department and vice versa. Minute notes are another form of official memoranda authorising or recommending a course of action. They are usually used for internal communication between superiors and subordinates and vice versa, and between staff at the same level in the organisational hierarchy.

Written communication between staff and management pertaining to personal or professional development requirement or other jobs entitlements have to be made through an appropriate application form provided. Some application requires only written letter of application while others requires both written and the filling up an application form.

In addition, there are official written circulars that communicate the organisation's and Brunei government public service policies and procedures. The written sources of policies are communicated from the following sources:

- The Prime Minister's Office (PMO)
- The Ministry of Finance(MOF)
- The Public Service Department (PSD)
- The Permanent Secretary (PS) of the Ministry of Religious Affairs
- The respective Heads of Departments directed to all staff in the department.

Any policy documents issued by the departments are communicated periodically. Circulars are issued if government introduced new policy on public service or invalidate and replace the old one. Circulars from the PMO, MOF or the PSD are addressed the all ministries PS and will then communicate the information to all departmental Directors under his jurisdiction. The Director will then transmit it to their appropriate sub-sections. Departments can issue circulars to their staff specifically reflecting departmental policies or position on particular perspective of management procedure.

In addition to communicating the introduction of new policies or changes to the old one, circulars are also used as a means of notifying organisational activities, call for meeting and other social and welfare activities of staff and personnel in the organisation.

Circulars are distributed through notice boards, pigeonholes and the internal mailing system.

The MRA through the Islamic Dakwah Centre (PDI) publishes a monthly newsletter called *Muslimin (the Muslim)*. This newsletter publishes news on departmental and ministerial activities and also publishes VIPs speeches and religious articles. The MRA also publishes pamphlets and leaflets for informing Bruneian public about the organisation's functions and services offered to them.

- **Oral.** Individuals interact with each other in a variety of ways within the organisation. Meetings to discuss important items involve considerable oral communication. In addition to the various formal committees such as MMPK, MBP, HRDC described earlier, each department has its own channel of communication through meetings of the Head of Sections (HOSs) which are usually chaired by the director or his deputy. There is interpersonal communication, superior-subordinate communication and subordinate-initiated communication systems, that emphasise transferring one piece of information from one person to another. Less formal methods may include telephone calls.
- **Electronic.** With an increase in the availability of electronic devices, the opportunities to communicate in new and novel ways have emerged. Computer-based Management Information Systems (MIS) are becoming increasingly important in modern organisations. MIS involves generating, processing and transmitting information. The ability to use electronic mail instead of written memos, teleconferencing in place of face to face meetings and the use of fax machine to send written information have all changed the nature of much communication in most organisations. However the use of E-mail and teleconferencing technology in the MRA is still in its infancy and still unacceptable as a form of formal communication between departments and government organisations. Each director is now allocated an E-mail address but these are not used widely. At the time of the research, only a handful of departments (DOA and IPI) have a computer that can access to the Internet. Moreover, there has yet been no official government standing on the use of electronic mail systems as an official form of communication in the Brunei public service. Obviously the issue of high costs and the current lagging information technology infrastructure in many public sector organisation offers no advantage of going forward with this novel mechanism at the moment. Unless this is tackled and exclusivity of access is not confined to senior executives only, the wide use of the internet or intranet facility in Brunei public service will still be a thing of the future.

Telephone, Fax and telegraphic communications are still preferred. This status quo may change over a short period of time.

The current administrative communications procedure among government departments is based on the guideline given by the PMO circular reference number 4/1985.

- The communications between the Permanent Secretaries are by formal letter (letterhead);
- The communication between the Permanent Secretary with departments outside the Ministry are by formal letter (letter head) and copies need to be sent to its Permanent Secretaries;
- The communication between departments and the Permanent Secretary in the same ministry is by a memorandum;
- The correspondence between Heads of Departments in the same ministry is by a memorandum
- The communications between Departments in different Ministries are made by a memorandum and copies of the correspondence will need to be sent to the respective Ministry.

In addition to these written mail systems other formal communication methods are widely used by the management. Other formal communication relating to personnel management include formal meetings for the decision making purposes; reports; notice boards; circulars; internal mail through memoranda and minutes.

4.8 Human Resource Management at the MRA

Managing human resources is one of the key elements in the co-ordination and management of work organisations. Whatever means are used to ensure the creation and delivery of service and goods in the public and private sectors, the role of individuals and groups as employees and the ability of management to deploy effectively, such a resource is vital to the interests of both employee and organisations alike. To a large extent this fundamental issue has been at the heart of a great deal of the analysis of how organisations are run. For these reasons, the question of how to manage employees has remained a constant element in organisational and managerial thought and prescriptions in the Brunei Darussalam public sector administration. Human Resource Management (HRM) is

therefore an approach to the management of people which is based on the following key principles:

- People constitute the resource by which the inanimate factors of finance, land, property and equipment are converted into the delivery of services;
- Policies and practices regarding the management of people need to be integrated with the total process of management;
- Strategies need to be evolved to ensure that the relevant authority can obtain, develop, deploy and retain employees with the requisite skills and attitudes;
- The leadership and motivation of an authority's employees are essentially a responsibility of all its managers, not just a task for personal specialists.

The Personnel Management Section (PMS) of the DOA monitors the operational tasks of the MRA's personnel management and practices, while human resource developments and planning aspects are managed by the Research Training and Planning Section (RTPS). The Special Duties Officer and the Group II Senior Religious Officer is responsible for these sections respectively. Formally, they have a responsibility to report directly to the Director of Administration. However, in reality they are also directly answerable to the Minister, and Permanent Secretary, particularly relating to the strategic human resource management and planning of the MRA as a whole. A number of vital decisions particularly in relation to human resource management policy, strategy, staff disciplinary action, promotion of senior officers and human resource development has to be referred to the above two top executives.

The main features of personnel management in all the government ministries in Brunei Darussalam in terms of decision making are diverse and sometimes complicated. Elements of bureaucratic intricacy seem to be its main characteristic particularly relating to decision making, though some effort has been made to improve the situation.

Operational management describes the processes of ensuring that specific tasks are carried out efficiently and effectively. Operational control within the perspective of personnel management involves essentially various activities and processes that attempt to meet the objective of the organisation. The use of information for operational control is communicative in nature in that information is the means for conveying objectives, plans, policies and procedures to all segments of the organisation. Operational control involves

feedback on the operations of the organisation. It includes co-ordination of the individual efforts of those in the group task and the regulation of the resource flows. In its operational control context, information serves both as a process activator by communicating requirements to each group and as a feedback mechanism by providing a basis upon which to determine whether requirements were received, understood, and carried out. The operational control within the PMS at MRA can be categorised into the following three areas as illustrated in Figure 4.2 above namely:

- **Personnel Service Division:** consisting of various aspects of personnel services including contract officers, daily rated services, personnel service records, salary increments and efficiency bars, pensions and workers provident funds, appointment confirmations, leave and benefits, and reemployment. The MRA's central filing division is another important sub-section of the Personnel Service Division which handles all mail and is responsible for distribution and storage of correspondence relating to personnel matters for staff and personnel of the MRA as a whole.
- **Establishment Division:** this section is accountable for all matters related to Appointments and Promotions of the Public Officers, and the Religious Council and Kadis Court enacted under the 1959 Constitutions, revised in January 1984. It has a strong rapport with the PSD and the PSC. Its responsibility also covers promotions and salary review; conduct and discipline; vacancies and advertising; schemes of service; public service examinations; transfers and secondments; Establishment Warrant

The Research Training and Planning Section (RTPS) deals with the task of overseeing three important elements in the management of the MRA as a whole:

- The human resource development (Training) either local or foreign in-service training programme including conferences, seminars, workshops and work placements.
- Organisational research and planning including performance appraisals.
- Information technology

The section also acts as a secretariat to two important ministerial board meetings. The first board meeting is the Muzakarah Bulanan Pengarah-Pengarah (Monthly Board of Directors Meeting) or better known under the abbreviation MBP. MBP is a meeting of all Directors and a number of senior executives (including the HOP and head of RTPS) chaired by the Minister of Religious Affairs. These board meeting are responsible for devising policies

and decision making on a number of matters relating to the task functions of the MRA. Secondly, it is the HRDC which mainly oversees and co-ordinates the human resource development programmes of the ministry.

Most employee development or training for MRA as a whole is centrally controlled and co-ordinated by the RTPS. The Head of RTPS is assisted by 3 officers, 3 assistant officers and 2 clerical staff. A central committee is also set up in the Ministry to devise strategies on employee development under the title Jawatankuasa Perkembangan Sumber Tenaga Manusia (Human Resource Development Committee) that was formed on the 5th April 1997 based on the recommendation of the National Human Resource Development Committee²⁷. This committee is popularly addressed by its abbreviation HRDC.

The HRDC is as an authoritative body in devising human resource development for the Ministry of Religious Affairs. Supplementing this primary role are various important tasks played by this committee:

- Identifying the long and short term training needs of all staff in the whole MRA;
- Identifying the human resource needs by preparing a succession planing so as to co-ordinate them with the MRA's training programmes;
- Identifying the 'quotas' or number of personnel for the long term and short term training programmes;
- To monitor proper submission of overseas training report.
- To monitor the academic progress of officers or staff of the MRA who attend courses overseas.

The HRDC usually meets every Thursday to discuss various issues on the employee development of the MRA. This committee is made up of a number of senior officials of the MRA.

There are a number of training programmes currently being offered for government officers in Brunei Darussalam including those from the MRA. These training programmes are either conducted by the department or through the respective Ministry. Other organisations may also organise their own training and offer it to the MRA. This may be through the Civil Service Institute (IPA) or it may be held overseas organised by foreign institutions. The current training programmes available to staff and personnel of the MRA are as follows:

- **In-house training programme:** This is a training programme organised by the department or ministry for the benefit of employees in the department or in the MRA as a whole. These programmes are internally organised by the RTPS or department concerned. It is usually based on the training programme of the MRA. Budget and logistics are provided either departmentally or ministerially.
- **Civil Service Institute Training programme:** This is a training programme organised by the Civil Service Institute based on their annual training programmes. This programme is usually offered to all ministries and departments in government. This programme is only for personnel in division III and upwards. Candidates for this programme are chosen by respective directors
- **The Local In-service Training Programme (LITP):** The category of in-service training is the most sought after programme in the MRA in the public service. It is a long term training programme offered to officials and staff in government ministries and department, to undertake a diploma, undergraduate or postgraduate programme with locally based academic institutions. All applications and recommendations have to be forwarded to the National Committee on In-service Training Programmes based in the Public Service Commission Department .
- **The Foreign In-service Training Programme (FITP):** This programme is a long-term academic programme with foreign institutions that are accredited by the Government. Any ministerial recommendation has to be forwarded to the PSD who will then forward it to the National In-Service Training Committee based at the PSC.
- **Short Term HRD:** This category comprises short-term courses, conferences, seminars, colloquium, assembly and congresses. The programme should not last more than 30 days. The authority to approve this programme is the respective government Minister.

The LSTP and FITP and the Short term HRD are under a special scheme co-ordinated by PSD through its In-Service Training Section. The final decision-maker for the LSTP and FITP schemes is the National In-Service Training Committee based in the PSC.

As with other aspects of managing an organisation's task functions such as procurement, finance, logistics, etc., information plays a vital role in the day to day running of personnel management. It is inevitable that the PMS and the departmental administrative sections have other responsibilities of managing the organisational information such as personnel files, records, and co-ordinating incoming and outgoing organisational mail.

The MRA's personnel management system embodies a multitude of tasks, processes and procedures based on the operational and strategic policies of the MRA that are usually made in parallel with the valid government human resource policies and procedures.

4.9 Summary

This Chapter has given background information about the MRA and reflected on the organisation's multifunctional role based on the five important elements of the Islamic Religion. Detailed information on organisational role, function and structure is gathered through documentation analysis of the organisation, which was collected during the empirical research study. This Chapter represents an understanding of the elements of slow to change factors such as the political context of power, authority, organisational structures, functions and the recognised processes of the situation under study. The next Chapter will represent the first stage of defining the 'problem situation unstructured' of the seven stages of the SSM.

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Chapter Five

System Intervention: Problem Situation Unstructured

5.1 Introduction

This Chapter provides the first stage of Checkland's Soft System Methodology (SSM), Mode 1. The first stage represents the problem situation of the organisation in an unstructured way. This can be cast in terms of a number of organisational, operational and strategic issues. These issues were identified from data collected through unstructured, semi-structured and focused interviews with 121 people employed in the various level of personnel management of the MRA. The findings demonstrate the depth and breadth of the problem situation. The issues identified have been classified into three recognised elements of MRA management: decision making, information management and communication. At a higher level of resolution, the issues include political, attitudinal, cultural, human resources, job satisfaction and training opportunities operating in an environment of infrastructural and budgetary constraints.

This Chapter is organised in a way as to interpret a systemic view of the problem issues, and contrasts with the systematic view presented in Chapter 4. The complexities of interrelationship between the classified elements of the system (decision making, information management, and communication) are presented in Section 5.2. Issues identified are further investigated in Section 5.3.

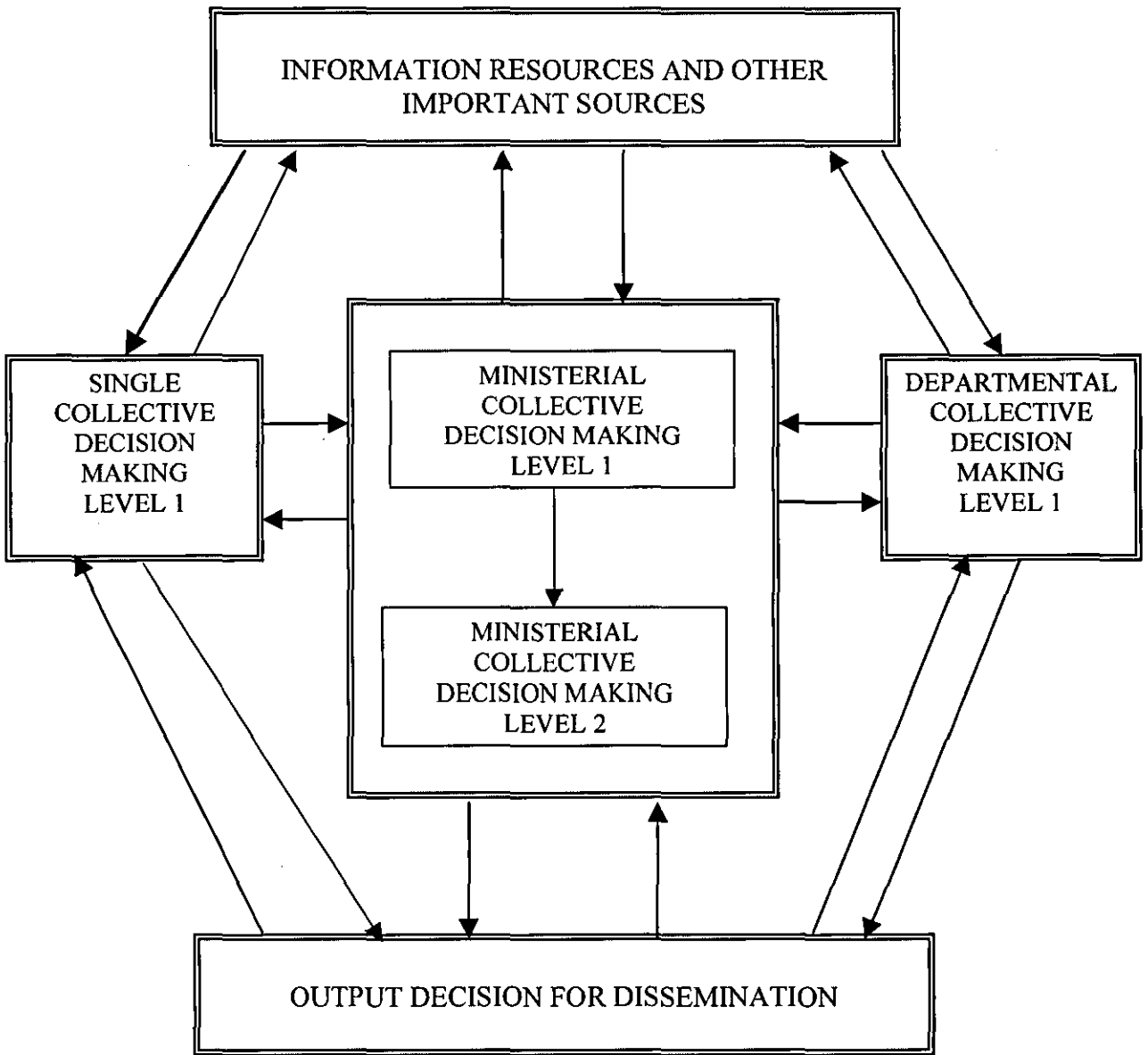
5.2 Systemic Overview of the Organisation

The previous Chapter illustrated the systematic view of the organisation in relation to the role and function of the departments, and systematic processes of decision making, information handling and communication of the stakeholders within the MRA. However, each of the processes and decision-making activities will inevitably affect the whole system or the sub-system, before they can be undertaken. Based on empirical interviews of personnel from the MRA, the organisation can be viewed systemically around three important elements: decision-making; communication; and information management.

5.2.1 Systemic View of Decision Making

Decision making in the MRA operates at different levels: political, strategic and operational. The MRA's political decisions may require forwarding to the HMPO, Council of Cabinet Ministers, Permanent Secretaries Meeting and the Brunei Islamic Council. On certain operational matters, a specialised government agency is designated to approve the preliminary decisions made by the MRA. For example, all matters pertaining to finance would need the final approval from the Department of Treasury. The government or agency's decision on these matters depends on the preliminary endorsement of the parent organisation (MRA or department). Decisions may also be made collectively by more than one agency. Only a handful of tasks on the finance and personnel can be decided directly by the parent organisation, for example leave application and application to go out of the country. The MRA is wholly accountable to decisions relating to its prime function and role in the government.

The ministerial and departmental decision making process in the MRA are complementary to each other. Decision making at the ministerial and departmental level is made either singly by an executive or collectively by a committee, based on the framework laid down by the Brunei government. These are supplemented by MRA's own policy to facilitate better decision-making activities and accommodate the organisational cultures and needs. In addition, the information provided by the department or section is crucial to the success of decision-making activities. These may be in a form of recommendation statements or processed documentary evidence. The decision-making activities of the MRA can be described in Figure 5.1, which demonstrates the complexity, recursion and iteration involved in the process.



Key:
 → Task

Figure 5.1 Decision-making Model of the MRA

The collective decision making environments involving the strategic and operational management of MRA are based on the consensus of the elected ministerial committee. Preliminary decision making processes through departmental committees are usually carried out before submission to ministerial committees for a final decision. In a committee such as the Human Resource Development Committee (HRDC), departmental representatives (either a Director, the Deputy, or senior officer) provide a supplementary argument to augment the recommendation. However some of these ministerial committees are not authoritative decision mechanisms of the organisation. Some vital decisions had to be referred to MRA's topmost collective decision making mechanism through the *Muzakarah Mingguan Pentadbiran Kementerian*. (MMPK)

Vital facts are gathered by the ministerial committee secretariat from various sources (i.e. personal records, performance appraisal reports) before a meeting takes place. It is presented in a standard format to enable decisions to be made efficiently with the readily available information. Information sources such as the Establishment Listing (EL), Job Vacancy Listings (JVL), Staff Listings (SL) are referred to constantly. Reports and working papers are presented as a means of presenting issues and needs of organisation to the committees. Some of the facts and figures to be presented are prepared by departments, where preliminary information gathering and departmental decisions have already been undertaken. A short-listing of suitable candidates for human resource development (HRD) programmes is usually undertaken on the basis of decisions by departmental committees or it may be a direct decision of the Director. At the final stage of departmental decision making, all necessary documents (application forms, supporting letter) and service evidence relating to performance and records (RS, RL) are sent to the head office (MRA). Records are despatched in transcript format. After a decision is made at senior management level, it is relayed to the authority for final decision.

The individual executive decision making environment is dependent on the type of issues to be tackled. Executives are designated with a certain level of authority in terms of decision-

making activities. The Minister is the topmost decision-maker in the organisation, followed by the Deputy and the Permanent Secretary (PS). At the departmental level, Directors and Deputy Directors are authoritative within their department. A number of executives are normally given a mandate to make departmental/ministerial decisions on behalf of the Chief Executives. The individual decision-making processes are multilevel. Decisions at the executive level are mainly on operational matters. All decisions affecting an organisation's strategic management and sensitive operational policies are usually handled by the Director or the Deputy, although they are occasionally handled by an experienced senior executive. The Director of Administration is the most senior decision-maker in the MRA for its human resource management. These are followed by the Head of Personnel (HOP) and the Head of Research Training and Planning Section (RTPS) who are responsible for their respective designations. Some of the departmental decisions require referral to the ministerial executives for clarification or prior consent on any proposed decision.

There are instances where issues are referred to a more knowledgeable person on the matter or other personnel who are in a better position to comment or make a decision. Colleagues and contacts either from within or outside the organisations (such as the PSC, PSD) are also the most vital sources of reference. Some executive decisions are communicated to the departmental or ministerial collective decision-making committees for further action.

Referring to the organisation's information resources is a normal practice for executives in making key decisions in the MRA. There are a number of information sources being referred for decision making activity namely the RS, Personal Files (PF) and Administrative File (AF), Performance Appraisal Report (PAR). In some rare problems, policy documents such as the Public Officers Act of 1962, the Prime Minister's Office Circulars, Financial Regulations, etc., are consulted with the view to finding solutions. These information resources are placed in different areas of the organisation either a special room or allocated areas and looked after by clerical level staff. The central file and record unit are located at the Personnel Management Section (PMS). Most large departments (DIE, DSA, PDI) have a specialised unit that looks after the departmental records (RS and RL), PAR and the filing system. These are usually staffed by clerical level staff. While in some smaller departments

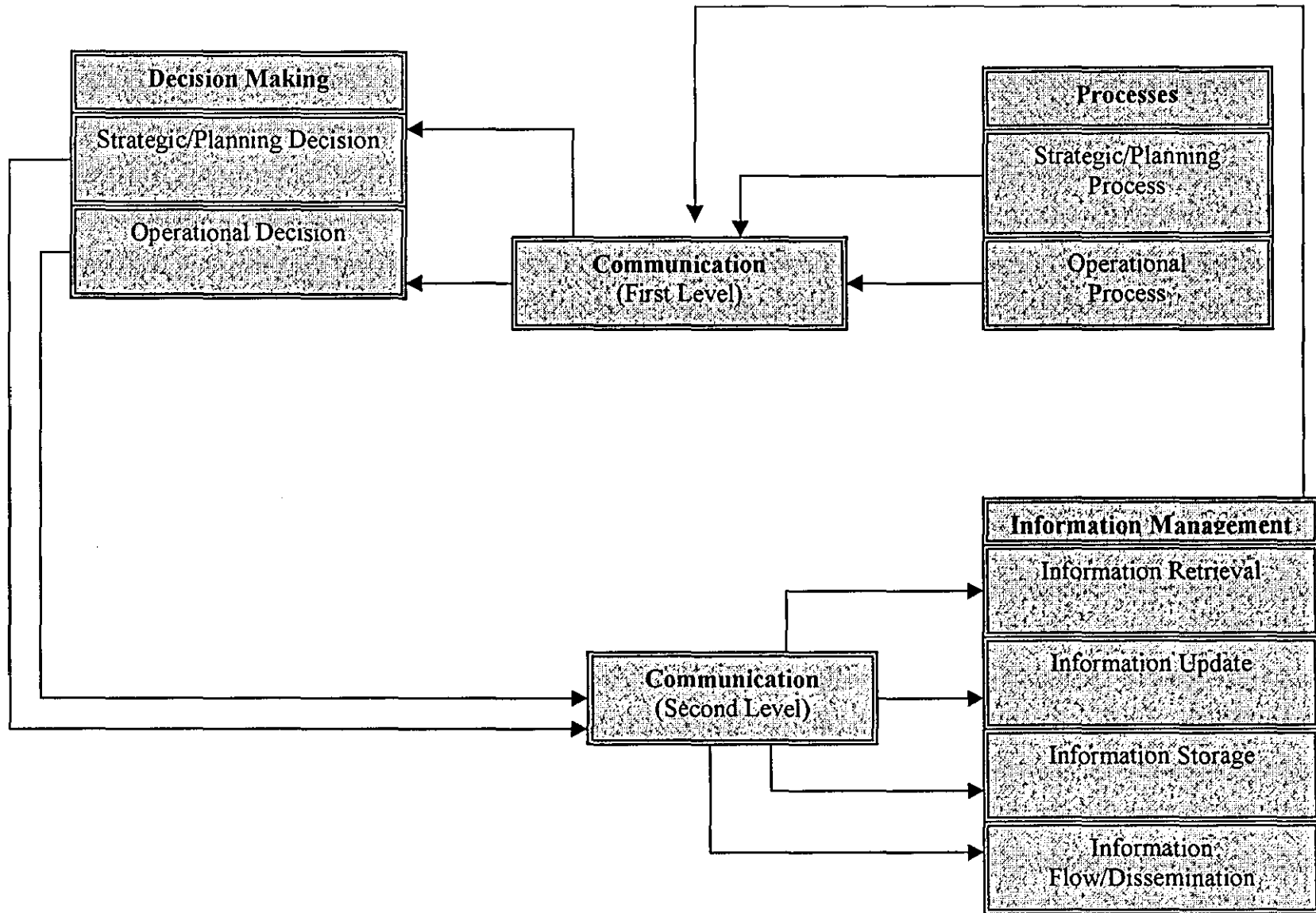
(such as IPI, DHA) these resources are managed by the administrative clerks who are responsible for other clerical duties as well. Some sections within the MRA have their own filing system in addition to the main system. The executive level staff has his or her own collection of reference sources.

Once decisions are made, they will then be communicated appropriately to various authoritative bodies in government. However, some departmental decision making requires Ministerial endorsement. The Ministry will then communicate their decision to the authority concerned. The external organisations that MRA and its departments constantly deal with include the Department of Treasury, PSD, PSC, Prime Minister's Office (PMO) and His Majesty's Public Office (HMPO). Feedback is usually communicated to the originator of the correspondence.

5.2.2 Systemic View of Communication

Official communication procedures within the MRA include written, oral, and electronic forms. The first two of these communication methods represent the formal communication procedures of the public organisation in Brunei. Formal correspondence using memoranda, minutes, and letterhead are officially accepted. In addition, circulars also play a vital part in communicating new policies, procedures, or the organisation's internal notification. Electronic communication such as fax or telephone conversation are considered as an *ad hoc* communication procedure. The content context of the communication will only be formally accepted upon receipt of the original written version. This mode of communication is being used as an advance notification or request for some information.

Communication takes place principally as a result of decision-making. The systemic description of the organisational communication process are illustrated in Figure 5.2. Each of these tasks is interrelated and linked by communication.



Most communication starts as result of strategic or operational processes that are initiated from within the various parts of the organisation. Communication may also be as a consequence of external communication received by the organisation. There are four types of communication in the MRA:

- Staff Internal Correspondence (SIC) embodies all correspondence between individual employees with their parent departments for various types of applications for entitlements, benefits, programmes, etc. These are usually in the form of a formal letter of application or on application forms.
- Intra-organisational correspondence, is the official communication channel between organisations i.e. letterhead, memoranda, and circulars
- Action correspondence, that consists of internal communication between staff and officials of the MRA. This may include minutes and notes.
- Decision Correspondences is a formal correspondence from an authoritative organisation in government, usually on a letterhead.

Basically the communication flow of the correspondences are illustrated in Figure 5.3 below. The 'other sources' will include all the authoritative bodies in government such as the PSD, PSC, PMO, and the Department of Treasury. In addition, there is staff internal communication (SIC) for correspondences and communication within the MRA and its department.

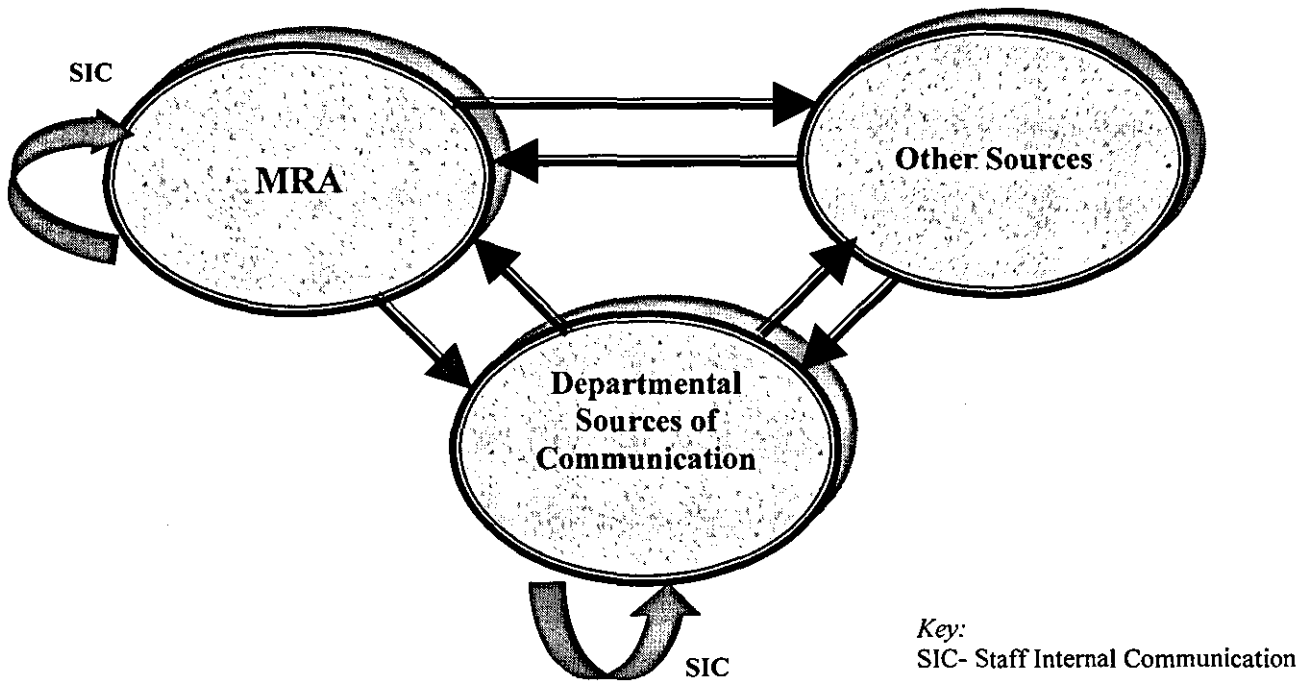


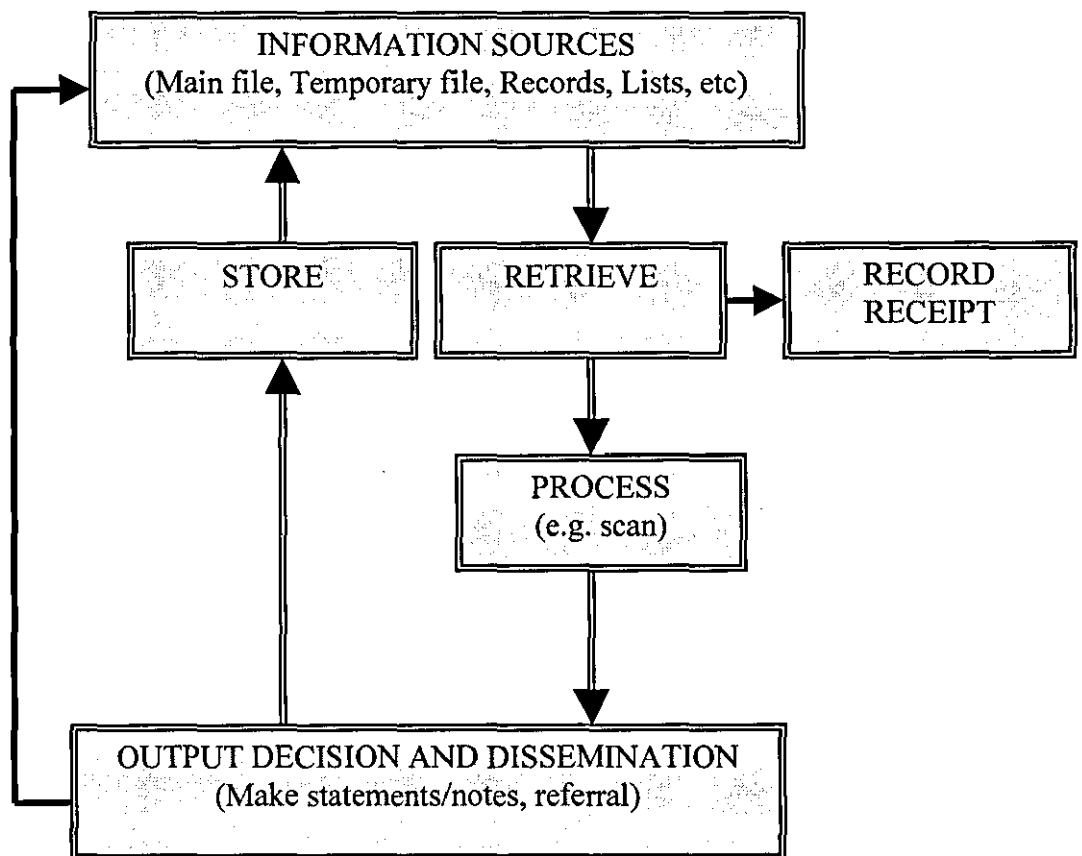
Figure 5.3: The Flow of Correspondence of the MRA

A confidential secretary or confidential clerk handles every flow of organisational confidential correspondence. He/she will handle the processing, distribution and storage of these types of correspondences from receipt of the message until its secure storage.

The management and co-ordination of ordinary correspondence is usually the responsibility of the filing section (FS) staff. FS staff will scan through the received correspondence and match it with the available file title. The matched file is then searched for and retrieved in the current file retrieval system. If the file is missing, a temporary file will be used. The correspondence will be clipped at the front part of the file. They will then identify the responsible executive for the job based on task delegation. Notes or minutes are then written indicating action to be taken and this information is then given to the designated executive. A message referring to the correspondence is then written and this will be sent by the office attendant to the official or member of staff concerned for appropriate action. After action has

been taken, the information may be required elsewhere. These files will then be returned to their rightful place once all actions relating to the particular case is settled.

The internal communicational flow of the MRA is illustrated in the Figure 5.4, and shows an indication of communication flow for a single instance. As can be seen, the flow of documentation and administrative actions are crucial to communication within the MRA. The effectiveness of this process is dependent on who performs the task and how it is carried out.



Key:

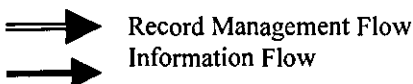


Figure 5. 4: The Conceptual Model of MRA Communication.

Every action or decision already undertaken by executives on any issue requires a formal statement of action taken. The written statement is the form of 'minute', instructions to the other executives or immediate subordinates for further action. Every record of written instructions, directives and request statements, are usually attached to the main file and every organisational decision is communicated, accompanied by the whole file. This instruction may be in the form of a request for further clarification and information on the matter at hand. Executives may communicate with other executives internally requesting for an additional opinion.

The establishment of various Ministerial and departmental committees as a mechanism for collective planning and decision making is one of the most important features of management in the MRA. It also represents an important communication platform for departments or sections to present certain issues to the superior officers and to tackle them in a collective way. It is also an important means for senior management to communicate organisational planning, projects and issues to a representative of the organisation. The existence of the MMPK, MBP, HRDC, Information Technology Committee is a forum for discussion for various strategic and operational needs of the MRA as a whole. At departmental level there is the Head of Sections meetings and the departmental HRDC. Various other committees are also established to monitor and plan the task functions of the organisation. A number of information sources in the form of listings and reports are also required for these decision making and communication forum. The EL, JVL, Staff Listing (SL) , Contract Staff List (CSL), PAR, In Service Training Details (ISTD) are among the important sources of information vital for decision making.

5.2.3 Systemic Overview of the Information Management

Information plays an important role in the decision making and the communication activities of the organisation. It is referred and communicated for various functions of the MRA. Without information, communication would be meaningless. Information needs to be managed in order that it be effective. Thus these three vital elements in management i.e. information, communication and decision are interrelated and cannot be divorced from each

other. The systemic view of the information management of the MRA is illustrated in the Figure 5.5

Information sources are created as a result of communication. They are in the form of correspondence, reports, and records. These information sources particularly the files, and RS are classified and indexed accordingly. Correspondence is accumulated to form a file while records contain a concise accumulation of the personal /leave information communicated. Files are an important information resource where correspondence about an individual or subject is compiled. Records, which are regularly and systematically updated, contain important personal service/leave details of every single employee in the organisation from the beginning of their service with the government until retirement.

Correspondence is communicated for action or decision making through the organisational filing system. Each item of correspondence received is scanned and distributed using either the main file or a temporary file. If the subject of the correspondence is new, a new file will be created. An appropriate file will be retrieved if the subject matter is already available. Temporary files are used if files are unavailable. The filing staff usually take the role of information co-ordinators of the organisation. They receive correspondence, retrieve files, and distribute this correspondence to those delegated to deal with the appropriate task. After each action by the relevant executive, files are then collected and stored.

Every file taken out has its destination recorded by a filing clerk. They monitor the flow of every file. They will also make sure communication or instructions in the minutes are distributed to the right person and every action required on a particular issue is undertaken accordingly. In addition to channelling organisational communication flow, the filing section staff also discharges files upon request by executives pertaining to specific issues. Staff responsible for records also undertake similar lending procedures.

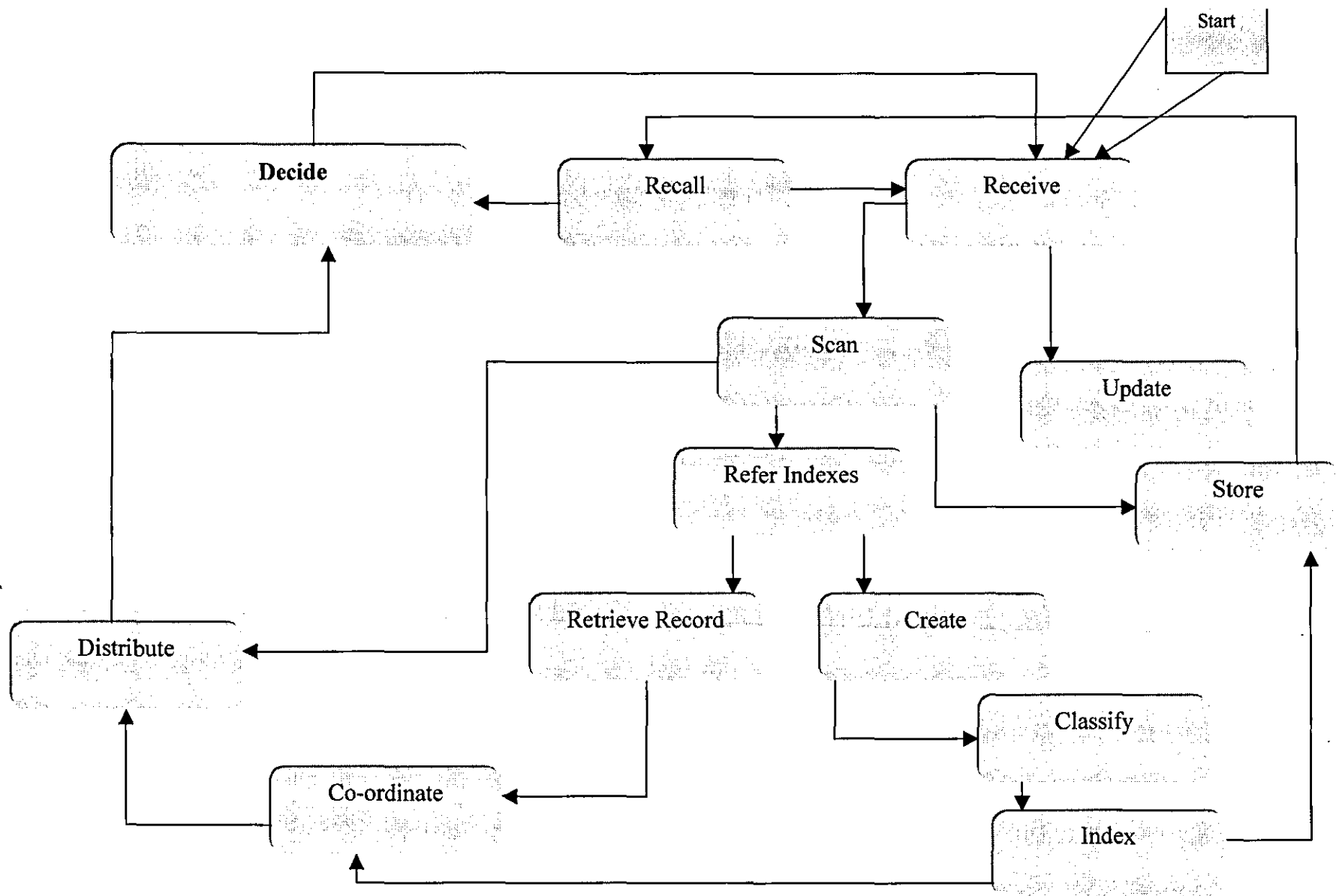


Figure 5.5: Systemic Model of Information Management of the MRA.

Most of the organisation's information resources are kept in designated storage areas and looked after by clerical staff. They monitor and ensure the resource's usefulness. The locations of the storage are dispersed and the staff responsible are also diverse. Filing and records are looked after by a specialised filing clerk. The PAR is kept by respective department and copies are obtainable from the RTPS. Staff at the Recruitment and Establishment Division of the PMS are responsible for the EL, JVL, and Scheme of Service (SOS). The EL is a master listing of all staff at the MRA, which details individual employment data. SOS is the job requirements or attributes that are sought in candidates before advertisement. The Contract, Daily Rated List (DRL), Extensions of Service List (ESL) and Staff Retirement List (SRL), can be found at its respective division. The ESL and SRL, which can only be found at the PMS are meant to provide management with relevant information for highlighting or providing the expiry date of a particular employee's appointment. Due to the dispersed locations of the information resources, executives or collective decision maker who requires referral have to request for this information from different parts of the organization, and every decision undertaken also requires co-ordination by those responsible for updating and maintaining its usefulness.

5.3 General Organisational Issues in Unstructured Problem Situation

As an important Ministry in the government machinery, the MRA is generally exposed to various stimuli and challenges, which come from various perspectives: social, technological, administrative, and economical.

- Socially, the MRA needs to be aware of the negative influence of the so-called 'borderless world' resulting from technological innovations and influences from western culture. According to Pehin-Yahya¹: *“What we are observing lately is the challenges faced by our Islamic and Bruneian way of life due to the global, developmental and technological influences of modernisation. Moreover, some parts of the western influences and thought, are not suitable and has resulted in negative influences to the Islamic community”*.
- On technological advances, the MRA have no choice but to appreciate the innovations and as far as possible perceive them as advantageous. The emphasis on the utilisation of modern technology in management is seen by many from within the MRA as vital in achieving greater effectiveness and efficiency. Moreover, the applications of computer-based technology in various organisational tasks will enable the MRA to be at the same level in terms of 'competitiveness' with other government organisations. A number of projects are currently being undertaken to introduce computer-based technology into various management activities in the MRA. The increase in the number of personal computers (PCs) in the organisation is further evidence of the progress towards technological innovation. The introduction of the Ministerial Committee on Information Technology in 1996 is a significant step forward towards recognising the importance of computer technology.
- On modern management techniques and procedures, the MRA, through its Research Training and Planning Section (RTPS) is taking a greater effort to adopt modern management techniques and approaches. The MRA is currently working very closely with various government bodies, particularly the Public Service Department (PSD), to implement and integrate a number of western management techniques such as the Quality Control Circle (QCC), Strategic Planning (SP), Total Quality Management (TQM) and Management By Objectives (MBO), The MRA is also working with the PSD and IPA on

blending these management techniques with that of the Islamic management thinking. In addition to these management techniques the MRA is also making an effort to introduce work concepts such as the clients charter, courtesy campaign and work procedure manual in order to produce efficient working practices in the organisation as a whole.

- The MRA has been exposed to economic drivers that have beset the entire South East Asian Region. As a result of these problems, less staff are recruited, job creation is limited, and annual budgets on expenditures and developments have been heavily slashed. Any new human resource development projects such as in-service training, in-house training, conferences and IT courses have to take into account the immediate need and budgetary limitations. Staff budgets have been restricted to 3% increase per year. Any additional budgets require special approval from His Majesty the Sultan.

5.4 Organisational Issues in Unstructured Problem Situation: Interview Analysis

As mentioned earlier in Chapter 2 a number of interviews were conducted as part of an effort to establish the 'rich picture' of the MRA. Various types of interview techniques were applied to obtain useful data for understanding the situation that is very essential to the rich picture stage of the SSM. 121 staff out of a possible 135 of the MRA were interviewed from various levels of management and groups within the personnel management of the MRA. The selection of the interviewee was based on a sampling frame provided by the management upon visits to the respective offices and sections. Almost everyone interviewed was a willing participant and very co-operative. They expressed openly their opinion on various issues affecting their tasks and their surrounding environment. Understandably, a handful of those interviewed had some reservations on certain sensitive topics.

The interviews were held at the participants' respective work places and offices, each interview lasting more than an hour depending on the kind of response and extent of issues being raised during the interview. The interview also took into account the willingness of the respondents to discuss the issues affecting their work. Seven important areas of management were chosen as a basis for the interview in order to identify current issues and problems affecting the personnel management of the MRA:

- The existence and achievement of departmental and sub-sectional objectives,

- The role and responsibility of each department and section within the area of research,
- The adequacies of human resources in department and section of the MRA,
- The presence and effectiveness of job descriptions,
- Decision making activities and how they are being achieved,
- Management style, and
- The type and effectiveness of communication channel

In addition to the above, a set of questions were put forward to staff /official on a specific staff or role (Appendix A2.5). These questionnaires were aimed at understanding specific task delegation of an individual interviewee and derive issues relevant to each individual and his/her tasks. Questions that were forwarded were based on the relevancy of the situation and dependent on the extent of types of issues being raised by the interviewees. On certain occasions, questions were not asked if relevant points had been already covered by the interviewee in an earlier question. The interview questions were not meant to be exhaustive but were constructed as a means of structuring the interview processes and to facilitate its flow. The use of an unstructured interview technique provided an additional means of collecting important data that was not covered by these questions. Moreover, a focus or in depth interview technique was also used as part of a data collection effort for the research.

In conjunction with these challenges, a number of management issues were identified during the empirical research. These issues were conceived from the interview processes and through observation of individuals undertaking their work. The issues were classified into three subject areas: process, people and organisational issues as shown in Figure 5.6. These issues were then sub-divided into a number of sub-issues, which were arranged accordingly, based on their relationship.

PROCESS	PEOPLE
Organisational Objectives	Finances and Budget
Strategic Planning	Task Delegation
Decision Making	Job Satisfaction
Training Programme/Scheme and Opportunities	Attitudinal Aspects
Communications	Work Culture
Information Management	Staffing
ORGANISATIONAL	
Politics	
Infrastructure Aspects	

Figure 5.6: Issues

5.4.1 Organisational Objectives

Departmental chief executives were asked a number of questions about the departmental objectives, its achievement, the way respective departments undertake to achieve it and the extent to which these objectives are made known to all staff and personnel of each organisation. The general scenario on this topic of interest is that most departments under the MRA including the Ministry have no short-term objectives. The work undertaken by the organisation as a whole is on the basis of a long term or strategic plan. Most of the stated objectives reflect general statements towards achieving an effective and efficient role and functions of the organisation within the bigger picture of the MRA. Most of the senior management expressed the opinion that it is difficult to quantify departmental achievements or give some sort of performance measure on the quality of services or performance on the basis of the current general objective. The organisation's ability to function and provide an acceptable level of service expected of the department is what really matters to these senior

management. Everyone within the senior management level seems content with the current arrangement. Moreover, according to one senior management executive:

“whatever we did in this department seems to be along the lines provided by the head office and we cannot overstep this line. We cannot set our ourselves a target as things can change overtime”.

When asked whether staff were made aware of the stated objectives, the general response was that most staff were well informed through various departmental communication channels. Each new staff member was briefed on the departmental functions and objectives. Some use departmental circulars to make staff aware of these matters.

At a lower level of management, particularly among intermediate and operational level staff, the awareness and understanding of the departmental mission and objectives was surprisingly low. The interview process revealed that staff at this level of management were neither informed of the departmental long-term targets nor were they told what the objective meant. When asked whether they knew of their departmental mission or objectives, the majority had never heard or been made aware of the existence of the objectives. Some did try to impress, but when asked to describe what the objectives were, they replied very unconvincingly. The interview also revealed that they were neither briefed nor formally introduced to their departmental role within the MRA. The only form of orientation upon joining any organisation within the MRA was through peer group and work colleague orientation.

5.4.2 Strategic Planning

Strategic planning is an area of great concern among departmental and Ministerial senior executives. All those interviewed admitted the difficulty in establishing a strategic plan of their respective organisation. The interviews have identified that the recurrent Brunei Government Five-year Development Plan which incorporates a five year infra-structural development plan of MRA and other government ministries, is the sole strategic document of the organisation. This development plan is monitored by a national committee based at the Ministry of Development.

The inability to undertake a proper strategic human resource planning is one of the significant shortcomings that is widely recognised by the senior management interviewed at the MRA. Despite the establishment of HRDC, the MRA has not been able to come up with a comprehensive strategic plan for its human resource management. The absence of such an important strategic plan has resulted in the implementation of inapplicable training programmes, flawed decision making, *ad hoc* actions and decisions, wastage of time and money, and misinterpretation of training needs. The lack of expertise on the subject and the unavailability of strategic information resources are perceived to be among the reasons behind the failure of the organisation to come up with an acceptable plan. The organisation's inability to undertake a training needs analysis is another probable reason for the failure.

5.4.3 Decision Making

Bureaucratic decision making processes are rife in the MRA. Most of the decision-making activities are centrally controlled by the ministerial head office. Basic operational decisions such as leave approval, benefits, and passages are routinely undertaken by staff at executive level, while important decisions involving sensitive, strategic and policy-level are within the jurisdiction of the senior management executive. Some decisions are fastidiously made through committees. Most decisions are multilevel, and they have to undergo various approval procedures. This situation has led to conflicts, controversy and poor management practices that require more effort and adequate manpower to be resolved. These issues can lead to destabilisation and demonstrate the need for a study such as this.

Among the contentious issues on decision making activities poignant to the strategic and operational requirement of the organisation either on individual or collective capacity are the following:

- Dissatisfaction over the way staff placement and reshuffling is undertaken; the lack of consultation with departmental senior management on the recruitment processes of fresh graduates from MRA's educational institutions; many of the selection processes do not reflect the department's staff requirement for the area of specialisation; the placement of staff is inconsistent with its budget allocations and discriminate against some departments. While departmental management appreciate the reasons for this practice

taking place, they feel that it is not the right way to do it. It ruins departmental strategic plans and lessens their effectiveness. It solves one dilemma but creates another. Departments create positions that are meant to accomplish efficiency but management tends to overlook departmental needs.

- Senior management expresses dissatisfaction on the limitation of their decision-making activities, which mostly involve routine personnel management decisions. Some do not have direct control over their own finances. Currently, only PDI, and DHA have overall authority over their budget. Others have to apply for approval from the Ministerial head office. One departmental chief executive revealed during the interview that they have to be cautious in making decisions particularly relating to staff management, to avoid making controversial decisions.
- The various collective decision-making committees are also under scrutiny from senior executives and executive level staff. Many felt that some of the decisions forwarded are routine and can effectively be made by a single executive. The ineffectiveness of the various committees are perceived to have caused great delays to some operational tasks. Standard guidelines and trust are what is required for these activities, and only when exceptional cases arise should approval from the committee be required. The organisation requires to spend more time on matters of strategic importance. Significantly, the role of MMPK as a central decision making mechanism for the MRA is also questioned. Some of the issues deliberated by these committees are perceived to be non-exceptional in nature, which can, and were previously dealt with by junior executives. The infrequent meetings, too long agendas and non-representation of department are perceived to be the root cause of the problems. On HRD decision-making activity, MMPK is seen as a duplicate to the MRA HRDC's role.
- The current Ministerial personnel management system, demonstrates that the MRA gives too much power to one person. The system is therefore open to his autocratic leadership style that may compromise work processes. His influence and power are very significant in many HRM decisions and everybody seems to know that he is behind a particular

decision. Many executives felt that this senior executive is left freely to control the overall patterns and direction of personnel management in the MRA. His arrogance and uncompromising attitude makes 'life' difficult for everyone in the organisation. His unwillingness to be part of HRDC and other committees serves to confirm his attitudes towards collective decisions.

- Decisions on human resource development (HRD) is another problematic area of the MRA. The HRD policies, the decision making committees, approval procedures and guidelines, application, short listing and selection processes are some of the areas that need to be addressed in order to improve its management. Inconsistencies in the ministerial decisions on human resource development policy/programmes are frequently experienced. For example, the number of staff allowed to follow a UBD graduate programme is always unclear. Moreover, decisions made by HRDC in terms of successful applicants and number of people joining the programme are often disregarded by MMPK. Earlier decisions on the placement of officers and staff who had just completed the in-service training programme are also not followed. Some senior executives suggested that the HRDC should have the overall authority on organizational human resource development and planning. Its roles needs to be widened and it required a well-defined decision making guideline to create an effective collective decision making mechanism for the MRA. The current approval procedure is considered to be very time consuming. The approval stages took at least six months to complete and another few months are needed for the PSC approval.
- Decision-making requires a number of factors for it to be effective, such as the currency, comprehensiveness and accuracy of information; consistency and confidence of action and an adequate level of knowledge. The interviews revealed that most of these vital elements are missing. The issues on effectiveness and efficiency of information sources are among the areas where interviewees are all in one 'voice' in expressing the complexities they face with the current disadvantaged information provision. The incomprehensive, inaccurate, inadequate and out of date nature of this information seems to form the general characteristic of the information provision of the MRA. These

problems have caused a major setback to the decision making and other management activities that require efficient information. It has brought an immense frustration and distrust among staff towards the organisation's important resource. Sifting through the pages of the personal file is currently an effective practice of obtaining an accurate information on leave. If, however the personal file/records is in use by someone else, decisions are deferred until the file reappears, adding delays to the decision making process.

- The complex nature of some of the HRM procedural policy directed towards certain groups of staff is another problematic area for executives. These may relate to the management of leave, passages, contract staff, the management of women, and daily rated staff. Many operational decisions pertaining to the task require computation and procedural formulae which can be complex . Lack of in depth knowledge on public service management policy is blamed for the problem. Most of the executives level do not have BAS qualifications. The rapid changing nature of these policies and procedures require executives to have an in-depth understanding of the policy . The failure to apply the right decision criteria coupled with the inaccuracy of information has caused mistakes and affect decision-making. This will usually result in queries from the central authority concerned. As a result organisational efficiency will be affected, and delays will be inevitable.
- Other shortcomings in applying the right decision criteria to the real situation are as a result of the incompetence of the executives and clerical staff about certain decision making activities; the changing nature of the rules and regulations; the heavy workloads and communication problems of the organisation. The issues on individual competency are made on a basis of claims and counter claims among executives towards their subordinates and *vice versa*. Lack of management knowledge, problem solving and leadership qualities among executives are perceived to be among the missing characteristics contributing to effective decision making activities. Too much workload or long job descriptions among the clerical level staff is one of the issues brought up for the

delays in the precursors to decision-making activities. The communication problems as mentioned in the Section 5.4.5 also contribute to the decision-making issues.

5.4.4 Training Programme/Scheme and Opportunities

An employee's in-depth knowledge or competency about their job is badly needed by the organisation as a whole. Lack of competency directly affects decision-making activities and creates an environment of scepticism and apprehension among personnel of the MRA. Reciprocal claims of incompetence and blaming of each other for the problem in information handling and management activities among staff is very apparent. Among the general perception of deficiencies in the current organisational settings are the lack of initiative and effort on the part of staff and personnel to tackle internal problems; lack and rarity of training being offered to the operational staff; the nature of learning their trade through experience and learning from colleagues; the incompetence of the executives in handling organisational issues.

The shortcomings of the current human resource development programmes and schemes are also perceived by senior executive and executive level staff to have a direct impact on staff knowledge and competency among the various sectors of staff of the MRA. Aspects of course content, format, individual requirements and the HRD management are also criticised. The criticisms, suggestions and needs of the individual are openly expressed by many within the executive level personnel. Some were dissatisfied with the way their training programme was being handled. Some executives complained about the course content being too theoretical rather than practical. Many within this group of personnel felt that they needed to learn in more formal depth about government policies and procedure on personnel management.

The internal training programme offered for the clerical and operational staff in the organisation as a whole is considered to be very poor. Almost all those interviewed at this level of management expressed dissatisfaction at the level of training in their field of work. Some admitted that they do not receive any training at all. Many within senior management staff could not understand the rationality of the decision by Institute of Public Service (IPA) in not offering courses for staff at division four and beneath. The training executive at the

MRA indicated that budgets for staff training are quite limited and the current in-house training programme is based on organizational priority. The \$40, 000 budget allotted for the purpose is far from being adequate to satisfy the demands of the programme

One senior management executive remarked:

"What we need in this department is staff who have expertise, initiatives, self-confidence, and who are industrious in their day to day job. We do not want employees who do not have the right attitudes, initiative and are static in their thinking".

The other most popular subject of discussion is on the need for computer-training programmes particularly in the use and application of computing software such as word processing, spreadsheet and database management systems. The interviews highlighted the desire to have more training for clerical and operational staff. In another related situation one clerical staff at the MRA head office commented:

"We were given a week training on the use of PC word processing but the problem with our section is that the computer system is unavailable. As a result we cannot apply what we have learnt".

5.4.5 Communication

Communication is commonly cited as one of the biggest problems facing modern management.² According to Martin³:

"In a large organisation the communication process needs to be managed carefully if total chaos is to be avoided".

Poor communication is often identified as the cause of problems in organisations. This is because the communication process provides the information used by executives or managers in making decisions that affect the organisation. When poor decisions are made a root cause is often ineffective communication. In the MRA situation, ineffective communication systems are a prevalent issue that affect various levels of management.

Communication between departments and the MRA and the communication between sections within departments is crucial for the proper functioning of departmental tasks. Executives and Clerical staff constantly experience uncoordinated information from those in charge of records. The uncoordinated nature of the information flow happens frequently within organisational communication systems and within intra-departmental communication. Two of

the senior executives at departmental level expressed the desire to obtain a number of strategic information sources for departmental strategic planning and decision making. Examples of information are not co-ordinated by the MRA but are required at departmental level are the JVL, EL and the retirement listings, which are required for the departmental recruitment decision.

In addition, the inefficiency in disseminating, use, lending or borrowing and distribution of the organisational information resources by officials, staff and departments within the MRA has often resulted in delays and flawed decision making by executives. This situation has a direct effect to on information record keeping at the department and Ministerial level. Basically, this information circulation system mediates the flow of responsibility from one executive to another. The issues will concern the circulation of the main information resources such as RS, RL, the personal and administrative files, and the policy documents of the organisation (circulars). These information or document flow issues are recognised to be in dire straits and in need of immediate solutions to make them more effective and efficient so that actions and decision making can be made more quickly and efficiently.

Among the well addressed issues concerning the staff and staff employed in personnel management in the MRA pertains to the flow of the personal file and records; the frequent occurrence of files being kept for so long by executives; files and records missing from storage, unknown and contradiction of file location with file distribution records; ignorance and misunderstanding of staff/official with the current information flow systems; carelessness of the filing clerks, unclear instruction given, the perceived lack of standardisation and control in the current management of information resources.

In addition to the information issues, there are various other communication issues, which are currently affecting the organisation's interpersonal harmony, understanding and causing a great deal of inconvenience to management. Interpersonal complexities, misunderstanding and lack of consultation and co-ordination are prominent in the organisation.

Most significant is absence of consultation and co-ordination in decision-making activities which has brought about a number of related issues affecting the efficiency and effectiveness of managing the human resource of MRA as a whole. These issues are widely covered by many respondents in the interviews. Some of the informational issues have already been mentioned earlier in this section. For example, the consequence of failing to co-ordinate information after decision making process to those in charge of information led to failure of updating records. Some of the issues pertaining to co-ordination and consultation have also been mentioned in the description of decision-making issues in Section 5.4.3, particularly on staff placement and reshuffling where proper consultation with departmental Directors is absent. Among other topics revealed are the lack of consultative committees, lack of staff meetings; unwillingness of the senior management to accept proposals/suggestions from the subordinate, lack of consultation and co-ordination from the MRA in staff recruitment, retention and development.

Departments are also criticised by RTPS executives for frequent delays in responding to a request for selecting suitable candidates for a training programme. Some departments tend to ignore the given dateline and have to be pursued to speed up responses.

Lack of effective co-ordination between the UBD and MRA on the notification procedure for the UBD programme is currently affecting the efficiency of the organisation. This is the view expressed by various Ministerial and departmental human resource development executives. Management is often confused and uninformed of the outcome of their staff applications for the UBD training programmes. Initial application for this programme was made through departmental recommendations and it is highly desired that UBD should provide some sort of notification or feedback on the outcome. On previous occasions they only knew about their staff joining UBD through informal channels. It is argued that departments are supposed to know who are being accepted so that proper arrangement could be made to replace or find somebody who can take over the job.

5.4.6 Information Management

Information management is the most contentious area discovered during the empirical research interviews. The issues faced by staff and officials on information management are

said to have created a 'disadvantaged' management system for the MRA. Decisions are delayed and inaccurate, and queries from the authoritative bodies due to mistakes in the decision-making or inaccurate information sources (e.g. RS, RL and PAR) are frequently received. The number of issues pertaining to the information management and its relationships with the operation and strategic management were highlighted by senior executives, executives and clerical staff at the operational level. Each group of respondents viewed the informational issues from various perspectives of its management and use. The general views among the respondents of the organisational information sources are that they are not kept current, leading to missing data and uncoordinated information sources. The availability of information sources is confined to certain groups and not shared with other departments that may require particular information. As a result of these shortcomings, operational decision making itself is also considered to be problematic by many senior executives and executive level staff in the organisation. The Director of Administration admitted during the interview:

"Information handling such as filing systems, and personal record information is the most problematic area in the organisation. Information is out of date, inaccurate, missing, and incomplete. An effective information management system for managing the personnel in the organisation is something that we crave for."

In an effort to improve the situation, he said:

"I have brought up and expressed this information handling problem several times in meetings and when talking to personnel executives but so far I have yet to hear any solution to resolve these problems, nor am I in receipt of any favourable response from them on these matters".

Moreover, the use of computers (PCs) in the information handling and management activities is still not widespread. The use of computers is mainly confined to word processing aspects of administrative work such as writing correspondence, preparing reports and listings. Electronic and manual typewriters are still in use for some administrative and information processing tasks. On a number of occasions, staff expressed great expectation on various advantages that can be achieved if computer technology is introduced into their daily work. However on its current standing, word-processing seems to be the only viable option, while data processing will be something for the future. The lack of development in computer-based data processing is mainly due to the lack of research and shortage of expertise among the MRA staff in data

processing knowledge or programming languages. In addition, the stringent rules and procedure in Brunei public service means that computer-based 'hardcopy' format other than the traditional 'card' based records is still not an acceptable form of official records required for processing various administrative decisions. This situation has also been a source of discouragement to organisation which try to be innovative in trying to come up with practical solutions to some of the administrative issues. Moreover, the Management Service Department (MSD) and the Department State Store and Information Technology (ITD), which are the government central bodies responsible for the development of effective management and IT respectively, have so far failed to come up with any information system solution to help lessen the burden faced by most organisations in Government.

The issues faced by the information handling and management at the MRA are depicted in Figure 5.7 This shows an hierarchy of issues with 'information standards' at the top to reflect the importance of consistency. The rationality for this figure is based on the understanding of the interrelated nature of the issues faced by the MRA in terms of its information management. It also signifies a situation whereby these factors are vital to be fulfilled, as perceived by the stakeholders, without which things can go utterly wrong with the whole system of information management. Each of the building blocks shown in Figure 5.7 will now be described in more detail.

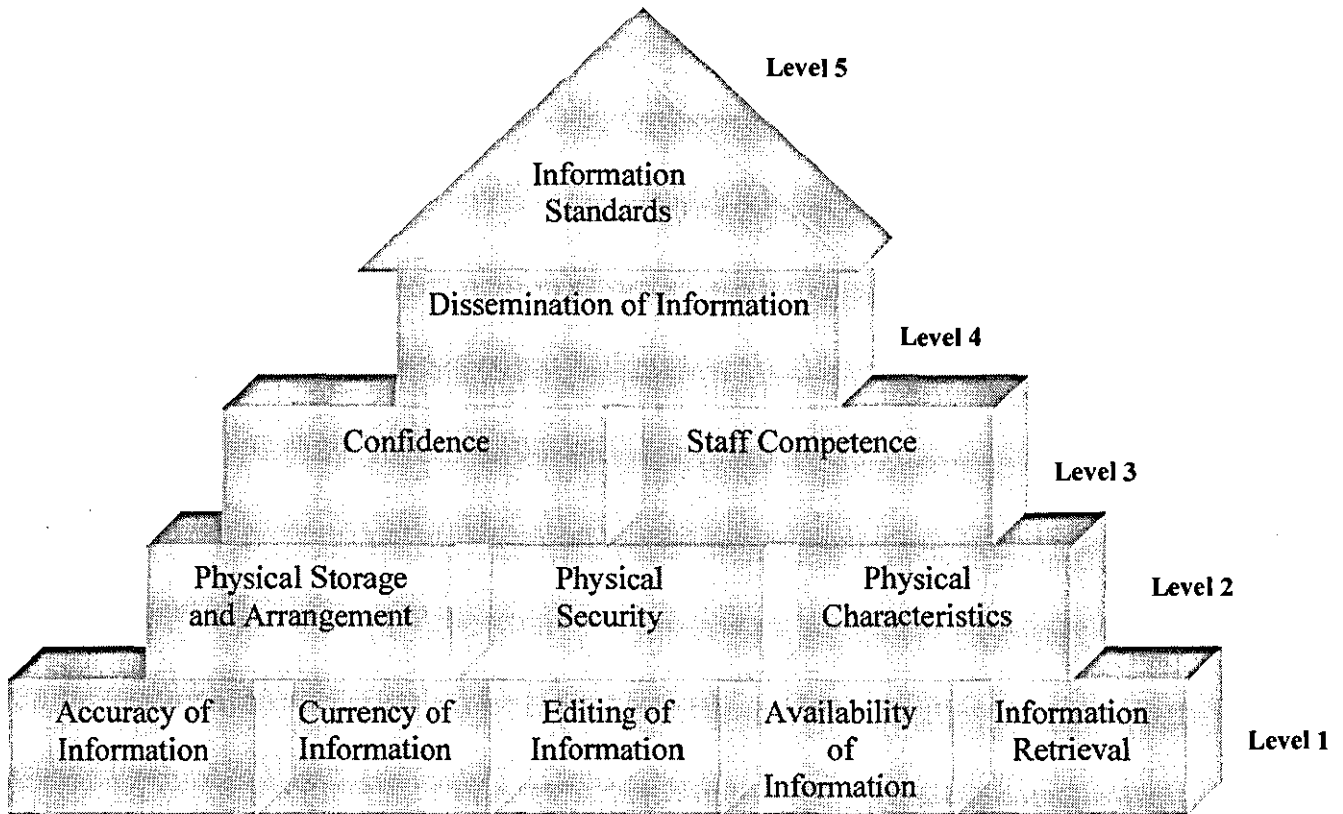


Figure 5.7: The Information Management Issues of the MRA

Level 1 (a) Accuracy of Information

The inaccuracy of records can cause wrong decisions and the miscalculation of entitlements that may lead to queries from the authoritative body such as the Department of Treasury, Public Service Department and Audit Department. This may also be due to carelessness and ignorance of the personnel management procedure on the part of executives who are responsible for certain decisions. There are also cases where information updated in the records are duplicates resulting in queries from the appropriate authority. Responding and resolving queries from the Audit Department and Treasury Department is considered to be the most excruciating task in dealing with personnel management. Some of these queries / issues date back many years and sometimes the officers and staff queried are not working with the departments/ministry anymore. When these matters arise, personnel staff have to sift through old documentation and closed files from the disorganised storeroom. The problem

with this information is that it is not easily traced as most of the information is lost and not properly stored. Executives and clerical staff who deal with contract staff, salary increments, and leave management often deal with all queries pertaining to their specific task.

Level 1 (b) Currency of Information

Information must be current if it is to be of any use. It is a central resource for decision making for top management, senior executives and executive level staff of the MRA. One of the drawbacks of the current operational and strategic environment of the MRA, is that the information used for decision making is not kept up to date. This leads to inefficiencies and inaccuracies of decision making among senior executives and others further down the line. A linked problem and issues faced by clerical staff in charge of updating records is keeping the information and records complete and accurate. Among the most woeful sources are the RS, and RL, which are vital for several decision-making activities. This situation is happening too frequently and executives have to refer to information in personal files in order to obtain accurate details before making any decisions. The inability of the organisation to provide up-to-date information has been attributed to a number of factors such as multi-tasking of those in charge of updating this information, the single nature of the information resource, carelessness and ignorance of staff in not communicating new information to those in charge and the ailing information flow systems. These factors have an adverse effect on the organisation processes and its information sources such as the unreliability of information sources, delays in decision making, erroneous decision-making, lack of confidence towards information, and queries from the authoritative bodies in government. It has caused delays in processing retirement and end of contract applications. It also causes inconvenience to those processing housing loans and biennial free passages as information had to be updated 'artificially' to enable the process of application to progress.

Level 1 (c) Editing of Information

A number of issues on information editing have caused a great deal of inconvenience to the processing of personnel information. The issues on information insertion and deletion are basically related to the way records and listings are amended when processing the information. Current practices of updating the information sources are mainly done manually.

Editing details using a pen or pencil and the use of correction fluid in case of deletion of information sources are normal. The physical characteristic of the personal record is another unfavourable feature of these information sources. The thickness of the paper used as personal and leave records are partly blamed for the inconveniences. Adding details on to these records can only be undertaken using a manual typewriter. In addition, any details or information that are updated into these information sources has to be arranged according to the date of its occurrence. Any deletion and insertion of preceding information is very time consuming. Information had to be deleted using rubber eraser as no correction fluid is allowed on the RS and RL. The issues pertaining to the editing of the information sources are experienced among staff responsible for updating these sources. Some of the staff at this level of management could not understand why the MRA has not been able to change the current paper-based records systems which has been used since the fifties to a much more flexible system conforming to current technological development.

Level 1 (d) Availability of Information

Adequate information needs to be made available in order for the decision making (and subsequent actions) to be made effectively. However, the current organisational information resources are prone to be lost or misplaced. The misplacing and unavailability of the organisation's information sources has consequently resulted in other related issues pertaining to delays in decision making and non responses or inaction on certain processes by executives of the personnel management. These dilemmas are blamed on the integrative and single nature of the RS, the carelessness and ignorance of staff in handling new information and communicational issues faced by the personnel management of the organisation as a whole. The clerical staff responsible for the storing of information revealed that the issues are integrative in nature stemming from various sources of the organisation.

Information must be adequate for the needs of decision making. In the MRA there is evidence that executives are making strategic and operational decisions based upon informal sources. This is the case as the information model is incomplete and does not cover the needs of all personnel. Further information is required such as the extension of services listings, the current employee listings based on divisional and appointment categories, the current listing

of daily rated, contract staff, the current retirement listing, staff contract expiry listings. Statistical information on personnel and records, and government policy document are also required by staff at the senior and executive level of the personnel management of the MRA. Lack of strategic information is another issue faced by the MRA. This is predominantly experienced by the senior executive level of the organisation as a whole. Information that is vital for strategic tasks of the human resource development management are either not available or it is incomplete. In some situations, vital information that is widely available in the organisation is not made use of. These situations have resulted in a number of contentious issues affecting the management of human resource development in the MRA. Among the information required by senior executives are:

- The current listings or databases of departmental staff who are currently undertaking graduate study either in local or foreign universities under the government In service Training Programme are not available at departmental level. It has to be requested from the RTPS in order to obtain the latest listings.
- The listings or database of staff who had undergone previous in-house training programme either organised by the MRA or the Institute of Public Service (IPA) are also unavailable. This listing is required by ministerial and departmental executive to avoid duplication of training of staff and be able to identify personnel who have not been offered any training programme. The requirement for listings is clearly expressed by many training executives of the MRA as a whole. It would also help in identifying suitable staff for future follow-up training and identify appropriate staff who may be able to fill suitable vacancies.
- Information about training programmes attended, needs to be made available in the personnel records. The lack of availability of such vital information in the records makes it difficult for executives to identify the extent of training that had been given to a particular individual. In addition duplication of training attended needs to be avoided.
- The need to design a computer database system for people who had completed an appropriate training programme is seen as paramount. It can assist in identifying suitable candidates for in-house and IPA Training Programmes.
- A complete listing or database of results of those who undertake the In Service Training study particularly related to the local In-service Training Scheme.

- The complete listing of employee's training needs or requirements reported in staff performance appraisal report in order to facilitate referral for the training needs analysis. Currently, what is reported in this document is occasionally used. In addition to individual training requirements, these reports revealed various kinds of personal qualities that each person possesses.
- A complete listing/database and index of contract staff detailing individual's personal information on a current place of work and contract expiry dates.

Level 1 (e) Information Retrieval

Information retrieval and indexes refer to the approach of storing, classifying, indexing, and numbering of information sources that are referred and processed. The MRA as a whole requires a systematic and efficient retrieval mechanism to retrieve information. Currently information resources are inefficiently retrieved due to the inconsistency and unavailability of indexes. Classification systems used are also known to be confusing and there is lack of standardisation from one department to another. In addition, manual retrieval is seen as a contributing factor to the systems inefficiency. Clerical Staff who retrieved this information in particular expressed their dissatisfaction with the current problematic nature of the information retrieval practices.

Level 2 (a) Physical Storage and Arrangement

Physical storage here refers to the actual place where the information resources are stored during their active, semi-active or inactive life cycle. This may also include the accoutrements that are being used to keep these assets, such as filing cabinets, work areas, and files. The current storage area for vital information resources such as files and records in the MRA head office is considered by some executive and clerical staff in charge of the information to be small and inadequate. Some of the active files have had to be put outside the work area and become visible to anybody who goes to the department. The situation is considered to be jeopardising organisation confidentiality. A similar situation is also happening at departmental level where the filing spaces are inadequate to accommodate all filing cabinets. This is particularly felt by clerical staff working at the DHA and the DIE. Filing cabinets are

also in short supply, and some of the files are stacked on top of the filing cabinet. The files in the cabinet are so tightly squeezed in, that shelf dividers cannot be used.

Meanwhile, the plight of closed or inactive files, which is another important source of information, is also completely ignored by the organisation as a whole. There is no proper storage for this category of file as most of these information sources are abandoned in the general storage area together with some unwanted belongings. These are neither arranged properly nor classified. Management is perceived by the clerical and operational staff to have failed to recognise the importance of these information resources.

In addition, the filing staff is increasingly having a great difficulty in filing information or correspondence that are in temporary files into its main file. This problem is blamed on their heavy workloads and multi-usage nature of the administrative and personal files. Currently there is a three-year duration of backlog information and documents on temporary files that have not been filed.

Level 2 (b) Physical Security

The physical security of the active or active information sources is paramount to safeguard the confidentiality of the strategic and personnel documents. The physical security aspect of organisational information sources is one of the areas that are of great concern to staff interviewed. Many feel that the lack of control has resulted in the information sources being lost and misplaced. The possible breach of confidentiality is always a possibility as the physical security aspects is constantly ignored by the management. There are no restrictions on the use and accessibility of these sources of information. They are unsuitably located and improperly supervised. These worries are expressed by some of the executives interviewed at the ministerial and departmental level.

Level 2 (c) Physical Characteristics

The physical nature and characteristics are also perceived to be a contributory factor to the problem of these information sources. The integration of personal information and leave information on one single document is one factor that makes it difficult to manage. The RS or

leave clerks staff do not have the liberty to update leave information onto these records if it is distributed out to other personnel for other purposes. As mentioned the physical features of the records such as paper thickness is one of the unhelpful features of the information sources.

Level 3 (a) Confidence

Confidence and trust among staff and officials is vital in any public or private sector organisation, as it will lead to a friendly atmosphere and create an efficient management mechanism for the organisation. The apparent lack of trust and confidence among officials and staff of the MRA towards those responsible for the information create an unfavourable climate of dissatisfaction and discontentment. Many executives and clerical staff at the DOA have expressed their negative perception towards their colleagues at the PMS particularly those responsible for managing the information sources. Some would prefer to borrow and update these records themselves rather than follow the normal practice of PMS staff doing the updating. Many opted to keep copies of any correspondence, working papers and notes related to the section in their own file rather than relaying the documents to the filing section to facilitate reference or future enquiries. Those responsible for the information management reject the criticisms that all the issues on currency, availability, insufficiency and the inefficiency of information resources are due to them. According to these staff, these issues arise due to a number of interrelated problems within the organisation and it is wrong to blame them alone.

Level 3 (b) Staff Competence

Staff and officials of the MRA are criticising each other for the inability to solve the shortcomings in the handling and management of organisational information. Senior executive and executive level staff are blaming clerical staff for their incompetence which caused the problem and lack of initiative to tackle the problem, while the clerical and operational staff are criticising their superior's passiveness and lack of ideas. They only know how to criticise but lack collective effort to improve the situation.

Level 4 Dissemination of Information

The incomplete nature and unavailability of personnel information which is vital for decision making activities is one the unfavourable characteristics of the management of the human resource development and training programme of the MRA. Ignorance and carelessness of departmental staff in handling the departmental human resource development processes are partly to blame. This was disclosed by the executive and the intermediate level staff at the RTPS. It has caused a great deal of inconvenience to the section, which is responsible for co-ordinating the MRA's training programme.

Level 5 Standardisation

Standardisation can be defined as adopting or conforming to certain orders or level of work practices including information handling and management activities, decision making, job descriptions, rules and regulations, and communication and distribution of information resources of the organisation. Lack of standardised guidelines of the working practices are one of the main issues faced by staff and officials of the MRA. The organisation does not recognise the significance of information management standards for the organisation as a whole. Top management only seems to be concerned with the operational and strategic decision-making aspect of the organisation, without much care being given to the information that supports it. They take it for granted that information management is easy and that one or two inexperienced clerical staff with no guidance can do the job. In addition a number of the government rules and regulations in personnel management are inconsistent with the needs of the department while some are inconsistently applied.

5.4.7 Finances and Budget

The financial restrictions imposed by the government of Brunei to create new positions at departmental or ministerial level mentioned earlier (Section 5.2) in this Chapter, have created a management vacuum that has stagnated organisational development. Currently, the MRA is facing great difficulty in creating new positions or additional posts needed by respective departments. In some circumstances departments have to endure a very restrictive staffing level to undertake various projects and management of change effort. Departments have to identify their priority in terms of projects or plans to be undertaken to accommodate

prevailing constraints. Creating new posts is one of the toughest hurdles identified by top management and senior executives at the ministry and departments as this is outside the MRA jurisdiction. At the current time, the financial climate makes it difficult for the MRA top management to apply for additions to staff and personnel. A very strong case for any new expenditure has to be provided by departmental management. Moreover, strong support and understanding from the ministerial top management is an important requirement for the application to succeed.

The National Budget Committee at the Ministry of Finance decides on all new proposals for additional staff in the MRA annual budget. If however, MRA wish to create a new scheme of appointment, it will have to be decided by the Salary Review Committee of the PSC. At departmental level, application for the annual budgets requires concrete proposals to be submitted to the MRA's Budget Committee. The Committee is chaired by the PS, who will then present all the Ministerial and departmental proposals to the National Budget Committee.

Small allocations of money for the in-house training programme are another major financial constraint in the management of human resource development (HRD) of the MRA. The current annual budget of B\$40,000, has been allocated to run the Ministry's in-house HRD programme and this needs to be shared among the seven departments within the MRA. This figure is totally inadequate as any training programme that includes a foreign lecturer can cost up to 33% of the total budget.

Senior management overcome the current budgetary constraints by using other departmental budget titles, which are seen to be viable to be used for this purpose. Currently, only two departments have this kind of allocation, namely the PDI where they have various expenditure codes to invite religious speakers or intellectuals; and the IPI where they have special budgets under general titles that can be used for conferences/training programmes. However this approach is not always a good option as it directly affects departmental planning and can only be used for courses that are organised jointly by the departments concerned, or courses or seminars that are organised for the benefit of the whole organisation.

Departments that do not have special expenditure on human resource development have to apply to the MRA for a portion of the limited ministerial in-house HRD budgets if they plan to organise any training programme for their staff. This situation is very difficult for some departments, as their 'specialised' staff professional development needs cannot be fulfilled. Moreover their needs may not be shared with other departments. For example the DMA may need to improve staff public speaking methods, or the department may need to organise workshops for the *Imams* (mosques officials) which are not available in other departments. This situation can hamper efforts to improve the knowledge and professionalism of Mosques officials, teachers, religious education officers and personnel of the DSA.

5.4.8 Task delegation

Too much work or long job descriptions are one of the main areas blamed for inability to undertake a number of personnel management tasks properly. This was well described by many within the rank of the clerical and the operational staff of the organisation as a whole. Part of the situation may also be due to shortages of staff in many areas of personnel management in the organisations. The budget restrictions enforced by the authority due to the current economic situation are also mentioned as a contributing factor to the problem. This shortcoming is seen as one of the root causes of the chronic problem to the organisation's information handling and management activities. In addition, multi-tasking or generalised job specifications and the lack of initiatives on the part of those responsible are also mentioned. One interesting issue is the current trend in giving more tasks to those who know how to use computers which causes discontentment and displeasure among this group of personnel.

The role and responsibilities of the staff and officials in the RTPS are acknowledged to be varied. Their multi-perspective role in organisational management of training and research, coupled with the shortage in number of staff to handle these responsibilities, makes it difficult to set priorities. While at the departmental level with the exception of the DIE, there is nobody specifically designated to undertake the task of identifying and managing the human resource development. DIE's training unit is also in charge of managing the welfare of the religious education scholarship award for students undertaking an undergraduate degree in a number universities overseas (Malaysia, Pakistan and Arab Republic of Egypt).

Approximately 100 students are currently given scholarships. The complexities of this task are known through interviewing those executive and clerical staff designated with the management of training.

The organisation or structuring of the human resource development responsibility within the wider context of the MRA is an important requirement of the management. The lack of a training and research section at the departmental level has caused great difficulty for the RTPS to co-ordinate the training programmes and research of the organisation. Requesting for departmental strategic information on personnel and training has been very difficult. Moreover, there is nobody at the departmental level except in the DIE, who are fully accountable towards the management and analyse training needs full-time. Responses from departments for vital information such as reports or analyses about a particular HRD matter are very slow to be received. The task of handling departmental training, and organisation planning at the departmental level are directly under the responsibility of the Directors. There is no designated official with the task of managing and looking after training specifically. The lack of this specialised section in the departmental organisational structure needs to be in order that the training and strategic planning of each department be given proper attention.

5.4.9 Job Satisfaction

Job satisfaction provided a major input into the empirical research study. The level of satisfaction among the organisation's community is very mixed and has brought up a number of interesting points. The level of job satisfaction can be significant towards an organisation's effectiveness and efficiency. However, in the current situation delegation and job dissatisfaction led to low self-esteem and loss of morale among the workforce. Moreover job satisfaction seems to correlate with the pattern of MRA's organisational structure. There is a relationship between job satisfaction and position in the organisation:

- As one moves up in the organisation hierarchy, satisfaction increases.
- There seem to be important differences between the satisfaction level of persons in line and staff positions
- Manager job satisfaction tends to increase as the number of subordinates supervised increases.

Almost all the senior executives, including Directors and Deputy Directors interviewed are basically satisfied with the current organisational arrangement and individual responsibilities. The only snags are the limited decision-making facilities and the various problems of communications within the organisation, described earlier (Section. 5.4.5) in this Chapter. Some decisions are made with great alertness avoiding the risk of censure from top management. The personal communication and relationship between departmental top managers and executives are generally very cordial. Every head of department expressed the desire to acquire adequate level of staffing in their department based on their department's role in the MRA. Staff shortages seem to be one factor that is dominant during discussions with departmental Directors and senior executives. Senior executives felt that additional clerical staff would enable them to do their personnel management job effectively. However, they all seem to understand the root cause of the situation and they know that everybody in the organisation is having a hard time when considering the recruitment issue.

Job promotion prospects of officers graduating from non-Arab Universities, particularly from the United Kingdom and the University of Brunei Darussalam, caused discontentment among these group of executives. Many feel that management overlooked their predicament when deciding on a promotion. The organisation is seen to be biased towards the so-called Azharian. The 'Azharian' executives or those executives who graduated from the Azhar University, Cairo, seem to get promoted quickly. These staff are the most favoured group among the staff of the MRA, and they are usually 'offered' a promotion after reaching five years of service with the government. Some were promoted even before confirmation of their position. Top management will seek ways to promote these personnel at some stage of their service with the Ministry. For non-Azharians, promotion is based on vacancies and rarely are they given any priority.

Meanwhile, staff who graduated from the IPI, are mostly given a skilled operational role in a number of administrative tasks of departments and the Ministry. They expressed the opinion that their job descriptions are too clerical and do not conform to their basic academic qualifications. Their basic qualifications are mainly on Islamic knowledge of Syariah (law), Usulludin (theology) and Dakwah (propagation). Too many clerical tasks such as word-

processing, routine information collection, and lack of challenging responsibilities are not exhilarating enough for these staff and have caused dissatisfaction. Many feel that they are more suited to teaching or counselling jobs and can utilise their basic Islamic knowledge. In addition, some of them felt that they are a by-product of pioneering higher education experiment of the then new institution (IPI). They were among the unlucky group not to be offered a scholarship to further their study abroad. It would have changed their present position and job prospects if a government scholarship had been awarded upon graduation.

There were hesitations from clerical staff to the question about job satisfaction. Some appeared unsure and many gave an 'its okay' response. Long job descriptions are one of the main causes of dissatisfaction. These are quite significant among those who handle and update personnel and establishment information, who on the other hand are also responsible for processing applications and doing word-processing work. One senior clerk at the Ministry complained that her workload was unbearably high and as a consequence she was very depressed. She is solely responsible for all the Ministerial establishment information, preparing vacancy information and processing recruitment and confirmation of appointment information. Management was perceived to fail recognised the situation and her complaints seems to have been ignored. Sometimes she had to take home office work and taking her leave entitlement is not always possible due to work demands.

Filing staff is another group of employees whose morale and level of satisfaction is very low. These staff acknowledge that they are always being criticised for the delay in correspondence, missing files, missing information, and uncoordinated written communications. Filing staff feel that all the blames and accusations are unfair and responsibilities for the problems should be shared among all users of the filing system. They do their job to the best of their ability. With all the pressures of work from complaints, blame, and negative accusation which they face every day, these filing staff cannot avoid taking these pressures home. These insults and imputation are not only coming from executives but also from other 'outside' staff and personnel that deal with the top management through the filing sections. The other annoying factor of working in the filing section is that nobody will take over their place when they are on holiday. They usually know that a lot of work will be waiting for them on their return from a long vacation, consequently they rarely take a holiday.

The multiple nature of work that staff at departmental level have to do, is one of the hindrances in achieving efficient working practices. There is no work specialisation or compartmentalisation. All clerical staff on personnel and financial management is collectively responsible for the administrative executives and the clerical staff. They process applications for leave, extension of services, pension, salary, bonuses and gratuity. These personnel are also responsible for updating the staff personnel records and word processing jobs. Some had to act as confidential clerks, typing working papers, in addition to basic clerical work. While a number of them are responsible for the filing systems. The only difference between these staff is in terms of who specialises in which group of personnel. Many felt that they had to take each task at a time and work to the best of their ability.

Lack of job rotation among executives and clerical staff is one element that caused ignorance about activities and tasks undertaken by other sections. Staff often do not know the needs and requirements of other sections. This is perceived to be one of the drawbacks of personnel management in the MRA. Being confined or condemned to one particular area of responsibility for a long period of time is how some individuals see themselves within the bigger picture of the organisation. Another perceived shortcoming of MRA management is lack of proper introduction to staff about the organisation and their work environment. Most learned about the organisation through 'self-acclimatisation' in the organisational environment. Such lack of understanding of the needs of others has caused disintegration among departments and sections within the MRA. Staff at sectional level seem to work on their own without having greater concern for the needs of others. Information processing is widely known as slow and it is not co-ordinated properly and inconsistently shared among sections of the MRA. Clerical staff are blaming each other for the issues raised on information management and process. Staff are perceived to have a feeling of exclusivity towards their job and are not concerned with what others are doing.

5.4.10 Attitudinal Aspects

Resistance to technological and management changes are common among the so called 'old order' group of personnel in the MRA. These points of views were expressed by a number of the senior executives interviewed at two departments of the MRA. Although the majority of

staff and officials within the MRA are willing to accept and support technological changes and management modernisation in the organisation, these groups have set a bad example and bring about a negative mentality among staff and personnel of the MRA. They resist changes and are unwilling to co-operate in the MRA projects. These 'old guard' try to make irrational comparison between the current management systems and the management systems of twenty-five years ago. Their negative mentalities can be summed up as old management styles that are still applicable and require no change. They perceive that technology and modernisation of management techniques are inapplicable to the Brunei situation. Even though these groups are small, they form some of the most influential figures in departmental and Ministerial decision making activities and are still vital for the success of projects.

Negative attitudes to work and being inflexible to instructions is another prevalent feature of the 'old order' group of staff. They are always inflexible in their work and are often unwilling to do other jobs that contradict their job descriptions. They lack responsibility and moan to do jobs that are alien to them. These groups are considered passive, careless, negative, and lacking initiative. They are received as unwilling to accept changes. They also refuse to learn new technologies such as computer-based skills and they feel that computers are for the younger generation only. An interesting statement from one clerical staff:

"The more I learn about computers the more work I have to endure, why should I learn it?"

They are unwilling to co-operate if requested to take over temporarily difficult jobs such as contract, filing and increments and salary section. Their favourite statement "*this is not my job*" are bad for the organisation. Senior Executives have to use some diplomacy and persuasion for them to be shifted to other positions either on a temporary or permanent basis. They also need to use a degree of politeness to ask staff to fill up positions that are vacated due to leave.

Adding to this dilemma of attitudinal negativity among the administrative staff is the irresponsible attitude of the office assistants as experienced by some executives. Their inconsistency in collecting files that have already been acted upon causes backlogs and further supplements the already woeful situation in the organisational information handling

activity. They are only reactive, tend to complete tasks at their own pace, and have little recognition of the importance of their tasks to the organisation. The situations are dominant in most departments in the MRA. Their ineffectiveness is detrimental to the organisation's communication system that has caused delays to many actions and decision making.

5.4.11 Work Culture

The organisational working culture has its good and bad effects towards organisation management. From a personal viewpoint, nearly all government departments seem to have a similar working culture that is vastly different from that of the public sector. It is a well known fact that working in the Brunei public sector is far more flexible in terms of working practices than those working in the private sector. These may be in terms of working hours including tea breaks and lunches, working practices, personal and work attitudes, family life, and so on. People will be able to deal with family life and social life while at work. While some are able to do business dealings in the comfort of their office where friends and colleagues are their customers. This flexibility may be one of the reasons why the majority of the populations are attracted to work in the public sector.

Negative working habits and practices such as lateness for work, early departure, and long coffee breaks are dominant in most organisations in Government. The MRA is not an exception. Top management admits that such practices and habits are difficult to stop. According to the Director of Administration:

"At the end of the day it all depends on the management whether to succumb to these cultures and make it an acceptable norm to the organisation, or enforce certain control to it, in order to halt these negative culture to become cancerous to others in the organisation and effect organisation efficiency and effectiveness".

This has caused a great deal of concern among the top management in the MRA. It is becoming a trend for some staff to arrive for work half an hour within the fixed time and leaving for lunch at 12.00 p.m. which is fifteen minutes before the permitted time. Another negative working culture practised by many government staff is the taking of a long morning tea break. A break that should have been taken in a time period of half an hour will usually take between one to two hours. There are times when these staff take the chance to do their

morning shopping. This kind of negative attitude is not only notable among the operational staff but also among executives in the MRA as a whole.

Supplementing the negative long 'coffee breaks' culture, there are increasing occurrences of staff and personnel who had to leave their work in between working hours to sort out family matters. The situation is very significant in many areas of management in the MRA, and top management is perturbed by these negative trends. This situation is particularly predominant among that staff who have a young family and those with many children. It occurs among staff at all levels be it at executive or operational level. This is brought about by the conflicting dual education systems of secular and religious schools timetable. The current cutback in school transportation means parents have to be responsible for all child transportation. Parents have to go out during office hours to collect their children. The government has yet to find a solution to this issue.

5.4.12 Staffing

Staff shortages are prevalent in many areas of the organisation. Adequate number of staff is undoubtedly a very significant factor for the success and efficiency of organisational processes. Reasons given for this shortcoming are budgetary constraints, misconceptions and misunderstanding of the top management towards departmental needs. The unavailability of administrative professionals such as the Administrative Officer (AO), Planning Officers and the limited number of clerical and operational staff are also perceived to be the reason for the various inefficiencies and ineffectiveness of a number of organisational elements and task functions. Staff shortages are experienced at various executive levels within the MRA.

Efforts to introduce an administrative post into the MRA's human resource budget has been tried several times, failing on each occasion. The PSD has an inadequate supply of AOs and cannot provide organisations that does not have this post in their departmental staff budget. One senior executive said:

"The importance of acquiring such expertise for the benefit of managing the organisation as a whole by those who are competent, knowledgeable about organisational management, familiar with government rules and regulations, and able to speak the same language with others in the trade, needs to be recognised. The teaching professionals should be placed where they belong to help build up the sagging religious, education system in the country".

Moreover, the MRA has limited choice, in providing the current available human resources to attain specialisation in management and training from foreign or local universities, due to their incompetence in English language. Although some came from English language stream schools with Cambridge G.C.E 'O' and 'A' Level qualifications, they tend to disregard the significance of the language upon joining the teaching profession.

Not all those who hold executive level posts have management knowledge. Only the Permanent Secretary (PS) and Director of Administration come from a management background. Both hold a masters degree in Public Administration from Harvard University, in the USA. The majority of departmental Directors are from a religious education background. They learned their management trade through their working experience as they rose through the organisational hierarchy. The training programmes which they attended are also helping them to cope with the management problems. One of the Directors admitted that his knowledge of the government human resource management policies is very limited and that there is an urgent need to acquire the management knowledge to effectively monitor the personnel management aspects of his department.

The small allocation of operational and clerical staff at departmental level, coupled with the difficulty in acquiring additional specialised staff provides a major stumbling block for the achievement of desired efficiency and effectiveness of departmental management. For example, with a manpower of 27, DHA finds it difficult to cope with its current heavy responsibilities. Efforts to increase the number of staff in the department have been fruitless. At the IPI the shortage of academic staff is one problem that is hindering the progress of the academic programme. This shortage of academic staff in many subject areas is very significant in this institution of higher religious studies due to resignations and transfers. More lecturers are needed to fill up vacancies and to teach a number of specialised Islamic subjects offered in the IPI. Additional problems will arise when these lecturers take their long leave entitlement, particularly their annual leave and end of contract leave. Though some alternatives are available such as requesting other lecturers to take over the period of the

absent lecturer and by encouraging lecturers to take their leave during the semester breaks, such problems will still persist.

Staff and officials who are knowledgeable in strategic planning and human resource development discipline are also needed by the MRA. Top management at the DOA feel that there is an urgent need to acquire these professionals in order to plan and identify human resource development and offer a better perspective of the training and planning of the Department and the MRA as a whole. The unavailability of highly qualified executives to look after the human resource development (training) management in the MRA is seen as one of the elements for the failure to achieve effectiveness in human resource management task. Meanwhile, most departments under the MRA (except the DIE) have no specific delegation of task given to official and staff, who will act as training personnel. This has caused great difficulties to executives at the RTPS in co-ordinating training matters or issues affecting particular departments.

Staff shortages are significant in many areas of personnel management in the MRA. It is perceived by many to be one issue that adds to the current organisation's information management problems. The budget restriction enforced by the authority was one of the reasons for the failure of the planned increase in manpower. The failure of management to recognise the importance of adequate staff in managing organisational information resources is a contributing factor. The limited number of staff responsive to this vital information is a reflection of a difficulty in achieving maximum efficiency, efficacy, and effectiveness of personal management. This may also reflect the ignorance of top management on work processes at this level.

5.4.13 Politics

One of the definitions of politics in the Oxford Concise Dictionary is:

*"Organisational processes or principles affecting authority, status, etc."*⁴

The above definition about organisational politics in the context of the MRA is relevant. The politics of the organisation usually refers issues involving the organisation's executive management and the current government's policy, planning, and finance. It is one of the dominant topics of discussion among top management and senior executives of the MRA.

These political issues that are currently taking place in the MRA have a direct effect on the planning and management of the organisation. The situation is seen to be undermining the authority of the organisation. The situation is also damaging to the government image that advocates the concept of *Muzakarah* (collaboration and co-ordination). Some of these issues are also considered as unwanted distractions, which the organisation as whole can do without. Some of these political issues are new, while some have been prevalent for several decades. It is also connected to one of the important management aspects in any organisation and that is finance.

The relentless effort of another government ministry to unify the religious education systems with the secular education in Brunei Darussalam is the most significant policy issue facing MRA. This integration is one of the long-term objectives of the Ministry of Education (MOE). The MOE saw the importance of having the two systems under one administration in order to facilitate its management, control, and monitoring of the overall education system of the country. The political and power squabbling between the two government ministries has been going on for nearly three decades. The MRA on the other hand, through DIE, had been strongly resisting the idea of combining the religious with the tertiary education for several years. Although a committee was set up by the Government to look into these matters in 1979, the outcome was inconclusive. The combining of the two education systems is far from being a reality. Another national education issue between these two government ministries is the proposed 'hostile take-over' of the Institute of Islamic Studies (IPI). At the moment, IPI is part of the MRA. It has been mooted that it should be part of Universiti Brunei Darussalam which is part of the MOE. This issue has yet to be resolved amicably.

5.4.14 Infrastructural Aspects

The multi-functional nature and expanding role of the MRA together with the increasing acceptance of the system in government and community from education, economy, banking, spiritual and legal responsibilities means an increase in requirement for the infrastructure and accommodation for the organisation as a whole. The housing and placement of some of the MRA's departments in a commercial building is damaging and undermining the image of the

MRA as a respected institution in the country. In addition, the current increase in population and the opening of new towns and villages means that more religious schools are needed.

The housing of the DHA, DMA and DSA at the Athirah Building is a major embarrassment to the concerned departmental Directors. The Athirah Building is a shopping mall located in one of the busiest business districts in Brunei. The DHA is worst affected by this unfavourable working climate, as it is located on the same floor as a commercial health and beauty salon. The departmental management was up-front on this matter, as they blamed the ministerial top management for being 'short sighted' in choosing this building.

5.5 Summary

The work presented in this Chapter forms the basis of Stage 1 of Checkland's SSM, a description of the problem situation unstructured. It can be seen that the issues can be classified as operational, strategic and communication. The information handling activities and processes of personnel information are also systemically interconnected and interrelated with another section in the MRA. The other feature of the system described is that it exhibits integration and cohesiveness of personnel management and the wider task functions of the MRA. This means that a system and its subsystems must be regulated, evaluated and adjusted as they operate, or else the entire system ceases to function effectively. A personnel information system within the personnel management of MRA produces various types of information in order to make possible the fundamental organisational function of strategic planning and managerial control. In the next Chapter, Stages 2 to 5 of the SSM will be discussed, comprising the rich picture depiction of the problem situation and the so-called root definitions that describe the human activity system to be investigated.

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- ² Luthans, Fred. *Organisational behaviour*. 5th ed. New York: McGraw Hill Book Company, 1989. p. 506.
- ³ Martin, John. *Organisation Behaviour*. London: International Thomson Business Press. 1998. p. 230.
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Chapter Six

System Intervention: Modelling Human Activity Systems

6.1 Introduction

The organisational structure, processes and problem statements that were described and expressed in Chapters 4 and 5 highlighted the personnel management environment and the unstructured problem situations in the MRA. The many issues described range from strategic to operational including attributes relating to decision making, information handling, storage and retrieval, budgetary and financial issues and those that impact on the routine work of individual. It was also descriptive of issues relating to human activity including attitudes, individual adeptness, work culture and professional demeanour. The situations portrayed by the interviewees indirectly divulge a number of issues and shortcomings in a number of areas within personnel management systems in the public service in Brunei Darussalam including the responsible body or the secretariat for deciding on a particular matter. The information gathered and issues described in Chapters 4 and 5 contribute to the first stage of the Checkland's Soft Systems Methodology.

This Chapter will investigate and highlight Stages 2 to 5 of the SSM regarding the problem situations of the MRA. It starts with a rich picture, the second stage of the SSM, that depicts the problem situations of the MRA in a condensed 'cartoon'. This helps in structuring the problem situation conceptually and analysing for consistency and completeness. On this basis one relevant system, which aims to produce an insight into the situation under study, is then outlined. It represents a choice of view of the situation from amongst the several which have emerged from the first two stages. The root definition Stage 3 of SSM, is a hypothesis or statement containing various elements to facilitate wider understanding of the problem situation, which is likely to lead to feasible and desirable outcomes. The relevant system defined will produce a conceptual model (Stage 4 of the SSM) which is a notional system containing a minimum set of activities that must be present to carry out the transformation defined in the root definition. The insights gained from the 'systems world' are then compared and tested against reality. A major question in relation to each element in the conceptual model is whether such activity exists and if so, in what tangible form is its existence. This stage of analysis is to identify areas

of change that the culture of the organisation will support and will yield the desired improvement to the process of transformation.

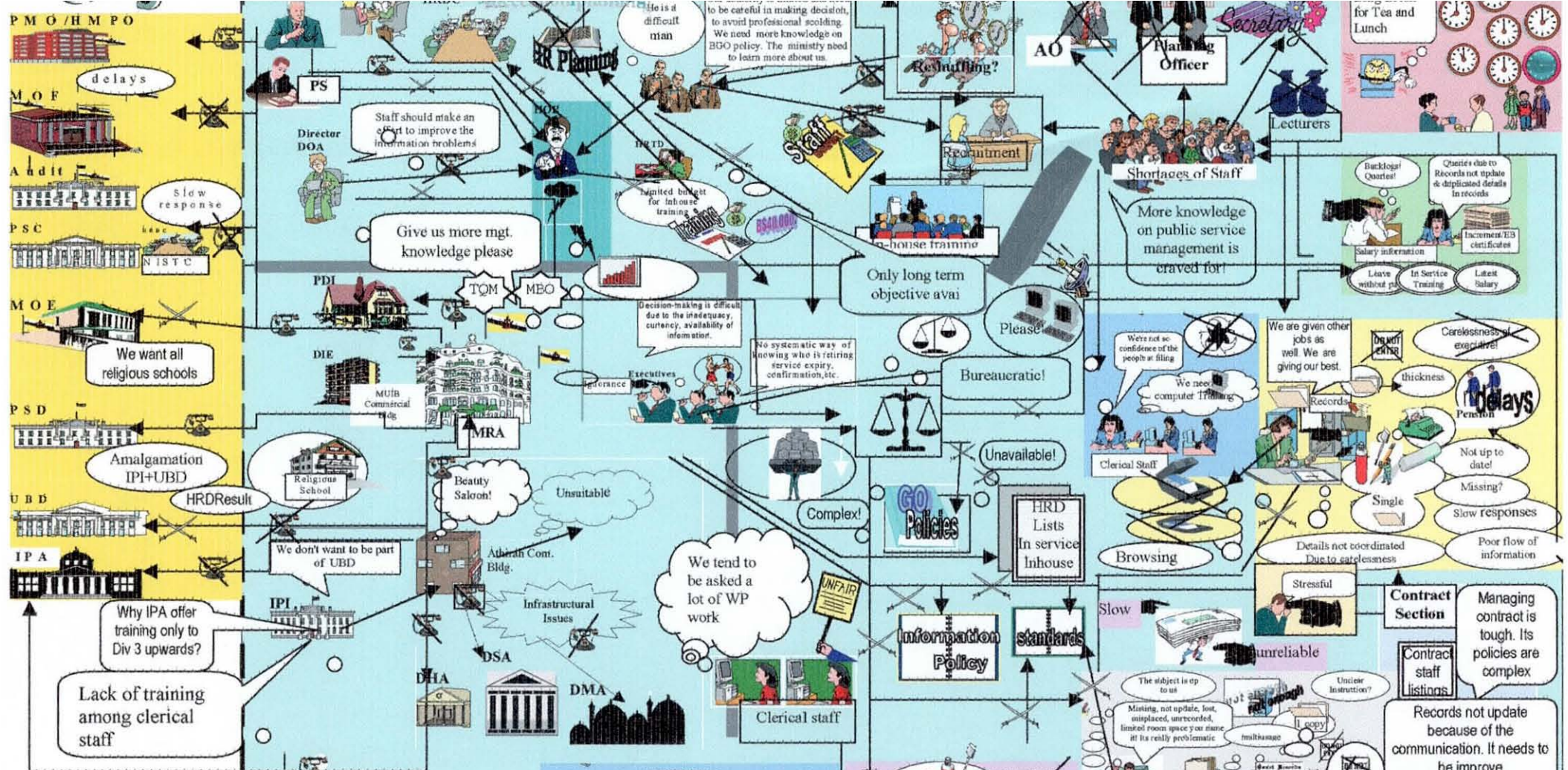
6.2 Rich Picture

The data collected from the empirical study is represented in the rich picture to depict and summarise the problem situations and convey a systemic understanding. This rich picture is a pictorial caricature of the organisation and is an invaluable tool for helping to explain what the organisation is about and how various parties view the situation and what constitutes the problem 'domain'. Checkland and Scholes¹ emphasised that creating a rich picture:

"...is an efficacious way of recording the finding-out phase because relationship and interactions are more briskly captured in pictures than in linear prose. However, the fundamental requirement is to gain a discussible appreciation of a problem situation; pictorial representation is simply one means of doing that, which has been found useful. But it is not an axiomatic requirement".

In the first instance a number of rich pictures are drawn representing issues faced by various segments of the MRA and can be seen in the Appendix A6.1 A6.2, A6.3 and A6.4. These rich pictures illustrate the many issues at a 'lower resolution' view of the problem situation which currently affect the MRA as a whole. These representations delineate the issues faced by the chief executives, senior executives, executives, and the operational and the clerical staff of the organisation respectively. The key guide for this representation is shown in Appendix A6.5

However, due to the segmentation of above 'rich pictures' by the category of staff, it is inadequately systemic, even though it illustrates the multi-perspectives and broad nature of the problem situation at the MRA. Thus a higher resolution level and systemic rich picture of the problem situation depicting a summary of important issues faced by the MRA is felt necessary and is shown in Figure 6.1. Unlike the above hand drawn pictures (in Appendix A6.1, A6.2, A6.3, A6.4), this new picture was drawn using graphic computer software (*Holy Cow 250,000 Graphics²*).



IP1 Graduates

Our task is not challenging, too routine!

Our qualification should have been better

We're an experiment!

Azharian

Promotion!

UBD Graduates

Why change, the old system is still okay

Computer is not for us. Its for the youth

"Old Guard"

"Old order"

The more I know about computers the more work I had to do

DO NOT ENTER

Not updated

Inf Not received

Establishment info

JVL Establishment inf

No collaboration Knowledges?

I have lots of other responsibilities in addition to this We had to take care at the time

Required by departments

DO NOT ENTER

The subject is up to us

Missing, not update, lost, misplaced, unrecorded, limited room space you stand at its really problematic

multitasking

I copy

Not by mistake for so long

Searching Closed file is boring

Inform about in CC and T-files cannot be find on time

Other jobs is also waiting

Duplicates may be created

They should notify us if they avoided it from last user Their ignorance can cause difficulty

It is abandoned

PSD Distribution records

Contradictions

Records not update because of the communication. It needs to be improve

Nobody takes over when we take leave

Details not received for records

The rich picture drawn is a reflection of the problem situation at the MRA and its departments and its interaction with other authoritative organisations such as His Majesty's Public Office (HMPO), Public Service Department (PSD), Ministry of Finance (MOF), University of Brunei Darussalam (UBD) and Public Service Commission (PSC). The 'dotted line' represents a 'flexible' departmental boundary while the continuous line indicates a 'fixed' ministerial boundary. The rich picture also reveals the political and work environment of the organisation. The human figures represent the stakeholders or the actors within the problem area. Some of them are drawn according to their distinctive features, such as those with academic dress to describe graduates, while contract staff are represented by a human figure with a safety helmet. Issues, concerns and needs are identified by think bubbles. Arrows and straight lines are sketched to show the interrelationship between the people (stakeholders) within and outside the MRA. Other symbols are used such as an open book to indicate Listings, policy documents to indicate standards, policy documents. Records (Leave and Personal Records) are depicted by 'open file documents'. A 'scale' is used to indicate decision-making activities, while a 'clock' indicates issues relating to time management.

The picture reflects a situation of the MRA which comprises various actors from the Minister, Head of Departments or Directors, head of RTPS (HRDT), Head of Personnel (HOP), executives, together with clerical and operational staff. There are also other supporting elements such as the communication, infrastructure, information, attitudes work culture, needs, job satisfaction, staffing, and budgetary issues. From the rich picture in Figure 6.1 a number of issues can be seen to be significant and these are shown pictorially in Figure 6.2 and discussed briefly below:

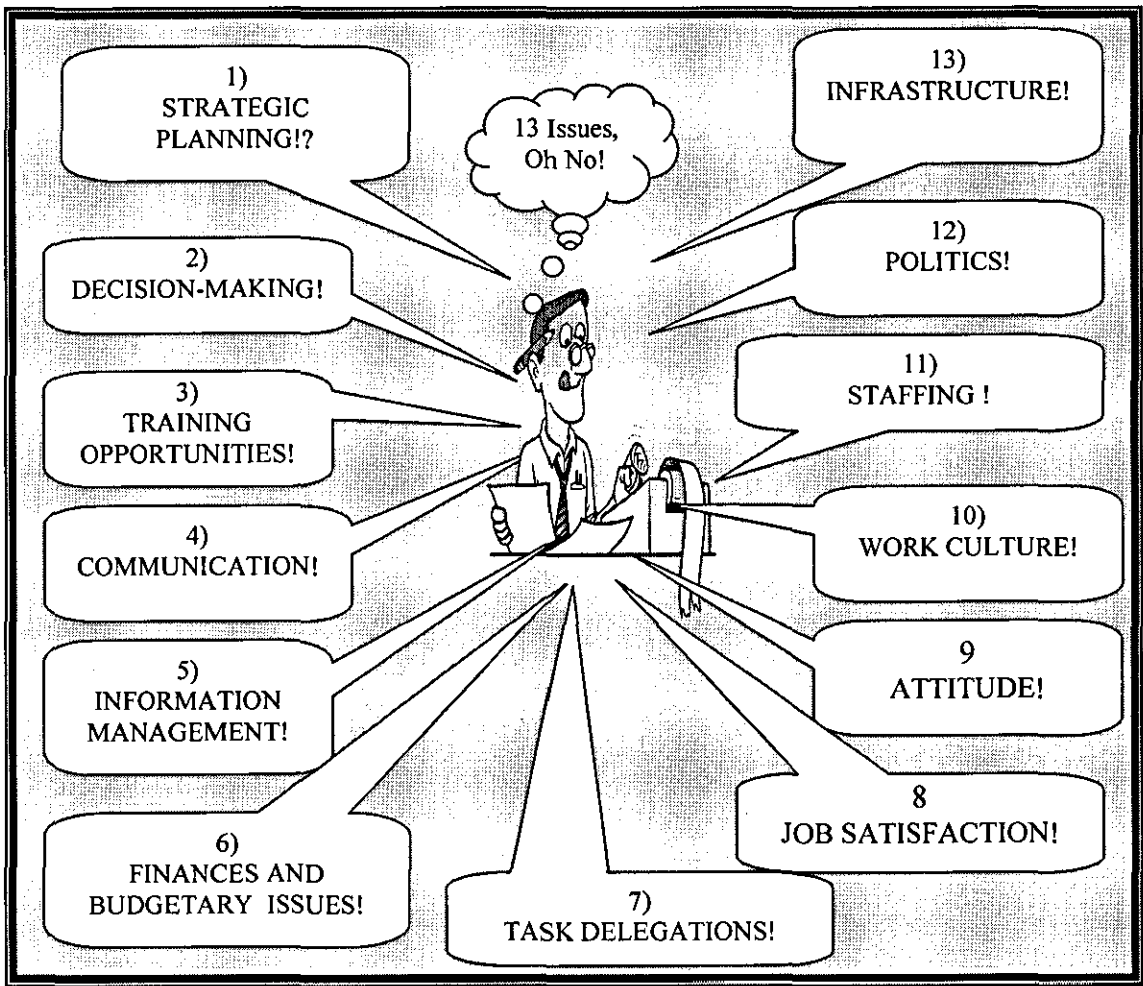


Figure 6.2: The Thirteen Significant Issues Faced by the MRA

i) Strategic Planning

The absence of effective strategic planning is an issue that has been mentioned as affecting the management of the MRA as a whole. The absence of such a plan is visualised by the drawing of a book encircled by the 'HR Planning'. The consequences of the absence is shown by a 'think bubble' and the 'crossed sword' linking the affected areas due to the unavailability of strategic planning. Among the areas affected are the training, decision making and budgetary areas, the arrow pointing to the 'crossed' figure of planning officer is a reflection of the needs for this professional in the organisation.

ii) Decision making

The issues on decision making are multi-perspective from a single executive decision to a collective decision via departmental committees. Among the issues are the uncoordinated decision making activities on the placement and rescheduling of officials and staff of the

MRA. The ineffectiveness and inefficiency of some of the collective decision making mechanisms as perceived by the stakeholders can be learned from the rich picture. The inconsistencies of the MRA decision making on Human Resource Development (HRD) programmes are also depicted in the picture. Decision-making is identified by the 'scale' and inconsistencies in the decision making are defined by the 'unbalance scale'

An individual in MRA management, who is seen as one of the men behind much decision making, is significantly displayed by a gentlemen pointing a finger, with 'clouds' and 'lightning' This figure signifies the extent of his authority and influence towards the organisation as whole. The lack of proper co-ordination with departmental management on recruitment and promotion decisions is shown by a figure of two men flying with a 'reshuffling' sign and a 'crossed telephone' in between the parties concerned. A 'crossed telephone' is an indication of the lack of communication in any activity. An uncrossed telephone is an indication of good communication and rapport. Another significant issue concerning decision making is the way staff are recruited or promoted using the departmental budget but not inducted according to the budgetary allocation. This situation is shown by a crossed 'money sag' connected by an arrow to the above reshuffling figure above.

The shortcomings of the current information management activities such as the non-current nature, inaccuracy, and the unavailability of information, has a direct impact on the decision-making activities. Some of the decisions made by executives are also known to be difficult and require complex procedural formulae. These issues are reflected in the picture by 'think bubbles' in the situation and arrows connecting to the information resources such as records, files and policy documents. Policy documents are depicted in the picture by a book, 'GO' policy which stands for HR government policy. The think bubble near to this icon is an expression of the issues faced by stakeholders.

The difficulty and complexity of certain decision-making is illustrated by ' think bubbles'.

iii) Training Opportunities

The inadequacy of training in the MRA and the kind of training required by the various sectors of the MRA is depicted by a 'think bubble' expressed by the various sectors of the organisation. Their requirements are also expressed in a star shaped 'think bubble with the

abbreviations of some of the modern management techniques as an example of the training that is required.

iv) Communication

The interpersonal communication between the actors is clearly shown in the rich picture, which is depicted as not as perfect as could be desired. There are elements of non-cordiality in some sectors of the organisation particularly involving a conflict of senior ranking officials and a lack of harmony among some executives in some sectors of the organisation. This conflict is represented by a 'crossed sword' while the lack of harmony is represented by a figure of two men using boxing glove.

Organisationally, all departments are depicted clearly as being inter-linked with the parent organisation and the intra-organisational communication between the MRA and other government organisations. These inter-linkages have significant bearings on the overall management of the MRA. This is represented by the abbreviation for each organisation such as HMPO (His Majesty's Public Office), PMO (the Prime Minister's Office), MOF (Ministry of Finance), PSC (Public Service Commission Department) and the PSD (Public Service Department. The MRA also communicates directly with UBD (University of Brunei Darussalam) and the IPA (Civil Service Institute) on matters relating to the local In-service Training Scheme.

On specific inter-organisational communication, one significant issue depicted in the rich picture is the lack of co-ordination between the MRA and UBD in relation to the outcome of the local HRD programme. In addition, there are internal issues on failure to communicate with those responsible for the information sources which led to information inaccuracy and non currency, thus affecting decision making activities. The issues are depicted by the figure of a *crossed telephone* and in some instances a 'callout box'.

Another significant issue that can be discovered in the rich picture is the issue of the misperception by the higher management authority of the departmental management needs. In addition, the unwillingness of senior management executives to accept proposals or suggestions from a lower level is another issue. This is represented by a 'satellite disc' sending messages to a 'brick wall' which demonstrates the difficulty of the current management system in terms of superior-subordinate communications.

v) Information Management

Information management is one of the contentious issues affecting the MRA. Its non-current and inaccurate nature and lack of co-ordination is clearly depicted in the picture by a think bubble. Among the consequences of the slackness of the organisation information which can be seen in the rich picture is the ever increasing number of queries from the authoritative bodies in government such as the Department of Audit and the Treasury. The 'messiness' of the situations are demonstrated by a picture of an 'open filing cabinet', and a 'scattered' location of the arrangement of files. A person with a statement of 'stress' pointing an arrow to the information and the figure of a filing staff 'stuck' in between the filing cabinet shows the extent of the feelings of the filing staff in dealing with the complexity of managing the information resources. The 'crossed indexing box' is an indication of the lack of systematic indexing and a classification system. The 'finger pointing figure' is a demonstration of blame or 'scapegoat' for the problems or for the inability in updating and managing information sources properly.

The 'typewriter', 'correction fluid bottle' and a 'man carrying a pencil' signifies the manual nature of the process in updating and editing records and listings respectively. The amount of information required by the management is highlighted by 'think bubbles' containing various information required by the management including the RTPS. A crossed 'Do Not Enter' sign' is an indication that the physical security of the information is in jeopardy and is easily exposed to a preying eye. A drawing of the information 'standards' and 'information policy' book divulges the organisational needs for a comprehensive information management policy for the improvement of the organisation information management as a whole.

The amount of information required for various management tasks either operationally or strategically is indicated by symbols. A symbol of a 'graph' is used to indicate the needs for strategic information, while a symbol of 'documents' is an illustration of the need for various documentation to undertake operational tasks

vi) Finances and Budgetary Issues

The budgetary issues faced by the MRA affecting various sectors of the organisation is represented by a picture of 'budget documents' with calculators together with 'money sag'. A statement on the issues is also visualised in a think bubble. The think bubble containing

a financial figure of B\$40,000 denotes the inadequacy of the HRD in-house budgets. Arrows depicting various linkages of the issues are drawn across the affected individual in the organisation with a 'crossed telephone' used to demonstrate non-communication between relevant parties in terms of decision making activities. A 'crossed-sword' is placed on the line to show the controversy with the decision-making activities. Below the activities concerned is clearly written the subject of concern depicting the issues, namely staff 'recruitment', 'reshuffling', 'staff budget' and training budgets.

vii) Task Delegation

The diverse job responsibilities undertaken by many employees of the MRA particularly among those in operational and clerical employment, are currently perceived to be affecting organisational efficiency. This is portrayed in the rich picture by a figure of a woman covered with paper work, a woman employee who has multiple hands holding various papers and a man carrying a 'heavy load'. This is significantly experienced by many within the MRA and its departments. Some of the points of view on the issues are also displayed by the 'think bubbles'. The 'UNFAIR' banner and the think bubbles 'we tend to be asked to do a lot of WP (word processing) is a symbol of the expression from the stakeholders on the management 'bias' towards those who know about computers and the lack of effort in training others.

viii) Job Satisfaction

There are a number of factors that have created a low level of job satisfaction among staff and personnel of the MRA. Among the issue raised is the job promotion prospects of those who graduated from non-middle eastern universities such as the UBD, and the University of Malaya and IPI. Significant workload and the multiple nature of the work undertaken is also another main cause of dissatisfaction. Staff also find the lack of job rotations frustrating. The issue of a job cycle is illustrated by a recycle sign displayed as a think bubble. A picture of a scholar wearing an 'academic gown' depicts the UBD graduates, while the figure of a man and woman 'wearing a academic hat' is intended to depict IPI graduates. The picture of a man wearing headgear with the 'four star' named the 'Azharian' is an illustration of the 'speed' of promotion for the Azharians (those who graduated from the al Azhar University from Cairo, Egypt) compared to the non 'Azharian'. The clerical nature of work undertaken by the IPI graduates is also depicted by 'think bubbles'.

ix) Attitude

The attitudinal issues of the MRA comprises various elements such as resistance to technological and management of change are depicted by the 'old order' and 'old guard' phrase close to the figure of an old man with 'a cigarette' and a stick, and bespectacled woman with various quotes and think bubbles. A picture of a PC computer is used to denote technological advancement and the two books entitled MBO, TQM, to indicate current management knowledge advancement that these groups refuse to acknowledge. These elements demonstrate their resistance towards the technological and management developments.

x) Work Culture

Negative work culture is widespread in the MRA. This is seen as affecting the organisation as a whole in terms of its performance and work output. The issues of non compliance on the working hours stipulated by the Brunei government is widely recognised and this is represented by a picture of a clock indicating an appropriate time that staff should arrive and leave work. A figure of a 'couple drinking coffee' is an indication of long lunch and tea breaks. A picture of three children displays the problems faced by those having a young family. A figure of a man looking at a 'wrist watch' with a think bubble portrays the worries and frustrations of the executives concerned.

xi) Staffing

Staff shortages, which is prevalent on a wide scale in the organisation, is caused by the budgetary constraints or misunderstanding towards departmental needs and is represented by a group of men and women employees sitting down. An important element in the rich picture is the crossed figure of an Administrative Officer (AO) and other professional staff such as training officers, the planning, confidential secretary and lecturers seen to be lacking in the MRA administration. An arrow pointing from various sectors to this figure is an illustration of areas affected by staff shortcomings.

xii) Politics

The political wrangling between the MRA and Ministry of Education on the religious schools and the 'hostile take over' of the IPI is clearly represented in the picture. A think bubble with a picture of a school represents the issues of the former, while issues on the

IPI are represented by think bubbles. The 'crossed swords' is a sign of controversy between the organisations concerned regarding the issues.

xiii) Infrastructure

The issue of the unsuitability of the departmental accommodation in the two commercial buildings is shown in the picture. It is represented with a single multi-story building and arrows pointing to departments that are affected by the issues. This issue is particularly significant in the DIE DMA, DHA, and DSA.

From the understanding of the situation built up in SSM Stages 1 and 2 several issues of concern expressed by the stakeholder are evident from their problem statement and the 'rich picture'. These multi-perspective issues will not be entirely addressed by this study. Since the main objective of the study relates to the investigation and improvement of the organisational information systems, this will then be the main area of concern, however other points brought up and described will also be taken into account for the study. According to Avison and Fitzgerald:

*"The process of creating the rich pictures serves to tease out the concerns of the people in the situation"*³.

The rich picture has steered the research in:

- Visualising a complex matrix of interacting people, roles, threats, facts, observations and so on. Its purpose is to facilitate an understanding of the problem situation.
- Avoiding imposing a rigid structure on the appreciation of the problem situation. A system perspective is to be avoided at this early stage. It would tend to force perception of the problem through systems concepts such as inputs/outputs, systems objectives, feedback and the like. This may not be appropriate for the situation.
- Aiding an investigative approach by the analyst towards the problem situation. It is all too easy for the fact that different participants have important divergent views of the situation to go unnoticed

6.3 Analysis of the Problem Situation

The analysis of interviews and data collected helps in the drawing of the rich picture. Data collected revealed a number of personnel management issues and problems faced by senior management, senior executives, executives, skilled intermediate staff, and the clerical and operational level staff of the organisation. The detail statements of issues and

problem statements by these groups of personnel are shown in Appendix A2.6. These interviews provide primary data for the follow-up stages of the SSM. It also revealed the respondent's systemic views of the problem situation pertaining to the MRA's general, operational, strategic and communicational issues from its human resource management perspectives. Specifically, the data collected through interview have been classified into various subjects or topic interests obtained through the formal interview questionnaire and other interview techniques used to collect the data. These include decision making, information handling and sources, job delegation, physical accommodation, research, staff shortages, training, work culture, and etc. as listed in Appendix A2.7.

The common notion in the organisational settings about one's views on certain issues is dependent on his or her role in the organisation, for example, strategic issues mainly come from the top or senior executives level staff. However, in SSM other views on or about the situation by relevant individuals who may be affected or involved in a particular task or processes provide an extra flavour and neutral points of view towards the performance or quality of services. The way in which each individual or group view the situation is different from that of other individual or groups. This view is dependent on the role of the individual within a group or the role of a group within an organisation. This view may be reciprocal in that each of the individuals or groups has a basic idea of the situation either favourable or unkind towards the other. Some identify it at the lower level of resolution while at the top management and senior executive level the view of the situation may be more generalised at the higher resolution. These views are valid based on each and everyone's knowledge and understanding of the perceived world of the MRA.

Chapter 5 offers a useful summary of data that highlighted the current difficulties from several angles of the organisation indicating that the issues are all interrelated. The problem with each task or process will undoubtedly affect others in the organisation and thus the impact can be organisation-wide. The organisation's information systems encompassing the management and handling of information, and informational impacts to organisational tasks and processes of decision making and communication and strategic planning, which as the main focus of the research, is considered to be one of the core problematic areas of the MRA's strategic and operational management. From the issues depicted in the problem situation unstructured section of the previous Chapter, the

problematic nature of information handling and management and its deep impact towards management can be summarised as follows:

- The majority of departments are experiencing a poor level of accuracy, currency, and completeness of their management records such as the personnel records and leave records. Personal files are referred to in order to be fully certain of ones updated information. This situation is also prevalent at the ministerial level where personal records and leave records that are supposed to be the main source of decision making cannot be relied upon.
- Inability to achieve the quality of accuracy, currency and incomprehensiveness of decision making data are often related with the communicational and informational flow problems, long job descriptions, and multitasking, negative work culture, non-standardisation of work, and the carelessness of the executives and clerical staff who undertook the jobs or decision making
- The filing system is known to be problematic both in terms of the way it is being managed and in its flow. The single copy and multi-usage simultaneous nature of the information sources by different executives and clerical staff, frequent occurrence of missing file are all blamed on the unsystematic and uncoordinated systems of file circulation, the unreliability of the temporary file system, files kept by executives for a long time, and the inability for the clerical staff to focus on their filing tasks.
- The problems of the filing system indirectly reflect upon the communication problem with the organisation's communication system, thus affecting other parts or tasks of the organisation such as decision making, updating of records, and misunderstanding among sections. Basically the file flow or circulation systems mediates the flow of responsibility in a process from person to person or from task to task. The failure to co-ordinate and receive information or important management decisions, which is in part a communicational issue, resulted in the unreliability of the information sources and confusion. Moreover, there is a widespread lack of confidence among the executive and clerical staff toward the effectiveness and efficiency of their filing systems.

- Other issues that are related to communication are the failure of the Ministerial management sector to co-ordinate policy documents with its departments, lack of work guidelines, delay in responding to correspondence from departmental management and the breakdown of personal communication among senior executives of the organisation are all affecting organisational harmony.
- There is a widespread belief among executives that some organisational strategic decision making is inconsistent. While some of the operational decision making activities are also perceived to be complex and difficult to make effectively and efficiently due to various informational and procedural circumstances. The former mainly relates to the changing and contradictory nature of the human resource development decision-making policies. In addition the ineffectiveness of the HRDC, approval procedures and guidelines, short-listing and selection processes are also criticised. The latter stems from the difficulty faced by executives and senior executive level staff due to the non-current, unavailability, and incompleteness of information resources. The human resource management procedural policies for making certain decision making such as the management of contract staff, leave, salary increments and the extension of services are also part of the complexity. Moreover the information relating to official policies are not handy and difficult to obtain (especially old circulars which are still valid). In some instances, new circulars relating to any changes are not properly received by executives at departmental level. Lack of personnel management specialists is another contributing factor to the ineffectiveness of the decision-making activities of the organisation as a whole.
- The information indexing and retrieval mechanism is also found to be restrictive. These views are perceived by the clerical staff, who are responsible for the information sources and to other staff who use the retrieval index as a sources of information.
- Too much work and long job descriptions among the clerical and the operational staff interviewed seems to be widespread. Multi-tasking or undertaking various unrelated responsibilities seems to be a normal practice in the organisation.

- The lack of information for strategic and operational decision making is impinging on the effectiveness and efficiency of departmental and Ministerial management. A number of information sources needed for decisions to be made effective are absent in the organisation. Such information needs to be made available. Moreover, the current disadvantaged nature of the resources such as lost or misplacement of information has resulted in delays in decision making and non-responses or inaction with regard to certain processes of personnel management.
- Most of the human resource management processes and decision-making efforts are still manually undertaken. Most executives would like to see some technological innovation or computerisation introduced into their work environment. The manual nature and lack of advancement of the processes has resulted in longer time to complete the undertaking thereby causing delays in decision making.
- Information storage compartments and its arrangement are perceived to be inadequate and unsystematic. Filing cabinets are not enough to accommodate the ever increasing numbers of information resources. Some files are stacked on the top of the cabinets and some are put on the floor. In the DIE for instance, staff had to remove the file dividers in order to find enough accommodation and some of the inactive files are still kept in storage. In some other departments, these resources are not arranged according to classification or reference numbers.
- The frequent incidence of inaccuracy in information sources is perceived to have caused a great deal of problems to the organisation's effectiveness and efficiency. In a number of human resource management tasks, these inaccuracies have led to queries from various authoritative bodies of the public service and caused delays in decision making. This delay can cause discontent among affected staff.
- The physical security of the information resources in some departments is also under the scrutiny of the executives and clerical staff. The Ministry and department's management seems to ignore the importance of safeguarding the resources from possible breaches of confidentiality and tampering with the information resources.

The lack of storage compartments, small and restricted accommodation, the abandonment of inactive and closed files in unsuitable areas, minimal supervision, and open accessibility of the resources to almost everyone within the PMS.

- Staff shortages is one of the common issues ascribed by top management, senior executives and executive level staff for the failure to meet effectiveness and efficiency targets in the personnel management activities of the organisation. This trend has resulted in the inability to undertake decision making and the updating of information immediately and speedily. The lack of understanding on departmental needs, the current budgetary constraints due to financial restriction imposed by authorities are among the reason given for the difficulties.
- Due to financial restriction imposed by the authorities on annual spending, the organisation is only allowed an increase of about three percent on their staffing and administrative budget. Because of this it is getting very difficult to apply for an increase in staffing numbers.
- Moreover, the small amount of money allocated for the in-house training programme is a significant issue for MRA management in their effort to achieve their goals. However, the organisation is so far able to limit the difficulty by other means such as using departmental budgets, or using internal expertise to provide the training.
- The negative attitude of some of the senior executives and clerical staff towards new technology and new management techniques is affecting the organisational effort to add new dimensions to its management. This is shown by their refusal to participate in some of the training programmes and to learn to use computers.

6.4 Defining the Root Definition

The third stage of the SSM is the specification of the root definition which according to Avison and Fitzgerald⁴ :

"..can be used to define two things that are otherwise both vague and difficult. These are problems and systems. It is essential for the systems analyst to know precisely what human activity system is to be dealt with and what problem is to be tackled".

In other words the root definition is a kind of hypothesis that describes what the system is and what it aims to achieve; not in a strictly mechanistic way, but taking account of the persons who could be affected by it, who would be part of it, and who could affect it in some way. It also defines the transformation that could be taking place and the environment that surrounds and influences the particular human activity system. Checkland⁵ defined it as a concise, tightly constructed description of the human activity system which states the purpose of the system.

A root definition is a choice point in the methodology. This is done by naming some notional systems which seem to the systems analyst to be relevant to problem understanding. The core of the root definition is a transformation process that transforms some defined input into some defined output. Each description will derive from a particular view of reality defining who is doing what, for whom, and to whom they are answerable. The point to be made is that any particular viewpoint chosen will be meaningful in terms of a particular view of the total reality which the world presents to us. Any system named as 'relevant' to the problem will carry with it some particular implied world-image or *weltanschauung*.

The derivation of the root definition, after being tested for completeness by CATWOE analysis, enables suitable systems to be identified and modelled. The six important elements that make up of mnemonic CATWOE were first introduced by Smyth and Checkland⁶ as a way of identifying or deriving a well formed root definition. They are defined as follows:

- **Customers:** The beneficiaries or victims of the systems activities, who are advantaged or disadvantaged by the system.
- **Actors:** The persons who carry out or cause to be carried out the system's activities.
- **Transformation:** The core Transformation process of human activity system. This might be defined in terms of the input and output of the transformation.
- **Weltanschauung:** The basic belief or view of the world implicit in the root definition that give coherence to this human activity system and makes it successful.
- **Owner:** The persons who have the power to modify or demolish the system
- **Environmental constraints:** The constraints on the system imposed by its environment or a wider system that is taken as given in the root definition.

In the perspective of MRA, some choices of the second level relevant systems are identified and named in relation to the study are as follows:

- A system to ameliorate the communication systems of the MRA
- A system to ensure efficient organisational recruitment
- A system to create an efficient filing system
- A system to improve the management and handling of personal and leave records
- A system to ensure efficient MRA decision making activities.
- A system to manage the personnel service.
- A system to reduce and prevent resistance to change.
- A system to ensure an efficient management of the contract officers.
- A system to ensure an efficient employee reward system.
- A system to provide an efficient strategic management for the MRA.
- A system to improve and ensure the efficient management of the human resource development.
- A system to improve the organisational communication systems.
- A system to improve the organisational decision support systems.
- A system to improve the organisation's decision making systems

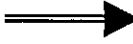
The second level system contributes to the primary relevant system, which can be viewed as a systemic perspective of the problem and issues of the MRA. This can be articulated as:

A system to transform ineffective, inefficient and unreliable information handling and workflow practices.

The CATWOE definition of the of the problem situation of the MRA is as follows:

C = Customers = All Stakeholders (The Minister of Religious Affairs, Permanent Secretary, Director of Administration, Head of Personnel, and Personnel management Staff of the MRA)

A = Actors = The Ministry of Religious Affairs Personnel

T = Transformation = Transform ineffective, inefficient, and unreliable Information handling and workflow practices  to effective, efficient, and reliable practises by an appropriate actions and activities of MRA personnel management staff.

W: Effective, efficient and reliable information is vital for the organization.

O: The Minister and the Permanent Secretary of the MRA

E: Resources constraints, cultural, attitudinal and moral aspects (including time constraints for the research)

This root definition represents the results of the finding out process of Stages 1 and 2 of the Soft System Methodology depicted in Figure 3.6. It attempts to capture the view of the situation as reflected in the CATWOE, into a verbal expression of purposeful activity systems. As a result, the primary task relevant system named “A system to transform ineffective, inefficient and unreliable information handling and work flow practices” defined above can be defined fully according to CATWOE as:

A Ministry of Religious Affairs owned human activity system to transform ineffective, inefficient and unreliable information handling and work flow practices to effective, efficient and reliable practices by the use of appropriate actions and activities by MRA personnel management staff for the benefit of the stakeholders that act within resource constraints imposed by the Brunei Government.

This root definition describes *what* is to be done by the system ‘*transforming the ineffective, inefficient and unreliable information handling and work flow practices*’ *how* the systems will attempt to do this by ‘*appropriate actions and practises*’ and *why*, ‘*for the benefit of the stakeholders*’.

6.5 Conceptual Modelling

Having created the pictorial representation and root definition relevant systems, the next stage of the SSM is to explore this definition in more detail. The definition of relevant systems is aimed at building a model that shows how the various activities are related to each other or at least how they ought to be logically arranged and connected. This model is called the conceptual model of the human activity system. Conceptual models are useful

techniques to manage the issues and complexities of the problem situation, and they also enable us to organise our perception of the world. The conceptual model is created by identifying the activities which must be logically done by the system if it is to pursue its given purposes by achieving the named transformation, and showing the logical dependencies between these. This logical model is an account of the activities, which the system must do in order to be the system named in the definition. The main purpose of the conceptual model is to help to focus the necessary activities required to realise the human activity system as stipulated in the root definition. It also provides an intellectual construct of doing systems thinking and providing a platform for the comparison and debate about change. Avison and Wood-Harper⁷ described the formation of the conceptual models based on the following ideas:

- Form an impression of the system to carry out a physical transformation from the root definition.
- Assemble a small number of verbs that describe the most fundamental activities in the defined system.
- Use the idea of a “formal system model” and decide what the system has to do, how it would accomplish the requirement and how it would be monitored and controlled.
- Structure similar activities in-groups together.
- Use arrows to join the activities which are logically connected to each other by information, material or other dependencies.
- Verify the model against a model of human activity system and then correct it.

The human activity model in Figure 6.3 serves as a useful basis for diagnosing the information handling and management system of the Ministry of Religious Affairs Brunei Darussalam and recommends the feasible and desirable changes for the improvement and the effectiveness of the present information handling system. In theory the personnel information management and handling activity at the MRA will be more effective if all the activities described in this Figure exist and are carried out properly. Looking back at the root definitions leads to the following seven activities model that defines how activities should proceed for the information systems at the MRA to function properly. According to Davies⁸:

“ the forming of the conceptual model relates only to the root definition and the logic of the formal systems to gain completeness. No activities are imported from the thinking about the real world of the problem situation ”.

The information handling activities that are seen as vital for this study are as shown in Figure 6.3 below:

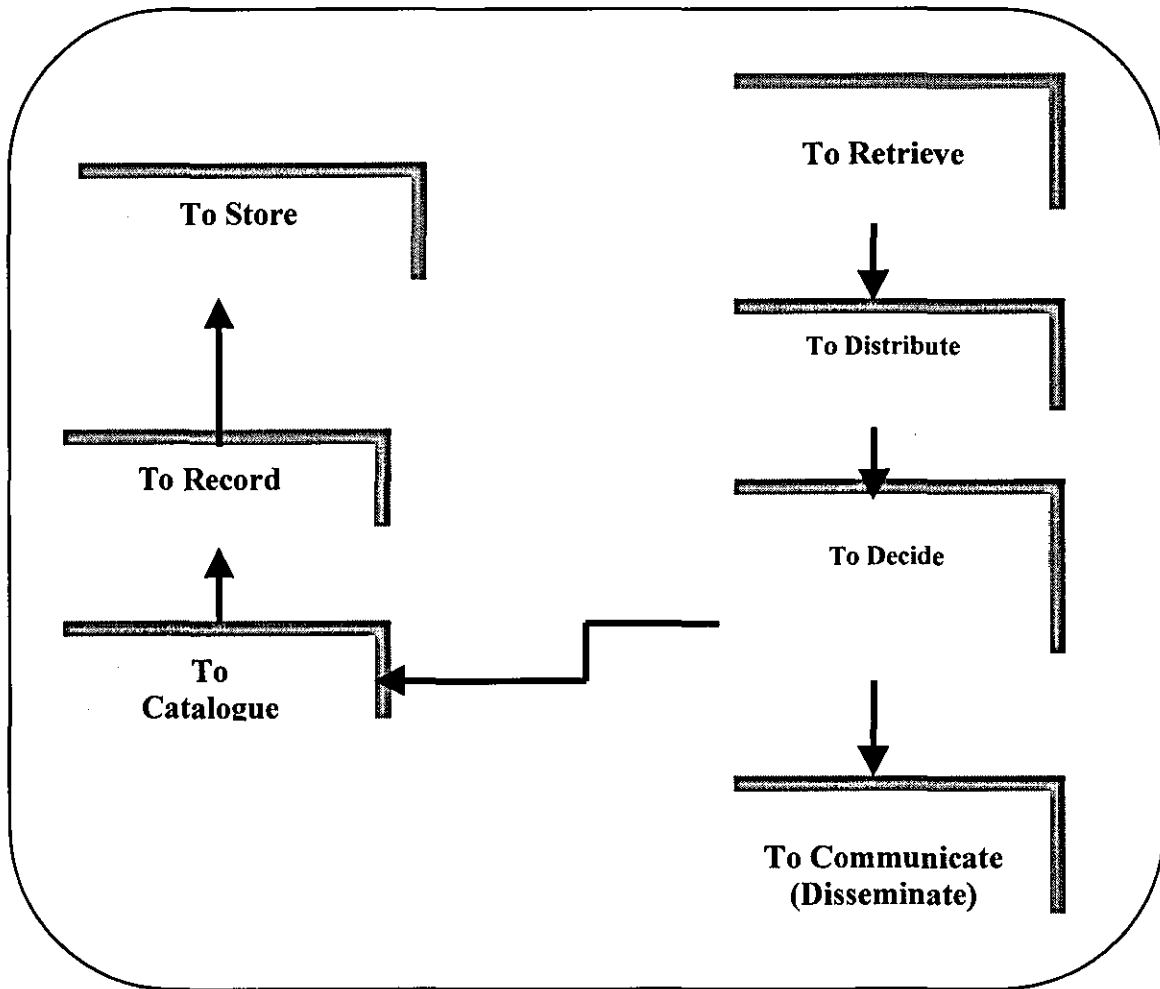


Figure 6.3: The Basic Model of Information Handling Activities of MRA

If the operation of the conceptual model is to be effective, there is a need to monitor stated performance criteria and compare them to predefined standards. This enacts corrective control actions when necessary. Thus the overall expanded activities of the human activity system of the MRA are illustrated in Figure 6.4 below:

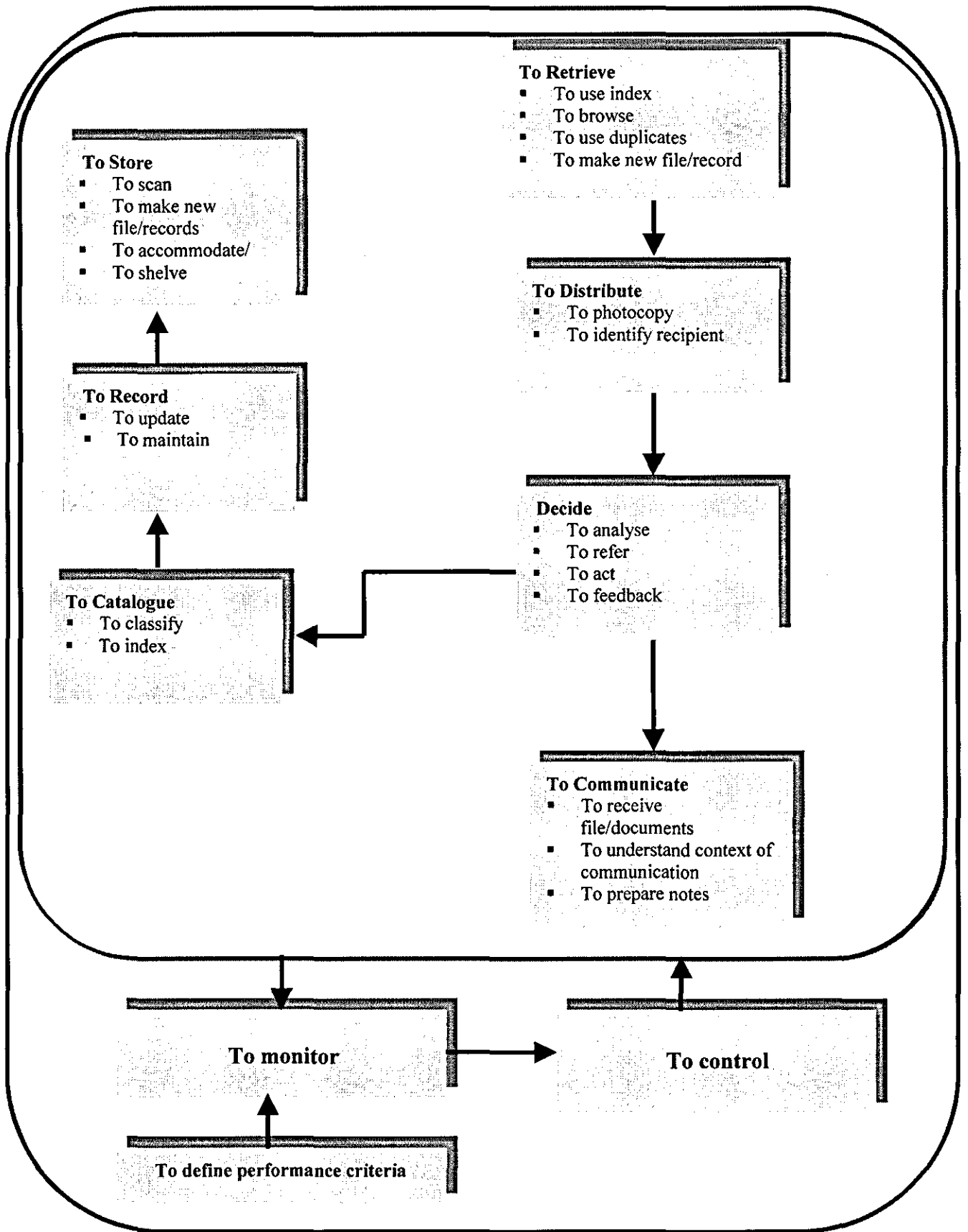


Figure 6.4: The Complete Conceptual Model of the Information Handling of the MRA

The given model consists of the minimum necessary set of activities that are considered necessary to be able to carry out the transformation process defined in the root definition. The modelling language is based on verbs to describe the activities and the dependency to describe the logical contingency between activities. An activity is the abstraction of a collection of operations that cause visible change of the state of affairs in the human activities systems. Dependency between activities is a token of the contingent relationship, such as sequence, control, or other perceivable form of interaction. Dependency refers to a single activity that relies on the result of the other or that must be preceded by another. The activities can be further expanded into an hierarchy that links each activity to its component at the next level.

In constructing the hierarchy, each activity can be regarded as a transformation in its own right. The minimum set of activities to realise the transformation in turn formed the set of components. Each activity at a certain level in the hierarchy should be meaningful in the problem situation, apart from acting as a notation for further breakdown at the next level. Activities at the same level should be of similar complexity. Emerging properties are assumed at each level, hence each set of components and their interdependency should not be interpreted as a complete definition of higher-level activity.

Dependency on certain activity, though not necessarily specified in the model can be derived from the dependency on any one of its components. On the other hand, dependency on component(s) of certain activity cannot be derived from the dependency on that activity as a whole, and must be separately specified

6.6 Comparing Conceptual Models with Reality

The comparison process is the most important process in Soft Systems Methodology. All of the effort involved in creating a model is to establish a firm basis for comparison. This stage concerns the comparison of the system definition or problem situation analysed and the rich picture of the problem situation, which was previously built up in Stage 2 alongside the conceptual models created in Stage 4. It is also about comparison of views. Since these views are those of the human activity systems, made by people, we may not be comparing similar things. The comparison stage, according to Checkland⁹ :

“is the point at which intuitive perceptions of the problem are brought together with the systems constructs which the system thinker asserts providing an epistemologically

deeper and more general account of reality beneath surface appearances; it is the comparison stage which embodies the basic systems hypothesis that concepts provide a means of teasing out the complexity of 'reality'".

Davies¹⁰ advocates:

"The effort involved in selecting and generating systems models is of itself valueless, it is only when the model is used in comparison that all the effort becomes worthwhile".

This comparison of a conceptual model with reality leads to a set of recommendations regarding change in order to help the problem situation. It uncovers potential problem areas of the organisation, so that one or more may be selected for further examination¹¹. The analysis is not concerned in the first instance with problem solving but with problem identification, as a basis for recommendation about feasible and desirable changes to the MRA organisation. Finding solutions to the selected problems may well require the use of other analytical techniques or methods in addition to the SSM but this will not be employed until after the initial focusing has been achieved. According to Davies¹²:

"..two ideas must be borne in mind during this stage, firstly that until the process is carried out there is no way of knowing the result it will produce (at least at any level of detail), and secondly that the process is crucial to the problem solving effort and therefore must not be treated lightly".

The carrying out of 'model' and 'reality' comparisons inevitably involves consideration of possible change, which could improve the situation at the MRA. The models are not necessarily thought of as designs, as happens in hard systems engineering, or as choices of desirable features of the model in the real world. The real point is that the models are meant to generate meaningful points with potential improvements that are worthy of consideration. By this time we have ensured that the models conform to systemic desirability and we have some idea of whether they are culturally feasible. These stages finally confirm which changes are indeed culturally feasible in this organization at this time.

A number of methods and techniques are currently available for carrying out the comparison process, namely the structured data collection and tabulation; model overlay; model to model comparison and attribute mapping. The technique adopted in this study is the structured data collection and tabulation approach that can also be used to assess the relevancy of the model in the context of the problem situation. The Table in Appendix

A6.6 shows how the model and real world comparisons are undertaken, and what the structured agenda at the end of this stage is based upon. Each conceptual model in the system is compared to the real world problem situation based on the activities. For each activity in the conceptual model, a set of questions about its 'existence' or 'happening' in the real world needs to be addressed. A basic question to be addressed is to what extent the activities in the model are actually carried out in the situation under investigation. In other words, this technique investigates the match between the model and the situation. Hence the basic question asked is 'Does this activity exist or not?' A 'comment' column to describe the current shortcomings, issues, and needs of the activities is also a vital part in defining a clear agenda for change. The comparison process identifies a number of changes, which are systematically feasible and culturally desirable in that a good system may arise from the application and use of human activity system models.

6.7 Summary

The study has now reached the point where the relevant system has been defined, as precisely and concisely as possible, in verbal terms. This is then followed by the building up of an activity model of the system – a model of the activities or processes which logically must go on if the system is to be the one described in the root definition. The model created is a purely abstract one which is not a picture of a real-world system; nor is it a system which is proposed to be built in the future. It is an attempt to trace the logical consequences of defining the system which have been designated as being relevant. Fundamentally, this Chapter comprises a comparison of the 'system thinking world' or 'model based world' with the real world problem situation which gives an item/s on an Agenda of possible changes which will be taken to the next stage.

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- ¹¹ Patching, David. *Practical Soft System Analysis*. London: Pitman Publishing, 1990. p. 99.
- ¹² Davies, Lynda and Ledington, Paul. op. cit p. 110.

Chapter Seven

System Intervention: Towards Change

7.1 Introduction

Chapters 4, 5 and 6 provide a greater insight into the organisational structure, processes, issues and challenges faced by the MRA in the current environment. Chapter 5 also highlighted the systemic view of the various processes of information management, decision making, and the communication of the actors in the MRA. The preceding Chapter undertook the task of describing and depicting the problem situations in the 'rich picture' format, which was then followed by an analysis of the problem situation via the system modelling stages used in the SSM approach. This Chapter is the bringing together of the various intermediate deliverables of the methodology. It proposes a number of actions to be undertaken in order to improve the current problem situation faced by the MRA in relation to the primary task root definition described in Chapter 6. This part of the dissertation omits any formal consideration of technical and economic aspects of the proposed change that are better explored using hard techniques. The main thrust of this Chapter is to identify changes that will yield the desired improvement to the process of *Transformation* indicated in the root definition mentioned in the previous Chapter 6. The relevant system from the root definition is defined as:

“To transform ineffective, inefficient and unreliable information handling to effective, efficient, and reliable information handling practices and workflow practices”.

7.2 Feasible and Desirable Changes

The activities and overall findings in the comparison stage of the methodology directly relate to the conceptual models, i.e. those functions within the conceptual model (see Figure 6.1) which are necessary for the operation of an information provision service as described by the primary task relevant system. The existence and effectiveness of each of the functions was considered, using the information gathered from the problem situation unstructured stage. This part of the analysis was a conceptual structuring exercise, comparing the information gathered with those functions that one would expect to be operating in an information provision service. The comparison activities between data collected from interviews and the model of human activity system paradigms in Appendix A6.6 demonstrated the interrelationships and relevancy between the current issues and the

problem situation in Stage 2 with the conceptual modelling stage (Stage 4) of the SSM. It leads to a better understanding of the problem situation and provides a better opportunity to achieve change that is both attainable and beneficial to the organisation as a whole. This understanding of the real situation deals with the requirement of change, particularly culturally feasible and systemically desirable change. From the detail of the agenda for change there is a need to consider:

- a) A human activity integrated record management system for the management of personnel for the MRA,
- b) An electronic-based records storage system for the management of personnel at the MRA,
- c) A computer-based integrated record management system for the MRA,
- d) An integrated personnel information system for the MRA.

The above candidate replacement systems are ranked according to priority and the systems proposal will be described in more detail in Sections 7.3 to 7.6.

The recommendation for a desirable human activity system preceding the automated or electronic record management system is based on the various agendas for change, which are derived from the comparison stage (as shown in Appendix A6.6). Significantly, this comparison stage brings together all the predominant issues affecting the current inefficient and ineffective human activity systems in many areas of information handling and management activities. The use of a System Requirement Identification Table (as shown in Appendix A7.1) helps to further define and prioritise the kind of information system that best suits the current situation of the MRA as a whole.

The issues highlighted by this stage of SSM overshadow the attractiveness offered by computer-based or electronic systems, which offers efficiency in retrieval and storage systems. Only when the improvement of the human activity is undertaken, can a computer-based record management system can be introduced more effectively. Thus this mechanism avoids the wastage and false expectation of technology based systems. However;

“To some extent the very rapid and diverse range of developments in computer and communications technology in recent decades, while bringing many benefits to organisation, has also made the task of maintaining, complete and accurate evidence of their business activities more difficult. The majority of business records are now

produced electronically. But they are likely to be produced on a range of systems and may be stored in a range of media, including paper. ...Consequently, organisations must develop strategies to manage across the media and systems, using business rules, operating procedures and other controls which take into account the special characteristic of the different media and systems”¹.

As a consequence of this it is extremely vital for the basic requirements and needs to be accomplished first in anticipation of a more difficult or challenging issue brought about by technologically desired improvement of the record management system.

7.3 A Human Activity Integrated Records Management Systems for the Ministry of Religious Affairs

Information is currently recorded in a paper-based format (such as reports, memoranda, and letters) and an electronic-based format via computer diskette or memory format. For information to be truly effective, it must be recorded in some form, stored in an appropriate system, and retrieved in an efficient manner. Each transition is in the form of records. According to Wallace et al²:

“Records are the memory of an organisation. They document information for management decisions, provide litigation support, show compliance with government regulations, supply a historical reference of transactions and events”.

A suitable definition of records in the context of the MRA is the one described by Emerson³

“those documents, in whatever medium, received or created by an organisation in the course of its business, and retained by that organisation as evidence of its activities or because of the information contained. Records... are products of the activities of which they form a part. Indeed records have no existence other than as a product of business activity, without which they have no context or meaning”.

From the above, it is clear that a number of vital organisational information resources that have been identified during the first five stages of the real world analysis and the systems thinking stages of the study can be considered valuable records. These vital information sources include personal records, leave records, personal and administrative files, performance appraisal reports, establishment listings, retirement listings, contract officer listings, etc. The number of issues and shortcomings of the organisational records, which play a vital role in the organisation's strategic and operational activities has prevented the organisation from achieving the efficiency and effectiveness desired. The existing issues at the MRA and its associated departments are clearly defined in the comparison stage of the SSM that can be solved by far-reaching improvements to both the process of maintaining,

retrieval, storage, communicating and updating vital organisational information. Towards this end the MRA will need to establish an effective information management subsystem in its administration comprising:

- Information Communication System,
- Information Record-keeping System,
- Information Retrieval and Indexing System,
- Information Storage and Circulation System,
- Information Monitoring System,
- Information Control Systems.

These subsystem requirements for the MRA integrated record management system are derived from the activities found in the conceptual model.

7.3.1 Information Communication System

The Information Communication System will be concerned with the improvement of the current flow of documents and records within the organisation. It may involve finding better solutions to improve information received from internal or external sources and co-ordinating it within the organisational hierarchy of the MRA. Among the probable options for the thinking of the current issues are as follows:

- The establishment of a specialised Information Co-ordinating and Mail Service (ICMS) centre that can monitor and systematically manage the mail operation of the organisation as a whole. Staff and personnel of the section will be responsible for maintaining and controlling records of selected types of mail.
- Appointing an executive level staff to head the ICMS who will be responsible for defining, co-ordinating, planning and monitoring the mail needs and management of the MRA. Basically the head of ICMS will ensure the effectiveness of the mail operation of the MRA as a whole.
- The production of a complete handbook that spells out the policy and procedure of the mail management of the MRA as a whole. The handbook should guide and clarify all relevant personnel of the ICMS, Head of Section, record managers, administrative staff, on the procedural policy of administering the organisation mail systems such as mail processing, delivery and handling of the incoming and outgoing mail.
- Adapting to a systematic routing principle is another way of improving the delivery of documents within departments or sections of the organisation. Routing involves

determining the correct delivery points for each incoming mail item and placing it in the appropriate organisationally captioned compartment of a mail-sorting device.

- Providing an effective and adequate messenger service for the MRA as a whole is of vital importance for the organisation to achieve the rapid delivery of its correspondence.

7.3.2 Information Record-keeping System

The information record keeping sub-system is mainly concerned with maintaining the currency, accuracy and adequacy of information and records of the organisation as a whole. The inability of the current information management to provide management at the ministerial and departmental level with up to date, accurate and adequate information may be resolved by establishing a set of rules and procedures of compliance for business processes. This can be done by devising its own information record keeping rules and procedure in compliance with the International Standards Organisation (ISO) 9000 series of quality assurance standards. The content of the standards may include:

- Rules and procedures covering what and how records must be created maintained and filed.
- A sign off routine may be utilised whereby each step in processing every piece of personal information and record is checked for completion.
- The retention period specified for documents created, needs to be documented in the record disposal schedule.
- Developing particular rules and procedures to control the amount of detail that is recorded for particular activities and transactions.

7.3.3 Information Retrieval and Indexing System

The characteristics of current information retrieval systems can be considered unreliable and weak. The current management of records is not systematically undertaken and requires urgent improvement if it is to function properly. Misplaced and lost information or records are frequent and lack of search indexes in retrieving these information resources are among the 'disadvantaged' features of the current record management system. Some departments keep this information in individual drawers and not in a secure place. The current single alphabet sequences of indexes are not adequate and it slows down the search process. Some departments do not have an index at all. Many of the existing problems associated with acquiring personal and administrative files can be resolved by extensive

improvements to both the functions and the implementation of information retrieval index systems. Among the options available to the MRA on this issue:

- A systematic and disciplined cataloguing and indexing system is required by the MRA in order for the information to be stored and retrieved effectively and efficiently.
- To establish a classification system of high quality for its records to assist in the retrieval and storage of the organisational records. This classification needs to incorporate the various types of information resources available in the organisation such as the administrative file classification, personnel files, confidential file types, and the scheme of service. Two popular types of classification system are the numeric and alphanumeric approach. The classification also requires a central classification or relative index to record every classification number assigned.
- Systematic and uniform retrieval indexes are needed to enable searches to be made effectively. An index is essential for the successful operation of any record centre⁴ and it is an important tool for retrieving information. An index is a pointer or indicator, or more fully, a systematic guide to the records contained in it, concepts derived from a collection of records or other information. These indexes need to take into account arrangements using an alphabetical and classification approach. An index is essential for the successful operation of any record centre⁵. The indexing systems of the MRA may include a name index; subject index; classification index; keyword index; the national registration identity card numbers index and position index.

7.3.4 Information Storage System

Lack of physical storage space and accommodation together with the failure to comply with the current record circulation procedure has caused a great deal of inconvenience to the MRA management. The filing cabinets are so full that files are stacked up on the top of filing cabinets and on the floor. In some instances, the filing staff have to make do without file dividers and have to compress files into an already packed filing cabinet. Frequent incidence of staff taking out records or files without notifying responsible staff and the abandonment of inactive files are among the main features of the current MRA's record storage systems, which require very drastic and immediate change. Any changes to the MRA's Record Storage Systems would be aimed at ensuring that the MRA has a strong administrative information base which is consistent, reliable, accurate, and up to date at all

times. The storage system will also ensure security against both unauthorised access to and destruction of these records in keeping with its obligation to staff and personnel of the MRA. Most importantly the records need to take into account ease and speed of access to records and environmental condition. In order for the MRA to cope with the ever-increasing range of types and volume of records and other information resources, a number of possible changes may be required, as described below.

- The organisation as a whole may need to adopt and modify the current departmental decentralised record storage system to centralise control to the ministerial office. The proposed decentralised storage concept is better known as the Combination Record Storage System⁶. It refers to a filing storage management concept of documents where all active records are controlled and kept in one or more central area by the record management section of the respective department.
- A record retention and disposition policy needs to be agreed and implemented for all categories of information stored by the system. This policy should be developed to retain and protect the MRA's vital records and dispose of the records that no longer serve a purpose. As a result, a retention schedule could be prepared. This is a documented agreement that provides for the identification of records that must be maintained for business purposes, and the systematic destruction of records that no longer serve any useful business purpose.
- The physical arrangement or layout of file registry or wherever files are kept should be properly made so as to accommodate the flow of the document; there should be enough space for employees to move around. The space should be properly planned for maximum efficiency.
- Appropriate floor guides or signposting to the collection need to be provided.
- Equipment may need to be to be multi-purpose, and adaptable to more than one function. The general environment should be clean and there should be security especially for important and valuable records.
- Once the active records are under control, it is also vital for the organisation to manage the organisations' inactive records. Inactive records need to be stored in a separate record centre or archive, which might be anything from a designated room to a separate floor or building. The purpose of having a separate record centre is to provide efficient storage of little used records and to provide for centralised controls that are maintained for operating or administrative purposes for a relatively short period of

time. It will ensure security against both an unauthorised access to and destruction of these records in keeping with organisation obligation.

- The process of storing records/documents to its rightful folder or files is an extremely important process that must be performed as a manual storage procedures⁷.

7.3 5 Information Circulation System

The organisation of personal records and administrative and personal files has developed into a chronic problem due to a number of shortcomings in the current systems. The descriptions of these problems have been widely identified and compared in the empirical and systems thinking component of this research. Currently, files and records are distributed to facilitate communication, information, decisions, and actions are communicated through these information sources. In many instances, the making of important decisions is made by referring to the filing systems. The messiness of the organisational filing and records systems needs to be addressed and solved in order for the organisation information handling and decision-making activities to be made more efficient and effective. As a result, it is paramount for MRA to establish a record circulation system that aims to ensure that the information distributed is consistent and accurate at all times. Among the possible options of the MRA in improving its circulation systems are;

- The MRA record storage systems need to control materials checked in and out, and the MRA's records centre must develop procedures for the effective circulation of material. Enforcing stricter control of the records distribution system is one solution to the current shortcomings in that systems. This strict control would be in the form of introducing a well-written and uniform record/information circulation or a charge out procedure. According to Gill⁸ :

“Rank cannot have privileges. Exceptions should not be made, no matter who requests the material or for how long. The policy has to incorporate the minimum periods or days of allowing executives and staff to keep the organisational files”.

- There is need for the organisation to look into devising an organisational policy of distributing and lending out of the records to staff and personnel of the organisation. This lending policy would offer an improved management and control of the record and file distribution within the organisation. It would also ensure consistency in terms of the circulation system of the records within the MRA as a whole. The lending policy would enable the flow of these information resources to be monitored all the

time. This policy would need to incorporate consistent work guidelines to staff and personnel of the ministerial and departmental record section. One of the hard and fast rules concerning records is never to remove documents without recording the name of the borrower and the due date of the records. It is also important for the organisation to restrict usage of the files by identifying staff and personnel who are eligible to use or refer to certain categories of records and files (personal records, personal files, administrative files, and confidential files).

- A similar system may be adopted for inactive records that are kept in the MRA record centre.

7.3.6 Records Management Control and Monitoring Systems

In order for MRA's record management programme and its component part to be consistent and maintained, and continue to work towards a common purpose, it requires record management control and monitoring systems. The record management control and monitoring system aims to regulate the behaviour of other operational subsystems ensuring that the agreed standards are adhered to and monitors the operation of the whole system. The main objective is to maintain an output that will satisfy system requirements.⁹ According to Jenkins¹⁰ :

“Control is necessary because not all the factors which arise could have been foreseen when the design was optimised. These unforeseen factors are called disturbances in control engineering and have the effect of causing what actually happens to deviate from what should happen. The object of the control scheme is to measure what is happening and then prescribe some action if performance is not up to plan”.

The current lack of consistency, carelessness and ignorance of officials and staff in information handling and management activities clearly illustrate that the proposed system requires a written policy and standard documents. A systematic training and professional development programme for the record management staff will follow. The characteristics of the record management control and monitoring systems are described below;

a) Record Management Policy

The record management policy will need to incorporate a number of important aspects of record management such as record retention policy; record management manual and record security:

i) Record Retention and Disposal Policy

A record retention and disposition policy needs to be developed in order to retain and protect the Ministry's vital records and to dispose of records that no longer serve a useful purpose. The most important document in any retention and disposition policy is the retention schedule. A record retention schedule is defined by Wallace et al.¹¹ as:

"..a documented agreement among the record creator, the record user, the record manager as to the retention and disposition of a record. In effect, the schedule specifies how long each type of active record is to be held for reference, the length of time it is to be held in storage for semi-active reference, and when the record may be destroyed".

According to Skupsy¹²:

"The record retention schedule is a report identifying the approved retention period for your organisation's records. The schedule identifies the "office of the record" – the segment of the organisation that maintains the 'official' version of the records for the full retention period".

The purpose of the retention schedule is as follows:

- To provide knowledge of what exists for everyone in the organisation.
- To provide right information to the right person at the right time at the lowest possible cost.
- To ensure records are retained for as long as they are needed and no longer.
- To provide standards and consistency across the entire organisation.
- To Identify unnecessary duplication.
- To encourage timely relocation of material from costly office space to less expensive, more efficient storage space.
- To promote effective management.
- To Identify records of long term value, as early as possible, to secure them from accidental destruction and to plan for their preservation¹³.

The anticipated advantages of the record retention schedules are the saving of storage space by aiding prompt destruction of records and facilitate prompt relocation of semi-active or inactive records which can be stored more efficiently. In addition the schedule also saves staff time in the long term, because 'repeat' appraisal can be made quickly by simply referring to the schedule, and time is not wasted moving records to inactive or archival storage when in fact they should be destroyed. It also prompts action in weeding

files, destroying records, relocating records, and provides measurable results in terms of space saved and created, the number of files recycled etc. This can be translated into monetary terms, something that is always of interest.

ii) Record Management Manual

A manual or handbook may be defined as a management tool designed to explain the essentials of a system or programme and to ensure its efficient and smooth implementation. It must allow its users to carry out in full the tasks, actions and activities for which they are responsible, using the least resources possible, whether human, material, financial or informational. A record management manual is a guide to the functioning of the record management system. A record management manual needs to incorporate a number of information management policies such as the information record-keeping rules and procedure, document style guidelines, document maintenance rules, informational code of conduct, record updating standards, lending policy, and record circulation standards. Basically it comprises information on the who, what, when, where and how of the records management systems in the MRA.

iii) Record Security

A programme on security management for organisational records needs to be initiated by the top management that would provide protection against intentional destruction, disclosure, modification, or breach of confidentiality. The management of record security applies to information and data in any form, whether on a personal computer, paper, or mainframe. The management responsibility begins with providing the lead in promoting and assuring the security of the records. Management needs to develop the policies and procedures for the security management programme and to assign responsibility and necessary authority for security management for the entire organisation. Without some formal security management structure and associated guidance users cannot be expected to apply consistent and effective controls.

Policies and procedures to protect information should be established and communicated to all that generate or use the information. A formal information security policy is a prerequisite to a workable programme. This requires identifying the types of information that require protection and specifying the types of control measures that apply to each type of information. Procedures must be in written form and distributed to members of the

organisation. The procedures should be specific in terms of physical protection that will be offered to the various types of information and the equipment used to generate the information, the specific administrative procedures that will be used to legitimately access the records, and the procedure followed to access facilities and equipment.

b) The Organisation and Staffing of the Record Management Systems

Record management is a support function that crosses departmental lines and provides services throughout the organisation. Ideally, record management belongs to the administrative services area along with the information technology section, finance, and research, training and development. Thus the MRA organisational record management should be placed on the same level as the above services. Record management should be directly under the control of the Director of Administration. The position designation of Deputy Director of Administration (in charge of records and information services) or Head of Record and Information Management needs to be created at MRA. It could also be called the Chief Information Officer (CIO). At the departmental level the responsibility for records and information management may be designated to the Head of Record and Information Management. Figure 7.1 and Figure 7.2 are the proposed new organisational charts for the Ministry and the departments under it respectively.

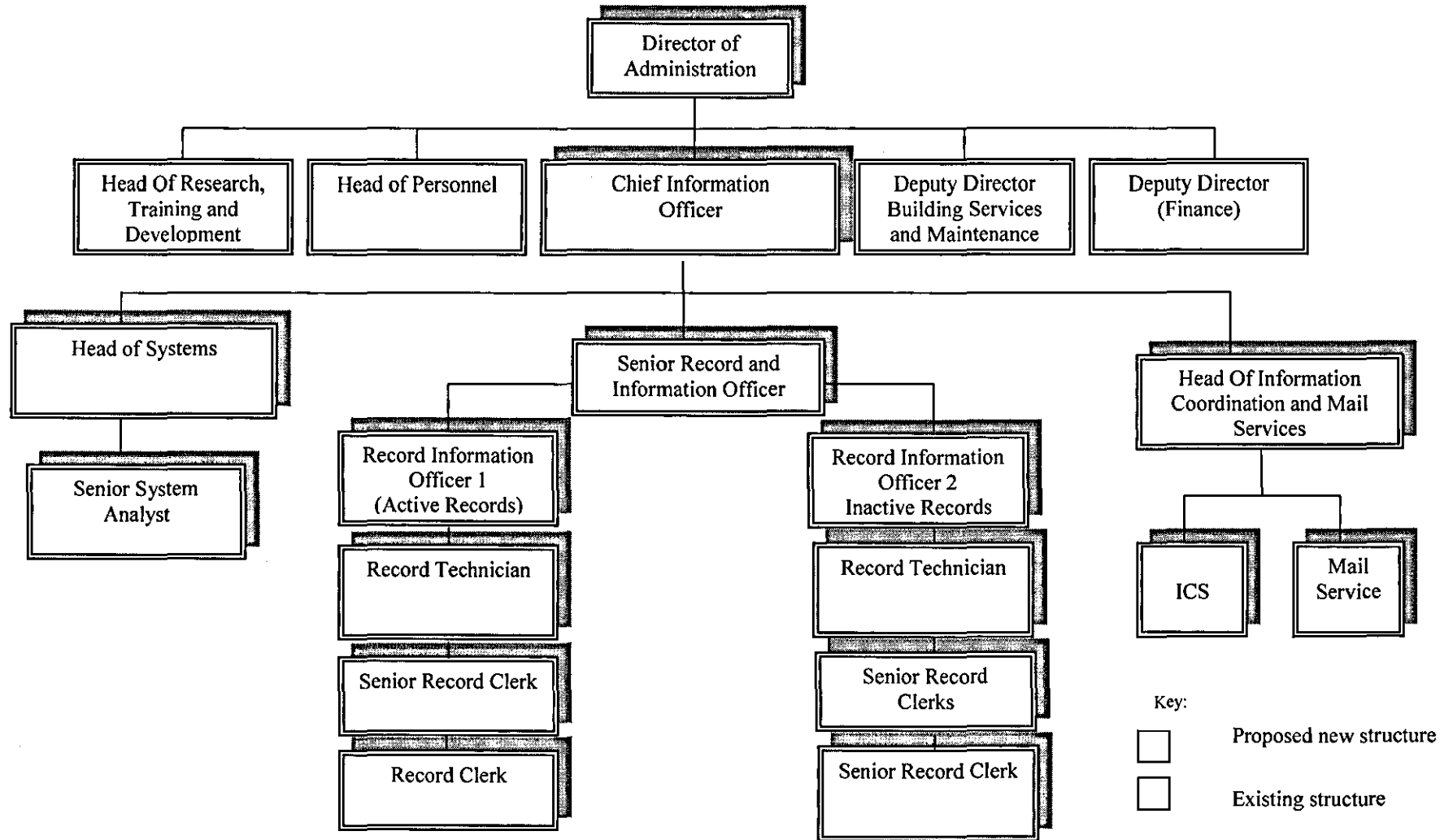
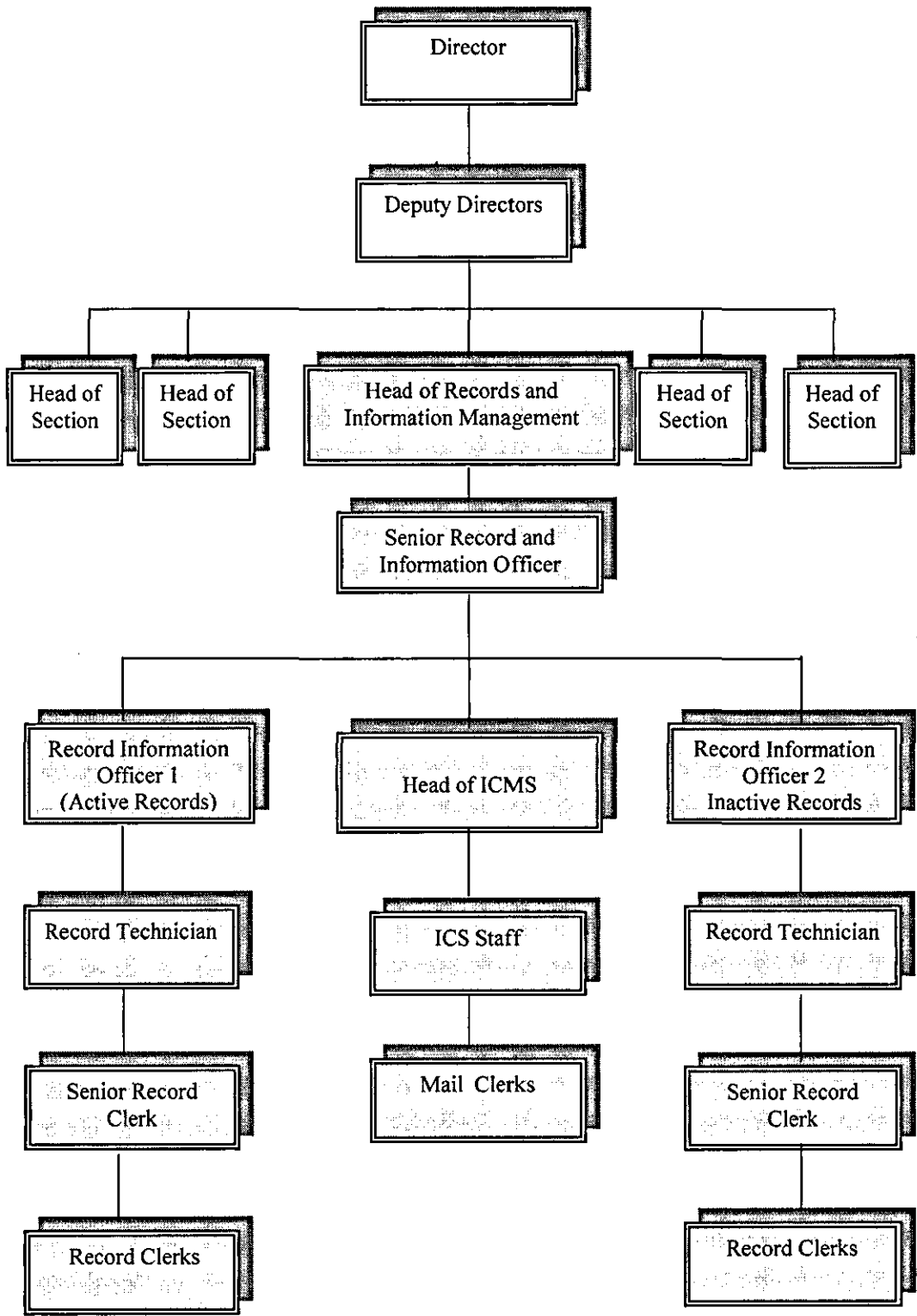


Figure 7.1 The Proposed New Organisational Structure of the Department of Administration with the Integration of the Record and Information Management Section



Key:
 [Shaded Box] Proposed new Structure
 [White Box] Existing Structure

Figure 7.2: The Proposed Organisational Structure of Departments under the MRA with the Integration of the Record and Information Management Section

The Head of Records and Information Management or the CIO at the MRA may be in a senior middle management position on a Group II or Group III senior management salary scale as with the Head of RTPS and Head of Personnel. At the departmental level it needs to be headed by a senior officer probably on a B3 salary scale category. The Head of Records and Information Management (HRIM) would be responsible for achieving the record management programme objective of the Ministry of Religious Affairs. He/she must be thoroughly skilled in the techniques and principles of record management and needs to be acquainted with computerised and electronic records, computer-based systems, word processing, effective personal supervision, modern record management systems or approaches, and administrative and personnel management procedures of the public sector in Brunei Darussalam. Those selected for the job must develop a thorough knowledge and understanding of the organisation's information needs. A general knowledge of the nature of the organisation's business activity is necessary as well as specific knowledge of how the organisation conducts its affairs. HRIM must be recognised by top management as an expert in information systems and knowledgeable in every aspect of information management from a hard copy manual system to automated systems and integrated networks.

In addition to appointing the HRIM, the establishment record management programme of the MRA requires the appointment of other supporting staff such as a Senior Record and Information Management Officer, Records and Information Officer, Records and Information Technician, a Senior Record and Information Clerk, and a Record and Information Clerk.

f) Training and Professional Development of Record Management Staff.

Record management is a rapidly changing field, particularly in the technological area. As a result, both record managers and their staff need to be exposed to professional growth and development. The development of training is a vital element in the management of organisational records so that the present employees can maintain high levels of effectiveness and new employees will become more quickly oriented to their position. Possible actions include the following:

- More staff should be encouraged to undertake professional or degree level courses in Library and Information Management overseas as part of the current organisation's In-Service Training Programme,

- The records management staff need to be given more exposure to management techniques and analysis so that they will be better qualified to assist in the management, as opposed to the mere maintenance, of records and information,
- All new employees should be given an orientation or familiarisation training programme including introducing the new employee to others in the record management or other departments with related work functions, briefing on the brief history of the organisation as well as a tour of offices that communicate with the records section,
- A new employee needs to be made familiar with his or her job descriptions and then become familiar with the policies and procedures. Some time should be set aside for the assimilation of the manual,
- A new employee may be assigned to another worker for on job training. On the job training is one of the most effective ways of training and familiarising a new employee with the work environment of a new employee,
- Various training programmes could be organised for all the employees including in-house training by internal and external personnel; conducting an in-house seminar; encouraging participation in seminars conducted by professional associations in and outside the country; institutional training programmes/courses offered by local colleges and the university,
- In addition to a generalised training programme, a specialised training programme should be designed for all levels of staff at the records management section including, personnel supervision, the techniques and principles of record management, data processing/local area networks and personal computing; indexing and classification; stock control and warehouse management; basic records management procedures; archives management; filing procedures, including rules for alphabetical and classified filing, and correspondence analysis.

Wallace et al. ¹⁴ advocated that

"Flexibility is a key word in implementing a training programme-not only for the personnel, but for the programme itself. The flexible programme is one that encourages creativity in personnel and motivates them to offer suggestions for improvement. In order to prevent boredom, the programme must be stimulating and fresh in the methods used in the training process".

In addition to implementing a training programme, the record management staff need to have greater awareness of the technological development in their field of work by

subscribing to various international bodies such as IFLA, ASLIB, ARMA, IIS and many others.

7.4 An Electronic-based Records Management Systems for the Ministry of Religious Affairs.

Based on the descriptions of the above manual based integrated information/record management systems for the Ministry of Religious Affairs two options of electronically based document management systems can be identified to help speed-up the retrieval of information and offer an efficient storage system of information and records for the MRA.

They are:

- A microform based storage information system which would be used to store semi-active and inactive information more efficiently. A microform is any medium that contains miniature or 'micro' images¹⁵. There are a number of types of microforms format available in the market today, namely roll film, microfiche, jackets, aperture card, micro-opaque, non standards microforms and computer output microfilm;
- An electronic document imaging system which would support the storage and retrieval of images, text and drawings. Like microfilm systems, EIS stores document images, retrieves, displays and transmits them in a highly automated electronic fashion using a powerful high capacity storage computer system.

The current systems would require rapid and quick access to relevant information using computer-assisted searching through indexes, and the need to rationalise storage. This means a move from paper-based storage to alternative electronic medium. This will also mean that the new patterns of record searching, retrieval, storage and referral work will require a great deal of interaction and use of computer terminals if efficiency is to be achieved. There will also be a dramatic shift from a manual system to a more 'sophisticated' computerised system.

7.5 A Computer-based Integrated Record Management Systems

An automated record management system consists of an electronic database containing data or details of records, whether it is hard copy, microform, or in magnetic or optical memory. These data are accessed and updated to better manage and control the existence, location, retention, movement and disposition of the media that the recorded information is on. The difference between this and the usual data processing system is that data

processing systems are made up of the data extracted from documents or information sources with the function of answering queries or making decision. Data processing systems are about the actual information in the documents. A computer based integrated record management system basically uses computer technology to enhance the quality and performance of managing information on paper based documents microform or on any other format used to store information during their life cycle.

As a result of the proper application of computer-based record management technology, five major benefits can be identified¹⁶:

- It will provide a computer capability to establish total life cycle control over records on a ministry-wide basis;
- It will greatly improve performance of the record-keeping system, enhancing the accessibility of the information contained in the records, so that the goal of precise and timely retrieval can be achieved;
- It will provide multiple pathways by which the information contained in a record-keeping system can be accessed;
- It will provide significant benefits in work measurement, cost reduction, productivity improvement, and better services to organisational staff and personnel;
- It will provide a means of upgrading the status of the record management function and those who work in it.

Ideally, the computer-based integrated record management system would include factors such as:

- Entry of descriptive data relative to the contents of individual file folders and records in the database, for subsequent retrieval by filename, number, keywords, or a variety of other search parameters;
- Ability to store standard subject filing categories from the files classification scheme in the database for subsequent manipulation and retrieval;
- The system must manage the file folder charge-out and return function;
- An efficient security level that would be able to identify an item that should have restricted access and apply restrictions to certain levels of staff;

- An ability to print bar code labels and monitor the movement of files by point-to-point tracking as they are passed from workstation to workstation in the processing cycle;
- Be capable of maintaining an index of all retention requirements for the organisation;
- Ability to print new file folder labels (on demand or by batch) and a variety of reports showing the status of the organisation's records would be highly required.

In addition, for inactive records, the following requirements may be desirable:

- The system should be capable of maintaining the index or inventory of all records stored in the facility by showing the contents of each carton or other storage container and sometimes each file folder stored in each box;
- The system must have the ability to store other data required to effectively manage the records, such as the inclusive dates of the records in each carton, retention schedule data, and disposal dates;
- The ability to reserve shelf spaces for incoming cartons and reports on free shelf space available to house them would be a great advantage;
- The systems must be capable of monitoring and tracking the movement of all records withdrawn from and returned to the centre;
- The system must be capable of printing pick lists showing those cartons eligible for destruction, print destruction notification forms to obtain authority to dispose of records, and print certificates of destruction;

The automated record management systems can be configured on any type of computer - mainframe, minicomputers, and microcomputers. A number of 'off the shelf' software packages are available for this system and some organisations prefer to develop their own software for managing their records based on their specific requirements. However according to Robek et al.¹⁷

"The most important precursor to applying this technology is that the organisation must have good manual records management systems and programs in place before attempting to install records management software. Otherwise, the new system is likely to be so riddled with errors that user confidence in its performance will soon deteriorate, and the integrity of the system may be virtually impossible to restore. Assuming a high-quality manual system exists, the records managers should then conduct a requirements analysis to determine the organisation's precise needs for records management software".

The function of a Computer-based Integrated Record Management System in decision-making activity is shown diagrammatically in the Figure 7.3.

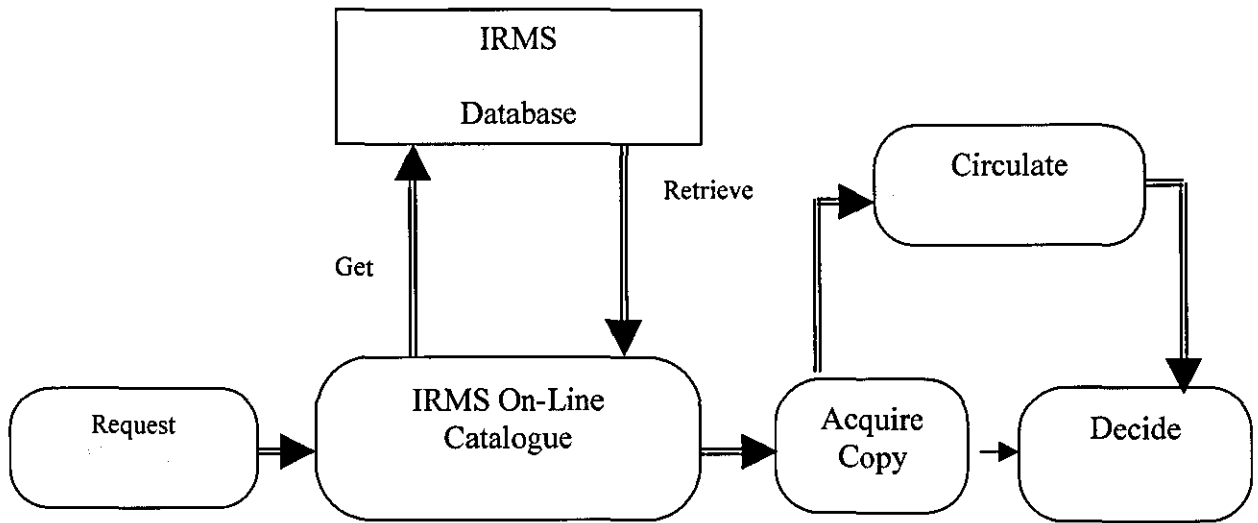


Figure 7.3 Computer-based Record Management System Module for the MRA

7.6 An Integrated Computer-based Human Resource Information System for Ministry of Religious Affairs.

A human resource information system (HRIS) is a computer-based system used to acquire, store, manipulate, analyse, retrieve, and distribute pertinent information regarding an organisation's human resources. The purpose of the HRIS is to provide service, in the form of information, to the users or clients of the system. Because there is a variety of potential users, the focus of that information may be to facilitate or support strategic, tactical or operational decision making, to evaluate programmes, policies, or practices and to support daily operation (for example, to remind of pay increases and make sure the people are paid on time). Regardless of the purpose of the information, the data must be accurate and timely and the user needs must be understood. Moreover, proper system design based on the needs and careful selections of an appropriate hardware and software, together with the organisational preparedness for the changes will guarantee successful implementation.

The computer-based integrated human resource information system for the MRA should have the following modules:

- Transaction Processing System (record data about events or transaction),
- Management Information System (support managers in making decision),
- Decision Support Systems (information system that assist managers with unique, non recurring strategic decisions that are relatively unstructured),
- Expert Systems (the knowledge of human expertise is stored in the form of a knowledge base and is a rule based for using that knowledge),

The MRA integrated human resource information systems can be represented diagrammatically as in Figure 7.4 below. This Figure shows the four key subsystems needed by the organisation. It demonstrates the kind of support that each system provides to the overall business operation of the organisation including a capability to support activities that requires human expertise. The outside frame indicates that that these systems may require to be interconnected with systems of the other government organisations.

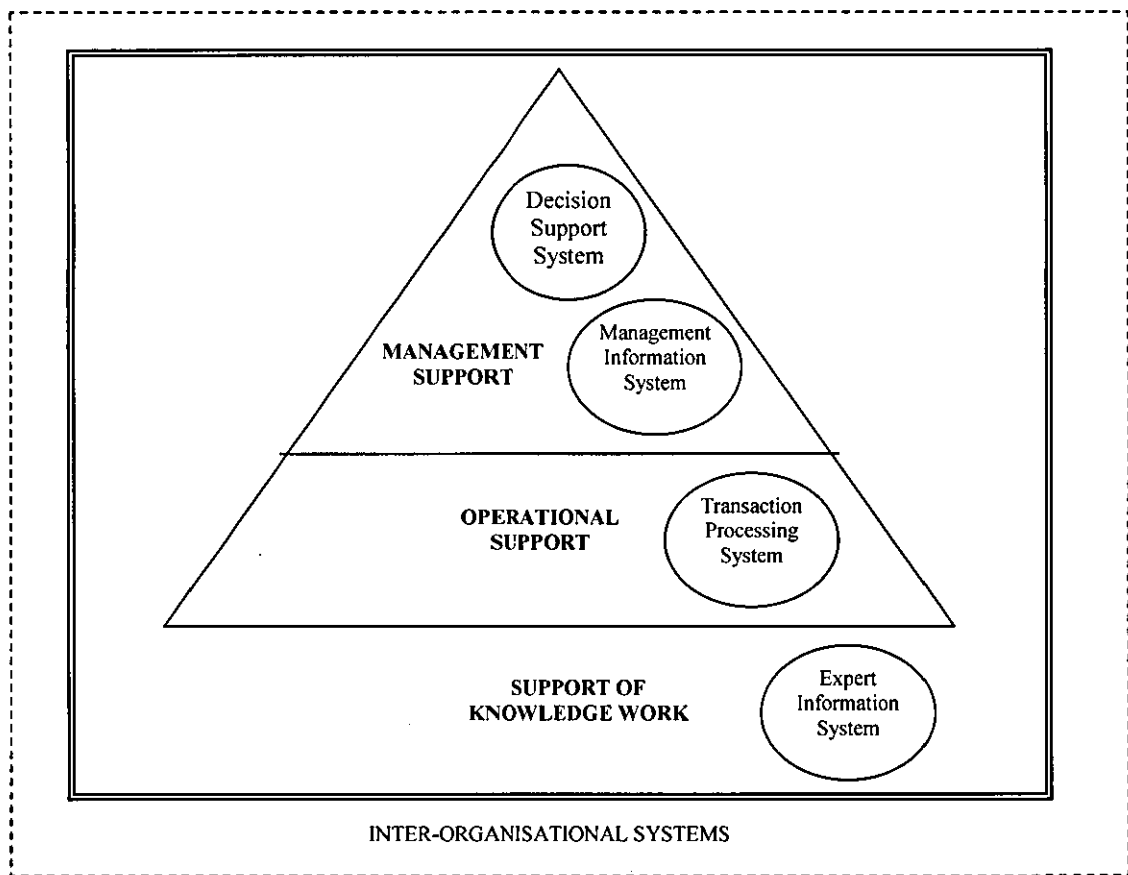


Figure 7.4: The Component of the Information System

As with the previous proposed systems, the following subsystem is also derived from the activities in the conceptual model.

7.6.1 Transaction Processing System

Transaction processing in the personnel management system is the automated processing of routine information. Its focus is on data, storage, processing, and it operates at the operational level. The probable candidates for the transaction processing system are as follows :

- The Employee Record System (personal records);
- The Information Receiving System (mail system);
- Leave Record System;
- The Payroll Information;
- The Establishment Information (listing);
- The Job Vacancy Information (listing);
- The Retirement Information (listing);

- The Extension of Services Information listing;
- Performance Appraisal information.

7.6.2 Management Information System

The second type of information system is the management information system where the focus of information system activities moves from the transaction processing level to emphasis on the integration and planning of the information systems function. The MIS produces meaningful information or reports aimed at middle level managers to support decisions and have enquiry and report generation capabilities. The management information system modules of the proposed information may include:

- Employment and recruitment;
- Time and attendance management systems.

a) The Employment and Recruitment System

The recruitment processes in Brunei Darussaalam's public service is basically similar to that in all government ministries, it is either through a centralised body of the public service commission department for all the permanent and contract service appointments, or internally decided for the daily rated appointment. However, a special provision is given to MRA for the appointment and recruitment of religious professionals. This special provision gives the ministry an extra responsibility in managing its own appointment and recruitment systems, which would have been a straightforward management process. Due to this factor the MRA may require a dual role in computer-based Employment and Recruitment Systems. The recruitment process itself is highly dependent on a number of information resources that come from various sources internal and external to organisation. This data will help to facilitate the process and management of organisational recruitment. Currently there are a number of computer applications available on the market that are designed to support the employment/staffing function of an organisation. The systems may incorporate a number of possible capabilities such as applicant tracking systems, the recruitment selection systems and the recruitment control management systems¹⁸. This system can be developed or tailored in-house.

b) Time and Attendance Management System

The proposed computer-based information system may require integration with the time and attendance management systems to allow the supervisor or managers to monitor the time their employees spend on the job. This is particularly important to management, since it is apparent that tardiness and absenteeism are among the problems faced by the organisation.

7.6.3 Decision Support System

The third category of information system is the Decision Support System. It focuses on the decisions made at the higher level in the organisation, usually by the senior managers and executives. It is an interactive system, capable of analysis through the use of models able to answer "what if" questions concerning decision alternatives. The decision support system of the MRA may encompass a number of sub functions namely; the human resource planning application¹⁹; human resource development application²⁰; and performance management application²¹ all of which are outlined below:

a) Human Resource Planning Application

A decision support system for the human resource planning should allow decision-makers to determine the implication and feasibility of various options for meeting future staffing needs. Two computer applications designed to support human resource planning may be relevant to the situation at the Ministry of Religious Affairs, namely the Workforce Profile Review; and Workforce Dynamic Reporting²². These applications are designed to provide a summary of information about the number and types of employees currently in the organisation, to track how employees have moved into, through, and out of the organisation, to project the future work force supply and demand based on the previous trends.

b) Human Resource Development Application

The human resource development application in the proposed information systems is concerned with training and career development of the employees. Training is usually seen and spoken of as something that is needed due to some deficiency in the skill and knowledge area of work. From a management perspective, training and career development are critical activities which aim to get the right people into the right jobs and to motivate them to strive to give and obtain the best. The entire training and career

development programme through the needs analysis, and career development programme and evaluation requires careful monitoring. Effective training and career development systems will require integration with the performance management system. The human resource development systems may consist of the Training Administration; Career planning and Training Evaluation Applications.

i) Training Administration subsystem

The Training Administration subsystem serves as a record of the past history of training and experience. It is often combined with the career profile applications from the beginning of service till present. It will also serve as an accounting tool for monitoring the entire in-house development programme.

ii) Career Planning subsystem

The career planning or succession planning application is particularly important to the company for it can be used for the internal movement of employees thus avoiding the need to undertake external hiring or the hiring of contract officers for a specialised position. In addition, it allows the employee to see exactly where he or she can expect to progress within the ministry. It can chart a path for employees to follow that could include training and job experiences necessary to reach their career goal. The system has a strong link to the performance management module.

iii) Training Evaluation Subsystem

The training evaluation system is concerned with evaluation of training and in some instances, the evaluation of what happens when training requirements or applicants are changed or altered.

7.7 Organisation and Staffing of the Information Systems and Record Management Services Unit

The establishment of the Information and Record Management Services Units in the MRA will be a vital step for the organisation to undertake as mentioned above (Section 7.3.6 (b)). In addition to its role of managing organisational hard information, the unit will be responsible for providing or co-ordinating the delivery of computer-based information service in the organisation as a whole. The section will be co-ordinated by the Chief Information Officer (CIO) or the Head of Records and Information Management, who will

also be responsible for the organisational records. His/her main responsibilities towards information systems management will include developing, operating and maintaining systems, as well as facilitating the acquisition and adaptation of software and hardware. With the integration of the computers and information technology, the proposed organisational charts of the MRA will be as shown in Figure 7.5. The Head of Systems or System Manager will need to be created to assist the Chief Information Officer in co-ordinating the Record and Information Management Section.

The senior systems analyst often acts as project manager during the systems development life cycle in addition to his role of assisting the CIO in co-ordinating the Information Systems section of the MRA. He is the second in command of the organisation's information systems. The systems analyst (SA) analyses the user information requirements, and develops systems that would satisfy them, and also often designs information systems based on requirement specifications. SA also plays a key role in translating business problems and opportunities into information systems and providing a liaison between users and information specialists. A programmer implements the analyst specifications. He develops codes and tests the programs that satisfy the requirements established by the analyst, using the design specification worked out by the designer. The programmer will also maintain any application use by the organisation. In addition, the responsibility for input (such as magnetic tapes to be mounted) and output (print out, report) in the data centre are assumed by the control clerks, and the data entry clerk enters data through a computer terminal.

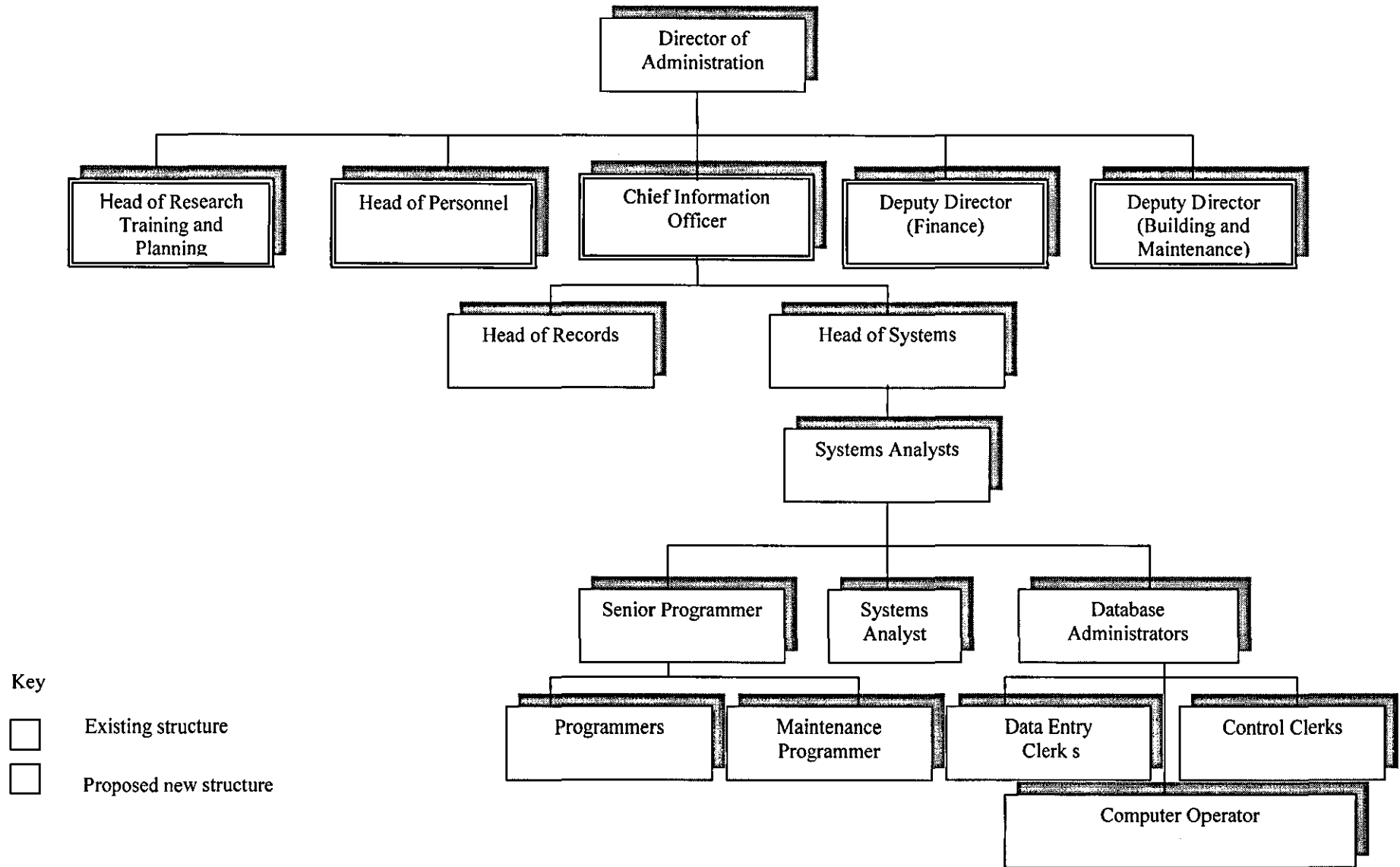


Figure 7.5 The Proposed Organizational Structure of the Department of Administration, Ministry of Religious Affairs with the integration of the Information Systems Division

7.7.1 Training and Development of the Information Systems Personnel

The introduction of the computer-based information systems into the human resource management system of the organisation requires professionals and operational staff with diverse skills and knowledge in order to do his or her job more effectively. In the current climate it is not sufficient for the organisation to be dependent solely on a competent administrator or an efficient worker to manage and process human resource functions. Kavanagh et al.²³ stressed:

“ Today and in the future, the successful human resource professional must be part human resource generalist, part human resource functional specialist, part consultant, part business manager and must understand and be comfortable with using information systems”.

Negative attitudes towards new technology need to be changed and a younger generation who possesses good qualifications together with vigorous and ambitious characteristics needs to be added to the team.

The human resources professionals currently in the organisation are also going to need to update their human resource information system skills. The need to integrate the organisation Human Resource Information System modules or facilities into the organisational training programme is also vital. These can be held internally by the organisation and provide a hands-on knowledge about the use of the technology and its management.

Other anticipated changes to organisational responsibilities are the organisation's job rotation programmes, which will begin to include human resource information systems assignments as a vital component. Such inclusion or experience in the human resource information system allows the human resource professionals to get an overview or understanding of all areas of human resource information system including the type, flow, analysis and use of data and information by each client in the human resource department. Such rotation assignment also allows current employees to understand the interrelationships between their department and other departments in the organisation.

7.7.2 Security and Confidentiality of Information System Operations

An organisational computer-based information system, if it is not properly safeguarded, can be an easy target of threats from various internal and external sources. They can stem

from technical, organisational, and environmental factors compounded by poor management decisions. The threats to computer based systems may be due to hardware and software failure, frauds, theft of data, services, intentional damage, unauthorised access, natural disasters, virus attacks, user errors, electrical problems, fire, or program changes, etc. Due to its vulnerability it is vital to institute control elements for the proposed systems at the MRA to counteract these threats, and "periodic auditing of the control is necessary to see that it remains effective"²⁴. To minimise the errors, disasters and breaches of security, special policies and procedures must be incorporated into the design and implementation of information systems. The combination of manual and automated measures that safeguard information systems and ensure that they perform according to management standards need be introduced by the organisation. These controls consist of all methods, policies and organisational procedures that ensure the safety of the organisation's assets, the accuracy and reliability of records and operational adherence to management standards. It is vital that vulnerabilities and control issues be identified as early as possible and they must be an integral part of the design²⁵.

A number of control elements need to be present for the proposed information systems at the MRA namely the general control and the application control²⁶. General control is one, which controls the design, security and use of computer programs and the security of data files, in general, throughout the organisation. It applies to all computerised applications and consists of a combination of system software and manual procedures that create an overall control environment. The application controls are controls implemented specifically for a particular information system or application such as the payroll or leave management system. These may include procedures and standards of the data input, processing, database and output to prevent error and abuse.

7.8 Summary

This chapter provides an elaboration of a number of culturally feasible and systemically desirable solutions and change opportunities for the MRA to undertake in order to solve various information system issues described during the first stage of the SSM. The suggestions put forward in this chapter are a by-product of a thorough examination and diagnosis of the problem situation of the organisation as a whole. As can be seen, four important actions were recommended as the most relevant to the MRA since a systematic improvement to the MRA's manual-based record management system programme is

highly essential before computer technology can be introduced in the personnel management activities of the organisation. The result of the study demonstrates that a computer-based system is not always the only solution to issues and problems of ineffectiveness and inefficiency of information management. It is just one of many solutions.

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Chapter Eight

Discussion

8.1 Introduction

The previous Chapters of this thesis (Chapters 4, 5, 6 and 7) demonstrated the capability of SSM as a learning system that facilitates greater understanding of the problem situation in the Ministry of Religious Affairs (MRA). A number of changes were proposed that are deemed both culturally feasible and systemically desirable. The study demonstrated that technological changes could only be made once the manual systems were properly investigated. It also highlighted desired 'improvements' for the system, based on the concern of individuals or particular groups within the MRA. What kind of change strategy do we need in anticipation of these changes and what can we draw from this experience?

This discussion will draw out the change strategy needed for implementation of the SSM output together with the learning outcomes from the experience. The first part of this Chapter discusses the possible repercussions of the organisational changes proposed for the MRA. The second part of the chapter unravels the manner in which the application of Soft Systems Methodology in the complex situation of the MRA has provided a solid platform for achieving the research objective. A post study evaluation of the relevance of the SSM using Flood and Jackson's Total Systems Intervention found in this chapter helps to confirm the strength and relevancy of the SSM to the MRA problem situation. With the overall positive contribution of the SSM for the initiation of the research, findings and recommendations identified in the study, provide a testimony for the methodology to be applicable not only to the real world problem solving but also to academic research. The study also provides a further confirmation of various hypotheses and thinking about the discipline of information systems. These precursors will allow the implementation of the desired systems to some extent, to be described.

8.2 Organisational Change

The proposed organisational changes highlighted in Chapter 7 of this thesis, is a key development of this study. This has been achieved through examination of issues from a multi-perspective point of view, which were explored through modelling a number of different relevant systems. The use of SSM facilitates a change intervention consisting of a planned action in an effort to make things different. SSM has the following characteristics:

- It is well established in the research literature of management science and information systems,
- It is distinctly non-traditional in philosophy and operation,
- It has a recognisable degree of formal structure,
- It has a clear profile in the literature for over two decades that suggests that there has been sufficient time for some impact upon practice to have taken place,
- There is some evidence of the use of SSM outside the research community¹.

The proposed organisational changes will directly affect the organisation's operational and strategic management processes, hence cultural change. Change is concerned with making things happen. Change is a pervasive influence, which is an inescapable part of both social and organisational life². Martin³ established that change is both endemic to management and an issue, which can generate resistance from a wide range of sources. MacDonald⁴ suggests that:

"Change is associated with progress, though it is not synonymous with progress. Change may indeed be required for progress, but change does not necessarily bring progress, except in the purely pedestrian sense of progression to a succeeding state. Progress in the sense of betterment of something or someone is not an inevitable consequence of change. Things sometimes have been better in the past and there is no justification for seeing change and innovation as inherently good".

The changes proposed in the study cover all aspects of change philosophy encompassing an organisation's culture. According to Martin⁵;

Culture is not a homogenous phenomenon but a plurality of heterogeneous mentalities consisting of separate and overlapping 'isms' or habits of thought, which is not a static entity but has a cycle of growth, maturity and decline.

Cultural change can be referred to as cultural engineering, a rational, technical, physical and scientific activity directed towards the control and manipulation of the concept⁶.

While Wilson emphasised that:

"The phrase cultural change is a useful catch-all, incorporating a broad aspect of organisation, including control, commitment, socialisation, manipulation (looking at groups and individuals) and structure, design and corporate performance".

Cultural change encompasses many aspects of the organisational change including structural, technological, strategic and management change. Thus when we change or propose new culture, we are, in effect, changing organisational strategy, structure, process and organisation. Moreover, in the event of technological change such as the introduction of computer-based information systems for the MRA, cultural change will be inevitable in

order that the desired improvement in efficiency and increased quality of work can be achieved. It will definitely lead to the restructuring of jobs, and other organisation practices. According to Eason⁷:

"The social and technical subsystems within the organisation are so tightly interrelated that change in the technical system inevitably has a knock-on effect in the social system".

8.2.1 Resistance to Change

Despite its potential in providing for positive outcomes, the proposed changes at the MRA are bound to receive some resistance from individuals, groups and organisations within the MRA. According to Buchanan and Huczynski⁸:

"One cannot expect everyone in an organisation to respond in identical manner to specific change proposals. Different individuals and groups are likely to be affected in different ways, and are also likely to perceive the implications differently from those proposing to implement the change".

Thus problems, challenges and resistance of the planned changes in the MRA, for a more efficient manual records management systems, plus the introduction of technological advances in the information management systems need to be anticipated in order to cope with the new management systems. As always, the successful implementation of change, however well designed is dependent on the responses of the people affected. It is important therefore, for management to adopt a clearly defined strategy for the initiation of change. New ideas and innovations should not be perceived by members of the organisation as threats but should be treated as a challenge. The possible reasons for individual resistance to the proposed information systems at the MRA is due to the following reasons:

- The proposed change may require a large investment in financial and human resources. These two critical elements, which have been difficult to acquire in the immediate past due to the economic turmoil, can be a determinant factor. Moreover, the current allocation of the departmental budget for training may be one of the obstacles to the proposed change at the MRA.
- The proposed changes may not be a top priority for senior management at the MRA. Management may have their own agenda for improving other areas before the organisational information management system can be undertaken.
- 'Parochial personal interest'⁹ among staff and executives in the organisation. Such changes may threaten to undermine the authority of certain executives and staff in the

organisation. Changes may bring things such as loss of power, prestige, approval, and status. For example certain executives may feel that their power or authority may be lost or be replaced by computer systems, or the introduction of Chief Information Officer may pose a challenge to other senior executives towards their authority and power of organisational information. Some senior executives may question the need for creating such positions.

- Changes in the organisational structure of the MRA may not be attractive to certain groups of people. Moreover, the bureaucratic form of the organisation, which was designed to deliver consistency and predictability of operation, may not be able to cope easily with change.
- The proposed change process may be incompatible with the established organisational culture, norms, and value. It must work with the prevailing organisational culture in order to bring about a lasting change. Change that requires people to function in a very new and different way will be at odds with the powerful norms and values that permeate the organisation.
- The rigid personnel management systems in the MRA could also restrict the ability to introduce change.
- Misunderstanding and lack of trust towards the proposed change. If change is not communicated, resistance to change due to the limited understanding of the reasons behind the proposed change is inevitable. There is a tendency for some people to regress and find security in the past where things appeared simpler and more familiar.
- Resistance may arise because the new information systems can be complex and unfriendly to the user. Change can destroy that level of familiarity and create situations, which are less predictable. If these changes are introduced without the appropriate training and induction then users will be reticent to change and may try to hold on to the old system.
- The current arrangement and integration with other government organisations such as the Public Service Departments and the Public Service Commission may restrict the proposed changes.
- The current centrally controlled rigid procedure of introducing or creating new positions (Chief Information Officer, Senior Information Officer, etc.) may limit the progress of the proposed changes.

- Lack of information management and computer-based skills among the Brunei workforce could restrict the number of people employed for the proposed systems.
- Finally, there may be reluctance to give up old work routines and habits. It is known to be difficult to change management style and working habits which have been reinforced over a long period of time. Individuals need to spend a significant amount of time and effort in altering ingrained behaviour patterns and developing new management styles¹⁰.

8.2.2 Strategy for Change

In anticipation of resistance towards the proposed changes and the need for the MRA to adopt to other changing social, political, economic and technical conditions, it is important for the MRA to devise a strategy to overcome resistance and ensure that the change is accepted and implemented rapidly and effectively. The human aspects of change have to be managed as carefully - indeed more carefully - as the technical and organisational aspects¹¹. The prime purpose of any change strategy is to alter the way organisational members think, behave, interact, communicate, make decisions, reward, monitor, praise and coach¹².

The proposed change strategy for the MRA should be progressive; indoctrinative; conciliative and coercive in nature¹³. The aggressiveness of the strategy should be based on rapid organisational change that dismantles traditional values. The strategy of indoctrination focuses on the concept of cultural change as an explicit learning process. The conciliative strategy believes that cultural change can be achieved through gradual and routine means. The coercive approach sees cultural change as essentially a political process, whose main purpose is to effect a major change in the locus of the distribution of power and authority within the organisational hierarchy. By using the integrative approach however, the MRA can move towards the objectives of achieving the desired cultural change for the introduction of a more efficient information system at the MRA.

Wilson¹⁴ offers a number of stages that need to be undertaken to implement change effectively and overcome resistance to the proposed cultural changes. Culture changes are greatly emphasised within the proposed strategy because culture appears to include virtually everything in an organisation. They consist of Deformative Stage; Reconciliative Stage; Acculturative Stage; Enactive Stage; and Formative Stage¹⁵.

- **Deformative Stage:** this initial stage is to present a different construction or impression which captivates people and moves them to experience their situation in novel, and often unanticipated ways. This approach seeks to deliver some kind of shock to the system that will reorient and trigger the process that will take the organisation off in a new direction.
- **Reconciliative Stage:** the reconciliative phase is to help staff and personnel affected by the changes to come to terms with the proposed change and let them participate in the making of those terms, widening rather than narrowing the possible option to them. This is the time for sitting down together, explaining the worries, identifying and explaining the zone of agreement between parties and finding ways to unite thinking.
- **Acculturative Stage:** the third stage is concerned with the acculturation or the learning process in order to gain commitment from those involved through a training programme. The primary purpose of this stage is to organise, "format", and diffuse the emerging meaning and value underpinning the new culture.
- **Enactive Stage:** this stage is to put to the test the individual ability to discharge their personal obligations and to achieve effective concerted action.
- **Formative Stage:** this final phase of the strategy is concerned with the structuring of culture and the creation of form. This phase will be concerned with the formation of a new working culture based on the new organisational changes and monitor the final design criteria of the cultural change programme, namely 'durability'.

Many different approaches and methods have been developed over the years as part of a strategy to deal with resistance to change. Kotter and Schlesinger¹⁶ suggested the following approach in dealing with individual or group resistance:

- **Education and Communication:** A training or education programme is one of the common ways to overcome resistance to any proposed change. It is a channel of communication of ideas that helps people to see the need for and the logic of change.
- **Participation and Involvement:** Involvement and participation are considered to be the most important factors which can be used to gain acceptance of change in an organisation. The organisation should try to involve their employees, including those who might resist change, in the planning and implementation processes so that they can be part of the change, not just aware of the change.

- **Facilitation and Support:** This approach to the management of change is more suited to a situation where the difficulty is one of being able to cope with the change process or the new situation. This may include giving counselling and therapy to help overcome fears and anxiety about change thus providing a confidence-boosting platform during the transition.
- **Negotiation and Agreement:** Management may have to negotiate rather than impose change where there are important individuals and groups who have enough power effectively to resist.
- **Manipulation and Co-optation:** This involves covert attempts to sidestep potential resistance by disseminating selective information (proposal reports, leaflets, etc.) which emphasizes the benefits to particular stakeholder groups of the proposed changes and ignores or plays down the disadvantages.
- **Explicit and Implicit Coercion:** This approach abandons any attempts to achieve consensus, especially where there is a significant disagreement between those concerned with change, and where there is little or no chance of anyone shifting their standing. It stresses the use of force or threats, sensibly but not violently. It is a 'take it or else' approach.

8.2.3 Implementation of the Designed Systems

Once the proposed change at MRA has been implemented, the new situation needs to be 'refrozen' so that it can be sustained or institutionalised over time. Unless this last step is taken, there is a very high chance that the change will be short lived and employees will attempt to revert to the previous practices. The objective of refreezing, then, is stabilising the new situation by balancing the driving and restraining forces. Basically it requires systematic replacement of a temporary or a trial system with a permanent one. It may mean formalising the driving forces, such as the information management policy or information systems security. The formal rules and regulations governing the behaviour of those affected by the change need be revised to reimpose the new situation. It is equally important to reinforce the changes through symbolic action such as an official launching, form of dress, building design, ways of grouping people to get work done.

The use of continuous data collection and feedback are essential to keep track on the progress of change and monitor new discovery in the light of the new environment. As a consequence, the MRA may need to adopt the Organisational Development (OD)

intervention approach so that it will be able to reinforce the new organisational changes, and achieve the desired effectiveness and employee well being. French¹⁷ identifies seven objectives of the OD:

- To increase the level of trust and support among organisational members,
- To increase the incidence of confrontation of organisational problems, both within groups and among groups, in contrast to "sweeping problems under the rugs",
- To create an environment in which the authority of assigned role is augmented by the authority based on knowledge and skills,
- To increase openness of communication laterally, vertically, diagonally,
- To increase the level of personal enthusiasm and satisfaction in the organisation,
- To find synergistic solutions to problems with greater frequency,
- To increase the level of self and group responsibility in planning and implementation.

The OD intervention approach for the implementation stage of change described by Senior¹⁸ consists of the following:

- **Survey Feedback:** Surveys can be used to assess the attitudes of people across the organisation, they should be used at different stages in the OD process. At the implementation stage, they are important for the effective management of change. Feedback from these surveys to those involved in the change activities helps stimulate discussion of what is working and what is not and should result in modifications to the action plan or the way it is being implemented or reorientation of the vision.
- **Organisation Mirroring:** Organisation mirroring is a set of activities in which a particular organisational group (the host group) first sits and listens to the other groups representatives, and gets feedback (without interruption) from representatives from several other organisational groups about how it is perceived and regarded. The representatives of the host groups and the other groups then exchange places to allow the host groups to have their say (ask for clarification, information, etc.) without interruption. Finally, the representatives of both groups are divided into small sets to work together on the problems and devise an action plan, assign people to the tasks and set target dates for improvements to be completed. This approach is referred to as the 'fishbowl' technique.

- **Inter-group confrontation:** This technique enables two groups which have their unique 'specialities', to confront organisations which go beyond their particular expertise. The objective is to help the members of the two groups increase their awareness of the importance of each other's activities to the overall organisational performance and thus reduce the sense of 'them and us'.
- **Role negotiation:** Role negotiation basically involves individuals or groups negotiating to 'contract' to change their behaviour on the *quid pro quo* basis. In general, it requires the help of a facilitator during a workshop session, each set of participants are asked to say what they want the others to do more of, do less of, maintain, or keep unchanged. A follow up meeting a month or so later assesses progress and, if necessary, renews or sets up new contracts.
- **Process Consultation:** The crux of this approach is that a skilled third party (consultant or expert) works with individuals and groups to help them learn about human and social processes and learn to solve problems that stem from process events. The kind of intervention which is part of the process consultation are; agenda setting interventions, feedback on observational data, coaching and counselling of individuals and suggestions about group memberships, communication and interacting patterns and allocation of work, responsibilities and lines of authority.
- **Team building:** Team building can be used for established long-term groups as well as for special, shorter term, project groups. The processes included in team building are: diagnosis of the task together with individuals and group needs; diagnosis and negotiation of roles; responsibility charting; understanding and managing group processes and culture. A facilitator or consultant is used to help team building.
- **Life and Career Planning:** One of the exercises that can help career planning is to draw a lifeline representing the past, present and the future. Past events are positioned according to the important things which have happened in life, including things done well and things not done well; ups as well as downs. Future required events are also recorded on the line, and some indication is given of the time of achievement.

Implementing change which will ultimately transform the MRA is a long-term process and it is understandable if commitment to the vision becomes somewhat weakened on the way. Consequently, short-term achievement is important, both as a motivating factor and as a mechanism for tracking the progress towards the long-term goal¹⁹. McCalman and

Paton²⁰ concluded that change is all pervasive; effective change needs active senior management support; change is a multi-disciplinary activity; change is about people, pure and simple; change is about success; change is a perpetual process; in terms of methodology, there is no best way; change is about ownership; change is about fun, challenge and opportunity.

8.3 A Total System Intervention Analysis on the SSM Study

The first stage of analysis for identifying the suitability of a methodology using the Total System Intervention (TSI) approach is creativity. This involves identifying the right metaphors for the situation under study. The cultural metaphors that are seen to be suitable for the present intervention are based on the following factors:

- The Ministry of Religious Affairs under study shows a 'rational' aspect of organisational life,
- The study requires cohesion generated through shared social and organisational practices which can both inhibit and encourage organisational development; and,
- The study offers a new perspective on organisational change without focusing exclusively on technology, structure, or culture. It also emphasises changing perceptions and values of the employees.

The consequences of the creativity stage highlight the cultural metaphors as the dominant metaphors that can be the basis for choosing an appropriate system intervention methodology in the second stage of choice. The research study can be categorised by a complex-pluralist situation where soft system methodology is the most suitable for the system intervention at the Ministry of Religious Affairs. The choice of situation is noted in Table 8.1 below:

Complex	Pluralist
<ul style="list-style-type: none"> • The MRA consists of large elements of people, management systems, etc. • The personnel management at the MRA consists of many tasks and responsibilities • The MRA involves of a lot of interaction with its own semi independent departments and other government departments and ministries. • The attributes of the area under study are basically unknown and the objectives are not predetermined. • Interactions between elements are perceived as being problematic. • The stakeholders have different perceptions, and behaviour towards the elements. 	<ul style="list-style-type: none"> • The stakeholders have a compatibility of interest. • The belief, perceptions and values of the people around the system are different. • They do not necessarily agree upon the ends and means but a compromise can be achieved. • They are all involved in the organisational processes.

Table 8.1: The Classification of Methodologies for the Complex-Pluralist Viewpoints.

The above analysis using Flood and Jackson's TSI convention demonstrates the applicability of the MRA situation to the system study of SSM. A systematic validation using a well-tried methodology also helps to confirm that the research findings and proposals have achieved the desired objectives of the research. These achievements are furnished with diverse experience of the research situation and the methodology used. These experiences enable new enlightenment or knowledge contribution to be highlighted.

8.4 Achievements and Lessons Learnt from the Research

The successful application of the methodology, the findings and proposals that are identified in the study is a testimony that the overall research aims and objectives have been achieved. Each action undertaken within the seven stages of SSM provides a learning experience. It brings a new perspective of understanding and a different way of thinking about a problem situation. Most importantly it is the use of SSM in this domain of study

that had played a very significant role in the successful completion of this academic research.

The extent to which the research aims and objectives have been fulfilled can be directly related to the use of the methodology and its application to the problem situation in the MRA. These aims and objectives were stated in Section 1.2 and are discussed below.

a) To define the information system requirements of the MRA

The use of the SSM as part of the research 'enquiry' methodology in this study, together with the use of conventional collection of primary and secondary data have produced an information system that is feasible and desirable to the organisation. The comparison stage of the 'real world problem situation' with that of the 'system thinking world' within the framework of SSM in the study has highlighted the various areas of the MRA's information system activities which requires great improvement if effectiveness and efficiency are to be achieved. It provides a means of teasing out the complexity of the relevant organisational activities, which leads to a set of recommendations regarding change in order help the problem situation. The agendas for change are a 'compendium' or 'summary' that describe the information system requirements to achieve the change. The introduction of the Information Requirement Table (Appendix A7.1) helps to aggregate and narrow down the kind of systems that are best suited to the aspirations of the MRA. Thus, the comparison of the real world problem situation with the system thinking stages, coupled with the production of agenda for change and the application of Information Requirement Identification Table has enabled the study to offer the 'best' way forward to implement the information systems required by the MRA. Hence, the research can boast its accomplishment as an advocate of designing an information system based on what is organisationally desirable rather than on what is technically possible.

b) To identify a suitable methodology which can address the information management issues faced by the public service management in Brunei Darussalam in general.

In the context of Brunei Darussalam the methodological 'discovery' and its successful application to a problem situation in the MRA, offers an unprecedented opportunity for other government ministries and private organisations to use the SSM approach in

structuring their information management problems. Moreover, the impressive track record of the SSM in a number of systems intervention for information system design and identifying management problems of a small and multinational commercial organisation in the UK²¹, Australia^{22 23}, and many other developed countries, extending over 30 years (from 1970 onwards) is a testimony to a practical and successful general purpose methodology which can be used in many information systems management circumstances.

The iterative nature of the methodology enables this research study to be done flexibly and holistically in a large public organisation in Brunei. The reflection on the chosen problem situations is structured by a number of systemic models, which are conceived through holistic study and analysis. The problem situation is taken as a set of assumptions where no objective or complete account of the problem issues are provided. It is mainly concerned with a complex world of people and organisations, as well as technology. In the past, many information system development methodologies stressed predictable technical aspects of system design. As a result, too much attention has been given to the technical issues and too little to the needs of the organisations and its impact upon those within it. People may have different or conflicting objectives, perceptions and attitudes. The human aspects are open, that is, there are many external influences beyond the obvious boundaries of the system. They are non-deterministic, that is the problem area is not well defined and there are no 'rules', which can lead unpredictability.

The successful application of the SSM in producing a set of acceptable proposals substantiates the strength and the universality of the methodology, in terms of its practical usability to an information systems requirement analysis by individuals without technical backgrounds, is one of its strengths. Moreover, this study can provide awareness that the design of an information system is not solely the responsibility of a computer expert or systems analyst. There is a perception that the computer system analyst can impose solutions that will benefit the end-users. Lately, this perception has proved to be untrue, and the rise of systems analysts that employ systemic modes of thought is becoming more prevalent. The user is seen as a key component in the whole system approach, and user needs, behaviour, and participation are studied in great detail.

- c) **To study the organisational information handling and information management activities of the public sector, particularly on matters relating to personnel management information in the MRA.**

The whole research process pertaining to the situation at MRA offers a deep understanding of the organisational information handling and management activities. The extensive use of the SSM for the derivation of the desired information system provides a sensible framework for an in-depth understanding of an organisational process in the MRA. It also increases the understanding about personnel management of public services in Brunei Darussalam. The use of the various interview techniques as part of the SSM study provide a much wider scope for identifying the shortcomings and issues that are detrimental to current efficiency and effectiveness of the MRA. In addition, the investigation of the organisational administrative documentation supplements the information gathered by the interviews.

The pictorial representation of the problem situation through the Stage 2 of the SSM highlights certain important aspects including elements of structure in the situation (i.e. organisation and reporting structures, physical location), the elements of processes (things continually happening) and the relations between the two, the climate of the situation²⁴. A rich picture is an appreciation of the problem situation rather than any form of diagram. The process of building up this pictorial representation was aimed at unpacking the situation without as far as possible imposing some structure on it. It captures the problem situation as deep as possible to enable viewpoints to be selected in as neutral a way as possible, as a basis of developing a model to be used to compare with what is in real world of problem situation. Most importantly, the rich picture serves as a means of condensing all information that has been gathered into a simple expression of the problem situation.

The ability of the research to go beyond information management and handling activities provides better understanding of the MRA environment and its stakeholders' aspiration of an efficient and desired information system, which is critical to its operational and strategic management. Thus, ideas and perceptions identified through interviews, informal discussions, documentary evidence and the rich picture, enhanced with the system thinking stages of the methodology, has brought together issues and

requirements that provide a useful impetus for the culturally feasible and systematically desirable information system for the organisation under study.

d) To identify the possible areas and problems of introducing change into the information management system of the MRA.

The SSM framework used in the study enables the identification of opportunities and threats when introducing change. The study reflects its independence from organisational or physical boundaries. The drawing of the rich pictures and the collection of problem statements forms first part of the study that highlights the diverse interpretation of issues and the voicing of proposals or opinions on the kind of changes desired. This part of the study provided the main focus for Stage 3 of the SSM, the formation of the root definition. Its production marked a point of transition from the 'real world' expression of the problem situation to the creation of a notional human activity system relevant to the problem situation. As described in Chapter 6, a root definition is a kind of hypothesis or technique of viewing the problem situation which describes what the system is and what it aims to achieve; not in a strictly mechanistic way, but taking account of the person who could be affected by it, who would be part of it, who could affect it in some way. It also defines the transformation that could take place and the environment that surrounds and influences that particular human activity system. This stage of the methodology is achieved by narrowing down the wider scope or area of concerns collected in the first two Stages of the SSM to an area that causes the study to take place. This is then transformed into a notional defined boundary of the relevant changes to be introduced to the problem situation and whose problem will be looked at in preference to that of others. In fact, it is this notional system that forms a basis for 'hard' systems intervention.

Furthermore, the analysis using SSM, formally recognises the importance of integrating the control and monitoring elements of systems function (training, policy, procedure etc) or proposed changes, in order to ensure the increased effectiveness and efficiency of the system to be introduced. The inclusion of this vital element has a role of providing some means of judging the success or otherwise of the current system. Although these elements can be a barrier to system development, it can be a basis for the kind of systems to be designed based on culturally feasible and desirable changes. These constraints, problems and barriers of implementation should not be considered

as a way of restricting desirable changes but as a supply of knowledge about the social world at the MRA that provides alternative action which is more relevant to the current situation. Moreover, as time passes and gradual change is achieved, a new Weltanschauung will emerge. This new might lead to a more radical change. The SSM contains the potential to be as reactionary, as emancipatory, as radical, as revolutionary as the user makes it²⁵. According to Checkland²⁶ SSM embodies a paradigm of learning. The notion of 'a solution', whether it optimises or satisfies, is inappropriate in the methodology which orchestrates a process of learning which, as a process, is never ending.

The study also advocates that any effort to change organisational processes should not be undertaken in haste and in an *ad hoc* manner. The information systems analysis is a complicated process, and to treat it as a simple and straightforward process is misleading that may invite disastrous consequences. The information systems study should be undertaken after looking at the organisation holistically and considering various options and possibilities before a defensible solution can be achieved. The thesis demonstrated that pre-implementation study for the change effort should be treated as important as the information systems to be proposed.

- e) **To provide a conceptual framework for the development and design of an integrated information system for the MRA with major emphasis on the improvement of information handling activities.**

SSM offers a conceptual framework for the development and design of the desired information system. Such a framework is necessary as it assists the organisation to make a right change, which may involve enormous risks, thus avoiding fixing or modifying a system, which is working perfectly. The study outcome can provide a strong basis for the basic system requirements, or its subsystem to be identified as part of desired changes, while indirectly divulging some of the important elements that can be considered to make up the proposed system.

As mentioned earlier in the analysis framework, the root definition stage provides the soft system analysis with a key definition or boundary of the information system named relevant to the situation. The next stage comprises the building of a conceptual

model and shows how the various activities are logically arranged and connected to each other. It is this stage of the SSM study that supplies the essential elements required of the proposed information system. The activities identified in the model significantly reflect the conceptual systems and subsystems of the proposed information system for the MRA based on the notional boundary specified by the root definition. Furthermore, the SSM formally recognises the importance of integrating the control and monitoring elements (training, policy, procedure etc) as part of proposed changes, in order to ensure the effectiveness and efficiency of the system to be introduced. The inclusion of this vital element has the role of highlighting the known constraints, problems and barriers of implementation that can help in providing a suitable action, which is more fitting to the current situation.

With thorough holistic analysis and understanding of the organisation, the proposed system requirement can be expected to receive support from top management and will be more likely to result in implementation. Moreover, the evidence, provided through the methodology, is unequivocal. The expression of the interest and perceptions gained in the empirical data collection were honest, unbiased opinion from which the requirements for the information system were eventually derived. The soft system analysis "proposes more than a physical explanation of the organisation in the same way that a systems approach does. It encompasses the perceptual domain as well, and draws both aspects into what can only be described as a fluid interactive process. Wholeness and relationships are more important because it is through such definition that the parts find their purpose"²⁷.

f) To identify the best system solution to issues faced by MRA management associated with their personnel management information system.

The realization of the proposal for a culturally feasible and systemically desired information system for the MRA, as described in Chapter 7, was a result of effort after undertaking a systemic analysis of the problem situation through the seven stages Mode 1 of the SSM. The highlighting of a 'best' system solution to tackle the issues associated with the MRA information system demonstrates the strength of the methodology in situations where the objectives themselves are unclear. The SSM used is built around the concept of a human activity system and accepts that whenever we

describe a human activity system, we include an interpretation, a taken-as-given point of view or *Weltanschauung*²⁸. It provides a sensible framework for understanding an organisational process and problems in the MRA, it creates a modelling framework relevant to the organisation and identifies its activities. This leads to an identification of what type of information system best suits the views and perceptions expressed by the respondents during the earlier part of the analysis. It provides structure and a flexible discipline for analysis and the development of options. The findings are a catalyst for future analysis of the problems identified by any further system interventions.

The use of SSM has demonstrated the utility of using a study of human activity systems as a precursor to other change, whether it be of 'soft' or 'hard nature'. The corporate attitude prevalent in many organisations in 'keeping up with the Joneses' in IT²⁹ will have to be reevaluated as a consequence.

Although the results of the SSM study in this thesis do not provide a real or physical proof of changes, they offer the organisation a 'right perspective' on information system development strategies for the MRA in order to move forward in improving the management problem situation. This so-called 'soft' (proposed) change provides the right answer or a basis for the 'hard' (real) change in an organisation's facilities, equipment, structure or procedures. The SSM avoids positivistic assumptions or '*priori*' knowledge about the possible outcome of the learning systems.

g) To highlight the information systems development discipline as multidimensional social change.

The ability of the study to provide the conceptual design and information systems requirements, indicate a multidimensional social affect on various sectors of the MRA. Most importantly, the outcome of this research has enabled the fundamental system requirements of the new system to be proposed, which incorporates both social and technical needs. It recognises the importance of both elements and provides the framework as well as the tools and techniques to develop a requirement statement, which includes both social and technical issues. The analysis process at the MRA involves the identification of a number of people within the information system. These

will include the individuals or groups who call for changes to the systems, top executives, managers, clerical staff, technical personnel and external users of the systems. Four important perspectives, which can reveal an insight or express significant detail in the analysis and design tasks, were explored: namely the functional activity supported; different technical components used; the organisational context in which the information systems is embedded; and most importantly the human perspectives comprising general and specific interests, requirements, and issues faced by the people involved. Basically, what the analysis has captured includes both formal and informal aspects of the organisation under study. The collection of viewpoints on issues and requirements statement coupled with observational approaches on the problem situation helps in deciding the range of possible actions to follow.

As a result of recognising the significance of understanding the organisational culture, behaviour, perceptions, needs and suggestions through interview and observation for the design proposal of the MRA's information system, it is illogical not to classify information systems within the disciplines appropriate to social science. It is conceived that computer technology side only makes a fundamental contribution as the enabling mechanism that helps the job processes and practices to be faster, enriched, simplified, accurate and upgraded, but it is the human being that transforms them into meaningful items or resources, called information. While computer science has evolved around the intellectual roots of the engineering discipline, it has been found to be restrictive and problematic particularly in the understanding and interpretation of the human that creates the information. As a result it is wrong to perceive that the technologist has all the answers to the organisational processing issues. It is also very wrong to be dependent on the technologist and let them do the entire job of solving the problem and identifying the needs based on their narrow and confined technological solution. The technical solution may not be the ultimate answer but may cause another set of problems as a result, needing another effort to find a solution. Finding a solution to an organisational problem can be an expensive never-ending cyclic process. What is needed is an 'holistic intervention' which will provide the best possible options before any action to rectify the situation is undertaken.

One of the appeals of this research study is in terms of the practical usability of the information system requirement methodology to the MRA situation by an analyst who

has no technical background. This development can provide awareness for other organisations in Brunei that the design of an information system is not solely the responsibility of a computer expert or systems analyst. It adds to the arguments about the end of an era of a false perception that computers can solve all information management problems and an era in which system analysts or programmers impose their solutions on user participation and involvement in the information systems development process. The computer system experts or system analysts seem to be losing their exclusive grip on the information system field.

h) To identify the feasibility and difficulty of analyzing information systems in the changing nature of the public sector administration with reference to personnel information system.

This academic research recognises certain limits or difficulties about applying SSM to information systems design. Significant among these is that a great amount of time is needed to complete the study. Lack of guidance and the ambiguity of the methodology during the initial part of the study was a very unnerving experience. Once the concept is understood, "SSM appears to be a methodology that can be interpreted simply by means of common sense. SSM can be presented in a popular yet elegant way, and does not demand difficult formal technique or artificial language"³⁰. It is vital to point out that familiarity, guidance and experience are important for the success of any study. According to Stowell et al.³¹ :

"There is no substitute for using SSM in the real situation... and it was in the real world experience which finally yielded the most significant learning".

It requires new terminology, activities, experience, skillful organising and facilitator and an ability to perceive the world through different perspectives, which is often hard to acquire. Moreover, the task of drawing the rich picture and the comparison stage of the problem situation and the model, are found to be very time consuming. The rich picture requires a great deal of consistency, coupled with ideas and drawing skills to represent the situation. Integrating later findings on to the limited single picture was found to be most difficult.

It is recognised that soft system thinking is not solution oriented, but biased towards clarifying the problems that are felt to exist in given situation. Once this has been

achieved, other analytical techniques may have to be applied before solutions are found. The research study undertaken at the MRA is a perfect example that shows that the SSM study does not provide any 'hard' change in the host organisation. Without a proper grasp of SSM concepts, the positive descriptions on what the methodology can do, and referring to various tremendous track record of the SSM in the many fields of academic research and real world consultancy can cause false hope and frustration by not offering a hard change to the effort of solving organisational problem. This is also stated by Jayaratna³²:

"For SSM users who are committed to the learning epistemology there will be considerable philosophical, political and pragmatic difficulties when trying to shift their clients' expectation from one of seeking improvements to one of learning. This is so unless the SSM users can successfully make their clients' expectation from one of seeking improvements to one of learning".

Gregory and Lau³³ recognises that;

" Some academics find 'soft change' unsatisfactory and consider that a method is valid only if it brings about significant hard change in the organisation".

One has to have a good grasp and deep understanding of the basic concept of SSM before a full appreciation of the methodology can be achieved. As far as experience is concerned, a proper guidance or mentoring of these concepts is required before one can fully experience and absorb the 'wonder' of SSM. Simply reading and learning through literature, in monographs, academic journals and working papers may not be enough, as the explanations available are conceptually based. This shortcoming is also noted by Cheung³⁴ who expresses:

"SSM suffers from over abstraction, and understanding of the theory is no guarantee for good practice. There is sometimes the danger of over-claim about the applicability of SSM to a wide range of problems."

Even if no physical or organisational changes have been made, the people in the organisation where the study is to take place will be offered new or changed thinking and a new learning process for approaching organisational problems, and an enhanced capacity of the organisation to handle future change.

8.5 Intellectual Basis

To use SSM is to carry out research on it. Arising out of its use comes awareness about the problem situation to which it is directed but also about the methodology itself. The

research attempts to learn about SSM through the real world problem situation and provide a great amount of knowledge and experience about SSM and the problem solving effort of an organisational information handling and management activity. The successful accomplishment of applying SSM using the logical seven-stage Mode 1 also confirmed its significant position in the theoretical underpinning of the methodology, even though the Mode 2 of the methodology has been introduced. The Mode 1 offered a structure of process that was flexible and gave a formal structure to impose on a very vague organisational study. The achievements of the study aims and objectives and the amount of knowledge obtained after undertaking the study has strengthened the existing foundation of knowledge and also brought new intellectual discovery that stimulates further discussions for the advancement of that knowledge. The six significant contributions of this academic study are described below.

i. Confirming the universality of the SSM in which this western oriented methodology can be used to tackle any human activity problems discounting organisational environment or cultural orientation.

The successful application of the SSM to the situation at the MRA strengthened Checkland's theory on human activity systems. This research demonstrated the universal appeal of SSM philosophy. In SSM the objective of a problem situation is assumed to be more complex than a simple goal that can be achieved or measured. Understanding can be achieved through debate with all the 'actors'. Even though the approach originated from the West, the study has shown that it can be applied successfully in an organisation of developing countries of the East where there is different cultural situation and environment. In fact SSM can be viewed as more suitable for these countries as it does not necessarily prescribe technology-based development.

The most notable findings that can be uncovered from the research is the consistency and resemblance of Checkland's thinking with a number of Islamic concepts of managing oneself, groups and organisations. These can be derived from various verses of the Holy Koran and the *Hadith* (traditions) of the Prophet Muhammad (peace be upon him). The most relevant is the use of the concept of "enquiry" in the SSM with the concept of '*muzakarah*' or 'consultation' in Islamic management

thinking. While SSM uses the term, the 'systemic' to describe a holistic understanding of a situation, in Islam an 'organic' concept to characterizes its spiritual and worldly view of a situation, these can be seen as isomorphic terms.

Checkland's concept of 'systemic thinking' in solving organisational problem closely relates to the Islamic 'framework of analysis' of the religion and the state which are considered as one organic unity that coheres into an undifferentiated social and political unity. The foregoing conception of Islam is that it is a comprehensive system of life. Islam, as a total civilization, looks upon human life as an organic whole and approaches its problems in the light of the holy Koran and the teaching and practices of Prophet Muhammad (peace be upon him). Islam does not divide the world artificially and arbitrarily into social and profane or into religious or secular.

The Prophet Muhammad (peace be upon him) has described the life of *ummah* (followers) as "the well-settled and consolidated building, each part of which buttresses the other" and he also compared it to "a body which reacts *in toto* with discomfort and fever whenever a part of it is hurt."³⁵ A well-known Islamic thinker, Faruqi³⁶ also points out:

"The Ummah is like an organic body whose parts are mutually and severely interdependent with one another, and with the whole. For the part to work for itself is for itself to work for each of the other parts as well as for the whole, and for the whole to work itself to work each of the parts".

Given the organic nature of the *ummah* (followers), it is appropriate that the framework for analysing the political, social or organisational phenomenon is to place parts within wider contexts. The individual for instance, cannot be understood on their own terms, in as much as individual purpose and identity are constituted by the participation in family relations; the family in turn must be placed in the wider context of social, organisational and political relationship. Individuals can have a sense of themselves as individuals to the extent that they can relate their own purpose to wider social groups such as family, community and workplaces, and they can sustain a sense of individual identity so long as these wider groups maintain themselves as coherent wholes. In analysing the political phenomena, Moten³⁷ offers the following Islamic framework in order to provide a solution to a political situation;

- The 'parts' in a functional sense are equivalent to the whole in that they maintain order; integrate, define and try to attain goals,
- The smaller units are easily accessible for investigation and often accommodate advanced methods of study.
- Placing parts within wholes widen the horizon of knowledge for it permits learning at macro and micro level,
- Finally, since Islam obligates every conceivable part of the society to seek actualisation of the divine will, it is not appropriate for the investigator to restrict his or her study to any one or two aspects of the social order to the detriment of the other parts and of the whole.

Another characteristic of Islamic thought is towards the understanding of the Islamic Shariah (Divine law). According to Abdurrahman³⁸ ;

"The characteristic of the Islamic Shariah is that it has to function as whole. Putting any of its fragments into practice isolatedly or bracketing it with other 'ism', will inevitably deprive its of its beauty and miracle. The Islamic Shariah, in this respect may be compared to a body which has a fascinating beauty if it is viewed as a whole in its original structure. But viewing any of its parts after being severed off from the rest parts of the body can give not attraction at all".

Equally, Checkland's theoretical foundation in interpreting human affairs as a product of a particular history³⁹ can be correlated with one of the historical perspectives of Koranic method of enquiry as described by Kirmani⁴⁰:

"History of a subject provide us a revealing account of legitimacy and limitation of knowledge of that subject. It provides us proofs, gives us trends, teaches us lessons and open our eyes. The holy Koran quotes a number of events both of pious and wicked persons, those of prophets and their opponents. While the very aim of these references is to teach lessons, the value of history cannot be discounted. In fact, whatever idea a scholar develops in his mind about the field of study through his acquaintance with contemporary knowledge of the subject, is surprisingly changed after going into the history of the subject. When we study Islam as a subject we at once correlate it with the Prophets Muhammad (peace be upon him) and his followers, but when we study the holy Koran itself we come to know that Islam is from the very beginning of human race with the same fundamental world view and conceptual structure"

From a management perspective, the enquiry processes (Stage 1) and accommodation between different interest in the debate stages (Stage 5) of the SSM are considered relevant to what has been propagated by Islam in managing a family unit, organisation or country. The concept of 'shura' or consultation which can be found in the various

verses of the holy Koran signify the importance of the undertaking to be followed in our day to day management of family, work or country. The holy Koran clearly states that the Muslims are those:

"..who conducts their affair by mutual consultation" ⁴¹

In another verse the holy Koran implies;

"It is part of the Mercy of God that thou dost deal gently with them. Wert thou severe or harsh-hearted, they would have broken away from about thee: so pass over (their faults), and ask for (God's) forgiveness for them; and consult them in affairs in affairs (of the moment). Then, when thou hast taken a decision put thy trust in God".

The above verse implies that those whose conduct in life is open and determined by mutual consultation between those are entitled to a voice, e.g. private domestic affairs; in affairs of business, as between partners or interested parties; in state affairs; as between the rulers and the ruled, or as between departments of administration. Islam promotes greater participation of those who are entitled to their own opinion. This cannot be effectively carried out without the trusted belief in the potential of people. Through this practice, everyone in the group is given a fair chance to freely express themselves, without fear or favour. Each member of the group would feel needed and has a role to play. This is indeed a great motivation for everyone to sincerely work for his own as well as for the benefit of everyone. In one of the Prophet Muhammad (peace be upon him) saying :

"Whosoever wish to undertake any task then make consultation before discharging his or her duties, he or she will be guranteed a valuable knowledge (hidayah) and proper application of the jobs "⁴²

The Prophetic approach to the broad masses serves to teach us the value of the consultation and debate based on the following verse of the holy Koran:

"Call into the way of thy Lord with wisdom and exhortation and argue with them in a way that is best. "⁴³

In Islam 'teamwork' or 'participative' management approach is an established principle which is applied to both the obligatory devotional duties as well as in all worldly or mundane matters. The holy Koran exhorts:

"And hold fast all together, by the Rope which Allah (stretches out for you), and be not divided among yourselves "⁴⁴

This particular verse clearly spells out and exhorts that all Muslims have to be together in both material as well as spiritual aspects of life. Muslims follow the same teaching, guidance, knowledge, mission, vision, and source of hope and strength. We should be able to understand each other well. Ahmad Sarji⁴⁵ provides an important guideline on effective participative management based on the Islamic principles which can be considered as similar to Checkland's concept of SSM:

- Respect towards people and recognition that every individual is endowed with certain gifts or potential, certain abilities which constitute his or her strength. These gifts are different for different people.
- Policies and practices should reflect what we believe in. This implies that individual personal value systems should be closely integrated into our working lives with our families, our groups, etc.
- The third requirement is to agree on the right of work. Each of us, whatever our rank is in the organisation, needs to feel that he or she has the same right as others.
 - a) Firstly, it is important that one feels one is needed or given the trust to express ones gift and develop ones potential.
 - b) Secondly one must feel that he is involved especially in areas where he is good. If one finds that his opinion is being sought, he would definitely feel happy that he is involved.
 - c) Thirdly, one must have the right to understand the organisation in terms of its mission, responsibilities, working environment, one personal career part, and the kind of competition the organisation faces.
- Understanding that relationships are more important than structure. Structures, system and procedures are considered to be important to organisations. Whatever structures, system or procedures are available, organisations still need individuals with the right attitude to effectively use them. Such structures cannot, by themselves, form an effective and proactive working group. Groups are formed on the basis of trust which can only come about through good relationships between people.

The above relationship and relevancy to some Islamic philosophical thinking is the very argument that can help to propagate SSM theoretical foundation and concepts to

other Islamic countries in solving organisational or social problems where the cultural and social value and orientation is entirely different from the western settings. The relevancy of many verses in the holy Koran and the quotation from the tradition of the Prophet Muhammad (Peace be upon him) or *Hadith* in relation to SSM theory provide an important foundation and critical stimulus for its acceptance in these countries where these two sources formed the key basis of any Islamic State or Government, According to Abdurrahman:

'Government is practically Islamic when the way it functions precisely conform with the holy Koran and the Sunnah (Tradition)'⁴⁶

He also stated that:

'A country is characterised as 'Islamic' not on the basis of the percentage of Muslim populace, such as predominantly or entirely inhabited by Muslims, but by virtue of Islamic practical life of its people. Thus the basic constitution is absolutely the Koran and the Sunnah (traditions)'⁴⁷

Islamic political concepts are characterised by the fact that their foundation rests upon judicial bases of Shariah (Islamic Law). According to Dairaned.

These concepts are based in Islamic ideals and principles. The prescribes a body of laws which governs the whole sphere of human life in its spiritual, physical, social, economic and political aspects.⁴⁸

Finally their relevancy can make them attractive to other public organisations in Brunei encouraging them to use SSM to understand organisational problems and highlight relevant solutions to organisational problem/s.

- ii. Providing an impetus or stimulus that SSM approach when applied accordingly, can be a fitting methodology in solving any human activity or organisational problem faced by a public organisation in developing countries such as Brunei Darussalam, based on collective and divergent views of relevant systems.**

The successful outcome of this pioneering study can provide a stimulus for its use in other public organisations in Brunei Darussalam and other developing countries. It also provides further evidence of the strength of the application of SSM in theoretical and practical paradigms. The philosophical foundation of the human activity system that has been introduced by Checkland is the main attraction of the methodology. This

basic philosophical foundation is already described in Section 3.3 of Chapter 3, and can be summarised below:

- Problems do not exist independently of observers; they are constructs of the concerned mind.
- People have different appreciations of problem-situations because they see them in genuinely different ways. It is often difficult, and sometimes impossible, to adjudicate between the different 'ways' of seeing
- Just as problems are intellectual constructs, so too are 'solutions'.
- The concept of problem (a perceived mismatch between a desired and an actual state) is inadequate for describing many of the difficulties which actually arise in organisation or human systems.
- Improvement in problem situations are most likely to be brought about through sharing of perceptions and a process of persuasion and debate.

In addition, SSM has been a very well known approach that deals with complex problem situations, ill-structured, ill defined, not dependent of people, in other words, where different organisational stakeholders with different weltanschauungen have different, possibly conflicting perceptions about the problem situation and the major issues, and where there may be no agreement about the appropriate objectives. The following characteristics of the methodology is clearly spelt out in the research :

- Structuring the problem situation rather than problem solving;
- Facilitating dialogue between the various stakeholders with the aim of achieving a greater degree of shared perception of the problem situation, rather than providing decision aids to the decision maker;
- 'What' questions are more relevant than 'how' questions, i.e 'what is the nature of the nature of the issue?', 'What are appropriate objectives?' given the various world views of the stakeholders, 'what is the appropriate definition of the system for the issue considered?', 'which changes are systematically desirable and culturally feasible?', and only then 'how are these changes brought about?.'
- Eliciting the resolution of the problem from stakeholders themselves, rather than from the analyst; and
- Changing the role of the 'problem solver' to one of becoming a facilitator and resource person who relies on the technical expertise of the holder.

SSM articulates a process of inquiry, it is a learning system that leads to purposeful action in a continuous cycle which differs from the hard approaches which adopts means-end directives, seeking to achieve organised action, while attempting to cope with an ever-changing flux of interacting ideas. The concept of learning in SSM is about perceiving and evaluating parts of the flux before deciding and taking action, which then becomes a part of the flux with new perceptions, evaluations and action emerging. SSM uses participative, iterative techniques and is designed to achieve feasible and desirable changes in a problem situation by means of a holistic approach. Learning then is never ending.

SSM, has a well-known reputation as multi-purpose problem understanding methodology. This single factor alone can be a major enticement to using the methodology. One of its strengths is claimed to be its practical usability in the wide range of situations by people without technical backgrounds and it has been used by academics in their research. It has also successfully been used as precursor to the introduction of the computer-based information systems, information systems requirement analysis, formulating information systems strategies and simulation of hospital outpatient services. Its track record indicates a substantial record of real world applications, extending over a period of about 30 years (1970-2000) demonstrating that success or failure is difficult to judge in the context, the record seems enviable. The number of success stories behind the application of SSM in a number of developed countries is a fitting tribute to its proponents. Moreover, Checkland's SSM is best documented in many academic sources, and is the most formalised system, consisting of a sequence of steps and rules that evolved from an extensive consultancy practice, rather than from theoretical considerations alone, and it is this that makes it eminently teachable in contrast to other methodologies. Naughton⁴⁹ describes SSM as the system that:

“ ..it tackles both intellectual problems of interpretations, analysis and synthesis involved in conceiving ideas for change, and practical, and the practical problems of facilitating the change process itself. Thus it uses powerful ideas – like the concept of system – to generate insights into a problem situation, but only in conjunction with a process of inquiry and debate which incorporates people in discussion of the implications of these abstract ideas. In that sense, the approach...is a unique blend of theory and practice”.

iii. Offering a foundation for 'change of thinking' in the developing countries that one needs to understand the situation as a whole before identifying the problem.

The study also advocates that any effort to change organisational processes should not be undertaken in haste and in an *ad hoc* manner. Information systems analysis is a complicated process and requires great effort, and to treat it as a simple and straightforward process is misleading which may invite disastrous consequences. The information systems study should be undertaken after looking at various corners of the organisation and considering various options and possibilities before a defensible solution can be achieved. The thesis demonstrated that a pre-implementation study for change should be treated as important as designing the '*what*' kind of information systems to be proposed.

iv. Providing an argument that managers must be 'hybrid' in terms professional knowledge and know-how in terms both of general management, and information management and on computer skills in order to provide the organisation with complete skills.

The study of the situation at the MRA reflected the prejudices and 'narrow-mindedness' of some of the public sector managers in Brunei Darussalam that may be a reflection of all organisational managers world-wide. They only seem to be concerned with managing their decision-making and less concerned with the surrounding environment which helps them in making those effective decisions. They know their trade of making certain kinds of operational and strategic decisions for certain situations based on certain conditioning. They either ignored the information management/systems circumstances, which support their decisions or lacked the knowledge of this vital management knowledge. This is an indication that organisations will now require hybrid managers and professionals who are knowledgeable in management, information systems, and information management knowledge in order for the organisation to be successful in operational and strategic decision making. Alternatively, managers need to be trained with the basic and advanced information management systems, in addition to traditional management skills.

v. Emphasising the importance of systematic management information in the public sector organisation.

The analysis and findings of the study signified the need for public organisations in Brunei to recognise the importance of information management to achieve organisational success. Without a positive attitude towards these vital resources the government efforts to achieve quality, effectiveness, efficiency, efficacy and productivity will be futile and doomed to fail even though efforts to train officials with modern and sophisticated operational and strategic management techniques are intensified. The study highlighted that the current grumbling is not due to the problems with the management techniques or individual deficiencies but mainly lie in the lack of recognition of information management within individual departments or the MRA as a whole.

vi. Highlighting the validity and significance of a moral aspect of the information system design.

In SSM the building of root definitions and conceptual models is followed by means of an iterative debate involving the organisational stakeholder and the facilitator (analyst). It is conceived that much of this work will take place in group meetings in which the organisational stakeholders will express their individual viewpoints. In these circumstances it can be expected that their viewpoints can be antagonistic and inimical. In these cases the analyst may be charged with producing a model, which accommodates a particular viewpoint or biases, even though SSM is commonly accepted as a methodology that professes neutrality.

In the MRA case, looking back at the current unfavourable climate as reflected in the rich pictures, no group debate took place. This is to avoid conflict and further disagreement and antagonistic viewpoints which could worsen the already fragile environment. The first stage of the research identifies a number of contentious and sensitive issues involving criticism between colleagues. These can be found in a number of problem statements and expressions identified from the empirical interviews. If this happens then the main purpose of the debate, which is to bring about different viewpoints to accommodate opposing views, will have been defeated. The author built the models on the basis of a one to one discussion with the research

supervisor. On a much lighter note, this action is undertaken for the sake of the success of this academic research and to avoid jeopardising organisational harmony as a result of the debate. This was not a thought out strategy but just seemed the most appropriate way to proceed, as the basics and findings of the SSM study is iterative and cyclic. As the present undertaking is for the purpose of academic research, there is always room for presenting the findings to the Permanent Secretary of the MRA for a further debate or public group discussion of the findings before action can be undertaken to solve or remedy a problem situation. Time constraints are also a determining factor for the modification to avoid spending much time on giving training on the concept of SSM and discussing various contentious issues in unaccommodating circumstances.

This modification procedure can be a further indication of the flexibility of the SSM in a problem situation that is culturally different from a western perspective. In the Bruneian Malay culture, pointing fingers or describing ones weaknesses as part of consensus seeking can be confrontational and a debate can involve a head on clash of values. Islam also disallows such confrontation. There is also an element of '*awar* and *galat*' or 'respect' and 'reticence' in the Malay culture towards superiors where a reflection presented by the superior is accepted without many questions. In other situations, such debate may not be that fruitful as openness and a free flow of ideas can be restricted by the intervention of those self-styled individuals, particularly from those in the higher authority, whose ideas must be followed. The eastern or Malay concept of debate within SSM may need to be undertaken with great caution if it is to avoid offending their cultural values. For Westerners, a debate tends to be considered constructive and beneficial; when people have adversarial position debate will help the truth to emerge to the benefit of all parties.

The ability to reflect and understand the situation that avoids confrontation is another 'beautiful' feature of the SSM. This feature also symbolizes the flexibility of the SSM in exceptional circumstances. This is made possible by the first two stages of the methodology that enables analysts to view and conceive the organisation's culture, structure, norms, values, and issues faced on the areas under study. Such understanding is vital for the success of the organisational study. The flexible nature of the methodology indicates the applicability of SSM in any environment

discounting any cultural values and norms that can make SSM acceptable to the eastern way of dealing with a problem situation.

8.6 Summary

This discussion chapter has provided an overview of the significance of the soft system methodology as an agent of organisational change in one of the important institutions in Brunei Darussalam. It also demonstrates the contribution of the methodology, not only in highlighting the problems and providing the best solution possible to these problems but offers various relevancy factors for anticipating the proposed new systems of change at the MRA. The discussions on the achievements and contributions of the thesis in attaining its aims and objectives, and reaching towards the advancement of knowledge incorporates within it some present limitations of the methodology, and the possibility of generalising the outcome of the SSM study at the MRA to other government organisations in Brunei and also to other countries which uphold Islamic ideology. The proclamation of various achievements of the research and contributions to the development of knowledge, open other avenues for further discussion and investigation that will be proposed in the next Chapter.

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Chapter 9

Conclusion and Recommendation for Further Studies

9.1 Conclusion

The research findings demonstrate that the aims and objectives, set out in Chapter 1, have been achieved. Emergent from the study is the general applicability of SSM to an alien culture for which it was not developed. This bodes well for its future use in similar scenarios. The problem situation unstructured (Stage 1) was adequately described using data from the interviews with personnel of all levels in the highly hierarchical MRA. It was clear from the responses given that conflict and divergent views were common place, and that several problems and issues could be defined. The difference between Western and Eastern cultures first became apparent at this point, the MRA personnel were entrenched in a defined social system that propagates poor information handling. Whereas Chapter 4 describes the system as it should be (derived from the administrative policy, procedures, job description etc.), the actual system used in Chapter 5 and Stage 1 of the SSM is derived from the primary data collection. The conflict, multi-perspectives and entrenchment led to a very complex 'rich picture' from which a number of relevant systems could be drawn.

The root definition decided upon is as follows:

'A Ministry of Religious Affairs owned human activity system to transform ineffective, inefficient and unreliable information handling and work flow practices to effective, efficient and reliable practices by the use of appropriate actions and activities by MRA personnel management staff for the benefit of the stakeholders that act within resource constraints imposed by the Brunei Government'

Thus, the transformation driver is unambiguous and seeks to "transform ineffective, inefficient and unreliable information handling and work flow practices to effective, efficient and reliable practices by the use of appropriate actions and activities by MRA personnel for the benefit of the stakeholders". This may lead to controversial change in practice in the MRA. Again the methodology must adapt to the Eastern culture, so what

would be feasible and desirable in the Western world may not be so feasible, nor desirable, in the Eastern world.

The position of actions taken is described as an intermediate step in an iterative methodology. Thus the MRA must endorse the principles and concepts of organisational learning to progress. This impacts upon some key recommendations for further work that is described in the next section.

It is clear that there is a difference between the organisational system and its component parts as it should (job description, policies and procedures), as it is (primary data), and as proposed (output of SSM). To develop these ideas needs a change of attitude, which by its nature is very slow in coming. Thus, the impact of the study, if implemented, will not be known for a number of years, and is likely to have to adapt to a change in technology.

9.1 Recommendations

From the general conclusions above, the following set of recommendations are made to further an understanding of the issues and to move through to an implementation and evaluation phase of the work, achieved in this study

- Further research is needed on the extent of implementation of the proposed information system of the MRA and identification of the kind of problems encountered by these changes.
- Once the project is implemented, an evaluation of the impact of the changes on organisational effectiveness, efficiency and efficacy can take place.
- The impact of organisational change on psychological and social interactions due to the introduction of new technologies and job processes requires further study.
- The integration of new technologies into work practices requires careful planning and multi-perspective study to ensure smooth transition.

- In order for Brunei to benefit from the universality of the SSM it can be reapplied to other organisational analyses within other public organisations in Brunei.
- The SSM and other systems techniques and methodologies should be propagated among executives and staff by integrating it into the organisational training programmes including the concepts of organisational learning.
- All government ministries should recruit more information professionals to provide a systematic handling and improved management of the organisational information resources.
- The public sector organisation in Brunei should recognise the importance of the information it produces. To facilitate this view, a mandatory training course on information handling, etc. is highly recommended.
- Greater flexibility and adaptability needs to be introduced into government procedures and its policy of decision-making by taking into account rapid technological advances affecting various work practices.

9.2 Final Remarks

Many of the experiences and expressed preferences in this thesis find a parallel in published literature, which indicates that in this field of endeavour, theory and practice are in step. This reflects the action research approach found in the system methods employed. The study has been very useful in making sense of the methodology and forms a picture of the wider framework of organisational information systems. In addition, as a process it is applicable not only to developing a tactical and strategic foundation but to providing a strong foundation for other problem understanding efforts, particularly in information systems planning. From this work the organisation will be more informed and, therefore, benefit from more effective decision-making.

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Appendix A2.1
Formal Letters of Application
For the Research

Haji Suhaimi Bin Haji Abdul Karim
No. 1 Coe Avenue,
Loughborough, Leicestershire, LE11 4SE
United Kingdom

Date: 6th August 1996.

The Third Secretary,
Recruitment and Training Section,
Brunei Darussalam High Commission in London,
19-20 Belgrave Square,
London, SW1X 8PG

(Attn: Pengiran Mohd. Ali bin Pengiran Haji Othman)

Dear Sir,

REF: Empirical Research in Brunei Darussalam

I would like to apply for your kind approval to undertake the above study, which is related to the PhD research that I am currently undertaking at Loughborough University.

For your information, this empirical study is part of the data collection effort for the writing up of a research thesis entitled "Towards an integrated information system for a public sector organisation in Brunei Darussalam with special reference to the needs of the Ministry of Religious Affairs Brunei Darussalam". The date proposed for the commencement of the study is the 7th December 1996, and will end hopefully by 7th of June 1997. It will involve a number of data collection techniques: interviewing, document investigation and observing staff at work at the Ministry of Religious Affairs for the purpose of identifying information system requirements of the organisation. The study will incorporate visits to a number of government organisations with the aim of understanding their information systems.

As a consequence of this, I would appreciate it if you could inform the authority at the Ministry of Religious Affairs of my intention and also make necessary arrangements for my trip to Brunei Darussalam. I would also like to apply for all my travelling expenses to be borne by the Brunei government. I enclose herewith a copy of supporting letter from my research supervisor and the proposed timetable for the proposed study.

Your co-operation towards this matter is greatly appreciated.

Yours sincerely

(Haji Suhaimi Bin Haji Abdul Karim)

[Translated from the original Malay]

Haji Suhaimi Bin Haji Abdul Karim
No. 1 Coe Avenue,
Loughborough, Leicestershire, LE11 4SE
United Kingdom

Date: 24th October 1996

The Permanent Secretary
Ministry of Religious Affairs,
Bandar Seri Begawan,
Brunei Darussalam

(Attention: Hajah Aishah Binte OKML Haji Yussof)

Dear Madam,

Ref: Empirical Research in Brunei Darussalam

I would like to make a reference to my letter of application dated 6th August 1996 that was made through the Brunei Darussalam High Commission in London for the above matter which is to be undertaken at Ministry of Religious Affairs Brunei Darussalam. The study is related to the PhD research that I currently undertake at Loughborough University, United Kingdom.

For your information, this empirical study is part of data collection effort for the PhD research entitled "Towards an integrated information system for a public sector organisation in Brunei Darussalam with special reference to the Ministry of Religious Affairs". The study will be mainly confined to the situation at the Ministry of Religious Affairs and the departments within it. It will involve various data collection techniques including interviews, observation of staff at work and document investigation with the aim of identifying the information system requirement of the Ministry of Religious Affairs. Discussions with the Ministry's officials are also part of the data collection.

On this occasion, I would like to apply directly to you for permission to undertake the study at your ministry for a period of about six months commencing 7th December 1996 and will hopefully end by the 7th June 1997. I would appreciate very much if you could also make necessary arrangements with all departments in the Ministry of Religious Affairs of my impending research based on the timetable enclosed. A supporting letter from my supervisor is also enclosed herewith.

Thank you very much

Yours Sincerely

(Haji Suhaimi Bin Haji Abdul Karim)

[Translated from the original Malay]

Haji Suhaimi Bin Haji Abdul Karim
No. 1 Coe Avenue,
Loughborough, Leicestershire, LE11 4SE
United Kingdom

Date: 1st November 1996.

The Third Secretary,
Recruitment and Training Section,
Brunei Darussalam High Commission in London,
19-20 Belgrave Square,
London, SW1X 8PG

Dear sir,

REF: Change of Date for the Empirical Research In Brunei Darussalam

I would like to refer to my previous letter of application dated 6th August 1996 regarding my application to undertake an empirical research study at the Ministry of Religious Affairs Brunei Darussalam. I would like to inform you of the change of date for the research study that will now commence on the 10th January 1997 and will end on 10th August 1997 due to some unavoidable circumstances.

I would appreciate if you could notify the Ministry of Religious Affairs and other relevant departments included in this research of the new dates. The new timetable for the proposed research is also enclosed herewith.

Your kind attention towards this matter is greatly needed and very much appreciated.

Yours Sincerely

(Haji Suhaimi Haji Abdul Karim)

[Translated from the original Malay]

Haji Suhaimi Bin Haji Abdul Karim
No. 1 Coe Avenue,
Loughborough, Leicestershire, LE11 4SE
United Kingdom

Date: 12th December 1996

The Permanent Secretary
Ministry of Religious Affairs,
Bandar Seri Begawan,
Brunei Darussalam

(Attention: Hajah Aishah Binte OKML Haji Yussof)

Dear Madam

REF: Change of Date for the Empirical Research In Brunei Darussalam

I would like to refer to my previous correspondence dated 24th October 1996 regarding my application to undertake an empirical research study at the Ministry of Religious Affairs Brunei Darussalam. I would like to inform you of the change of date for the research study which will now commence on the 10th January 1997 and end on 10th August 1997. This change is made due to some circumstances that could not be avoided.

I would appreciate if you could notify all those concerned at the Ministry of Religious Affairs of the new dates. On this occasion, I would also like to request your co-operation to correspond with the three external organisations and inform them of my intention to make a study visit to their department. The new timetable for the proposed research is enclosed herewith.

Your co-operation towards this matter is greatly needed and very much appreciated.

Yours Sincerely

(Haji Suhaimi Haji Abdul Karim)

[Translated from the original Malay]

Appendix A2.2
Empirical Research Schedule

**INVESTIGATIVE STUDY AT MINISTRY OF RELIGIOUS AFFAIRS
BRUNEI DARUSSALAM
From 10th January 1997 to 10th August 1997**

Departing to Bandar Seri Begawan : 10th January 1997.

Department of Administration

Establishment Section – 13th January – 15th March 1997

- Director of Administration
- Deputy Director Administration

- Head of personnel
- Record Service
- Contract
- Establishment
- Personnel Record
- Salary Increment
- Recruitment and Appointment
- Pension and Gratuity and Workers Provident Fund
- Benefit (Leave and fares entitlement)
- Appointment outside the Jurisdiction the Public Service Commission
- Promotion and Salary review
- Disciplinary/etiquette
- Job Advertisement
- Scheme of Service
- Extension of Service in Government
- Examinations
- Transfers and secondment
- Establishment Warrant

20th March 1997 – 20th May 1997

Head of Research, Development, and Training

- Research and Planning
- Information Technology Unit
- Organisational and Management Research
- Public Service Review
- Public Service Award
- Board of Directors Meeting
- Human Resource Research
- Human Resource Management Planning
- Performance Appraisal Unit

Training Unit

- Local Training
 - In-house training secretariat
 - Civil Service
 - Local University
- Foreign Training
- Seminar/Workshop/Attachment

Institute of Islamic Studies : 21st May 1997 – 31st May 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Appointment
- Human Resource Development
 - Training

Islamic Dakwah Centre : 1st June 1997 – 10th June 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Performance Appraisal
- Human Resource Development
 - Training

Haj Management Department : 11th June 1997 – 21st June 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Appointment
- Human Resource Development
 - Training

Department of Islamic Education : 23rd June 1997 – 2nd July 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Appointment
- Human Resource Development
 - Training

Department of Syariah Affairs : 3rd July 1997 – 12th July 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Appointment
- Human Resource Development
 - Training

Department of Mosque Affairs : 16th July 1997 – 7th August 1997

Director

Deputy Director

Administration Section

- Head Personnel
- Administration of Leave
- Personnel Record
- Appointment
- Human Resource Development
 - Training

Familiarisation Visits

Computer Section, Department of Civil Services – 17th March – 20th March 1997

Computer Services, Public Service Commission – 26th February – 27th February 1997

Information Technology Department, Ministry of Finance – 9th July 1997

Appendix A2.3

Interview Questions put forward to the Director of Administration

Interview Questions with the Director of Administration Ministry of Religious Affairs.

Part One: About the MRA

The Objective of the MRA

According to my understanding there are two written objectives of the MRA, they are as follows:

- To uphold Brunei Darussalam as an independent sovereign democratic country based on the teaching of the Ahli Sunnah Wal-Jamaah (Sunni Sect).
- To establish a dynamic society, and develop a disciplined and responsible citizens in order to meet the challenges of progress and development.

Questions:

- a. Are the above objectives still valid or are there any additional points to be added?
- b. How successful are MRA in achieving these objectives?
- c. For each of the objectives specified, how would you go about achieving it?
- d. What are the major problems faced by the MRA in achieving the above objectives?
- e. What do you think is necessary to solve this problem?
- f. As we are approaching the new millennium, Do you foresee any challenges to this organisation from within or outside the Brunei government?
- g. We have heard a number of new management thinking and ideas (such as privatisation, outsourcing, Total Quality Management, Management by Objective, etc) do you personally sanction any of these management techniques?
- g. Does MRA have any strategic plan for the year 2000?

Part 2: The Department of Administration.

Mission

" To provide an efficient and effective service and assistance to the Ministry of Religious Affairs on matters relating to human resource; finance; management and maintenance of buildings and vehicles; management and co-ordination of planning

and development projects; management of research, planning and human resource development and general administration"

Objective

" To upgrade the administrative capability of MRA through the management of human resource; maintenance of buildings, research, planning and human resource development; and effective and efficient office management"

Questions:

1. How successful is the DOA in the accomplishment of the above objective?
2. According to my understanding of the mission statements and objectives of the DOA, which stipulate the need to upgrade the administrative capability of MRA in various aspects of management, how would you go about achieving each of the objectives in conjunction with the following matter:
 - a. Management of human resources,
 - b. Research, planning and human resource development;
 - c. Effective and efficient office management?
3. Is the objective of this department and the ministry known to all of your staff and officials?
4. How do you make them aware of the mission or objectives of this department?

Role and Responsibility

5. One of the responsibilities of the DOA is "Managing and co-ordinating, MRA human resource" Which means that your departments are directly responsible for the management and allocation of "human Resource". How would priorities be identified in this matter?
6. In part 7 of the responsibility statement "providing management assistance to all departments under the MRA". What kind of management assistance does it mean? Can you describe two of the most significant areas of assistance that are being offered by the DOA? How successful are you in offering these assistance to all the Departments of the MRA?
7. Looking at the organisational chart of the DOA the human resource development is under the Head of Research, Training and Planning Section not under personnel management section. Don't you think that aspects of human resource development (HRD) should be under Personnel Management so that planning towards HRD such as training can be undertaken properly?

Human Resource

8. Does the number of qualified or professional administrators at this department in line with your expectation in administering the Ministry and the DOA?
9. From the statement on DOA's roles and responsibilities, it demonstrates that your department has a vital role in the personnel management of the MRA. Do you personally think your organisation has enough manpower to smoothly run the personnel management of the DOA and the MRA as a whole?
10. Judging from the number of middle managers in this department and most of other departments, they are not from what you would call professional "public administrators" and they are mainly recruited from other disciplines mainly from religious teachers. Some of them are directly recruited after the completion of their undergraduate study. Is this a good thing or a bad thing?
11. Are there any plans to recruit more qualified managers or make an effort to have such an expertise from other sources (Public Service Department)?
12. Are the present managers who deal with various aspects of personnel management given adequate training to shoulder a complex rules and procedure of the Brunei Government Public Service.
13. It is obvious that the training programme is based on the needs of the department and the ministry as a whole. How do you identify the training needs of each individual or section? Do you have a strategic plan for this training programme in-house, local or overseas?
 - a) Does the training programme conform to the strategic planning of the department?
14. How are decisions made in conjunction with the training needs of personnel at the MRA
15. Can you outline a number of obstacles in the relation to human resource development (training)?
16. Are you planning to introduce more management or professional based posts such as Administrative Officer, Assistant Administrator, Engineer, Accountant to fulfil needs and improve the performance of the ministry?

Problem

17. Apart from the lack of a qualified professional administrator (as it may seem) What is the other primary issue faced by your department and the MRA as a whole?
18. Faced with the problems or shortcomings, do you think that it can be solved? How does your department go about solving this problem or constraints?

Job delegation

- 19 I understood that certain tasks are delegated to other officers on your behalf, do you give them the overall or partial authority to make a decision? Do you fully trust your subordinates to undertake the decision on your behalf?
- 20 Does your department have a job description? Who prepares this job description before it is being endorsed?
- 21 If you delegate a task to a member of personnel which is outside his/her job descriptions, what usually is the response?
- 22 Do you think job descriptions play an important role for the co-ordination of staff and proper discharge of duties?

Management Styles

- 23 There are a number of management techniques or styles whereby the emphasis on quality and productivity seems to be its important aspect. Do you propagate or endorse any this systematic management style in this department? Do you expect certain level of standard or benchmark to be followed in undertaking each task?
- 24 How do you define quality and productivity in your administration? How successful are you in maintaining consistency and quality in the work output?
- 25 Individual performance is measured annually through a performance appraisal scheme introduced by the Government some years ago to measure the performance of a civil servant in the country. What to you think of this personally?
 - a. What is the strength of the current performance appraisal system?
 - b. How do you emphasis its importance to your subordinates as an assessment on the overall performance of the Department?
 - c. Do you use this measure of performance technique to make a recommendation on as aspects of promotion, training needs etc.?

Communication

- 26 What are the main communication channels used, to convey messages or information with regard to policy matters to those concerned at departmental or ministerial level.

- a. In addition to the paper-based communication with members of your staff what other means is needed?
 - b. What is the strength of the current communication systems?
 - c. What is your opinion on the electronic based communication such as an Email? Do you think it can be effectively applied to the MRA situation?
- 27 In case a problem arises be it work related or on personal matter, do you prefer your staff to see you personally and put their problem to you, or you would prefer him/her to see their immediate superior first before they come to see you.?

Decision Making

28. As the chief executive of this department what was the most difficult decision you have made in connection with personnel management?
29. Normally, what supporting documents or information do you use and where are its sources when making certain decision?
30. Usually there are three important supporting procedural documents or rules which are vital in assisting decision making in terms of personnel management namely;
- The Government Financial Regulation
 - The General Order of 1962
 - The Civil Service Department Circular
 - The Prime Minister's Office Circular
- Do you refer to these established procedures when you make your decision?
How often do you refer to these resources?
- 31 What is your personnel opinion about these information sources?
- 32 Are there any other sources used for the decision making activities?

Computer-based system

- 33 It is obvious that information technology particularly the use of the PC has been significant in this department. What is your personal opinion about it? What aspect you think it can change the organisational situation and partly replace humans on matters of decision making?
34. What aspects of management has IT been introduced in your department?

Job Satisfaction and Final Comments

35. Are you happy with the current position you are in at the moment in terms of your responsibilities, number of staff, challenges, etc. ?

36. Any other comments which you would like to make pertaining to anything about your organisation, suggestions, etc ?

Appendix A2.4

Interview Questions put forward to other Departmental Directors and Deputy Directors

Interview questions put forward to other Departmental Directors of the Ministry of Religious Affairs

1. According to my understanding the objectives of your department are as follows:

(will be described during the interview)

2. Are these objectives still valid?
3. For each of the specified objectives how would you go about achieving it?
4. How do you make them aware of the mission and objective of this department? Are there any specific objectives for the management of personnel at your department?
5. Do you personally think that your department has achieved its objective? Can you provide me with some examples of successes?
6. Does your organisation have a strategic plan for the year 2000?

Problems

7. As a public organisation you will not be immune to problems in various matters. Can you clarify to me as to the kinds of problems faced by your department in particular to the management of personnel ?
8. Do you think these problems can be solved? Is your department in a position to solve its own problems without depending on the MRA?
9. Which constraint is important for your organisation to solve first?
10. In most departments under the MRA, the daily administration is being handled by a "middle manager" who is not public administrator and mostly from the education sectors. Is it a problem to you? Are you making an effort to recruit more specialised management staff?

Training

11. Do you feel that the present staff are sufficiently trained to cope with the present workload?
12. From time to time your staff will obviously require appropriate training programme, what action is undertaken to identify their training needs? Do you

have any strategic plan for the departmental training programme (in-house, local and overseas)?

13. How are decisions made in conjunction with the training requirement of personnel of your department?
14. Do the training programme of your staff conform to the current departmental strategic plan?
15. How much money is being allocated for the training program in your department?

Job Delegation

16. I understood that certain tasks are delegated to another officer on your behalf do you give him the overall or partial authority to make a decision? Do you fully trust them to make certain decision?
17. Does your department provide job description to its staff? Who prepares this job description before being endorsed?
18. If you delegate a task to a member of staff which is outside his/her job descriptions, what usually is the response?
19. Do you think job descriptions play an important role for proper co-ordination of staff and proper discharge of duties?

Management Styles

20. There are a number of management techniques or styles whereby the emphasis on quality and productivity seems to be important aspects, do you propagate or endorse any of this systematic management style in this department? Do you expect certain level of standard or benchmark to be followed in undertaking each task?
21. How would you define quality and productivity in your administration? How successful are you in maintaining consistency and quality in the work output?
22. Individual performance is measured annually through the performance appraisal scheme introduced by the government some years ago to measure the performance of civil servant in the country. Do you think it is an effective measure of performance? What do you think of this personally?
23. What is the strength of the current system?
24. Do you emphasise its importance to your subordinate as an assessment of the overall performance of the Department?

25. Do you use this measure of performance technique to make recommendation on aspects of promotion, training needs etc?

Communication

26. What are the main communication channels used to convey messages or information regarding departmental matters with those concerned at other departments or ministerial level?

27. In addition to the paper-based communication with members of your staff what other means is needed?

28. What is the strength of the current communication systems?

29. What is your opinion on the electronic based communication such as the Electronic mail? Do you think it can be effectively applied to the MRA situation?

30. Are the communication channels used by the MRA efficient or deficient? In addition to the conventional paper-based communication with members of staff what other means do you think is needed?

31. In case a problem arises be it on work related or personal matter, do you prefer your staff to see you personally and put their problem to you or you would prefer them to see their superior first before they come to see you?

Decision Making

32. As the chief executive of this department what was the most difficult decision you have ever made in connection with personnel management?

33. Normally, what supporting documents or information do you use and where are its sources when making certain decision?

34. Usually there are three important supporting documents or rules which are vital in assisting decision making in terms of rules and procedures of personnel namely ;

- The Government Financial Regulation
- The General Order of 1962
- The Civil Service Department Circular
- The Prime Minister's Office Circular

Do you refer to these established procedure when you make your decision.? How often do you refer to these resources?

28 What is your personnel opinion about these information sources?

29 Are there any other sources of information used for the decision making activities?

Computer-based system

30. It is obvious that information technology particularly the use of PC is significant in this department. What is your personnel opinion about it? In what aspect do you think it can change the organisational situation and partly replace human on matters of decision making?
31. What aspect of management has IT been introduced in your department?

Job Satisfaction

- 33 Are you happy with the current position you are in at the moment in terms of your responsibilities, challenges, etc. ?

Final Comments

- 34 Any other comments which you would like to make pertaining to anything about your organisation, suggestions, etc ?

Appendix A2.5

**Interview Questions put forward to
Heads of Sections, Middle Managers,
and Senior Managers.**

Interview Questions put forward to those concerned with specific activity or role within the perspective personnel management and information handling activities

Question to the head of Unit or Section

1. What is your position in the organisation?
2. How many people are working in your section?
3. Are you aware of what the MRA/department is trying to achieve in relation to its overall objective?
4. As one of the major units in this department, one must have the overall objective of its formation. Do you know what the objectives of the section are?
5. What are your understandings of the aims and objectives of your section?
6. How do you make your staff aware of the existence of such objectives?
7. What are the main obstacles in achieving the stated objectives?
8. What are activities carried out by the unit to achieve the above objectives?
9. How do you control and co-ordinate your staff/personnel in terms of discharging their duties to a maximum in line with the role and function of your section?
10. What action do you undertake to provide a favourable climate of work?
11. Do you have full authority towards your staff, or are there any overlaps of responsibility on the part of your subordinate?
12. From the departmental/organisational chart, your section is responsible for a number of tasks. Do you have any problem with the given tasks?
13. What is the main problem or shortcoming of your section in relation to the delegated task?
14. Judging by the staffing level, do you feel that you have a right number of staff? Is your staff well qualified, as you would like them to be?
15. You have mentioned a number of shortcomings generally or specifically, how does it affect the section. What do you think is the right remedy for this problem?
16. How do you think these problems can be solved. Are you in a position to solve them?

17. Do you think the yearly performance appraisal report has a direct effect on the performance of your staff? In addition to these assessments is there any other assessment method which do you think is vital?.
18. Do you use the current measure of performance to make recommendation on aspects of promotion and training needs. What other criteria are necessary?
19. Does the current issues arising on a specific tasks related to your job description go direct to you, or referred to the director of administration first, before he delegates to you?
20. In the context of Job "X, do" you think you need any additional training?
(Yes/NO) If yes, What kind of training is needed? Have you requested such training?
("x" will depends on the main tasks of the person interviewed)
21. Are you in a position to make any decision-making? What level of decision-making can you undertake?
22. What types of information are required when decisions are to be undertaken. Are these information readily available?
23. Who will provide these information? Are they to date?
24. Can you highlight some of the problems of acquiring and accessing personnel information in the your section?
25. What do you think is the main cause of the problem and how do go about solving these problem?
26. Office computerisation is now a norm in many organisations, do you think, this technology alone can solve the current issues of personnel management faced by you and colleagues in this organisation.
27. What aspects of your tasks has IT been introduced?
28. How would you tackle if there is any resistance?.
29. Are you happy with the current position you are in at the moment in terms of job responsibilities, challenges, etc. ?
30. Any other comments which you would like to make pertaining to anything about your organisation, suggestions, etc ?

Appendix A2.6

Interview Questions put forward to Staff on Specific Task or Role

A questions to staff on specific task/role.

Questions A

The objectives of the MRA are as follows:

- To uphold Brunei Darussalam as an independent sovereign democratic state based on the teaching of the Ahli Sunnah Wal-Jamaah (Sunni Sect).
- To establish a dynamic society, and develop disciplined and responsible citizens to meet the challenges of progress and development.

And the objectives of your department as follows:

(Based on respective department/section)

1. Are you aware of the existence of the above objectives of the Ministry or department?
2. Does your superior provide you with job descriptions? What do you think of your job descriptions?
3. Is your task confined to the specified job descriptions? Are there any overlapping tasks?
4. If there are any overlapping task, do they directly affect your primary task? Does your superior know about it?
5. What are your primary responsibilities in this section or Department?
6. What kind of problem do you come across in your work?

Questions B.

Personnel Information Handling Activity of *(identified during the interview processes)*

7. What are the tasks involved in each activity?
8. What are the objectives of this activity?
9. What are the inputs of this activity?
10. What are the purposes of these inputs, namely useful information that can be derived from them which might be useful for problem understanding?

- 11 How do you go about extracting information from the inputs, namely the models or procedures used?
- 12 What information would have to be available to enable someone to do this activity? Where would it come from, in what form and how frequently?
- 13 What information would be generated by this activity? What form would it be produced in and how frequently?
- 14 Can these inputs always help you in understanding the problems (if yes, go to Q15)
- 15 What supporting information do you use and where are its sources?
- 16 How do you go about solving problem in this activity:
- 17 By using ready made solutions based on established procedures or models or rules.
- 18 By using procedures generated as situation demands, namely custom made solution.

(if established procedures are used then Q19, 20, 21 are necessary, if custom made solutions are used, go to 22 and 23).
- 19 What is the main source of these procedures, namely management manual?
- 20 How long have these procedures been used?
- 21 What are the advantages and limitation of these procedures?
- 22 How did you arrive at the custom made solutions, namely from personal experience and judgement etc?
- 23 Do you think you can improve your custom made solutions?
- 24 What are the factors that can influence or constrain the way you work?
- 25 Do you use computerised information systems to help in your current work (if no go Q28)?
- 26 Where in your current work are computer systems being used?
- 27 Is it adequate or helpful in your job?
- 28 What change, if any, do you think should be made to this system to improve the current work?

- 29 Do you intend to extend your computerised information to other applications in this activity?
- 30 Do you know any computerised information systems which can help in your work?
- 31 For what application?
- 32 What is the name of the system?
- 33 What factors in your opinion would constrain the development of such a system in the context of your current work?
- 34 Are you happy with the current position you are in at the moment in terms of your responsibilities, the use technology, challenges, etc. ?
- 35 Is there any other comments which you would like to make pertaining to anything about your organisation, suggestions, etc ?

Appendix A2.7

**Interview data collected based on
a specific group of personnel**

- ❑ I think there are still a lot of people in this department who are still not aware of or do not understand the function and the role of the DOA.
- ❑ I support changes and modernisation and would like to bring in new ideas and techniques into the management. New technologies will be among the menus. However, there are those within the rank in the ministry resisting to these staff and official changes and are unwilling to co-operate in some of the MRA projects. These particular individuals tried to draw a comparison between the current management techniques and how it was done twenty years ago. But they will not stop me from introducing or initiating changes in the organisation. The Minister and the Permanent Secretary are very supportive of what I am doing.
- ❑ The ministry lacks Senior Executive with management and administrative knowledge. It may be, due to fact that no body in management are competent enough to set up training programme for them. Lack of communication language barrier may also be the main problem. Nearly all senior executives have Religious (Islamic studies) qualification but do not have management qualification. Strangely, enough when they are promoted into senior executives post, most of their responsibilities are related to management.
- ❑ What we need in this department is staff who have expertise, initiatives, self-confidence, and who are industrious in their day to day job. We do not want employees who do not have the right attitudes, initiative and are static in their thinking.
- ❑ The other problem faced by the organisation is that once individual are delegated with certain job, he/she will be stuck with it and be the only one who would know about it. If he or she takes leave due to sickness or annual leave entitlement, et cetera, we would have to wait for him/her to come back before certain cases or queries can be resolved.
- ❑ There seems to be poor co-ordination in sections and department and what I want to see is that responsibility to be shared among staff so that in such cases it could be dealt with professionally.
- ❑ I had such a bad communication problem with the head of personnel. As a result, I have restricted options to improve the situation in that particular section without him to co-operate with me.

- ❑ The Personnel Section is unable to tackle the ever increasing problems of getting an update of organisational records (Personnel Record, Leave Record).
- ❑ We lack staff that are competent and dedicated.
- ❑ We lack highly qualified staffs to deal with personnel management.
- ❑ We recognise that there is problems with the filing and record systems that has been going on for quite sometime.
- ❑ The budget for in-house training is quite small. The B\$40,000 that are currently allocated has to be shared among the seven departments within the MRA. This allocated budget is for all the necessities or accoutrements to organise a training programme. This may include lecturer, rental, food and drink, accommodation, and etc.
- ❑ Since our responsibilities are for a number tasks relating to four key organisational functions namely: Research, Planning, Training and performance appraisal we have to divide our tasks among our staff according to the current needs and planning of the organisation.
- ❑ Our section seem to be a "dumping ground" for some unrelated activities of the organisation.
- ❑ We find it difficult to understand what is behind the thinking of our top management. There seems to be an inconsistency in terms of their decision making activities particularly in relating to the In-house in-service training. We need to apprise the minister, who seems to have a great interest in this matter.
- ❑ The approval procedure of the graduate In-service training programme are very time consuming . It has to undergo two stages of approval process. The first stage is the consensus of the Human Resource Management Committee, which is then followed by top management approval through the Weekly Administrative Meetings.
- ❑ The head of department needs to recognise the importance of the information stated in the performance appraisal report. It should reflect what is really needed by individual terms of training needs. What we have seems to be unrealistic and written giving without much thought. Due to these, we find it difficult to define exactly what the training needs are.

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- I recognise that there are so many things that need to be done to the situation in the personnel section. They are very slow and probably inefficient. I had a consultation with the number two in charge of the Section about the situation. Up until now I have yet see to any proposal/effort to improve the situation. I think they are also in a difficult position to bring about changes because of the leadership style. I think it's typical in our Bruneian Malay culture that we tend to follow our leader. If the leader is slow the follower will also be the same.
- My main concern is of the improvement in the personnel Management of the Ministry. It is really one of the difficult areas in my administration.
 - The Information handling such as filing systems, budgetary information needs, personnel information is the most problematic area.
 - The organisational work culture for the whole organisation need to be improved.
 - Communication need to be improved. Relationship between heads is paramount and the relationships between heads and its subordinates is also important but most important of all is the willingness to listen and accept criticism.
- I have brought up and expressed this information handling problem several times in meetings and when talking to personnel executives but so far I have yet to hear any solution to resolve these problems, nor am I in receipt of any favourable response from them on these matters. I do not know whether they don't know how to do it or that they have no will to improve the situation.
- There is an urgent need for the filing system to be improved and the establishment lists and scheme of service list to be updated.
- There is still a negative mentality especially among the "old guards" who think that the old management style is still good or better yet they do not want any changes. The attitude of certain staff is that "as far as I know this is how the systems had been operating"
- There is an urgent need to acquire a qualified professional administrative officer, training officer, and research officer like in most other government department/ministry in Brunei, to look after the personnel, finance, training and research of the organisation. This has not been successful due to current budgetary restriction imposed by the Government and the supply for

- We find it difficult to have working relationship with the head of personnel. Fortunately the relationship between staff are very good and cordial. The head seems to have negative attitudes towards our work and very uncooperative. This is the difficult hurdles that we are facing at the moment. He is unwilling to participate a member of the human resources committee. This indirectly affect the effectiveness and efficiency effort to improve the organisation human resource development planning and program.
- Our biggest disappointment resulting from this situation is the placement of personnel after completion graduate In service Training Program. The placement does not conform to our human resource development planning.
- It will be more appropriate if the role Human Resource Management Committee is widened and well defined. We need a concrete guidelines as to our roles and functions and this guidelines needs to be reflect our integrity as channel for collective decision making. What is happening in our organisation is that because of the arrogance of one man our effort is basically useless and a waste of time.
- Obtaining a personnel information (listings, records, performance appraisal report, et cetera) from the appropriate sources is ever difficult and response is always very slow. Moreover these information are not always reliable.
- Lack of staff who can be delegated to undertake the research is another problem. Top management fails to realise that our emphasis is not on any research. It should have been those perspective related to the management problems. It seems that some our research are more specialised that can be done by other specialised departments within this ministry.
- Due to the current unfavourable climate, some of the informational tasks such as preparing listing of staff in certain salary division etc. need to be undertaken by our staff.
- Our top management seems to be reluctant to accept new ideas or change management ideas. We seem to have a difficulty in persuading top management to have a succession planning based on identifying individual who will take over senior position in the near future. They do not seem to like the ideas of pointing fingers or deciding now who would be a capable of taking the MRA into the next Millennium.

CHIEF EXECUTIVE

the administrative post from the Civil Service Department is also limited. What we have as our executives are from the teaching profession and those holding the Religious or Education Officer's post.

- The performance appraisal report is an important information that need to be used by the organisation. We have not been able to utilise it properly in terms of training it needs more analysis in that area. We need to make sure that what is reported in this document, needs to be used in the identification of training needs analysis of staff in departments. Among other things that these reports reveal is the kind of training needed by a particular staff and that we do not do it for just a kind of annual routine of filling up a form without any actions taken.
- What we need in this Ministry is a comprehensive strategic planning in the human resource development. I would prefer officers and staff to be trained according to what organisational strategic human resource development programme requires. We at the MRA, do not want wastage of government money in giving training, which are irrelevant to the organisational planning. I have seen many cases where office is given training that are not related to his or her work and I think subject specialisation are needed for the benefit of the particular department and organisation as a whole.
- There is a need for each department within the Ministry to have its own training and research section so that this aspect of management can be properly co-ordinated from the head office. This unit or section should be manned with full-time staff and delegated with these aspects of management. What I have seen during these past two years, is that responses for certain kind of information regarding the analyses or reports relating to departments are very slow to be received. What is happening now is that this type of task is delegated to one senior officer in the department who are responsible for other unrelated administrative job. I am sure that he cannot fully concentrate on two different tasks. I see that kind of problem is vital to be addressed in order for the training and strategic planning of each department is given a proper attention. Information relating to the organisational personnel development and strategic planning can be made available for the betterment of the management of the whole organisation.
- The main problem faced by the Institute of Islamic Studies (IPI) is the building that is currently being used to house the Institute is not conducive to house an ever-growing Institution of Higher Education. As a department within the MRA and a respected higher Institution in the country we feel that it is not right to combine us together with a secondary school.

SENIOR EXECUTIVE

- We are the largest organisation in MRA of staff population. Currently we have more than 2000 staff in which the majority of them are Religious Teachers. We tend to have more problems and less people to deal with them especially clerical staff. We cannot avoid this problem and we cannot blame it on the Ministry. It is probably due to the budgetary constraints of the whole organisation. To solve this problem we have to try to find ways to find vacancies of non clerical position in the departmental budget to be placed in our head office.
- However, by doing this we are jeopardising other parts of the organisation, which are also facing shortages. During the past three years only 3% increase are allocated for each ministry in terms of its expenditure.
- The current recruitment practice of MRA appear to disadvantaged our department in terms of addressing our problem of inadequacy of staff. There are a number positions in our departmental budget that is being filled by somebody not working with us. They are being allocated to other departments. This situation makes our administration and planning for personnel very difficult.
- Recruitment is controlled by the personnel section of the MRA and some decision relating to recruitment/reshuffling is not co-ordinated with us. I feel frustrated some time for over this situation.
- What we need is from the top management is that an up to date information about establishment lists and Job Vacancy should be made known or passed to us on a regular basis.
- Our clerical staff are also spread out in terms of their responsibility. They not only do jobs relating to personnel, they are also do jobs that are related to other functions of the Department (secondary education, primary education)
- We have identified two types of clerical staff in this department that are differentiated based on the way they undertake their job. The aggressive are mainly those that have the initiatives, right attitudes and technology conscious. While the other group comprises of those who are passive group, careless, negative attitude, and lack of initiative. They come mainly from what we called as the "Old Order" group. For this particular group we only give a much lighter routine task otherwise it will take ages to complete one job.

CHIEF EXECUTIVE

- Currently we are having a shortage of lecturers which resulted in extra responsibilities shouldered by the current lecturers. In a typical Islamic higher institution environment, each lecturer is allocated between two to three subjects. But at the IPI, each lecturer allocated six to seven subjects. This is considered to be unacceptable in the higher institution level. It cannot be compared with teaching a primary or secondary school level.
- In addition to the current shortages, another problem arises on who will take over their lesson when the lecturers take their annual leave entitlement. The only way the management can tackle this problem is through some sort of understanding with other lecturers to take over the period of the absent lecturer. The former will only teach his own specialised subjects whilst the latter will utilise the subject period of the former when he comes back from holiday. We are encouraging these lecturers to take their leave during the semester break.
- Another important problem that needs to be addressed by the management is the issue of lecturers who do not turn up for work if they are not teaching or do not adhere to the Government office hours. Although this issue is practised by minority and does not affect the academic level of the institute, it does directly relates to the disciplinary policy in the government service.
- We need a specialised staff to handle contract staff so that information can be properly disseminated for these particular groups of personnel and their welfare/needs can be look after by these unit or individual
- Currently we have a number of local lecturers working at the IPI but these lecturers do not posses the right qualification/knowledge to fill up these needs.
- We are fortunate to have a special training scheme for the professional development of our teaching staff, but we do not have a written strategic planning for the IPI Training Scheme.
- Due to certain circumstances we have not been able to establish a research development unit which, I think, is significant for this department.
- As far as I know, I have never been given training or a preliminary talk introducing the Public Officer Act of 1959 and the Financial Act of 1959 which governs the public service in Brunei Darussalam.

SENIOR EXECUTIVE

- Training programme organised by the Ministry either through the Institute of Public service or organised by Research and training section is too short and infrequent. As a big organisation in the MRA, more quotas should be allocated to us in terms of the number of people attending this training programme
- Ever since the processing of personnel records are being entrusted to all the departments, the story so far has not been favourable. The process of photocopying past records from the Personnel Section had been slow and some of the records belonging to our department are lost. The two staff that are being delegated to handle this 2,000 records seem to be having hard time lately.
- Our department do not have a strategic planning for its human resource development. I think even the ministry does not have its own strategic planning, either for short-term local training or long term graduate training. What is happening now is that staff has to apply to get a Graduate In-service Training either in Brunei or foreign universities. For short term or in-house training it will be based on what is on offer from the Ministry.
- What we need now is the improvement in training program for our clerical and operational staff. They seem to be left out by the organisation
- Decision made by our Director is inconsistent and sometime difficult to comprehend
- The three policy document for Brunei Darussalam public service i.e. the Prime Minister's Circular, the financial regulations, the Public Service Department Circular are difficult to acquire and most often not received. The dissemination of this is poorly co-ordinated by the authority concerned.
- The difficulty with circular from the Prime minister's Office is that it is sometimes confusing and difficult for us to identify which one of the rules and regulation has been mutated or changed. Moreover, the weakness of these circulars are not properly classified according to the subject matter.
- The weakness of this department is lack of departmental meeting, as a result, channel to express our opinion on certain issues is quite limited. There seem to be no consultation between head section in terms of staff reshuffling and it seem that it is controlled and manipulated by one person in this department.

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- Generally what I found out about the various information sources on personnel especially the public Officer Act of 1959 and the Financial Act of 1959 are very difficult to understand and needs to be simplified. The Prime Minister's office and the Department of Public Service circulars which are the main policy documents of Public Services are not disseminated properly. There is no proper classification in terms of subject matter and can be quite frustrating in locating which are the valid one and which have already expired. There is no effort to make it accumulative.
- In most circumstances, there are no consultations between the directors and top management at the MRA relating to staff reshuffle or placement. The way it is undertaken now is very confusing and need to be co-ordinated properly. As an academic Institution we need to be consulted on who will be allocated to us so that we can relate it to our academic programme needs . There are many instances that staff allocated to us cannot be fully utilised due to qualifications.
- There is the need to disseminate some information relating to the Government policies, rules and regulations into the Arabic Language so that our lecturers from the Middle East will be position to understand its contents to avoid misunderstanding and demanding something that they are not entitle for.
- It is always difficult to make those in the top management to understand the management system of Institution of higher education. They always compare it with the academic environment of secondary schools. To request additional lecturer, for instance, they will barrage us with a number of insensible questions that display their ignorance of the matter. They will argue based on the ratio of student per lecturer without looking at shortages in certain speciality subjects.
- The most frustrating thing is dealing with the top management in the MRA. They are unwilling to accept fully our argument on certain number of topics.
- Our decision making is restricted to the internal routine of personnel management work (leave, passage, students and academic affairs,) and departmental decision that do not involve finance and ministerial policy. Decisions relating to policies, training and finance need to be relayed by the head of office (ministry) for approval. We tend to be cautious in making our decision. We do not want to be unprofessionally scolded and being blamed for our action.

- Staff listings is very difficult to acquire
- One of the negative work cultures of the Ministry is that there is no harmony among the senior staff. The environment is sometimes inimical and slanderous. There seems to be no co-operation and collective effort to improve the situation by learning from the mistakes of others.
- There seems to be no co-ordination in terms of the way information are managed. Each department tend to have its own way in terms of processing and management of information. There is a lack of standardisation of its management system.
- It is important to established a special section that concentrate on Research and development to ensure each department canmaintain and monitor its role and objectives. It is important for departments to evaluate itself and make a strategic plan for the future of the organisation.
- One of the slackness of the department in terms of its information management is that is no systematic classification for the information is kept in the departmental file.
- The IPI has been fortunate to have its own in service training scheme called the IPI's Academic Staff Training Scheme that are exclusively offered for those who wish to further their academic standing in Islamic Studies in a foreign University and would like to be part of IPI's academic staff. The scheme is intended as a platform to produce locally qualified academicians to support the shortages of the academic staff. It is intended as part of a succession plan of the organisation so that in years to come the Institute will be self sufficient and able to replace expatriates with local staff. However, it seems that not many are interested to be part of THE "Academic Staff" and according to our understanding, the provision in the scheme that requires them to work and teach in the IPI seems to be the greatest deterrent,. The response for the scheme had been rather lukewarm.
- A number of the government rules and regulations relating to the retirement age and the in-service training scheme (including the IPI's Academic Staff Training Scheme) do not suit the aspiration of the IPI. In academic world people reaching the wise age of 55 years, which is the age of retirement in the public service, can still be considered as competent and strenuous. We would like see changes in these policies

- We, at the department are in need of more additional male staff who holds a degree in Islamic Study i.e at least two graduates from the al Azhar University and two from the University of Brunei Darussalam.
- We are also in need of those who have vast experience working in mosques to work in the Main Office as consultants.
- Lately, what we have been given is female staff (al Azhar) which is very inappropriate to our situation. We have not been allocated with any UBD graduates so far. Our department seems to be overlooked by the Ministry for new intake of personnel from the University of Brunei Darussalam or from the Institute of Islamic Studies.
- Decision making on personnel placement is not co-ordinated properly. Most of the time we, as director, are not consulted or are not involved in advance if there is a plan to transfer staff from one department to another. In most instances we only receive a memorandum about the decision or copy of a letter addressed to a particular individual instructing him or her to report to another department on a given date.
- The most frustrating management style practised by the ministry is the use of the departmental staff budget to appoint staff that will not be inducted in the particular department concerned. We have 4 Assistant Mosque Officer positions that are filled by someone who is not working in this department.
- Budget for training our staff and mosques official is basically not available and this situation is very difficult for the department like us, where our staff training needs are different from other department. We have to fight for the limited training budget with other departments that are available in the Ministry. This situation has hampered our effort to improved the knowledge and professionalism of Mosques Officials and Staff of the DMA.
- Decision in terms of placement or reshuffling of personnel is entirely manipulated and controlled by one person in the Ministry which is not to the advantage of the organisation. I think that there are some kind of "personal interest" in certain decisions made by the ministry. In a particular instance when we were instructed to recruit a daily rated labourer. Decision on the successful applicant that is supposed to be made by us overlapped with the decision made by the head of Personnel.
- Due to the "unfavourable environment" in terms of quantity of staff at the IPI, we have not been able to undertake a number of tasks needed as part of our function as Institution of Higher Learning. Research, that is part of the organisation's long term objective, is very much lacking.
- The process to acquire academic staff needed for the Institute are not fully understood by the top management at the MRA. They are trying to equate the recruitment of academic staff with that of the clerical or other operational staff.
- The application for leave for lecturers is one that needs to be monitored all the time due to the nature of the department. We need to have their records handy and information about who took leave at a particular time must always be updated.
- In addition to the staffing level in the academic staff we are facing shortages in the administrative section where we need more Arabic clerical staff to support the organisation in its effort to improve the information and documentation processing of the Knowledge. At the prevailing situation, we are not in a position to set up a separate administration for our academic departments so that it will function like any other universities and higher institution in the world.
- Another important aspect that requires attention is the need to have somebody who is fluent in Arabic to act as a liaison officer who will handle the welfare of expatriates (lecturers) from the time they arrive to the time they go back to their respective countries.
- In comparison with other departments, in the MRA, we are the smallest in terms of personnel.
- The most significant problems faced by this department are shortage of staff in terms of the following factors:
 - The quantity of staff (25 people)
 - The quality of work (work experience, expertise, training, etc.) need to be improved and enhanced.
 - The need for more support staff who are qualified in the Islamic knowledge of Fiqh to act as an expert, is needed in this department to answer enquires from members of the public.

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- The fact that the authority had not been successful in getting a confidential clerk for the department for nearly four years, while the budget is there, is a major frustration. We have to appoint from one of our clerical staff on a rotation basis to fill this job on acting post.
- Some of the clerical staff that we have in this department is hopeless and have no motivation what so ever. To apply for an additional clerical staff is very difficult due to budgetary restriction enforced by an authoritative body.
- The main drawback with some of these clerical staff is their negative attitude to work and being inflexible. They are unwilling to do a job that are outside their job descriptions.
- The main drawback of the current administration is that too much power is delegated to one man and his arrogance makes life difficult for everyone in the MRA. For the benefit of the organisation, we want the top management in the MRA to get rid of this man.
- My main future plan for this department is for the mosques official to be a competent leader not only in Prayer but also in the community serve. Secondly we want them to be a good propagators of the Faith.
- The Department has a small number of staff, which is 25 including the director and the department role is widespread.
- With the current small staff population in my department and the role the department plays in the MRA, we have to work as a "team".
- Our priority in this department is the "service" to our customers (prospective pilgrims, travel agents, airlines, and other government in and out side the Ministry). In this current situation, we cannot really concentrate on the administrative and personnel management
- All staff including the Administrative Staff have to be involved in the organisation's main task of registration, courses, preparation and in the and of haj management perspective of the organisation.
- The Department is trying its best to cope with the staff shortcomings and any help given by other departments in the ministry is invaluable.

- The current government policies on personnel management including rules and regulations relating to personnel in the public sector are very complicated and the idea behind it is difficult to grasp. Information's relating to these policies are not handy and sometimes difficult to obtain (especially the old circulars that are still valid). In certain instances, new information (circulars) relating to changes are not properly received by the department.
- The main problem to be addressed by this department is the perception that the responsibility of certain quarters in the MRA is seasonal without recognising that the work is ongoing and very complex and had to done far in advance. We also have to deal with Umrah (a religious rite that can be performed at any time of the year)
- Since the majority our work in this department is concerning various structures or levels of the public, we are exposed to criticism and are constantly in the "firing line" if the service we provide are not good enough or if they are dissatisfied with certain "package" company elected by the department. The public does not want to know the problem within the organisation.
- I can appreciate that the significant problem in this department is that there is a shortage of staff. Like any other department, the staff are not immune to personal and, family problems or to complications. Once this kind of problem arises, we cannot escape but we have to prevail with our limited human resources and try not to make it a big issue. This can be significant in the Registration section where there are currently only 3 people responsible for the registration of the intending pilgrim for the whole country.
- More widespread and comprehensive training programme is needed especially for clerical or operational staff in terms of IT usage so that management will not only concentrate on one or two staff that know how to operate computers (Word processing, spreadsheet, database). This kind of approach can cause a major displeasure or discontentment on the part of those who already knew how to operate computers, due to an overload of work. It may also discourage others who have no knowledge of computers to acquire this skill. They might get a negative attitude of the more I learned about computers, the more responsibility will be put on my shoulders".

- Training programme for the clerical and operational staff is very poor. What we need in this department is staff who have expertise, initiatives, self confidence, and who is industrious in their day to day job. We do not staff those who do not have the initiative and is static in their thinking.
- We at the management level see that "self confidence" among the operational staff is lacking and we have to devise programmes to motivate them by providing a platform to improve their self confidence:
 - Informal discussion, meetings, lectures for half an hour before work followed by a morning prayer.
 - Leading the "doa" session on alternative session
- Registration, which is one of the paramount chores of the Department, is manned only by three people. You can just imagine what will happen if these three people are solely responsible for the registration of the intending pilgrimage for whole country. What the department did in order to solve the shortage of manpower during registration season is to relegate all the staff and personnel to work as a team during the last registration season. Nobody is exempted and all must be involved in the registration processes.
- We have long term plans to set up our offices in other districts. Due to a number of administrative constraints, this plan cannot be accomplished yet. All recruitment is centrally co-ordinated and controlled by the Ministry, and budget for staffing either daily rated worker are also the major constraints of the MRA. Even if we were to allocate our current head office staff, to work full time to other districts, it would directly affect the whole management of the Department.
- Due to this shortage, it does not only affect the department in terms of its service but it also causes some inconveniences to the intending pilgrimage. In case of any enquiries regarding to their application/registration, they have to come down to the capital city or make an expensive phone call to the Main Office. The Religious District Offices are not in the position to answer enquiries.

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- The importance of acquiring such expertise (administrative officers) for the benefit of managing the organisation as a whole by those who are competent, knowledgeable about organisational management, familiar with government rules and regulations, and able to speak the same language with others in the trade, needs to be recognised. The teaching professionals should be placed where they belong to help build up the sagging religious, education system in the country.
- The most significant problem faced by the department is of replacing personnel that are to be transferred to other department within the MRA, which does not involve job promotion. In most times we are not consulted with the transfer. We only received instruction from the head office for a particular individual to be transferred on a certain date. As a result, we need to find somebody in the department to take over his/her role which then affects the whole organisational structure. We appreciate that the head office also have their own problems but it helps to have consultation with us this way, we can understand more of the attitude of the management in the ministry toward the problem faced by the department instead of having a limited understanding now.
- The most frustrating aspect of our position is aspect of scheme of service. The prevailing situation on this matter is biased towards the Azharian or those who hold a religious qualification (al Azhar University Qualification). There is a lack of opportunity and assurance in terms of job promotion for us especially those who graduated from non Al Azhar University.
- Basically, I am not satisfied with the way things are handled at the moment of attaining knowledge in personnel management. We need to learn more in-depth about the government policies and procedure on personnel management. It has been five years that I had been working in this department and my knowledge in this area is still insufficient. What I knew about personnel management is mainly through consultation with a more experienced staff.
- Information handling such as filing systems, and personal record information is the most problematic area in the organisation. Information is out of date, inaccurate, missing, and incomplete. An effective information management system for managing the personnel in the organisation is something that we crave for.

- Efforts to improve the situation have been done, but it is beyond the departments control. One alternative way which the department thought of to partially solve this problem is to elect one officer/staff in the Districts Religious Affairs Office to act as a liaison officer for Haj matters in the District (as part of his/her job description). However this plan is still in discussion phase with the appropriate department in the Districts. In the context work of "Co-operation or Help" of others from other departments will be significant if this "help" part of their job descriptions.
- The human resource committee of the MRA is mainly seen to concentrate on "human resource development" (training) alone but the emphasis should be more towards other aspect of human resource management and planning.
- We do not have a special budget for staff development.
- Whatever we did in this department seems to be along the lines provided by the head office and we cannot overstep this line. We cannot set our ourselves a target as things can change overtime.

- The blame that is placed on us by the ministry due to delayed information handling are sometimes without foundation. Most of it are due to the problems that are rooted from the ministry themselves.
- We do not seem to have proper guidelines or policies relating to placement and reshuffling of Mosques Officials.
- The major problem faced by our department at the moment is the negative attitude of mosques official. We have received various complaints from village community regarding the absence of these officials from work during working hours.
- The need for the management to find ways to effectively recruitment of staff and does not cause inconvenience to other department. The ways thing are happening, especially the recruitment of fresh graduates should be planned far in advance. They should be placed in the organisation where the staff budgetary allocation has been taken.

2

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- ❑ The conflict and communication problem that existed among top management, particularly between the Director and Head of Personnel, makes life difficult for us at the Personnel Section. Any issues relating to the management the director will refer to he and us tend to go at us if there is any complaint with the management.
- ❑ Information (listings) relating to contract officer/Daily rated staff is prepared manually and typed using a word processor. These listings are needed by top management of the ministry in the Weekly Administrative meetings. Due to our workload we have not been able to update this list periodically. Since this list has just been initiated recently, most of the information in it is still incomplete and need be improved further.
- ❑ New information about contract officer need to be co-ordinated effectively. Information about contract officer/teacher being transferred to other department within the MRA sometime did not reach us. With this situation we find it difficult to update the whereabouts of the information on contract officer.
- ❑ We find it difficult to consistently update the information of the contract officer/daily rated due to the workloads.
- ❑ The room allocated to store these files is so small and the storage space (cabinets) is limited. We find it difficult to accommodate new files and the old or closed file that are still useful have to be stacked on the cabinet. The collection of these files dates back from 1959.
- ❑ The main problem with the current filing systems is the way these files are used. This single copy of administrative and personnel files are currently being used by a number of executive within the Ministry for various administrative purposes namely: Finance; Housing; Contract; Training; and it may also be used in other departments. The multi-usage has cause some chaotic scene in the organisation. Problem arise when these files are needed by several sections at one time and those who want to use it, would have to refer to previous issues or application.

- ❑ Files are kept by the officer for so long that we have to recalled it.
- ❑ There are only two of us who are responsible for processing the Salary Increment and Efficiency Bar for the whole Staff and official of the MRA and every thing is being done manually.
- ❑ We find it difficult to concentrate on updating individual's annual salary increment information in to the Service Record (SR) on time due to the fact that a great deal of our time is spent on answering queries from the treasury.
- ❑ These queries are either from the Finance Ministry or the Audit department and is usually related to various aspects of management such as application for contract extension information. The inaccuracy of information in leave and personnel record which is prevalent in the current circumstances directly affects many. We feel that too much time is spent on this work.
- ❑ The inability of the current staff to process the backlog of unsolved cases of increment and efficiency bar information are quite significant to be addressed.
- ❑ Duplication of information inputted into the SR can affect the process of increment and efficiency bar, and resulted in the queries from the Treasury Department.
- ❑ Certain important information that can affect the incremental dates such as taking an unpaid leave and extension of services for women in division III and below, are not updated into the record service. Details in the Personnel Records relating to the unpaid leave and changes in the appointment due to marital status of women are among the basis to be taken into account when processing for the Increments and efficiency bar.
- ❑ One of the prevalent problems being faced when processing an Efficiency Bar is frequent occurrence of incomplete Performance Appraisal report and responses for this documentation are usually very slow

- More depressing is when a file cannot be traced of its whereabouts and the last officer who used is according to records did not have it anymore. Among the root cause for this situation are that:
 - The officer who last used the file did not follow or was being ignorant about the ministry's procedure of file distribution
 - The staff who requires it took it from the last user without informing the filing section.
 - The distribution are not recorded and poorly co-ordinated.
 - The staff misfiled it.
- Effort to improve the situation has been undertaken a number of times but up now we have not found the optimum solution yet. This is probably due to our failure (Personnel Management Section) to co-ordinate this improvement with other officers and staff who use this filing system.
- The failure to improve this situation may also be due to it being done without great effort or it might be that our knowledge in record management are limited.
- We find it mystifying with all our effort to improve the situation, that we are the one being blamed and became the scapegoat for the problem that is not entirely due to us. The management even stereotyped us as being slow and inefficient.
- Tracking down "pension information" or information on staff who are retiring is a painstaking task. The current information systems are not very reliable and some information are missing.
- In a number of occasions we came across mistakes and misunderstanding made by filing section whereby files/information were addressed to me that are not related to my responsibilities.
- The information flow, especially the flow of the personnel file or other administrative file, need to be improved and the management needs to find some way to make it more efficient so that action can be taken more quickly and information can be effectively distributed.

- We do not have a systematic technique of identifying the incremental information except by browsing through an array of personnel record. We find it hard to cope with the current workload of processing the incremental information and processing queries from the appropriate authority. Management should not only know how to criticise but should also be the one who find ways to improve our situation.
- There is difficulty in identifying the date of Increment and Efficiency bar for each staff/personnel of the MRA . Information on this matter are acquired manually by scanning through an array of personnel record from the cabinet.
- Annual increment process cannot be done on time due to the fact that we have to spend some of the time to answer queries from the Audit Department.
- We need some form of guidelines from the management as to how we should do our job. There seems to be inconsistency and an uncoordinated way in doing our job. What we are doing in this section is basically entirely up to us.
- There is no way we can identify the exact number of Personnel Record in the MRA.
- We are not only responsible for updating personnel record but also we have to do other work that needs to be attended to, such as handling the annual salary increment of the daily rated staff.
- Personnel record systems are one of the most important information sources in personnel management. It is one of the problematic areas in management information in the MRA. In most situation we are always the ones being blamed for the problems occurring relating to its currency. In most situation such information are not received and I think the file distribution systems that are currently being used needs to be improve.
- The current techniques of managing these personnel record information requires standardisation. The personnel records are handled by two people who have their own techniques of handling the information. One is responsible for the Personnel record of General Staff in division 1 to 5 and daily rated staff, while the other one is responsible for those who work as Religious Teachers, Mosques Official. The way information are managed are different.

EXECUTIVE

- Some of the decision-making procedures undertaken in this section are slowing things down. The need to bring routine matters into our weekly meeting between the head of sections is unnecessarily affecting the efficiency of this section. Some of these decisions are routine and can effectively be made without much hassle. What we need is some sort of guidelines to make decision relating to standard situation, and only bring up the things that are of exceptional nature. What we need to do is spend more time and discuss other matters of a more important nature.
- The problems that have always been with the organisation are the inability of the organisation to tackle problem of the currency of information, ineffective document distribution and in efficient processing and retrieval of management information. These problems have been with us for quite some time and various efforts have been made to improve the situation but the problem persisted.
- The most vital information that are always problematic is the leave information, especially the leave information relating to the application for an unpaid leave. Once an officer/staff took an unpaid leave, it would automatically shift the date of his/her next salary increment entitlement. For a contract officer who is applying for their end of contract gratuity, leave information will also be important. Failure to up date this record will be queried by the public service department and the ministry of finance, which will slow down the process of gratuity application.
- The problem with the current system is that information that are needed to update the records (leave, personnel records, daily rated, listings etc.) are not received by the staff in charge of this information. Those who are responsible for these records are only in position to update records with information that are passed or directed to them.
- Those personnel who are responsible for personnel management tasks such as salary increment, efficiency bar, extension of services, confirmation of appointment, etc. will process information based on the available records. They are not in a position to know if these records are correct or otherwise.

CLERICAL/OPERATIONAL

- The numbering system of the personnel records are sometimes confusing to staff and this causes misfiling. Each category of personnel record are subdivided into the salary division and numbered sequentially.
- We are not in a position to know the number of personnel record service available in the organisation.
- Information relating to "reporting for duty" for new staff are either not passed to this section or information received are incomplete.
- There are a number of information that need to be put into this record. These information are typed using manual type writer and need to be arranged in order of date. Inserting antecedent information into the record can sometimes be a frustrating effort. Information will either be deleted by using rubber eraser or by using fresh sheets.
- Since these records are accessible to all official and staff at Personnel Sections, problems arise when staff using this records do not register their use or the whereabouts of the file in the special card called "the absent card".
- I have seven different responsibilities that need to be undertaken with great composure. I find it difficult to understand the reason why my workload seems to be more in comparison to other staff in this section. I have made my problem known to the management in which they promised to do something about it, however, up until now the situation is still the same. It's quite depressing for me and I feel that it is unfair to put these responsibilities on to one person alone. Sometime I had to bring my work home, and even taking leave are something I had to think twice to do, knowing that there would be no one to take over my job.
- With the current working environment, I find it difficult to cope with the workload. I had to take each task one at a time and give priority to things that need to be done urgently.
- The Establishment List which are prepared by a word processor and can only be prepared once a year. Updating information is done from time to time by pencilling down new information into the lists. The list has a very limited feature and are arranged based on the annual budget information. Its one of the most sought after information by executives in the sections and other department within the MRA

EXECUTIVE

- We cannot point a finger at a particular section that did a particular job nor can we blame clerical staff due to this inefficiency. I think we have to blame the current system and carelessness of certain senior staff who are responsible for undertaking decision on certain matters. The ignorance and carelessness of some senior officials (especially new staff) on the next action to be taken after each decision, caused important information not reaching those concerned with records updating. Once file are returned to filing section after an action was taken, one clerical staff will check for subsequent action/attention that will be necessary.
- The multi-usage of this single administrative and personnel files by various sections of department especially those that requires urgent action by other section (finance, housing, etc) can also cause information to be missed or lost. Urgent action will be given a priority. Files/information that are supposed to be passed to Record section will shift direction and in most time, actions that are supposed to be taken, will be forgotten until those concerned enquired about it.
- Basically, we are aware of certain techniques that can be used to improve our information filing and distribution but, for some reason, probably due to shortage of staff we are not able take advantage of it.
- In addition to our main task in managing personnel and its information, our staff also acted as a personnel support to other major section of the ministry in case of any shortages due long leave.
- As far as I know, the head of personnel , who is the deputy chairman of the Human Resource Committee has never attended this meeting. I think the situation is really bad and directly affect the organisational management.
- Listings of staff who are currently undertaking graduates study either in local or foreign universities are not available.
- Information about staff and personnel training are not up-dated into the personnel record. As a result it is difficult to rely on this record to identify who in the organisation has attended what training program. They seem to be blaming us for this problem and argue that they do not receive the information. Reliable information about training can only be obtained through the personal file.

CLERICAL/OPERATIONAL

- Difficulty arises when management requires an urgent personnel listing that should be arranged according to special classes of personnel i.e. division, sex, et cetera. This information will be compiled manually and take quite some time to finish.
- There seem to be a poor co-ordination in terms of the distribution of information within the Personnel Section. Information about changes to individual appointment scheme, salary are very slow and sometime this information are not received at all. The current way of doing our job is by updating information based on the information received.
- So far we only manage to revise Establishment Listings of two departments (Department of Administration and Department of Mosques Affairs). The rest will follow later.
- We know that we can offer a lot more services in terms of personnel information to the management and to other department as a whole but with the current environment and systems of management, we can only give them our service to the best of our ability.
- We need to have close working relationship with the staff at the Personnel Record and Increment Section so that information can be easily changed and updated. It seems we have people working on their own and are unwilling to share their information.
- Currently the salary information that are updated in the Establishment Lists are based on assumption that an individual has reached certain level of the salary scheme.
- The ministry do not have a complete information on the scheme of service.
- The failure of ministry to devise a technique in identifying the incremental date has resulted on the Increments and Efficiency Bar information in the establishment list to be obsolete.
- I think our head of section is very incompetent and weak in the administration of Contract Officer.
- We have to divide our task between processing the information/application to entertaining enquiries from the contract staff.

EXECUTIVE

- There seems to be no well planned in-house training programme for the MRA.
- We need current listings on of staff who are currently undertaking graduate study either in local or foreign universities under the government In service Training Programme and who had undergone previous in-house training programme either organised by the MRA or the Institute of Public Service (IPA). This lists would also help in identifying suitable staff for future follow-up training and identify appropriate staff who may be able to fill suitable vacancies.
- Information about training programmes attended needs to be made available in the personnel records. The unavailability of such vital information in the records makes it difficult for us to identify the extent, training had been given to a particular individual. In addition it will also facilitate to identify duplication of training attended.
- The complete listing of employee's training needs or requirements reported in staff performance appraisal report in order to facilitate referral for the training needs analysis. Currently, what is reported in this document is occasionally used. In addition to individual training requirement, these reports revealed various kinds of personal qualities that each person possesses.
- A complete listing/database and index of contract staff detailing all individual's personal information on current place of work and contract expiry dates is needed.

CLERICAL/OPERATIONAL

- We are always being blamed if the process of application are slow and that is beyond our responsibility.
- There is slow response from other department (within the MRA) when requesting for the Personnel Record of their contract officer.
- Our information retrieval technique are a bit slow but effective. We need to find some other way to improve it much further and in the current circumstances we find it impossible to concentrate on it.
- I think management should be innovative in finding ways to tackle our information and handling problem. I think that they are very passive in this subject. What currently happens is that all that is being done in this section is entirely up to our own initiative. What we need is action to improve the situation from them not just words.
- The most depressing aspect in this work is addressing the query for the Audit Department relating to past issues of contract officer. Some of these issues date back to many years ago (in one occasion we receive queries on things happening 30 years ago). We have to shift through old documents and closed files from the store room. The most tedious thing is that these files are difficult to trace and are being disregarded by the management.
- The most difficult thing in undertaking the work relating to contract officer, is to make sure all the records relating to leave in vogue to avoid queries. This is something very difficult to achieve. What we have are dependent on how the whole system of management runs to work effectively
- The more I learn about computers the more work I have to endure, why should I learn it?"

Appendix A2.8

**Interview data arranged based on the
specific subject of discussion**

PROBLEMS FACED BY CHIEF EXECUTIVES

1. ACCOMMODATION

- ❑ The main problem faced by the Institute of Islamic Studies (IPI) is the building that is currently being used to house the Institute is not suitable to house an ever-growing Institution of higher education. As a department within the MRA and a respectable institution of higher religious education in the country we feel that it is not right to combine us together with a secondary school.

2. COMMUNICATION PROBLEM

- ❑ I had such a bad communication problem with the head of personnel. As a result, I have restricted options to improve the situation in that particular section (personnel management section) without his full co-operation.
- ❑ Communication needs to be improved. Relationship between heads is paramount and the relationships between heads and his subordinates is also important but most important of all is the willingness to listen and accept criticism.
- ❑ In most circumstances, there are no consultations between the directors and top management at the MRA relating to staff reshuffle or placement. The way it is undertaken now is very confusing and needs to be co-ordinated properly. As an academic Institution we need to be consulted as to who will be allocated to us so that we can relate it to our academic programme needs . There are many instances that staff allocated to us cannot be fully utilised due to lack of proper qualifications.
- ❑ It is always difficult to make those in the top management to understand the management system of Institution of higher education. They always compare it with the academic environment of secondary schools. To request for additional lecturer, for instance, will always be difficult. They (senior management) will barrage us with a number of insensible questions that display their ignorance of the matter. They will argue based on the ratio of student per lecturer without looking at shortages in certain speciality subjects.
- ❑ The most frustrating thing is dealing with the top management in the MRA. They are unwilling to accept fully our argument on certain number of topics.
- ❑ Decision making on personnel placement is not co-ordinated properly. Most of the time we, as directors, are not consulted or are not involved in advance if there is a plan to transfer staff from one department to another. In most instances we only receive a memorandum about the decision or copy of a letter addressed to a particular individual instructing him or her to report to another department on a given date.

3. DECISION MAKING

- Our decision making activities are restricted to the internal routine of personnel management work (leave, passage, students and academic affairs,) and departmental decision that do not involve finance and ministerial policy. Decisions relating to policies, training and finance need to be relayed by the head of office (ministry) for approval. We tend to be cautious in making our decision. We do not want to be unprofessionally scolded and being blamed for our action.
- The most frustrating management style practised by the MRA is the use of the departmental staff budget to appoint staff that will not be inducted in the particular department concerned. We have 4 Assistant Mosque Officers position that are filled by others who are not working in this department.
- Decision in terms of placement or reshuffling of personnel is entirely manipulated and controlled by one person in the Ministry, which is not to the advantage of the organisation. I think that there are some kinds of "personal interest" in certain decisions made by the ministry. In a particular instance when we were instructed to recruit a daily rated labourer. Decision on the successful applicant that is supposed to be made by us overlapped with the decision made by the head of Personnel. Our decision was not accepted.
- The main drawback of the current administration is that too much power is delegated to one man and his arrogance makes life difficult for everyone in the MRA. For the benefit of the organisation, we want the top management in the MRA to get rid of this man.

4. INFORMATION HANDLING ACTIVITY/FLOW

- The Information handling such as filing systems, personnel information is the most problematic area. We need an effective information system to solve our problems.
- I have brought up and expressed this information-handling problem several times in meetings and when talking to personnel executives but so far I have yet to hear any solution to resolve these problems, nor am I in receipt of any favourable response from them on these matters. I do not know whether they don't know how to do it or that they have no will to improve the situation.
- There is an urgent need for the filing and information delivery system to be improved and the Establishment Lists and scheme of service list to be updated.

5. INFORMATION SOURCES

- Generally what I found out about the various information sources on personnel especially the public Officer Act of 1959 and the Financial Act of 1959 are very difficult to understand and needs to be simplified. The Prime Minister's office and the Department of Public Service circulars which are the main policy documents of Public Services are not disseminated properly. There is no proper classification in terms of subject matter and can be quite frustrating in locating which are the valid one and which are already expired. There is no effort to make it accumulative.

- There is the need to disseminate some information relating to the Government policies, rules and regulations into the Arabic Language so that our lecturers from the Middle East will be in a position to understand its contents to avoid misunderstanding and demanding something that they are not entitled for.
- Information handling such as filing systems, and personal record information is the most problematic area in the organisation. Information is out of date, inaccurate, missing, and incomplete. An effective information management system for managing the personnel in the organisation is something that we crave for.

6. JOB DELEGATION

- The other problem faced by the organisation is that once individuals are delegated with certain jobs, he/she will be stuck with it and be the only one who would know about it. If he or she takes leave due to sickness or annual leave entitlement, et cetera, we would have to wait for him/her to come back before certain cases or queries can be resolved.
- There seems to be poor co-ordination in sections and department and what I want to see is that responsibility to be shared among staff so that in such cases it could be dealt with professionally.

7. RESEARCH

- They should have their own Training, Research and Development section to deal with these aspects of management of organisation
- Basically we have no problem with the routine administration but our main problem lies with inability to undertake management research and development.

8. ROLE AND FUNCTION

- I think there are still a lot of people in this department who are still not aware of or do not understand the function and the role of the DOA.
- I do not want the MRA to be stereotyped as backward and orthodox organisation that only specialises in Islamic Law and jurisprudence I want people to think of us as a government ministry that is active and innovative in parallel with current management thinking.
- whatever we did in this department seems to be along the lines provided by the head office and we cannot overstep this line. We cannot set our ourselves a target as things can change overtime.

9. PERFORMANCE APPRAISAL REPORT

- The performance appraisal report is an important information that needs to be used by the organisation. We have not been able to utilise it properly in terms of training needs more analysis. We need to make sure that what is reported in this document

needs to be used in the identification of training needs analysis of staff in departments. Among other things that these reports reveal is the kind of training needed by a particular staff and that we do not do it for just a kind of annual routine of filling up a form without any action taken.

- What is stated in the performance appraisal reports contradicts their training programme. It should have been used as a tool or information to identify their training needs rather than as merely as a tool for identifying those who perform well for a particular year to entitle for an annual bonus.

10. STAFF SHORTAGES

- The ministry lacks expertise in management and administrative knowledge among its senior executives. This may be, due to fact that no body in management are competent enough to set up training programme for them. Lack of communication, and language barrier may also be the source of the problem. Nearly all the senior executives are from Religious knowledge (Islamic studies) background but do not have any management qualification or knowledge. Strangely, enough when they are promoted to senior executives post, most of their responsibilities are related to organisational management.
- There is an urgent need to acquire a qualified professional administrative officer, training officer, and research officer like in most other government departments/ministry in Brunei, to look after the personnel, finance, training and research of the organisation. This has not been successful due to current budgetary restrictions imposed by the Government and the supply for the administrative post from the Civil Service Department is also limited. What we have as our executives are from the teaching profession and those holding the Religious or Education Officer's post.
- The importance of acquiring such expertise (administrative officers) for the benefit of managing the organisation as a whole by those who are competent, knowledgeable about organisational management, familiar with government rules and regulations, and able to speak the same language with others in the trade, needs to be recognised. The teaching professionals should be placed where they belong to help build up the sagging religious, education system in the country.
- Currently we are having a shortage of Lecturers, resulting in extra responsibilities to be shouldered by the current lecturers. In a typical Islamic higher institution environment, each lecturer is allocated between two to three subjects. But at the IPI, each lecturer is allocated six to seven subjects. This is considered to be unacceptable at the higher institution level. It cannot be compared with teaching a primary or secondary school level.
- In addition to the current shortages, another problem arises on who will take over their lesson when the lecturers take their annual leave entitlement. The only way the management can tackle this problem is through some sort of understanding with other lecturers to take over the period of the absent lecturer. The former will only teach his own specialised subject whilst the later will utilise the period of the

former when he comes back from the holiday. We are encouraging these lecturers to take up their leave during the semester break.

- We need a specialised staff to handle contract staff so that information can be properly disseminated for these particular group of personnel and their welfare/needs can be looked after by this unit or individual
- Currently we have a number of local lecturers working at the IPI but these lecturers do not possess the right qualification/knowledge to fill up these needs.
- We, at the department are in need of more additional male staff who holds a degree in Islamic Study i.e at least two graduates from the al Azhar University and two from the University of Brunei Darussalam.
- We are in need of those who have vast experience working in mosques to work in the main office as consultants.
- Lately, what we have been given is female staff (al Azhar) which is very inappropriate to our situation. We have not been allocated with any UBD graduates so far. Our department seems to be overlooked by the Ministry for new intake of personnel from the University of Brunei Darussalam or from the Institute of Islamic Studies.
- The fact that the authority had not been successful in getting a confidential clerk for the department for nearly four years even though the budget provision is there, is a major frustration. We have to use one of our clerical staff on a rotation basis to fill this job in an acting post.
- The Department has a small number of staff, which is 25 including the director and the department role is widespread.
- With the current small staff population in my department and the role the department plays in the MRA, we have to work as a “team”.
- Our priority in this department is the “service” to our customers (prospective pilgrims, travel agents, airlines, and other government in and out side the Ministry). In this current situation, we cannot really concentrate on our administrative and personnel management issues.
- All staff including the Administrative Staff have to be involved in the organisation’s main task of registration, courses, preparation of flights and in other haj management aspect of the organisation.
- The Department is trying its best to cope with the staff shortcomings and any help given by other departments in the ministry is invaluable.
- Only three people manned the registration section , which is one of the paramount chores of the Department. You can just imagine what will happen if these three people who are solely responsible for the registration of the intending pilgrimage for whole country took a long leave. What the department have to do in order to

solve the shortage of manpower during registration season is to relegate all the staff and personnel to work as a team during the last registration season. Nobody is exempted and all must be involved in the registration processes.

- We have long term plan to set up our offices in other districts. Due to a number of administrative constraints, this plan cannot be accomplished as yet. All recruitment is centrally co-ordinated and controlled by the Ministry, and budget for staffing of either permanent or daily rated worker are currently major constraints of the MRA. Even if we are to allocate our current head office staff to work full time to other districts, it would definitely affect the management of the Department as a whole.
- Due to these shortages, not only it affect the department in terms of its service but it also cause some inconvenience to the intending pilgrimage. In case of any enquiries regarding their application/registration, they have to come down to the capital city or make an expensive phone call to the Main Office. The Religious District Offices is not in a position to answer enquiries.
- Efforts to improve the situation have been done, but it is beyond the departments control. One alternative way in which the department thought of to partially solve this problem is to elect one officer/staff in the Districts Religious Affairs offices to act as a liaison officer for Haj matters in the District (as part of his/her job description). However this plan is still in the discussion phase with the appropriate department in the Districts. In the context work of “Co-operation or Help” of others from other department will be significant if this “help” is part of their job description.

11. TRAINING/HUMAN RESEARCH DEVELOPMENT

- What we need in this MRA is a comprehensive strategic planning in the human resource development. I would prefer officers and staff to be trained according to what organisational strategic human resource development programme requires. We at the MRA, do not want wastage of government money in giving training, which are irrelevant to the organisational planning. I have seen many cases where an officer is given training that is not related to his or her work and I think subject specialisation, needed for the benefit of the particular department and organisation as a whole.
- There is a need for each department within the Ministry to have its own training and research section so that this aspect of management can be properly co-ordinated from the head office. This unit or section should be manned with full-time staff and delegated with these aspects of management. What I have seen during these past two years, is that responses for certain kinds of information regarding the analyses or reports relating to departments are very slow to be received. What is happening now is that this type of task is delegated to one senior officer in the department who is also responsible for other unrelated administrative job. I am sure that it is difficult for to concentrate on two different tasks . I see that this kind of problem is vital to be addressed in order for the training and strategic planning of each department is given a proper attention. Information relating to the organisational personnel development and strategic planning can be made available for the betterment of the management of the whole organisation.

- ❑ We are fortunate to have a special training scheme for the professional development our teaching staff, but we do not have a written strategic planning for the IPI Training Scheme.
- ❑ Due to certain circumstances we have not been able to establish a research development unit which, I think, is significant for this department.
- ❑ As far as I know, I have never been given training or a preliminary briefing introducing the Public Officer Act of 1959 and the Financial Act of 1959 which governs the public service in Brunei Darussalam.
- ❑ Budget for training our staff and mosques official is basically not available and this situation is very difficult for the department like us, where our staff training needs are different from other departments. We have to fight for the limited training budget with other departments that are available in the Ministry. This situation has hampered our effort to improve the knowledge and professionalism of Mosques Officials and Staff of the DMA.
- ❑ Training programme for the clerical and operational staff is very poor. What we need in this department is staff who has expertise, initiative, self confidence, and who is industrious in their day to day job. We do not staff those who do not have the initiative and is static in their thinking.
- ❑ The human resource development committee of the MRA is mainly seen to concentrate on “human resource development” (training) alone but the emphasis should be more towards other aspects of human resource management and planning as a whole.
- ❑ We do not have a special budget for staff development.
- ❑ Its frustrating for me to see that those delegated to attend the Human Resource Development Committee meeting are not in position make direct decision on behalf of the department they represent I would prefer the director or the deputy to attend this meeting. They would be in position to know what their needs are. When coming to discuss the topic of research titles, they would be in position to know of their situation better.
- ❑ What I have seen from those who are sent to further their academic studies so far are that these personally are indifferent in the way they undertake their work.
- ❑ What we need is for each department to identify their own training needs and the Department of Administration should only be in a position to co-ordinate the training programme for the whole ministry.
- ❑ Departmental Training is currently undertaken on an ad hoc basis and there is no full concentration on these aspects of personnel management. Training was not part of the organisational structure of these departments.

12. WORK CULTURE

- I support changes and a modernisation and would like to bring in new ideas and techniques into the management. New technologies will be among the menus. However, there are those within the rank in the ministry resisting to these staff and official changes and are unwilling to co-operate in some of the MRA projects. These particular individuals tried to make comparison between the current management techniques and how it was done twenty years ago. But they will not stop me from introducing or initiating changes in the organisation. The Minister and the Permanent Secretary are very supportive of what I am doing.
- I recognised that there are so many things that need to be done to the situation in the personnel section. They are very slow and probably inefficient. I had a consultation with the number two in charge of the Section about the situation. Up until now I have yet see to any proposal/effort to improve the situation. I think they are also in a difficult position to improve the situation because of the leadership style. I think it's typical in our Bruneian Malay culture that we tend to follow our leader. If the leader is slow the follower will also be the same.
- The organisational work culture for the whole organisation needs to be improved.
- There is still a negative mentality especially among the "old guards" who think that the old management style is still good or better yet that day do not want any changes. The attitude of certain staff is that "as far as I know this is how the systems had been operating".
- Another important problem that needs to be addressed by management is the issues of lecturers who do not turn up for work if they are not teaching or do not adhere to the Government office hours. Although this issue is practised by minority and does not affect the academic position of the institute, it does directly relate to the disciplinary policy in the government service.
- Some of the clerical staff that we had in this department is hopeless and had no motivation what so ever. To apply for an additional clerical staff is very difficult due to budgetary restriction enforces by an authoritative body.
- The main drawback with some of these clerical staff is their negative attitude to work and they are being inflexible. They are unwilling to do a job that is outside their job description.
- At the end of the day it all depends on the management whether to succumb to these cultures and make it an acceptable norm to the organisation, or enforce certain control to it, in order to halt these negative culture to become cancerous to others in the organisation and effect organisation efficiency and effectiveness

- We at the management level see that “self confidence” among the operational staff is lacking and we have to devise programmes to motivate them by providing a platform to improve their self confidence:
- Informal discussion, meetings, lectures for half an hour before work followed by a morning prayer.
- Leading the “doa” session on alternative basis.

PROBLEMS FACED BY EXECUTIVES

1. ACCOMMODATION

- We are experiencing a shortage of school buildings. Nowadays, It seems to be getting difficult to get co-operation from other government schools under the Ministry of Education to accommodate religious education classes.
- The prevailing situation of the primary religious education is that demand is greater than supply of religious schools. There are overcrowding in a number of schools due to these shortages. More schools are going to be built but it will take sometime to complete.
- The room allocated to store these files is so small and the storage space (cabinets) are limited. We find it difficult to accommodate new files and the old or closed file that are still useful have to be stacked on the cabinet. The collection of these files dates back from 1959

2. COMMUNICATION

- The conflict or communication problem that existed among top management, particularly between the Director and Head of Personnel, makes life difficult for us at the Personnel Section. Any issues relating to management, the director will refer to us and he tends to go at us if there is any complaint with the management.
- As far as I know, the head of personnel, who is the deputy chairman of the Human Resource Committee has never attended this meeting. I think the situation is really bad and directly affects the organisational management.
- As far as I know, the head of personnel, who is the deputy chairman of the Human Resource Committee has never attended this meeting. I think the situation is really bad and directly affects the organisational management
- The problem with this department is that we had no consensus to the way we handle information. It seems that I had my way of doing my job and other executives want to have their own way dealing their job. There seems to be a lot of interference and less suggestions.
- The organisation does not seem to accept proposal from the lower level staff to improve the problem of information distribution. I have tried to put forward proposals for changes to the way information is stored and delivered systems since

1992. I think I know how to solve this problem after having been working with several government departments. I had anticipated the problem to happen as the responsibilities on leave, passages, personal records are now part of our responsibilities. However up until now, all my suggestion has fallen into deaf ears. There seems to be no collective effort to improve the current system.

- Lately, I was excluded from the head of section of meeting which I find very strange. I think it is probably due to my outspoken character that makes them dislike me.
- I find it unacceptable to hear that our top management has to approach the Permanent Secretary to seek an approval relating to my suggestion to improve our filing systems. I was frustrated to hear that the small matter of great importance has to have his stamp of approval and worst of all is that he is not keen on the idea. I don't see the rational of this action and the other factor is he does not understand our situation. We could have just discussed it among found ourselves and found a solution to this ever growing problem. What would happen if every suggestion we make is not approved by the permanent secretary ?. He does not do the job.
- We do not know in advance how many of those graduates from the al Azhar University or the University of Brunei Darussalam will be allocated to us. It will be the prerogatives of the Permanent Secretary to allocate us these staff. As a result, although we know in advanced how many from our scholarship scheme passed their exam, we are not in a position to plan their place of work. I think nobody in the department is consulted about their placement.

3. CONTRACT OFFICERS

- Information (listings) relating to contract officer/Daily rated staff is prepared manually and typed using a word processor. These listings are needed by top management of the ministry in the Weekly Administrative meetings. Due to our workloads we have not been able to update this list periodically. Since this list has just been initiated recently, most of the information in it is still incomplete and need be improved further.
- New information about contract officer need to be co-ordinated effectively. Information about contract officer/teacher being transferred to other departments within the MRA sometime did not reach us. With this situation we find it difficult to update the whereabouts of the information on contract officer.
- We find it difficult to consistently update the information of the contract officer/daily rated due to the workloads.
- We do not have any listings of contract staff whose contract are about to expire. The current procedure of applying for extension of contract is that they will have to apply for extension one year before there are due to expire.
- We do not have the time to make the list of contract staff and their place of work .

- In certain cases where certain contract officers take long leave and we have to be cautious about these matters to avoid them from losing their gratuity at the end of their contract.

4. DECISION MAKING

- Some of the decision making procedure undertaken in this section are slowing things down. The need to bring routine matters into our weekly meeting between the head of sections is unnecessarily affecting the efficiency of this section. Some of these decisions are routine and can effectively be made without much hassle. What we need is some sort of guidelines to make decision relating to standard situation, and only bring up the things that are of exceptional nature. What we need to do is to spend more time and discuss other matters of a more important nature.
- The most difficult decision is these reshuffling of school head teachers especially the effort to replace those who do not hold a bachelor degree with those who does. We have to find some ways to accommodate the former head another comfortable position. The options we have now is beginning to become limited.

5. FILING SYSTEM

- The main problem with the current filing systems is the way these files are used. These single copy nature of administrative and personnel files are currently being used by a number of executives within the Ministry for various administrative purposes namely: Finance; Housing; Contract; Training; and it may also be used in other departments. The multi-usage has caused some chaotic scene in the organisation. Problem arises when these files are needed by several sections at one time and those who want to use it, would have to refer to previous issues or application.
- More depressing is when a file cannot be traced of its whereabouts and the last officer who used it according to records, did not have it anymore. Among the root cause for this situation are that:
 - The officer who last used the file did not follow or was being ignorant about the ministry's procedure of file distribution
 - The staff who requires it took it from the last user without informing the filing section.
 - The distribution are not recorded and poorly co-ordinated.
 - The staff misfiled it.
- Effort to improve the situation has been undertaken a number of times but up now we have not found the optimum solution yet. This is probably due to our failure (Personnel Management Section) to co-ordinate this improvement with other officers and staff who use this filing system.

- We find it mystifying with all our efforts to improve the situation, that we are the ones being blamed and became the scapegoat for the problem that is not entirely due to us. The management even stereotyped us as being slow and inefficient.
- In a number of occasions we came across mistakes and misunderstanding made by filing section whereby files/information were addressed to me that are not related to my responsibilities.
- The information flow, especially the flow of the personnel file or other administrative file, need to be improved and the management needs to find some way to make it more efficient so that action can be taken more quickly and information can be effectively distributed.
- The multi-usage of this single administrative and personnel files by various sections of department especially those that require urgent action by other sections (finance, housing, etc) can also cause information to be missed or lost. Urgent action will be given a priority. Files/information that are supposed to be passed to Record section, will shift direction and most of the time, actions that are supposed to be taken, will be forgotten until those concerned enquired about it.
- I think the problem is the failure of the filing section of being ignorant of what information should be relayed to the Personal Record Section.
- We have known the problem of filing and information distribution systems of the filing systems. That was the main reason why we have to set up our own filing systems to avoid confusions and delay in processing the application .
- There seems to be no well planned in-house training programme for the MRA.
- The use of temporary file is quite significant in this department. The problem with this temporary file is that we cannot do anything if action to be taken on the particular cases (correspondences) requires referral to previous cases. We also faced problem of “missing” or “misplaced” personal files.
- We can't do without the concept of temporary file. In a way it helps to speed up the flow of information/correspondences. However, it can also cause problems if it is not managed properly.
- I think the main reason why most of the information on the Personal Record of Service/leave record are always problematic is due to the fact that staff did not a full use of the information in the personnel file and use too much of temporary file.
- The biggest problem faced by this organisation the information or documentation distribution systems that is currently handled by two clerical staff and one office assistant. I think it is impossible for these two ladies to co-ordinate these with the current flow of information. There are about 2000 staff to be handled and about 200 correspondence received each day. We have around 4793 titles of administrative files in the department.

6. EQUIPMENTS (COMPUTERS, FILING CABINETS, FURNITURES et cetera)

- There is only one clerk who can operate personnel computers
- More PC computers is needed by the departments.

7. INFORMATION FLOW

- The problem with this department is the way information is flowing. It took at least three to four days for a document or file to flow from one section to another within the same building.
- Others outside the department do not seem to understand how the system works. They were always complaining of delays even on a simple application of a Wedding Leave for example, takes ages to get approved. It is beyond our control.
- The way information or files are collected from each executive daily needs to be co-ordinated properly. The inconsistency on these matters has lead to delays in the processing of applications. Most of the time it takes two to three days for the files that had been acted upon to collected from my table.

8. INFORMATION HANDLING ACTIVITIES/FLOWS

- The problems that have always been with the organisation are the inability of the organisation to tackle problem of the currency of information, ineffective document distribution and in efficient processing and retrieval of management information. These problems had been with us for quite some time and various efforts had been made to improve the situation but the problem persists.
- The problem with the current system is that information that are needed to update the records (leave, personal records, daily rated, listings etc.) are not received by the staff in charge of this information. Those who are responsible for these records are only in position to update records with information that are passed or directed to them.
- Those personnel who are responsible for personnel management tasks such as salary increment, efficiency bar, extension of services, confirmation of appointment, etc. will process information based on the available records. They are not in the position to know if these records are correct or otherwise.
- We cannot point a finger at a particular section that did a particular job nor can we blame clerical staff due to this inefficiency. I think we have to blame the current system and carelessness of certain senior staff who are responsible in undertaking decision on certain matters. The ignorance and carelessness of some senior officials (especially new staff) on the next action to be taken after each decision, caused important information not reaching those concerned with records updating. Once file are returned to filing section after an action was taken, one clerical staff will check for subsequent action/attention that will be necessary.

- The most significant problems of processing these information is in terms of time taken to process these application in the MRA alone is around two-three months. Another three month is taken to by Public Service Department.
- We need current listings on of staff who are currently undertaking graduate study either in local or foreign universities under the government In service Training Programme and who had undergone previous in-house training programme either organised by the MRA or the Institute of Public Service (IPA). This lists would also help in identifying suitable staff for future follow-up training and identify appropriate staff who may be able to fill suitable vacancies.
- Information about training programmes attended, needs to be made available in the personnel records. The unavailability of such vital information in the records makes it difficult for executive to identify the extent, training had been given to a particular individual. In addition it will also facilitate to identify duplication of training attended.
- The complete listing of employee's training needs or requirements reported in staff performance appraisal report in order to facilitate referral for the training needs analysis. Currently, what is reported in this document is occasionally used. In addition to individual training requirement, these reports revealed various kinds of personal qualities that each person possesses.
- A complete listing/database and index of contract staff detailing all individual's personal information on current place of work and contract expiry dates.

9. JOB DELEGATION

- The problem with our organisation is that we are managing around 2000 staff, more than other departments.
- The most frustrating situation about the current situation is that if a clerk who is responsible for certain task goes on leave, we have to wait for him or her to come back before certain task can be processed further.
- In addition to dealing with personnel, I am also designated with a number of developmental projects of the Religious Schools. Currently I am looking after five new schools project of the department. My other responsibility is looking after the office equipment and stationery for all the schools the ministry. With the current multi-perspective role in the department I find it difficult to concentrate on one task.
- I have a long list of job descriptions.
- These two ladies are very diligent workers and can be considered as experts on the filing systems of the department but the problem is that no body would like to be in their shoe. I would not like to anticipate what would happen if both resigned.

- ❑ My main task in this department is mixed with the personnel management, handling of the school furniture, schools meals, and biennial tender of school ration and housing loans.
- ❑ Although I graduated in the Islamic Studies with no background knowledge in management or financial matters, I find these work very interesting. I would love to know and learn about it in great depth.
- ❑ I do not deal with promotion and curriculum.
- ❑ I have to deal with 1,303 teachers for whole country.
- ❑ The responsibility towards housing matters of staff and personnel of the department is an unwelcome burden to our already busy schedule. These tasks requires full attention. It seems that we had to deal with it more than our main responsibility of dealing with schools.

10. LEAVE INFORMATION

- ❑ The most vital information that are always problematic is the leave information, especially the leave information relating to the application for an unpaid leave. Once an officer/staff took an unpaid leave, it would automatically shift the date of his/her next salary increment entitlement. For a contract officer who is applying for their end of contract gratuity, leave information will also be important. Failure to up date this record will be queried by the public service department and the ministry of finance, which will slow down the process of gratuity application.
- ❑ The “accumulation of leave” is not done unless requested by individual. We can’t automatically give the exact number of leave remaining due to the fact that there is nobody specifically designated to do this job and the number of people to be dealt is massive. We can only manage to do the calculation based upon request.
- ❑ We encourage them to apply for accumulation leave so that the latest information of their leave can be identified.
- ❑ The calculation of leave is not a straight forward issue and we need to know the formula. The rules and regulation are also very rigid. These rules and regulations keep changing according to the prevailing situation.
- ❑ Ever since the management of leave and personal records are delegated to our department it has been a nightmare for us. We are inheriting an information systems that is imperfect and questionable.
- ❑ I had so many bad experiences relating to the information in the Record of Leave. It is incomplete and unreliable. There is one particular case involving one individual in this department whereby about 10 of his leave application that was approved was not written in the record. Also, there is another case of an individual who was transferred from another ministry where the information in his

leave and personnel record are filled only with the information during the time he was working for other ministry.

11. PENSION AND RETIREMENT INFORMATION

- ❑ Tracking down “pension information” or information on staff who are retiring is a painstaking task. The current information systems are not very reliable and some information are missing.
- ❑ We have no way of knowing who is retiring or is about to retire. These information can only be obtained from the Ministry or we will be notified by the Public Service Commission.
- ❑ We had one or two instances where an individual complaining about his/her date of birth in the personal records contradicts what is in their birth certificate.

12. PERFORMANCE APPRAISAL INFORMATION

- ❑ On many occasions, documents that are supposed to be enclosed in the application form are not given and has to be requested a number of times. These slow the process. Notable among these is the Performance appraisal reports where the section should have kept a copy of these reports. Currently we only have the performance appraisal for two departments. The good things about the availability of this report are that we can easily refer to these reports in order to process application.

13. PERSONAL RECORD

- ❑ I can't rely entirely on the Record of Leave of a particular personnel to calculate the accumulation of leave. I had to refer to the personnel file. This is a very slow process but accurate information can be undertaken.
- ❑ Ever since the management of leave and personal records are delegated to our department it has been a nightmare for us. We are inheriting an information system that is imperfect and questionable.
- ❑ There are also incidents where the actual personal record document is missing.

14. RED TAPES/BUREAUCRACIES

- ❑ The long-term in-service training programmes are governed by rules and regulations that are centrally co-ordinated by the Public Service Department. Neither the Public Service Department nor the MRA are in position to make decision on these matters. The final decision will be made by a committee at the Public Commission Department. . It has to go a lot of processes and red tapes. The MRA will only make recommendation to those who it thinks should be awarded the scholarship based on needs. It usually takes quite some time to complete.

- The result from the Public Service Commission are very slow and sometime the courses that an officer is supposed to undertake has already started we receive the results.
- Every year for some reason, we seem to experience delays in receiving the application for the In service Training programme which has its dateline. The main cause of these problems are red tapes. These applications have to undergo various unnecessary stages of the organisation which are not in a position make decision. The communication systems seem to delay the process.

15. SALARY INFORMATION

- We find it difficult to obtain an update information on salary information that is vital to process the housing loan application. What we did is to update this information on the basis of assumption that one has reach certain level of salary scale after completing certain years of service..

16. STAFF SHORTAGES

- Basically, we are aware of certain techniques that can be used to improve our information filing and distribution but, for some reason, probably due to shortage of staff we are not able take advantage of it.
- In addition to our main task in managing personnel and its information, our staff also acted as a personnel support to other major sections of the ministry in case of any shortages due to long leave.
- We have shortage of clerical staff and equipment.
- More staff is needed to handle the ever-growing task
- We had a surplus of teachers who came from the capital city but we had shortages of religious teachers in other districts (particularly in the Belait Districts). In cases where shortages occurs we solve it by instructing those teachers who are from the capital to work in the districts. Alternatively we give instruction to teachers who taught in morning to do overtime by teaching classes in the afternoon and vice versa.
- Our position is very difficult as the issue of religion is a sensitive issue and vital one in the country. We have to give a 110 percent effort to entertain requests for religious teachers from various parts of the community and other non-religious institutions.
- We had not been successful in our effort to have clerical staff in the ever-growing numbers of schools. The reason given was often due to budgetary constraints.
- The appointment of religious teachers as mosques officials cause a vacuum to exists in the administration of schools and requires immediate attention and

reshuffling. The prospect of becoming mosques officials appear to attract many religious teachers nowadays. The scheme of services is becoming more attractive than what was available for them as a religious teachers.

17. STANDARDISATION

- What we need is some sort of standard as to the way files either personnel or administrative, are being used. There are cases where executives are in possession of files for weeks. These type of situation is very bad and causes delays in the processing of other application or action that may require the same files.

18. STRATEGIC PLANNING

- There seems to be no strategic planning and research in terms of the need for school equipments.
- There is no written strategic planning on the sending of students overseas as part of the future needs of the human resources of the Department and the ministry. The higher authority of the MRA usually decides these and we only act as a secretariat to the committee. There seems to be inconsistency on the number of students to be sent.
- There is no written strategic planning on the sending of students overseas as part of the future needs of the human resources of the ministry. These are usually decided by the higher authority of the MRA and we only act as a secretariat to the committee. There seems to be inconsistency on this matter.

19. TRAINING/HUMAN RESOURCE DEVELOPMENT

- The failure to improve this situation may also be due to it being done without great effort or it might be that our knowledge in record management is limited.
- Listings of staff currently undertaking graduates study either in local or foreign universities are not available.
- Information about staff and personnel training are not up-dated into the personnel record. As a result it is difficult to rely on this record to identify who in the organisation has attended what training program. They seem to be blaming us for this problem and argue that they do not receive the information. Reliable information about training can only be obtained through the personal file.
- There seems to be no well planned in-house training programme for the MRA.
- Listings of staff who are currently undertaking graduates study either in local or foreign universities are not available.

- Information about staff and personnel training are consistently not up-dated into the personal record. As a result it is difficult to rely on this record to identify who in the organisation has attended what training program. They seem to be blaming us for this problem and argue that they do not receive the information.
- The training section will only deal with aspect of training relating to management knowledge. For other specialised training, each department has to deal with its own training programme. In this case we will only provide some financial assistance.
- The planned in-house training programme will be instituted based on the prevailing organisational circumstances. Some of it has to be shifted to another date due to its coincidence with other ministerial projects. In certain situations unplanned programme has to take precedence and some has to be shelved due to shortage of funds.
- We have so many things in our head with regard to in-house training but due to time constraints, shortage of staff in co-ordinating the training programme we have to take things one at a time.
- We do not have listings of staff who had undergone previous in-house training programme either organised by the Ministry or the Institute of Public Administration. It would help to have these lists to avoid duplication of training of staff. We should have a computer database of people who had completed an appropriate training programme.
- In addition to these main rules and regulations, the MRA has its own preparatory guidelines to suitable candidates to be recommended to the Public Service Department. These guidelines are distributed to all departmental heads to be used as a basis for recommending suitable applicants from their own department. Unfortunately, departments do not seem to use these guidelines to make their decisions and shortlists the prospective applicants based on the their needs.
- There is the need for departments to make decision first before forwarding it to the Ministry. Most departments forward all the applications to the training section without extra effort to identify the suitability of the applicants . This leaves us with a lot of work of identifying applicants and short lists those that conform to the rules and regulations. The situation is very frustrating and the time that we spend on it can be used for other useful purposes.
- Various preliminary action will be undertaken prior to forwarding it to the Human Resource Committee of the MRA. Another stage of hard work is done before forwarding these applications to the Public Service Commission. Due to the uncoordinated circumstances of the processes the process of submitting these applications are very slow.
- The Organisation In Service Training Programme should be based on the prevailing needs of the organisation, not the other way round. Currently this category of training are co-ordinated based on individual needs or application not from the organisation strategic training needs.

- I have to have an initiative to attend courses on the spreadsheet software Excel , using my expenses in order to conciliate my work.
- Most of the departments in the Ministry, except the Department of Islamic Education , has no specialised sections that deals with training . These makes it difficult for us to liase with departments regarding training and any enquiries are related to the information are referred to the Administrative Section of each department.
- We only act as a co-ordinator to courses organised by the Department. As we have a limited number of staff we are not in position to identify the training needs of the department. The responsibilities of identifying training needs are in the hands of each section of the department.
- We have no specialised funds for organising a training programme.
- Recently our efforts to send our staff to undergo various training causes overseas was turned down by the ministry and the reason given was unacceptable.

20. WORK CULTURE

- There is a negative attitude and inflexibility among the clerical staff relating to the job delegation and this is very frustrating. The attitudes that this “ is not my job” are very bad for the organisation. We have to have a diplomacy and in a polite way to ask them if those who are responsible are on leave to carry out these additional duties.
- Adding to this dilemma, there is inconsistency in some of our office assistants in collecting files that had already been acted upon. These factors had added to our problem in information handling activities. They seem to take this matter lightly
- The negative attitude of some religious teachers of not favouring to work in schools is unprofessional and is a very discouraging trend. These may be due to their unattractive employment scheme of service and heavy responsibilities. The trend is also significant among those who had graduated from local university. Their perception that working in the head office is some kind of promotion is very wrong.

PROBLEMS FACED BY CLERICAL/OPERATIONAL STAFF

1. ACCOMMODATION

- We have a shortage of space in terms of storing the performance appraisal report.
- The Photocopy machine that is kept in our room is very noisy and affects our concentration.

2. CONFIRMATION OF APPOINTMENT

- It is difficult to ensure that confirmation of appointment for those outside the public service are done on time.

3. COMMUNICATION

- One of the prevalent problems being faced when processing an Efficiency Bar is frequent occurrence of incomplete Performance Appraisal reports and responses from the department for these documentation are usually very slow
- We need some form of guidelines from the management as to how we should do our job. There seems to be inconsistency and an uncoordinated way in doing our job. What we are doing in this section is entirely up to us.
- I have just been transferred to this section and everything I have done is based on the way my predecessor did his job. There is no proper guidelines given to me from my superior as to the right way to undertake my job.
- We need to have close working relationship with the staff at the Personal Record and Increment Section so that information can be easily changed and updated. It seems we have people working on their own and are unwilling to share their information.
- There is slow response from other departments (within the MRA) when requesting for the Personal Record of their contract officer.
- I think management should be innovative in finding ways to tackle our information and handling problem. I think that they are very passive in this subject. What currently happens is that all that is being done in this section is entirely up to our own initiative. What we need is action to improve the situation from them not just words.

- We also have to answer queries from the officer and staff in relation to allowances due to them. The problem is that we do not have the information of the progression of their application after forwarding it to the Department of Public Service. They should inform us whether it has been forwarded to the treasury or not.
- There seems to be delayed responses from other departments every time we send them questionnaires.
- We do not received the latest leave information of staff or personnel on secondment to the Ministry of Foreign Affairs.
- Responses from the departments regarding the recommendations also contributed to the delays.
- Some of the delays are not entirely due to us. We had processed some of those queries but due to some unknown reason the information does not reach the finance ministry.
- Personnel who had previously worked under a different ministry also problematic. Their personal record before they joined the MRA are not available and have to be requested from the previous employee. In some of the cases their salary information are also not updated. This has to be straightened by the previous employee first before the MRA can do something about it. The other problems of this category of personnel is the acquiring from of their records takes very long time to be received.
- Some departments do not respond to our enquiries and sometime have to go to the Public Service Department to obtain latest records..
- Any information regarding new staff that report for duty, will need be relayed to me so that I can update the Retirement List for Staff and Personnel Of the MRA. However there are many instances when these information are not received in which I cannot do anything about. I will only update information that I received.
- The flow of information relating to report for duty is in consistent. The report for duty of staff in the division II are supposed to be handled by the one of the Executives in the Confidential section. But for some reason this information are also relayed to me.
- In some instances I was not informed of staff or personnel who are being transferred or promoted to other departments or sacked due to disciplinary action. Due to this problem I was not in a position to up date these information effectively.
- Some of the information flow relating to job promotion within the MRA is inconsistent and sometimes not received.
- The biggest problem is when the location of the files are unknown or contradicts our Files Flow Records. Sometimes the movements of these files after each action are not according to the prescribed system. As a result, we are the ones being blamed for any delays.

- Sometime the senior officer does not understand the problem faced by us in the filing section.
- We often receive details of leave information for the contract officer two to three months later.
- We can't avoid using a temporary file to avoid delays in certain applications or the information received requires urgent attention from our executives. Usually we use temporary files on the following matters:
 - Passages
 - Children's Education Allowances
 - Application to own land
 - Application for Loan
- Certain correspondence requires several duplicates or copies to be sent to appropriate bodies. Usually this is done by the clerical staff who are delegated for a particular job. The problem is that we came across a number of those who does not seem to appreciate that we are understaffed and had a lot of work to do. There are many cases where we had to do all the photocopying for them. Its a very encumbering situation and we don't want to fuss about it which can cause further delays.
- We are often be blamed for the delays of correspondences either from the management or from those personnel who do not understand the difficulty we face in our work. Management also blames us for not doing much to improve the situation, while most the blames from personnel are mainly due to delays to their applications.
- The most pathetic things about our top management is that they are taking things lightly. There is only one office assistant in this department who are responsible for sending all departmental mail to various organisations. It is appalling to understand that he has to use his own car (without patrol allowance) to ferry letters to the various departments. It's a pity that some executive do not realise the situation and these executives are sometimes very demanding.
- Some of the instructions given to me are not clear and confusing. I feel that I am answerable to all the senior staff in this department.
- We had to send files to the officer in charge of certain actions to avoid delays and backlogs. The office assistant is not reliable and often very slow in collecting completed information
- There are inconsistencies in terms of the distribution of documentation. Some of the application relating to the accumulation of leave go direct to me and some are directed to the actual officer in charge.
- Every application from religious school has to be relayed by the Districts Inspectorate and the Districts Religious Education section which usually receive "every" application of religious teachers who are working in Schools. These

sections are understaffed and serve as a transit point of the communication between the Department and the schools.

- Even though the initial applications for this training programme are processed in our section the result or the outcome of the application is not relayed to us officially in “black and white”. We had to request for it before we knew about. I think this system needs to be improved so that management can do something about the schools who are affected by it. We do not know who to blame for this.

4. CONTRACT OFFICERS

- I think our head of section is very incompetent and weak in the administration of Contract Officers.
- We have to divide our task between processing the information/application from contract officer to entertaining enquiries from the contract staff.
- We are always being blamed if the processing of application is slow and this is beyond our responsibility.
- The most depressing part in this work is addressing the query for the Audit Department relating to past issues of contract officer. Some of these issues dates back to many years ago (in one occasion we receive queries on things that happened 30 years ago). We have to sift through old documents and closed files from the storeroom. The most tedious thing is that these files are difficult to trace and are being disregarded by the management.
- In addition to the jobs listed in the Job descriptions, we are also being instructed to take over the responsibilities of those who are on leave. But nobody wants to undertake the job the deals with contract officers. It is something we dare not involve and it is very complicated.
- The problem with updating the leave information of contract officer is that not all the information about the application did reach me. As a result, some of their leave information are not updated.
- The policy for the renewal of contract are inconsistent. We thought that every new contract signed by those who are in this category of appointment will be based on the new rulings but that does not seem to be case. They are still those who are extended based on the old scheme. The old scheme of service in the contract are very laborious and require complex formula.
- We often had a problem with the information on the leave record of the contract officer not recorded . These problems came to light at the end of the end of their contract when they will be applying for the end of contract gratuity. Queries are usually received from the Public Service Department or the finance ministry.

5. EQUIPMENT (COMPUTERS, FILING CABINET, FURNITURE)

- We need computers and learn how to use to use them
- We need more computers to enable us to work efficiently. Currently we sometime have to share among us the two computers in the department.
- We need more training on the use of IT.
- We have to share computers among ourselves. Problems arise when the available computers are heavily used.
- We need more computers and special typewriters to type in the information into the Personal Record. The one PC computers that we had in this room had to be shared by five of us and it is heavily used.
- We can't use the electronic typewriter to input information into the Personnel Record. It has to be a manual one to do the job more effectively.
- The problem with us in this section is that we were given a week training on the using a micro-computer word processing software but the hardware itself are not available in our section. As a result we have no where to apply what we have learnt about it.
- I would like to learn more about computers.
- I feel bored doing my job with the typewriter and would be quicker to do my job using a Personal computer.
- We also had severe shortage of filing cabinets Some of the files cannot be shelved properly and have to be put on the top of the cabinet. We cannot not use the divider in order to save some space.
- We have not been allocated a filing cabinet for the personal record.
- I do not want to learn about computers. The more I know about it the more work I had to do.
- "The more I learn about computers the more work I have to endure, why should I learn it?"

6. ESTABLISHMENT LIST

- The Establishment List which are prepared by a word processor can only be prepared once a year. Updating information is done from time to time by pencilling down new information into the lists . The list has a very limited feature and are arranged based on the annual budget information. Its one of the most sought after pieces of information by executives in the section (PMS) and other department within the MRA

- So far we only manage to revise Establishment Listings of two departments (Department of Administration and Department of Mosques Affairs). The rest will follow later.

7. EXTENSION OF SERVICES

- Lately we find it hard to update this listing properly. To make things easier we just jot down the changes or deletion by using a pen or pencil.
- We feel that some of the decision that are currently undertaken with regard to “the extension of service” are very time consuming . Previously, decision was based on the recommendation of the Director of Mosques Affairs and we do not need to forward it to Weekly Meeting of the Head of Section.
- We had a few cases where people forgot to apply for extension of their services. I think there is a need for the management to inform them when their services are due for extension.

8. FILING SYSTEM

- Files are kept by the officer for so long that we have to recall it.
- Whenever new information or working paper is created on a particular subject, I would prefer myself to put this information in its designated file. I will not be confident if I were to give notes to the filing Section asking them to file a particular information/correspondence.
- We have to have our filing systems relating to the research done by the Section, in order for the information that has been typed to be kept properly rather than relying entirely on the filing section to keep this information. This is to ensure that these information are kept for future referral.
- Problem of updating the leave record arise when the personnel are used by other personnel for other purposes.
- We find it difficult to transfer correspondences/information in the temporary file to its original file. This is because of its sheer volume and the time available to do this job is quite limited.
- The most frustrating thing about the information in the temporary file is when we want to file the information into the original file , the original is still being used.
- The other problematic area of our filing systems is that there are no records of the file being used by somebody. I had to ask around all the clerical and executives who might have come across this file.
- The most boring job is searching for files that had already been closed. Some of these files are unavailable in this filing section and needs to be searched in another

area of the building. The worst thing about the storage systems for these files in the building is that they are not arranged systematically. We had to examine piles of documents to look for a particular file.

- If we receive correspondences from other organisation relating to a particular subject and the administrative files are being used for other purposes, we will then have to use temporary file in order to process and speed up these correspondences.
- Problem arises when the information received requires referral to past correspondence and somebody else is still using the file needed for the task.. Worst of all is when we are unable to find its whereabouts. Sometime we have to wait for the file to come back to us, or we give chase to those who are in possession of the file.
- We have not been able to file consistently those correspondences using a temporary file into its main file. Some of the information that is still not filed dates back to a period of three years. .
- Currently a copy correspondence (c.c) is also as problematic as the temporary file in that these information cannot be filed accordingly.
- We sometimes face the problem of files taken out without notifying those responsible.
- We loathe the task of searching for files that have already been closed.
- The problem with the temporary file is the inability to refer to earlier application or letter to act on follow-up correspondences from an authoritative source.
- The main problem with the information handling of contract officer is when so many applications are received from one officer. It will be difficult to trace the main file and the use of temporary file is significant. If the temporary files are being used and require referral to previous information, we will have to wait for the main file to be returned to the Filing Section. The current systems of handling information cause delays for many applications and missing information of the contract officer.
- There are only two of us co-ordinating the Filing Section for the whole department. Currently we are dealing with approximately two thousand files and receiving hundreds of correspondences each day. We have told the management of our problem but it seems that nothing concrete had been done about.
- We do not keep a record of KIV information .
- Delays in information distribution will happen if the files are out. We had to identify the correspondences that require immediate attention if the files are not in the cabinets. We will use temporary files for information that we feel important. The important information that usually deserve our attention relates to aspects of financial interest of staff and personnel of the Department such as passages, gratuity, loan, allowances and et cetera.

- ❑ Although, the temporary file systems in one aspect solve the smooth flow of information, it can also cause great delays if the correspondences require referral to previous information.
- ❑ This work is sometime stressful especially when we receive blame due to delay or missing files. We can't avoid thinking about it even during resting at the comfort of our home.
- ❑ The arrangement of files in the cabinet cannot be indexed properly and files are retrieved scanning through.
- ❑ To entertain request for closed filed is very difficult to handle.
- ❑ We need some sort of standards in the management of the filing systems of the department. We would like management to find some solution to our problem and not only rely on two of us.

9 INFORMATION HANDLING ACTIVITIES/FLOWS

- ❑ Information relating to "reporting for duty" for new staff are either not passed to this section or information received are incomplete.
- ❑ There seem to be poor co-ordination in terms of the distribution of information within the Personnel management Section. Information about changes to individual appointment scheme and latest salary information are very slow and sometime the information are not received at all. The current way of doing our job is by updating information based on the information received.
- ❑ Our information retrieval technique are a bit slow but effective. We need to find some other way to improve it much further and in the current circumstances we find it impossible to concentrate on it.
- ❑ The working papers that were presented to the Board Directors meeting (MBP) and any decisions relating to it not classified and kept properly.
- ❑ Problem arises when past research papers are requested by the top management in that I had to scan through arrays of diskettes to look for the file. Some of these requests are not very clear.
- ❑ The amount of information handling that we have to do is huge. In addition to processing the leave application we had to update all these information on to the Record of Leave. I cannot do everything at one time and had to divide my time between processing the information and updating the Record of Leave. This is done in order to speed the applications and lessen the amount file on my table. Information that need to be updated on to the Leave Record will be recorded temporarily on to a sheet of paper containing details of the leave or other information to be added on to the Record. These information will be then up dated later when we will have a free time.

10. INFORMATION SERVICES

- We know that we can offer a lot more service in terms of personnel information to the management and to other department as a whole but with the current disadvantaged environment and systems of management, we can only give them our service to the best of our ability.

11. JOB DELEGATION

- I have seven different responsibilities that need to be undertaken with great composure. I find it difficult to understand the reason why my workload seems to be more in comparison to other staff in this section. I have made my problem known to the management in which they promised to do something about it, however, up until now the situation is still the same. It's quite depressing for me and I feel that it is unfair to put these responsibilities on to one person alone. Sometime I had to take my work home, and even taking leave is something I had to think twice, knowing that there would be no one to take over my job.
- With the current working environment, I find it difficult to cope with the workload. I have to take each task one at a time and give priority to things that need to be done urgently.
- There are so many things I have to do and had to do it one at a time. The most difficult job is processing the application for the in-service training programme. We also have to deal with various allowances of those undertaking courses at the University of Brunei Darussalam.
- I feel that what I am doing now is too clerical and It does not correspond to my qualification. My basic qualification is Islamic Law and I was instructed to work here. I feel that my knowledge on the Islamic Law can be utilised to other areas where my knowledge can be useful. My current job delegation can be done by clerical staff.
- We need to undertake so many information processing prior to submitting the In service training application to the Public Service Department. We have to serve two committees (Human Resource Committee, Weekly Administrative Meetings) in terms of providing processed information before decision on the In service and short terms courses/seminar are made.
- I have to list down and type each individual's overall performance grade to be submitted to the Public Service Department.
- I feel that we have to respond to a number of personnel at one time. Before we manage to finish with one task for one officer, another is asking us to do another job. There seems to be a lot of overlapping tasks.

- The need for the organisation to particularise the responsibilities of each staff so that it will be easy for us to concentrate on it and it will be easy to refer to those who are responsible. Overlapping tasks should be reduced.
- I feel that what I am doing now is not challenging enough and it is more towards clerical job. I think we can do more than what we are doing now. Most of the work that I do now does not require a lot of hard thinking and decision making. Most our work is on the basis of the instruction from our superior and processing information based on something that is already available or done by them. Its frustrating sometime that we feel that it might be more worthwhile for us to be posted to schools in the first place so that we would be able to transfer the knowledge we specialised in.
- I can only manage to process the Increments of 15 Records of personnel per day.
- In addition to undertaking the task of dealing with basic information processing for EB and Increment, we also have to deal with enquiries from personnel of their Efficiency Bar and Increments.
- The Chief Clerk told us to do increments in the morning and queries in the afternoon. This cannot be done due to fact that we tend to deal more on formal and informal enquiries.
- This work is very stressful due to a lot of pressures from various sides. We were blamed and sometime scolded by those staff who do not want to understand how the system works. It is very difficult to deal with financial interest of individual.
- We have to divide our time doing the typing job, processing application and checking information about their appointment date.
- We have so many records to be updated once the processes of extension of services are undertaken. It will require an updating of the Officers in the Month to Month Appointment list. This list will indicate the expiry or termination date of his current appointment. This listings will require us some consistency in putting the information. Some time due to the heavy load of work, I tend to forget about it. We need some kind of discipline in undertaking our job.
- In addition to the jobs listed in the Job descriptions, we also being instructed to take over the responsibilities of those who are on leave. But nobody wants to undertake the job the deals with contract officers. It is something we dare not involve and it is very complicated.
- I have been working with the government for than 18 years and passed the Brunei Clerical Examination but I have not been successful in applying for the Grade III clerks post.
- I have to divide my job between the clerical (work permit, retirements information) work with the filing work.

- I am the chief clerk, I am also the office boy . I have to do all typing and sending these payment vouchers to the Ministry of Finance. My biggest problem is that I do not have a car and have to asked my friend to take me to the Ministry of Finance.
- The problem with my current position is that I have to work in two different places.
- We need to have a section that deals specifically with the Finance.
- Most of the things we did is mainly confined to the work of Grade III clerks. It is very frustrating sometime.
- The amount of information handling that we have to do is huge. In addition to processing the leave application we had to update all these information on to the Record of Leave. I cannot do everything at one time and had to divide my time between processing the information and updating the Record of Leave. This is done in order to speed the applications and lessen the amount of files on my table. Information that need to be updated on to the Leave Record will be recorded temporarily on to a sheet of paper containing details of the leave or other information to be added on to the Record. These information will be then updated later when we have free time.
- What we need in this department is a proper delegation of job. The job descriptions should not be too wide in scope and we need to have some sort of specialisation area. What we are doing now seem to be like “cocktail” of unrelated task.
- The way things are going now in terms of action to be taken to an application is different from what was ten years ago. We seem to process all the information relating to a particular application first before passing it to the executive. We do all the information processing and drafting in advance before he signs it. We are undertaking a lot of work that should be done our executives and appear to know more about the procedure and rulings than them.
- We seem to have so many superiors and some time this situation is very confusing
- Since my job deals with the financial interest of the contract officer, everybody wants me to speed up their application. Some of them are very demanding especially those who want to send their application directly.
- There are only two of us co-ordinating the filing section for the whole department. Currently we are dealing with approximately two thousand files and receiving hundred of correspondences each day. We have told the management of our problem but it seems that nothing concrete had been done about it.
- We can't transfer the information in temporary file to its main file straightaway. These are usually done when things are calm and sometimes we had to do it doing lunch hours.

- We cannot cope if one of us is on leave and there won't be anybody to take our place.
- We need to have a leader or head of filing section from middle management level staff to act as an intermediary between us and the management and lead us in our daily task.
- In addition to acting as a Confidential clerk to the director, I still had to do a lot of other work relating to application of annual leave, leave without pay, housing loan, et.cetera and record it into the personal record systems.
- Some of the work are repetitious and can be frustrating
- Sometime I had to take my work home in order to keep up with my works.

12. JOB PROMOTION

- I have been working in this department since 1969 and my position from the start had been Office attendant. Our salary had reached the maximum for long time. The management do not seem to bother about our plight.

13. LEAVE INFORMATION

- These queries are either from the Finance Ministry or the Audit department and is usually related to various aspects of management such as application for contract extension information. The inaccuracy of information in leave and personal record which is prevalent in the current circumstances directly affects many. We feel that too much time is spent on this work.
- The most difficult part in undertaking the work relating to contract officer, is to make sure all the records relating to leave are in vogue to avoid queries. This is something very difficult to achieve. What we have are dependent on how the whole system of management runs to work effectively.
- Any changes or cancellation to the unpaid leave application had to be done by erasing the date of earlier application using rubber eraser, which is painstakingly done.
- We tend to have more application for the annual leave during term holidays.
- Calculation of leave tend to take a lot of time in the calculation of annual leave
- We always receive queries about leave entitlement of officers and staff who is about to retire.
- We have an alternative leave record card as an alternative option to record the leave information in the personal record. But due to our inconsistency of inserting information, the cards are not so reliable. For some unknown reason some of these records are also missing.

- It usually took a long time to obtain an approval from the Public Service Department regarding the religious officers that had been transferred to work full time in the main head office. As a result we find it difficult for us to calculate their entitlement.
- We are trying our best to give an accurate information of their leave entitlement as accurate as possible.
- Processing leave requires a lot of calculation. We need to have a formula handy for the calculating an annual leave entitlement. If the information on the record of leave are not accurate then our calculation are not up dated.
- The problem with updating the leave information of contract officer is that not all the information about the application did reach me. As a result, some of their leave information are not updated.
- The most difficult task is updating the leave record and currently there is still hundreds of information relating to sick leave, leave, acting information that are still outstanding.
- Since the sick leave information are not so important in the management of personnel we only update this information when there is a free time.
- Staff and personnel had to officially apply for the “accumulation” of leave, and without applying for the accumulation we can only give them an approximate number. We had a difficulty of knowing the exact numbers of individual’s leave entitlement as a result we are not able to state the reminder of their leave in the approval letter.

14. PERFORMANCE APPRAISAL

- One of the prevalent problems being faced when processing an Efficiency Bar is frequent occurrence of incomplete Performance Appraisal report and responses for this documentation are also usually very slow.
- We do not receive the performance appraisal report from the department of Syariah Affairs and The Department of Islamic Education. It is needed by top management for various purposes and it may also be needed by other external Department. Due to its unavailability we are not able to respond to requests from our top management or external organisation promptly. We have to request it from the appropriate department that is understandably slow to respond.
- The latest information about the performance appraisal report on these two departments is only up to 1992. We have to approach them in order to get this information.
- Some of the procedure that are undertaken by department/section in appraising their staff are not according to rules. There is an incident that involves one school

under the MRA where the principal asked his subordinate to sign and agreed to their performance appraisal without knowing what is written about them. In other words this school principal force them to sign agreeing to the blank form that would be filled later. We have received a complaint on this.

- Performance Appraisal reports are sometime difficult to acquire from department and this slows down the processes of those efficiency Bar.
- Details of the performance appraisal report that are not complete may also affect the EB process.
- In processing an Efficiency Bar we seem to have a problem in requesting the performance appraisal report from the Inspectorate Section. It seems that we have to write to them a number of times for these information before they were able to respond to our request.

15. PERSONAL RECORD

- Duplication of information inputted into the personal record can affect the process of increment and efficiency bar, and resulted in the queries from the Treasury Department.
- Certain important information that can affect the incremental dates such as taking an unpaid leave and extension of services for women in division III and below, are not updated into the personal record. Details in the Personal Records relating to the unpaid leave and changes in the appointment due to marital status of women are among the basis to be taken into account when processing for the Increments and efficiency bar.
- There is no way we can identify the exact number of Personal Record in the MRA.
- We are not only responsible for updating personal record but also we have to do other work that needs be attended to, such as handling the annual salary increment of the daily rated staff.
- Personal record systems are one of the most important information in personnel management. It is one of the problematic area in management information in the MRA. In most situation we are always the ones being blamed for the problems occurring relating to its currency. In most situation such information are not received and I think the file distribution systems that are currently being used needs to be improved.
- The numbering system of the personal records are sometimes confusing to staff and this causes misfiling. Each category of personal record are subdivided into the salary division and numbered sequentially.
- We are not in the position to know the number of personal record available in the organisation.

- There are a number of information that need to be put into this record. These information are typed using manual type writer and need to be arranged in order of date. Inserting antecedent information into the record can sometimes be a frustrating effort. Information will either be deleted by using rubber eraser or by using fresh sheets.
- Since these records are accessible to all official and staff at Personnel Section, problems arise when staff using these records do not register their use or the whereabouts of the file in the special card called "the absent card".
- Difficulty arise when management requires an urgent personnel listing that should be arranged according to special classes of personnel i.e. division, sex, et cetera. This information will be compiled manually and took quite some time to finish.
- When an individual takes an unpaid leave due to medical or personnel circumstances, it will directly affect the annual increment. Sometimes we were blamed when these unpaid leave information are not updated into the Record Service. Sometime it was not entirely due to our own fault. We did not receive the information.
- Personnel who had previously worked under different ministry also problematic. Their personal record before they joined the MRA are not available and have to be requested from their previous employee. In some of the cases their salary information are not updated. This has to be straightened first by the previous employee before we can do something about it. The problems of these type of personnel is to acquire these records took a very long time .
- Another aspect of queries is about the payment of gratuity either upon retirement or at the end of each contract for expatriates. If information on our records are not compatible with records at the Public Service Department we had to settle this first. These incompatibility is either due to an unrecorded unpaid leave information or miscalculation of incremental dates in the service records. It may also be due to unprocessed incremental information.
- What I dislike about this job is entertaining the request for personal records that are not available in the cabinet. I had to ask around to find its whereabouts and the frustrating thing is if these records cannot be found. We are the ones blamed for these problems.
- The problem with the records under my control is that there is no registration system for those who refer or use the records. These is contradictory to the systems used by my colleague that handle non teaching position.
- I need to be stricter on the way these records are to be accessed and will require them to register all the usage.
- At present, all the updating of personal records are delegated to respective departments and the process of photocopying these records under my control are now undertaken by the Department of Islamic Education and the Department of

Mosque Affairs. The dilemma is that some of these personal records are missing and cannot be found up until now.

- The problem with these personal records is that not only we who use the record, It is open to everybody in the Personnel section of the MRA. The effectiveness of these records depends on the co-operation of other staff in these section to properly used the records and adhere to the system.
- Requesting for Personal Record is one of the problematic area. Some of it are not recent and some cannot be found. We some times had to request for a copy from the Ministry.
- We not only deal with processing the information, we had to answer enquiries from the Staff regarding their entitlement for the passages. Our main sources for these enquiries are mainly from their Personal Record or the Personal File, but the problem with these information sources is its negative characteristic of unreliability.
- We cannot be too dependent on the information updated by our personal record section. I would prefer for the information to be updated by myself.
- Personal Record especially on salary information is not always up to date. We had to update this information based on the assumption that certain individual will be on a particular level of salary scale to speed up the passage application.
- We need to up date these Personal Records to speed up the process the most of the application.
- Any deletion and insertion of preceding information date in personal record is a very time consuming.
- The information updated on to the Personal Record need to be verified by chief clerk at least.
- Previously all the updating of personal record was the responsibility of the Ministry and it was only in 1995 that all these personal record are given to us. We are inheriting an information system that is always problematic.
- We are currently in the process of integrating personnel information that was previously distributed among different staff in this department . Before 1995 there was no proper recording of personal record and responsibility of updating the personal record was distributed among the staff who are responsible for groups of teachers. There was no centralisation of the personal record and there was a widespread use of temporary personal record.
- What we have identified so far is that some of the records that we registered are duplicates.
- We still do not know when are we going to complete this job. It is very difficult to undertake and there is no co-ordination among the staff. What I find difficult to

understand is that the management did not give us the listings of all names of religious teachers working under the ministry of religious affairs as a guideline to do our job.

- So far we had only managed to group together around 900 plus personal record out of 1000 plus records for the female teachers.
- This tasks proved to be no easy task especially with the way things were handled previously and some of the records of the religious teachers in the Personnel Section of the MRA cannot be found.

16. RETIREMENT INFORMATION

- We do not keep records of people in this category of appointments that had retired or their services not extended.

17. SALARY INFORMATION

- There is only two of us who are responsible for processing the Salary Increment and Efficiency Bar for the whole Staff and official of the MRA and every thing is being done manually.
- We find it difficult to concentrate on updating an individual's annual salary increment information in to the Personal record on time due to the fact that a great deal of our time are spent on answering queries from the treasury.
- The inability of the current staff to process the backlog of unsolved cases of increment and efficiency bar information are quite significant to be addressed.
- We do not have a systematic technique of identifying the incremental information except by browsing through an array of personal records. We find it hard to cope with the current workload of processing the incremental information and processing queries from the appropriate authority. Senior management should not only know how to criticise but should also be the ones who find ways to improve our situation.
- There is difficulty in identifying the date of Increment and Efficiency bar for each staff/personnel of the MRA . Information on this matter are acquired manually by scanning through array of personal record from the cabinet.
- Annual increment process cannot be done on time due to the fact that we have to spend some of the time to answer queries from the Audit Department.
- Currently the salary information that are updated are based on assumption that individual has reached certain level of the salary scheme.

- The failure of the management to devise a technique in identifying the incremental date has resulted in the Increments and Efficiency Bar information in the Establishment List to be obsolete.
- The main reason why the annual increment are often not updated and always being queried by the Finance Ministry is the failure of those in the Annual Increment and Efficiency Bar Section to check for unpaid leave information.
- It may also be due to copies of the approved application were somehow not received by the Finance Ministry.
- We have to deal a lot of enquiries regarding the salary increment and efficiency bar. These enquiries will mainly be based on a number of information that need to be updated into the Personal Record. Significant among these are the information about the unpaid leave record, incomplete performance report and incomplete increment information. This enquiries are mainly from the Finance Ministry, Audit Department and the Public Service Department.
- Personnel who had previously worked under a different ministry are also problematic. Their personal record before they joined the MRA are not available and to be requested from them. In some of the cases their salary information in the MRA are also not updated. This has to be straightened first before we can do something about it. The problems of these type of personnel is to acquire these records took a very long time .
- Information about changes to their marital status that are not updated in the Record Service will also be part of the enquiries. Change of marital status for women directly effect their incremental dates.
- It is very difficult to be sure that we handle and process the incremental information on time.
- We are trying our best to respond to enquiries from staff and personnel of the Ministry regarding their salary increment discrepancy.
- We have to have our own file in case of enquires relating to their application for salary review.
- The latest salary information are not obtainable in the department. The increment and efficiency bar are processed by the Ministry and currently there are nobody in the department who is responsible for up dating these information into the Personal Record. As a result when processing the application for the government housing, we had to check with the ministry for the latest information on his or her salary.
- Personal Record especially on salary information is not always up to date. We had to update this information based on the assumption that certain individuals will be on a particular level of salary scale to speed up the passage application.

- ❑ The salary increment date for daily rated worker had to be remembered by the staff themselves. They had to apply for the increase before we can process it and give recommendation.
- ❑ There are many cases that salary information in the Personal Record are not up dated.

18. SCHEME OF SERVICE INFORMATION

- ❑ The ministry do not have a complete information on the scheme of service that cause difficulty when undertaking recruitment.

19. STAFF SHORTAGES

- ❑ I need at least one assistant to help in the typing job particularly those dealing with vouchers and other financial matters. It seems that I have to do every thing on my own.
- ❑ Recently we were given an extra manpower to help us with our work but the problem with this extra “woman power” is that her appointment is a cleaner. We were disgusted about this and it is not somebody who we can expect to lighten our burden. We tried to train her but so far we had so many cases where information are misfiled.

20. STANDARDISATION

- ❑ The current techniques of managing these personal record information requires standardisation. The personal records are handled by two people who have their own techniques of handling the information. One is responsible for the Personal record of General Staff in division 1 to 5 and daily rated staff, while the other one is responsible for those who work as Religious Teachers, Mosques Official. The way information is managed is also different.
- ❑ My other colleague who is working on the personal records of religious teachers has different ways of handling information. She does not use the “absent” card to show that the records are out or being used by particular personnel
- ❑ Information are also retrieved differently. I used a “bin card” to index and arranged names alphabetically and she does not used any indexes at all. She will refer straight to the register when searching for information or scanning through lists of names.
- ❑ These differences are probably due to the fact that we were located in a different working area and we seem to be working based on our own .
- ❑ Standards of for compiling the data into the records are non existence. There was no inconsistency in the filing of names into records..

- ❑ No proper standards is required in the handling of personnel information. It seems that what I did here is different from other department.
- ❑ I have just been transferred to this section for less than a month. It seems that, what my predecessor did before was not systematic and in compatible with the one done by my colleague who deal with the personal record of those in the Division I, II, III, IV, V of non teaching profession. It seems that I need to improve the systems in order for the flow of the information to work smoothly and less blame will put on me. I do not how he was coping with the situation.
- ❑ The way these records are filed after use are also confusing and often misplaced in a different sequence.
- ❑ We can only record files that are out to certain executive and there is no proper records of the files that are return to us. Our greatest headache is when these files are supposed to be in the hands of one executives and he/she then passed to another executive who then give to another.. We often came across a situation where officers and staff denied ever using or receiving a file in which our record shows he /she was the last person to use it. I think there should be a proper record of the flow of these information and each responsible personnel should recognise the importance of the flow of information

21. TRAINING

- ❑ So far we have not been given any training what so ever. We learned everything that we know through consultation with our superior and through our initiatives to learn new things.
- ❑ The most boring part of my job is filling up the personnel and academic information of each applicant in a special form that is needed for the Human Resource Committee. All respective departments should fill up this form in advance.
- ❑ There is a special clause in the In-service Training programme regarding minimum age of the applicants that can be considered eligible for this programme. There is a special formula for this calculation. We had to do the calculation of their eligibility as well.
- ❑ Some of the forms that are received are not complete and have to be sent back or requested once again.
- ❑ We have not been able to update consistently the listings of staff who had undergone in an In service Training Programme either in local University or in foreign Universities.
- ❑ Listings of those who had undergone the an In-house Training programme and those organised by Institute Public Administration are one of the things I need to look at in future.

- ❑ One information that should be available is the outcome or result of their study. We just do not have the time to make it.
- ❑ Some of the information about the training needs in the performance appraisal reports are unavailable.
- ❑ Although most of our jobs are dealing with in-house training, we were never included as a participant. We are more involved as an organiser only it is frustrating.
- ❑ Slow responses from department in choosing a suitable candidates to fill up seats for courses organised by the MRA or the Public Service Department. We always give dateline for choosing suitable candidates but they just don't seem to bother about it. We had to give chase and phone around to speed up their responses.
- ❑ We also received complaints from certain groups demanding to know why he/she is not selected for a particular in-house training programme.
- ❑ On certain occasion those selected for these in house training programme are also complaining that he/she are not interested to follow these courses.
- ❑ I had been in this section of nearly five years now I have not been given any training at all.
- ❑ I do not know how to use the computers
- ❑ The problem with us in this section is that we were given a week training on using a micro-computer word processing software but the hardware itself are not available in our section. As a result we have no where to apply what we have learnt about it.
- ❑ We never been given any training relevant to my work.
- ❑ We have undertaken a number of courses in the management of files but it seems that what we have learnt in these courses cannot be applied in the actual situation.
- ❑ We were not given any training in relation to my work. I attended a typing lesson outside the normal working ours that was paid out of my own pocket.
- ❑ Short-listings of those who apply for the In service Training Programme for the university of Brunei Darussalam (UBD) are a very time consuming effort as we had the largest number of applications among the departments under the MRA to join these programme. Everything is done manually and based on our needs.
- ❑ In order to speed up the application we can only entertain those who had a complete application form. We need to be strict about this.
- ❑ I do not know why we do not send a reply to those who are not successful in their application for the UBD programme.

- We are not directly inform of the outcome of the UBD programme. In some occasion, we only know about it when our staff have attend classes.
- There seems to be inconsistency in terms of selecting those who are eligible for the in service training programme. Some special discretion is given in previous cases where one teacher that was supposed to be unqualified for the scheme was given the go ahead.
- The difficulty in organising an in-house training programme for the department is acquiring an expertise in number of subject areas. Another problem is the timetable or programmes are not co-ordinated with the programme organised by the MRA. We had to shift it to avoid clash with other important activities of the MRA.

22. WORK CULTURE

- I can't give full concentration on my job each day. I have to leave the office twice to send and fetch my kids before 11.00 am and 3.00 p.m. respectively .
- I do not want to learn about computers. The more I know about it the more work I have to do.

PROBLEMS FACED BY SENIOR EXECUTIVES

I COMMUNICATION

- We find it difficult to have working relationship with the head of personnel. Fortunately the relationship between staff are very good and cordial. The head of personnel seems to have negative attitudes towards our work and very uncooperative. This is the difficult hurdle that we are facing at the moment. He is unwilling to participate in a number of human resources committee. This indirectly affect the effectiveness and efficiency effort to improve the organisation human resource development planning and programme.
- Our top management seems to be reluctant to accept new ideas or change management ideas. We seem to have a difficulty in persuading top management to have a succession plan based on identifying individual who will take over senior position in the near future. They do not seem to like the ideas of pointing fingers or deciding now who be a capable of taking the MRA into the next Millennium.
- Recruitment is controlled by the personnel section of the MRA and some decision relating to recruitment/reshuffling are not co-ordinated with us. I feel frustrated about these situations.
- The three policy documents for Brunei Darussalam public service i.e. the Prime Minister's Circular, the Financial Regulations, the Public Service Department Circular are difficult to acquire and most often not received. The dissemination of this are poorly co-ordinated by the authority concerned.
- The weakness of this department is lack of departmental meeting, as a result, channel to express our opinion on certain issues is quite limited. There seem to be no consultation between head section in terms of staff reshuffling and it seem that it is controlled and manipulated by one person in this department.
- The process to acquire academic staff needed for the Institute is not fully understood by the top management at the MRA. They are trying to equate the recruitment of academic staff with that of the clerical or other operational staff.
- The main problem to be addressed by this department is the perception that the responsibility of certain quarters in the MRA is seasonal without recognising that the work is ongoing and very complex and had to done far in advance. We also have to deal with Umrah (a religious rites that can be performed at any time of the year)

- The most significant problem faced by the department is replacing personnel that are being instructed to be transferred to other department within the MRA which does not involve job promotion. In most times we are not consulted with the transfer. We only receive instruction from the head office for a particular individual to be transferred on a certain date. As a result, we need to find somebody in the department to take over his/her role which then affects the whole organisational structure. We appreciate that the head office also have their own problems but it helps to have consultation with us this way, we can understand more of the attitude of the management in the ministry toward the problem faced by the department instead of having a limited understanding now.

2. DECISION MAKING

- We find it difficult to understand what is behind the thinking of our top management. There seems to be an inconsistency in terms of their decision making particularly on relating to the In-house or Graduate in-service training. We need to apprise the minister, who seems to have a great interest in this matter.
- Our biggest disappointment resulting from this situation is the placement of personnel after completion a graduate In service Training Program. The placement does not conform to our human resource development planning.
- It will be more appropriate if the role Human Resource Development Management Committee to be widened and well defined. We need concrete guidelines as to our roles and functions and these guidelines need to reflect our integrity as channel for collective decision making. What is happening in our organisation is that because of the arrogance of one man our effort is basically useless and a waste of time.
- Decision made by our Director is inconsistent and sometime difficult to comprehend

3. ESTABLISHMENT LISTING

- What we need from the top management is that an up to date information about Establishment Lists and Job Vacancies list should be made known or passed to us on a regular basis.

4. EQUIPMENT (COMPUTERS, FILING CABINATE, FURNITURE)

- More widespread and comprehensive training programme is needed especially for clerical or operational staff in terms of IT usage so that management will not only concentrate on one or two staff that know how to operate computers (Word processing, spreadsheet, database). This kind of approach can cause a major displeasure or discontentment on the part of those who already knew how to operate computers, due to too an overload of work. It may also discourage others who has no knowledge of computers to acquire this skill. They might get a

negative attitude of the more I learned about computers, the more responsibility will be put on my shoulders” .

5. FILING SYSTEM

- ❑ One of the slackness of the department in terms of its information management is that is no systematic classification for the information kept in the departmental file.

6. INFORMATION HANDLING ACTIVITIES

- ❑ The Personnel Section is unable to tackle the ever increasing problems of getting an update an organisational records (Personal Record, Leave Record).
- ❑ We recognise that there are problems with the filing and record systems that has been going on for quite sometime.
- ❑ Obtaining a personnel information (listings, records, performance appraisal report) from the appropriate sources are ever difficult and response is always very slow. Moreover these information are not always reliable.
- ❑ Due to the current unfavourable climate, some of the informational tasks such as preparing listing of staff in certain salary division etc. need to be undertaken by our staff.
- ❑ Ever since the processing of personal records are being entrusted to all the departments, the story so far has not been favourable. The process of photocopying past records from the Personnel Section had been slow and some of the records belonging to our department are lost. The two staff that are being delegated to handle this 2,000 records seem to be having hard time lately.
- ❑ The blame that are placed on us by the ministry due to delays information handling are sometimes without foundation. Most of it are due to the problems that are rooted from the ministry themselves.

7. INFORMATION SERVICES

- ❑ Staff listing is very difficult to acquire

8. JOB DELEGATION

- ❑ Since our responsibilities consists of four different tasks relating to: Research, Planning, Training and performance appraisal we have to divide our tasks among our staff according to the current needs and planning of the organisation.

- ❑ Our section seem to be a “dumping ground” for some unrelated activities/programme of the organisation. Some of the non management research programme are also delegated to us.
- ❑ Lack of staff who can be delegated to undertake the research is another problem. Top management fails to realise that our emphasis is not on any research. It should have been those perspective related to the administrative or management problems. It seems that some our research are more specialised and can be done by other specialised department within this ministry.
- ❑ Our clerical staff are also spread out in terms of their responsibility. They not only do jobs relating to personnel, they also do jobs that are related to other functions of the Department (secondary education, primary education)

9. LEAVE

- ❑ The application for leave for lecturers is one that needs to be monitored all the time due to the nature of the department. We need to have their records handy and information about who took out leave at a particular time must always be updated.

10. PERFORMANCE APPRAISAL

- ❑ The head of department needs to recognise the importance of the information stated in the performance appraisal report. It should reflect what is really needed by individual terms of training needs. What we have seems to be unrealistic and written giving without much thought. So we find it difficult to define exactly what the training needs are.

11. PERSONAL RECORD

- ❑ Ever since the processing of personal records were entrusted to all the departments, the story so far has not been favourable. The process of photocopying past records from the Personnel Section had been slow and some of the records belonging to our department are lost. The two staff that are being delegated to handle this 2,000 records seem to be having hard time lately.

12. POLICIES AND PROCEDURE

- ❑ The difficulty with circular from the Prime minister’s Office is that it is sometimes confusing and difficult for us to identify which one of the rules and regulation has been mutated or changed. Moreover, the weakness of these circulars are not properly classified according to the subject matter.
- ❑ A number of the government rules and regulations relating to the retirement age and the in-service training scheme (including the IPI’s Academic Staff Training Scheme) do not suit the aspiration of the IPI. In academic world people reaching the wise age of 55 years, which is the age retirement of public servant, can still be

considered as competent and strenuous. We would like see changes in these policies

- ❑ The current government policies on personnel management including rules and regulations relating to personnel in the public sector are very complicated and the idea behind it is difficult to grasp. Information's relating to these policies are not handy and sometimes difficult to obtain (especially the old circulars that are still valid). In certain instances, new information (circulars) relating to changes are not properly received by the department.
- ❑ We do not seem to have proper guidelines or policies relating to placement and reshuffling of Mosques Officials.

13. RECRUITMENT

- ❑ The need for the management to find ways to effectively recruit staff and does not cause inconvenience to other department. The ways thing are happening, especially the recruitment of fresh graduates should be planned far in advance. They should be placed in the organisation where the staff budgetary allocation taken.

14. RED TAPE

- ❑ The approval procedure of the graduate In-service training programme are very time consuming . It has to undergo two stages of approval process. The first stage is the consensus of the Human Resource Management Committee, which is then followed by top management approval through the Weekly Administrative Meetings.

15. RESEARCH

- ❑ Lack of staff who can delegated to undertake the research is another problem. Top management fails to realise that our emphasis is not on any research. It should have been those perspective related to the management problems. It seems that some our research are more specialised that can be done by other specialised department within this ministry.
- ❑ It is important to established a special section that concentrate on Research and development to ensure each department can main maintain and monitor its role and objectives. It is important for departments to evaluate itself and make a strategic plan for the future of the organisation.

16. RETIREMENT

- ❑ A number of the government rules and regulations relating to the retirement age and the in-service training scheme (including the IPI's Academic Staff Training Scheme) do not suit the aspiration of the IPI. In academic world people reaching the wise age of 55 years, which is the age of retirement of public servant, can still be considered as competent and strenuous. We would like to see changes in these policies

17. SCHEME OF SERVICES

- ❑ The most frustrating aspect of our position is the aspect of scheme of service. The prevailing situation on this matter is biased towards those who hold a religious qualification (al Azhar University Qualification). There is a lack of opportunity and assurance in terms of job promotion for us especially those who graduated from a non Al Azhar University.

18. SERVICES TO PUBLIC

- ❑ Since the majority our work in this department is concerning to various structure or level of the public, we are exposed to criticism and are constantly in the “firing line” if the service we provide are not good enough or if they are dissatisfied with certain “package” company elected by the department. The public does not want to know the problem within the organisation.

19. STAFF SHORTAGES

- ❑ We lack staff that are competent and dedicated.
- ❑ We lack highly qualified staffs to deal with personnel management.
- ❑ We are a large organisation in MRA in terms of number of staff. Currently we have more than 2000 staff in which the majority of them are Religious Teachers. We tend to have more problems and less people to deal with them especially on clerical staff. We cannot avoid this problem and we cannot blame the Ministry for the problem as well. It is probably due to the budgetary constraint of the whole organisation. To solve this problem we have to try to find ways to find vacancies of non clerical position in the departmental budget to be place in our head office, as clerical workers.
- ❑ However, by doing this we are jeopardising other parts of the organisation, which are also facing shortages. During the past three years only 3% increase are allocated for each ministry in terms of its expenditure.
- ❑ The current recruitment practice of MRA appear to disadvantage our department in terms of addressing our problem of inadequacy of staff. There are a number positions in our departmental budget that are being filled by somebody who are not working with us. They are being allocated to other departments. This situation makes our administration and planning for personnel very difficult.
- ❑ Due to the “unfavourable environment” in terms of quantity of staff at the IPI, we have not been able to undertake a number of task needed as part of our function as Institution of Higher Learning. Research, that is part of the organisation’s long term objective, is very much lacking.
- ❑ In addition to the staffing level in the academic staff we are facing shortages in the administrative section where we need more Arabic clerical staff to support the organisation in its effort to improve the information and documentation processing of the Knowledge. At the prevailing situation, we are not in a position to set up a

separate administration for our academic departments so that it will function like any other universities and higher institution in the world.

- Another important aspect that requires attention is the need to have somebody who is fluent in Arabic to act as a liaison officer who will handle the welfare of expatriates (lectures) from the time they arrive to the time they go back to their respective countries.
- In comparison with other departments, in the MRA, we are the smallest in terms of personnel.
- The most significant problems faced by this department are shortage of staff in terms of the following factors:
 - The quantity of staff (25 people)
 - The quality of work (work experience, expertise, training, etc.) need to be improved and enhanced.
 - The need for more support staff who are qualified in the Islamic knowledge of Fiqh to act as an expert, is needed in this department to answer enquires from members of the public.
- I can appreciate that the significant problem in this department is that there is a shortage of staff. Like any other department, the staff are not immune to personal and, family problems or to complications. Once this kind of problem arise, we cannot escape but we have to prevail with our limited human resources and try not to make it a big issue. This can be significant in the Registration section where there is currently only 3 people responsible for the registration of the intending pilgrim for the whole country.

20 STANDARDISATION

- There seems to no co-ordination in terms of the way information are managed. Each department tend to have its own way in terms of processing and management of information. There is a lack of standardisation of its management system.

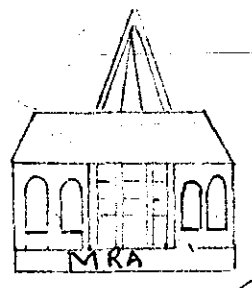
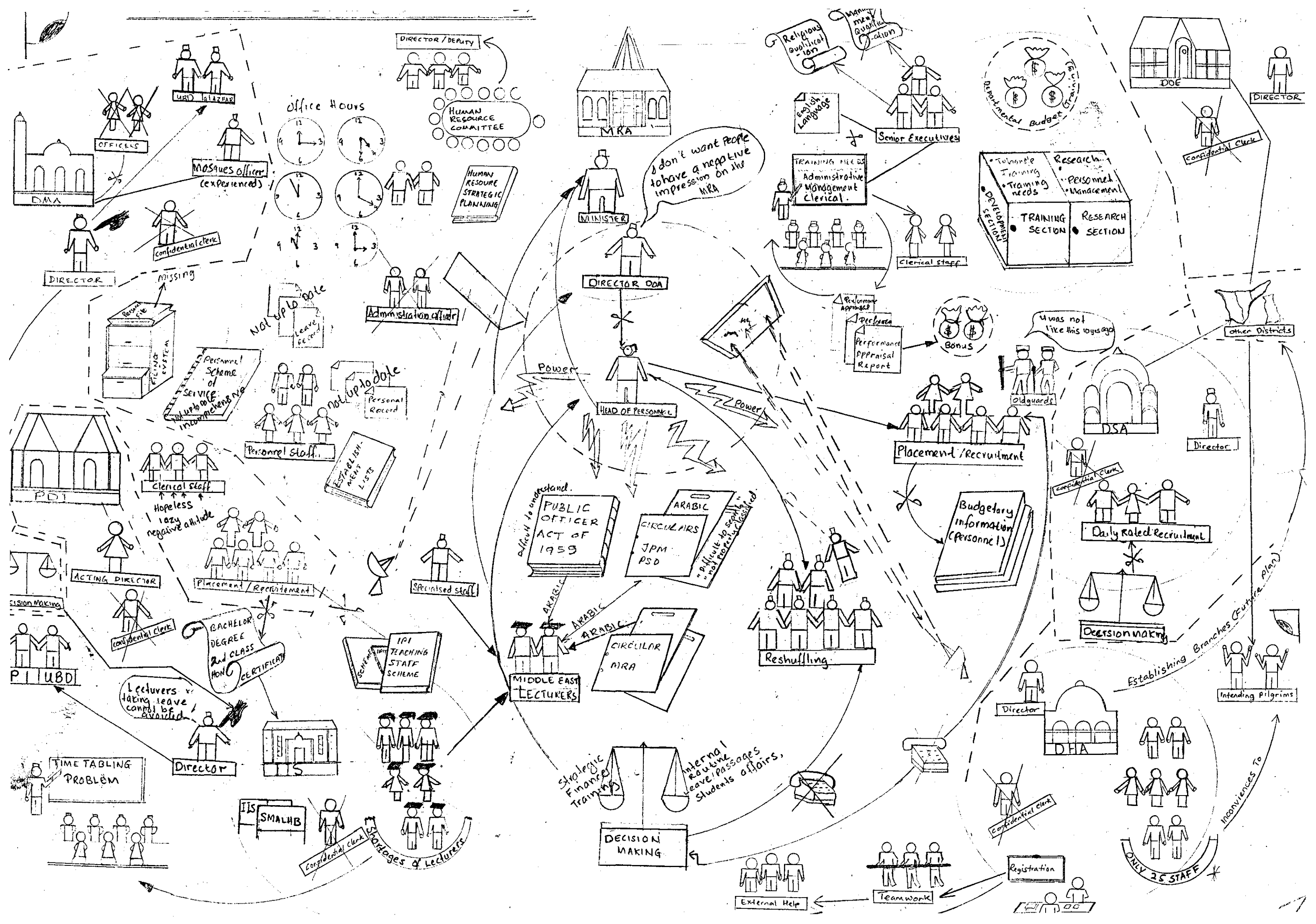
21 TRAINING

- The budget for in-house training is quite small. The B\$40,000 that are currently allocated has to be shared among the seven departments within the MRA. This allocated budget are for all the necessities or accoutrements to organise a training programme. This may include lecturer, rental, food and drink, accommodation, and etc.
- The approval procedure of the graduate In-service training programme are very time consuming . It has to undergo two stages of approval process. The first stage is the consensus of the Human Resource Development Committee, which is then followed by top management approval through the Weekly Administrative Meetings.

- Training programme organised by the Ministry either through the Institute of Public service or organised by Research and training section too short and infrequent. As a big organisation in the MRA, more quotas should be allocated to us in terms of the number of people attend this training program.
- Our department does not have a strategic planning for its human resource development. I think even the ministry does not have its own strategic planning, either for short-term local training or long term graduate training. What is happening now is that staff has to apply to get a Graduate In-service Training either in Brunei or foreign universities. For short term or in-house training it will be based on what is on offer from the Ministry.
- What we need now is the improvement in training program for our clerical and operational staff. They seem to be left out by the organisation
- The IPI has been fortunate to have its own in service training scheme called the IPI's Academic Staff Training Scheme that are exclusively offered for those who wish to further their academic standing in Islamic Studies in a foreign university and would like to be part of IPI's academic staff. The scheme is intended as a platform to produce locally qualified academician to support the shortages of the academic staff. It is intended as part of a succession plan of the organisation so that in years to come the Institute will be self sufficient and able to replace expatriates with local staff. However, it seems that not many are interested to be part of the 'Academic Staff' and according to our understanding, the provision in the scheme that requires them to work and teach in the IPI seems to be the greatest deterrent. The response for the scheme had been rather lukewarm.
- More widespread and comprehensive training programme is needed especially for clerical or operational staff in terms of IT usage so that management will not only concentrate on one or two staff that know how to operate computers (Word processing, spreadsheet, database). This kind of approach can cause a major displeasure or discontentment on the part of those who already knew how to operate computers, due to too an overload of work. It may also discourage others who have no knowledge of computers to acquire this skill. They might get a negative attitude of the more I learned about computers, the more responsibility will be put on my shoulders".
- Basically, I am not satisfied to the way things are handled at the moment of attaining knowledge in personnel management. We need to learn more in-depth about the government policies and procedure on personnel management. It has been five years since I had been working in this department and my knowledge on this area is still insufficient. What I knew about personnel management is mainly through consultation with more experienced staff.
- We at the department could not understand why we do not received any feedback for the UBD programme. Since the initial application is made through the head of department, it is appropriate that we received the feedback from them.

- We have identified two types of clerical staff in this department that are differentiated based on the way they undertake their job. The aggressive are mainly those that have the initiative, right attitudes and technology consciousness. While the other group comprises of those who are passive group, careless, negative attitude, and lack of initiative. They came mainly from what we called as the “Old Order” group. For this particular group we only give a much lighter routine task otherwise it will take ages to complete one job.
- One of the negative work culture of the Ministry is that there is no harmony among the senior staff. The environment is sometimes inimical and slanderous. There seems to be no co-operation and collective effort to improve the situation by learning from the mistakes of others.
- The major problem faced by our department at the moment is the negative attitude of mosques officials. We have receive various complaints from village community regarding the absence of these officials from work during working hours.

Appendix A6.1
**The Rich Picture of the MRA as
perceived by Chief Executives**



MINISTER

DIRECTOR ODA

HEAD OF PERSONNEL

POWER

POWER

ARABIC

ARABIC

ARABIC

ARABIC

ARABIC

ARABIC

OFFICERS

MOSQUES OFFICER (EXPERIENCED)

CONFIDENTIAL CLERK

MISSING

PERSONNEL STAFF

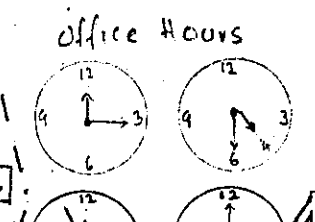
CLERICAL STAFF

ACTING DIRECTOR

CONFIDENTIAL CLERK

LECTURERS & TAKING LEAVE CANNOT BE AVOIDED

TIME TABLING PROBLEM



OFFICE HOURS

NOT UP TO DATE

PERSONAL RECORD

ESTABLISHMENT LIST

PLACEMENT / RECRUITMENT

BACHELOR DEGREE 2ND CLASS HONOR CERTIFICATE

IIS SMALHB

STAGES OF LECTURES

HUMAN RESOURCE STRATEGIC PLANNING

ADMINISTRATION OFFICER

SPECIALISED STAFF

PUBLIC OFFICER ACT OF 1959

CIRCULARS

JPM PSD

CIRCULAR MRA

STRATEGIC FINANCE TRAINING

INTERNAL ROUTING LEAVE / PASSAGES STUDENTS AFFAIRS

TRAINING NEEDS

ADMINISTRATIVE MANAGEMENT CLERICAL

PERFORMANCE APPRAISAL REPORT

BONUS

BUDGETARY INFORMATION (PERSONNEL)

RESHUFFLING

DECISION MAKING

EXTERNAL HELP

TEAMWORK

RELIGIOUS QUALIFICATION

ENGLISH LANGUAGE

SENIOR EXECUTIVES

CLERICAL STAFF

PERFORMANCE APPRAISAL REPORT

BONUS

OLD GUARDS

CONFIDENTIAL CLERK

REGISTRATION

DEPARTMENTAL BUDGET

RESEARCH PERSONNEL MANAGEMENT

TRAINING SECTION

RESEARCH SECTION

OTHER DISTRICTS

DIRECTOR

DAILY RATED RECRUITMENT

DECISION MAKING

ESTABLISHING BRANCHES (FUTURE PLAN)

INTENDING PILGRIMS

ONLY 25 STAFF

INCONVENIENCES TO

DIRECTOR

DIRECTOR

DIRECTOR

DIRECTOR

DIRECTOR

DIRECTOR

DOE

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

CONFIDENTIAL CLERK

DIRECTOR

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Appendix A6.2

**The Rich Picture of MRA as perceived
by Senior Executives.**

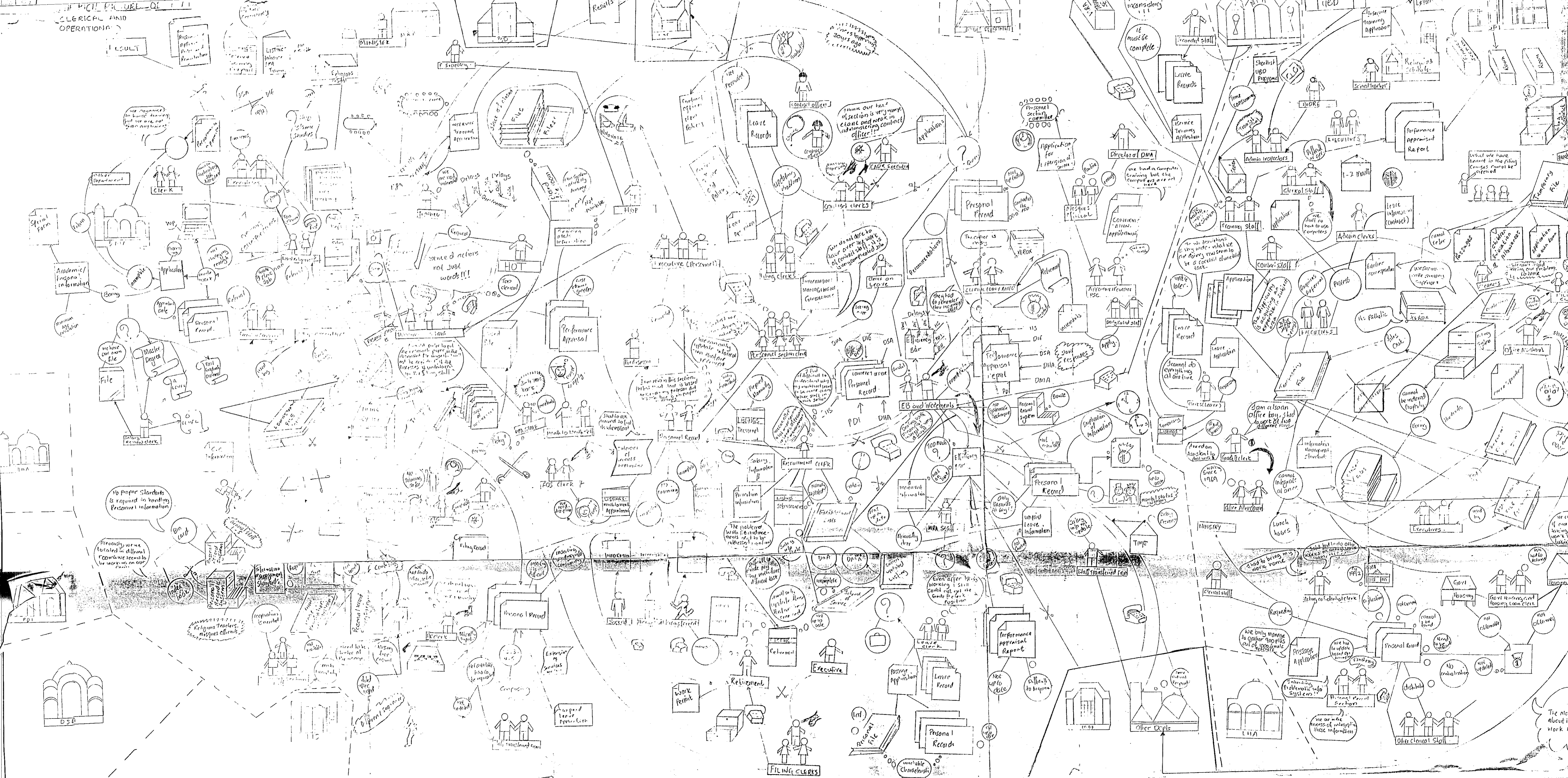
Appendix A6.3

The Rich Picture of MRA as perceived by Executives

Appendix A6.4

The Rich Picture of MRA as perceived by the Operational and Clerical Staff

CLERICAL AND OPERATIONS



No proper standards is required in handling Personnel information

Previously we were located in different rooms we seem to be more in our room

The more I know about it the more I had

I am not sure to have over the work of contract job

We do not have to have over the work of contract job

I am not sure to have over the work of contract job

We do not have to have over the work of contract job

We had a computer training but the computers are not working

The problem with the performance appraisal is to be addressed

I am not sure to have over the work of contract job

I am not sure to have over the work of contract job

We do not have to have over the work of contract job

We had a computer training but the computers are not working

The problem with the performance appraisal is to be addressed

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We had a computer training but the computers are not working

The problem with the performance appraisal is to be addressed

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I am not sure to have over the work of contract job

We do not have to have over the work of contract job

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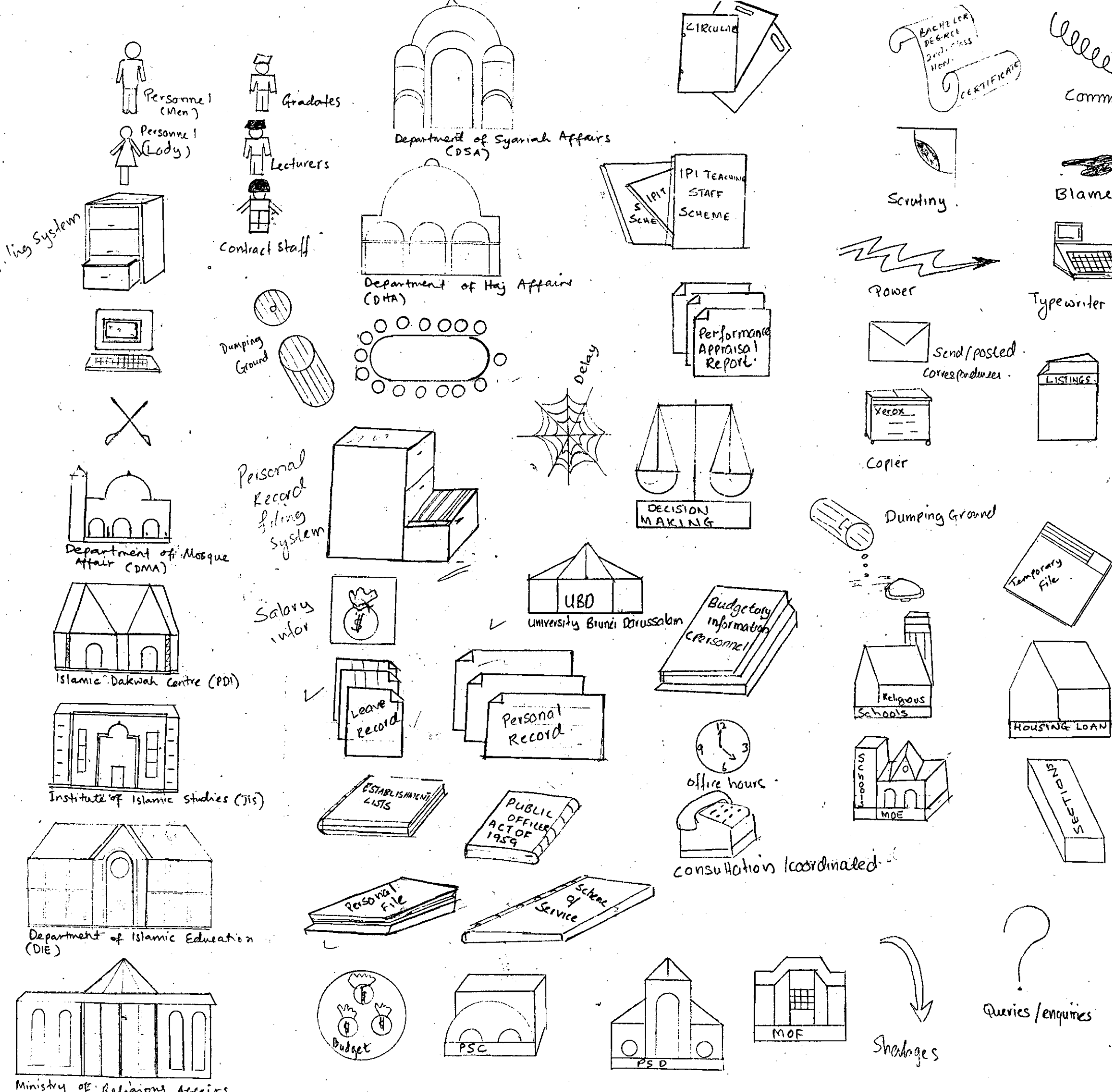
We had a computer training but the computers are not working

The problem with the performance appraisal is to be addressed

I am not sure to have over the work of contract job

Appendix A6.5

The Key Guide to the Rich Picture



- KEYS:**
- AA - Assistant Administrative officer
 - DHA - Department of Hajj Affairs
 - DIE - Department of Islamic Education
 - DMA - Department of Mosques Affairs
 - DOA - Department of Administration
 - DSA - Department of Syariah Affairs
 - HOLRE - Head of Lower Religious Education
 - HOT - Head of Training
 - HOP - Head of Personnel
 - IIS - Institute of Islamic Studies
 - PDI - Pusat Dakwah Islamiah
 - PSD - Public Service Department
 - PSC - Public Service Commission
 - Ps - Permanent secretary
 - MOF - Ministry of Finance

Appendix A6.6
The Comparing of the Conceptual
Model with Reality

To Communicate

**Activity in the conceptual model (stage 4) : To Receive files/Documents
Present in a real world situation (stage 2) : Yes**

Comments on a real world situation (stage 2)	Include on the agenda?
<p>i. Information is frequently unavailable for retrieval due its multi-use and single copy nature; the integrative nature of records; making multi applications or correspondence between employees; irresponsible acts of staff not following the procedural methods of the circulation records/files; uncoordinated circulation; being kept for a long time by staff due to inaction or waiting for action; loss due to carelessness; record distribution contradiction; unavailability of distribution records in some departments.</p>	Yes
<p>ii. Retrieving information in some departments is time consuming. Some of the information is not indexed, while other information is not indexed properly. Scanning through arrays of files and records when retrieving is usually acceptable.</p>	Yes
<p>iii. Retrieving record/files that have been inactive or semi active is detested by most clerical staff responsible for records. Some of these files are not available in the Filing Section and needs to be searched in another area of the building. The worst aspect of this category of files is that there is no proper storage, it is abandoned, in a bad state and not arranged systematically. Filing staff have to sift through a mass of old files.</p>	Yes

Activity in the conceptual model (stage 4) : To understand the context of Communication Present in a real world situation (stage 2) : Yes	
Comments on a real world situation (stage 2)	Include on the agenda?
i. A number of executives voiced their concern on organisational information distribution. On a number of occasions they come across mistakes and misunderstanding made by the filing section whereby information is passed to them that is not related to their responsibilities.	Yes
ii. The information flow, especially the flow of personnel files or other administrative files, need to be improved and the management needs to find a solution to make it more efficient so that action can be taken more quickly and information can be effectively distributed.	Yes
iii. The filing clerks find that the instructions relayed to them are not very clear and sometimes confusing.	Yes
iv. The clerical staff find it difficult to divide the tasks of processing and handling of information/application of contract officers whilst dealing with enquiries from them.	Yes
Activity in the conceptual model (stage 4) : To prepare notes/minutes Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
i. It is recognised that the current problems in terms of inability to update relevant information can be blamed on the carelessness of some of the executives. Failure of the executives to give instructions through minutes or notes can cause delays in information/documentation being relayed to other sections that are responsible for updating organisational files.	Yes

Comments on real world situation (stage 2)		Include on the agenda?
ii.	The problem with the current system is that information that is needed to update the records (leave, personal records, daily rates, listings) are not received by the staff in charge of this information. Those who are responsible for these records are only in a position to update records with the information that is passed or directed to them.	Yes
iii.	Some of the instructions given to the clerical staff are not very clear and confusing.	No

To Catalogue

Activity in the conceptual model (stage 4) : To Classify Present in a real world situation (stage 2) : Partially		
Comments on real world situation (stage 2)		Include on the agenda?
i.	The classification systems for files in some departments are confusing and make this information difficult to manage.	Yes
ii.	No proper standards, as to the kind of subject classification, was given for particular information / correspondence for the organisation as a whole.	Yes
Activity in the conceptual model (stage 4) : To Index Present in a real world situation (stage 2) : partially		
Comments on real world situation (stage 2)		Include on the agenda?
i.	There seems to be no proper systems of indexing the information sources in the department. There is no subject index for the filing systems for most departments. It is mainly based on name index, but some are not arranged alphabetically.	Yes

Comments on real world situation (stage 2)	Include on the agenda?
ii. Staff have to ask around to find out the whereabouts of personnel records if the usage is not recorded in the "absent card" .	Yes

To Record

Activity in the conceptual model (stage 4) : To Update Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
i. The inability of the organisation to provide up to date information has been a great concern to many within the organisational community. The "non current" nature of some of organisation's information resources has been attributed to a number factors from packed job descriptions to ailing information flow systems. Among the points brought up are the following:	Yes
<ul style="list-style-type: none"> • Information that is needed to update these records (leave, personnel records, daily rates, listings etc.) are not received by staff in charge of these information sources. Those responsible for these records are only in a position to update records that are passed or relayed to them or directed to them. Nearly all the information sources such as EL, JVL, Extension of Service Listings, Retirement Listings are not up to date due to the 'miscommunication' of information. 	Yes
<ul style="list-style-type: none"> • The lack of staff delegated to update and monitor departmental records has resulted in vital information being missing. 	No
<ul style="list-style-type: none"> • The ignorance and lack of awareness of staff on the type of personal details to be updated into the RS causes some important information to be overlooked. 	Yes

Comments on real world situation (stage 2)	Include on the agenda?
<ul style="list-style-type: none"> • The multi-usage of this single administrative and personnel file system by various departments, especially those who require urgent action by other sections (finance, housing, etc.) can also cause information to be missed or lost. Urgent action will be given priority. Information that is supposed to be passed to the records section will shift direction and in most cases, actions that are supposed to be taken will be forgotten until those concerned enquired about it. 	Yes
<ul style="list-style-type: none"> • The multi-usage and integrative nature of the information sources has also caused great difficulty in updating vital records and listings in particular: 	Yes
<ul style="list-style-type: none"> • The problem of updating personal records arises when personal files are being used for other purposes. 	Yes
<ul style="list-style-type: none"> • The clerical staff in charge of updating information have no choice but to have some form of temporary record on a piece of paper/note book. Clerical staff find it difficult to update these vital records once the decision has been made and these records are unavailable. In most situations clerical staff do not have the time to update this information on to the actual records either due to their heavy workload or they do not bother to do so because of having a backlog of information. 	Yes
<p>ii. The Physical nature of the RL and RS makes updating difficult. It is in on F4 Foolscap sized card and can only be typed on using a special manual typewriter. Ordinary electronic typewriters cannot do the job. The paper is too thick for it.</p>	Yes

Comments on real world situation (stage 2)	Include on the agenda?
<p>iii. The current practices for updating information sources are done manually and the use of a PC computer is only done for word processing purposes (creating listings). Any deletion and insertion of details on to RS and RL is also done manually. Every detail and piece of information that is updated onto these information sources has to be arranged according to the date of its occurrence. Any deletion and insertion of preceding information is very time consuming. Information is deleted using a rubber eraser, or blanco and typed using a typewriter.</p>	Yes
<p>iv. There are cases where information updated in the RS is a duplicate. Such duplication can cause queries from the Ministry of Finance. Any inconsistent information forwarded to the Treasury for the salary increment and Efficiency Bar process will be returned to the MRA for ratification and will cause delays.</p>	Yes
<p>v. Making sure the organisational personal records and leave records are in an 'up to date' state, seems to be impossible to achieve in the current situation. The system is dependent on the whole system of management and currently it is not working properly and effectively. Staff are dissatisfied as to the way information flows and the fact that leave details about individuals are not consistently relayed to them.</p>	Yes
<p>vi. The non-current nature of vital details in the information sources such as the RS and leave creates delays in some of the operational tasks of the Personnel management, such as housing loan application and passages. Staff undertaking the task of processing passages and the housing loan have to update information on the photocopied version of the personal record, based on the assumption that particular individual will reach a certain salary scale in order to speed up the applications.</p>	Yes

Comments on real world situation (stage 2)	Include on the agenda?
vii. There are frequent occurrences when the organisational leave records are not current and some information is not updated in the records.	Yes
viii. Some of the leave information on contract appointments is not recorded. This information comes to light usually at the end of a contract when staff apply for the end of contract gratuity. These queries usually come from the PSD or the Finance Ministry.	Yes
ix. The non-current nature of the leave records always delays the retirement process. The overall leave entitlement has to be identified before retirement can be processed. All leave details have to be rectified first before the retirement process can proceed.	Yes
x. On many occasions RS clerks are being blamed by executives for the problems occurring relating to its currency and availability. Most of these problems are beyond their control and this root cause of the problem is interrelated with other aspects of personnel management. Some of the blame is sometimes unfounded and, in most situations, information which needs to be updated is not received by the clerical staff.	Yes
xi. Among the other general issues pertaining the updating of information are: <ul style="list-style-type: none"> ❖ Incorrect personal details. ❖ Information about staff and personnel training .As a result, it is difficult to rely on this record in order to identify which individual in the organisation has attended which training program. 	Yes

Activity in the conceptual model (stage 4) : Make new file/Record/Listings Present in a real world situation (stage 2) : Yes		
Comments on real world situation (stage 2)		Include on the agenda?
i.	Lack of standardization and proper guidelines to create and indexes. New files/records are created by filing or administrative clerk without proper guidance usually based on their understanding. Some of the new administrative files created represent a duplication of what have already available.	Yes
ii.	The failure to coordinate personal Information needed to create new records and slow responses from departments in terms of request for these information makes it difficult in the creation of records, as personnel information are not available.	Yes
iii.	Current HRD information that are required for strategic and operational decision making are currently not available. Among such listings required are the:	Yes
	❖ Listings of staff and personnel who are currently undertaking graduates study either in local or foreign universities:	Yes
	❖ Complete listings of staff who had undergone previous in-house training programme either organised by the Ministry or the Institute of Public Administration.	
	❖ Complete listings of the outcome or result of those who undertake the In Service Training study particularly relating the local In Service Training Scheme. The RTPS had problems of collecting the data about these results, as the current training staff did not have the time to collect these data.	

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<ul style="list-style-type: none"> ❖ Complete listings of contract staff whose contract is about to expire to assist in identifying the contract expiry. ❖ The complete list of contract personnel includes place of work and home address due to the workload. Staff who are in charge of this information do not have the time to create a complete information. ❖ A complete Daily Rated Employee List is required by all departments, most departments only kept the name list of a daily rated employee. <p>v. The manual nature of some work processes involved in the creation of the records/listings makes it difficult to prepare records promptly.</p> <p>vi. There are also incidences where clerical staff fail to understand the context of the document which resulted in the creation of duplicate file titles.</p>	<p align="center">Yes</p> <p align="center">Yes</p>
<p>Activity in the conceptual model (stage 4) : To Maintain Present in a real world situation (stage 2) : Yes</p>	
<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>i. Staff failed to understand the contents of the document/correspondence or that they are careless which causes vital information that needs to be relayed to the record section to update the personnel records to be missed.</p> <p>ii. There are incidences where clerical staff fail to read the instructions properly which lead to vital information that is needed to be relayed to the Record sections (Leave, Personnel Record) not passed on .</p>	<p align="center">Yes</p> <p align="center">Yes</p>

To Store

Activity in the conceptual model (stage 4) : To Scan Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
<p>i. Some of the instructions are unclear for the follow up action to be taken.</p>	Yes
<p>ii. Carelessness of clerical staff/officers in the filing section, who are responsible for co-ordinating the organisation's correspondence, do not properly read the instructions or messages and some follow up instructions are not passed to those who should be given the task. There are incidences where vital information that needs to be relayed to the records section (Leave, Personnel Record) is not passed on and filed straightaway.</p>	Yes
Activity in the conceptual model (stage 4) : To Accommodate/Shelve/ file Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
<p>i. The current limited storage space for storing vital information is one of the issues faced by the organisation as a whole.</p>	Yes
<p>ii. Some departments are having great difficulty in acquiring filing cabinets and space for the filing rooms and other information resources. Filing staff have to compress these files into the already packed file cabinet. For some departments, they have no more room to keep this ever-growing store of information sources and have no choice but to put it on the floor or stack it up on the top of filing cabinet.</p>	Yes

Comments on real world situation (stage 2)	Include on the agenda?
iii. The organisation does not seem to recognise the importance of the closed or inactive file as these vital resources are completely ignored. There is no proper storage and they are abandoned with other organisational unwanted belongings.	Yes
iv. Carelessness/ignorance of filing clerks in misfiling information sources are considered to be one of the factors that cause the file to go missing.	Yes
v. Heavy workload or sheer volume of tasks means that some information or copy correspondences (CC) from temporary files or copy correspondence cannot be filed or stored straightaway.	Yes
vi. The single and multi-use of these information sources also means that it is difficult to shelve these sources as they are heavily used.	Yes
vii. Lack of trusts exists between departments/section as to the effectiveness of the filing section, particularly in relation to the information being filed. Many sections have to create their own files and opt to keep copies of any correspondence, working papers and notes in their own files rather than relying on the filing section. It has been found on a number of occasions that a large amount of correspondences goes missing or it is not put into the main file.	Yes
viii. There is a lack of procedural standards in the management of records to be used.	Yes

Activity in the conceptual model (stage 4) : To Circulate Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
i. The 'single copy' and 'integrative nature' of an organisation's information resources such as the personal and administrative files, RS have caused chaos. There are situations where senior executives, executives and clerical staff want to get hold of these documents at the same time for their own purposes. The 'tug of war' between senior executives, executives, and clerical staff results in delays in decision-making, inability to update information, and miscommunication. Priority will be given to those who are required to make important and strategic decisions. The updating of any leave information is left until later.	Yes
ii. The unreliability of the current document or information distribution systems through the use of filing office assistants is one of the contributing factors in the delays in correspondence. Many executives and clerical staff find it difficult to rely heavily on the office assistants to distribute departmental communication files. In many instances, clerical staff or executives themselves have to send the files themselves to the officer in charge of certain sections to avoid delays and backlogs. These assistants are not so reliable and management often experience delays in collecting completed information.	Yes
iii. The inconsistency of the office assistants in collecting files that had already been acted upon adds up to the problem on the information handling activities. These office assistants seem to take this matter lightly.	Yes

Comments on real world situation (stage 2)	Include on the agenda?
iv. The filing clerks within departments and the ministry cannot avoid using a temporary file to speed up communication and avoid delays in certain applications. This may also be due to the fact that information being received requires urgent attention from executives. The temporary files are used if the main files are being used for other purposes or have been lost.	Yes
v. The information or document flow, especially the flow of personal files is recognized to have a problem and requires an immediate solution to make it more effective and efficient so that action and decision making can be carried out more quickly and efficiently. Among the perceived problem of the flow of the personal files are:	Yes
<ul style="list-style-type: none"> • There are frequent occurrences of files being kept for so long by executives that the filing staff have to make an effort to recall them. Currently there are no limits as to how long the files can be kept by an officer because officers can keep them as long as they like. 	Yes
<ul style="list-style-type: none"> • Some executives give the file they have to another executive for follow-up action without notifying the filing section. 	Yes
<ul style="list-style-type: none"> • Some executives or clerical staff want to take particular action pertaining to an issue in the temporary file or new correspondence receipt, take the liberty of acquiring the main file from the last user without notifying the filing section. 	Yes
<ul style="list-style-type: none"> • Even in small departments such as the IPI, DHA, and the DMA faces similar problems of missing files and misplacing personal files. 	Yes

Comments on real world situation (stage 2)	Include on the agenda?
<ul style="list-style-type: none"> • Within the current file handling activity in the PMS files are taken out from the its place without filing staff being notified. There are no records of it being out, borrowed or referred. If this happens staff have to ask all clerical staff and executives as to where the files are. 	Yes
<ul style="list-style-type: none"> • There is no distribution record of files in departments. The filing staff at the departmental level do not see it as being necessary to record files that are released to staff. 	Yes
<ul style="list-style-type: none"> • Many, including the filing section of the MRA, are not able to utilise fully the file recording system using the absent cards. 	Yes
<ul style="list-style-type: none"> • There are many incidences of the file distribution record that contradict the actual location of the files. 	Yes

To Retrieve

Activity in the conceptual model (stage 4) : To Use Index Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
i. A number of issues pertaining to the information retrieval and indexes can be found. These issues are mainly related to the unsystematic and manual handling or processing of the information sources such as establishment lists, personal files, RS, RL, retirement listing, contract officer's lists, incremental information. The issues are as follows:	Yes

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>❖ Some of the retrieval indexes are old and require changes. They are not not alphabetically arranged, some are stapled together and could easily be misplaced.</p>	<p align="center">Yes</p>
<p>❖ There are no proper alphabetical or subject retrieval indexes for most of the information resources. Some information is retrieved manually by scanning through the pages or records</p>	<p align="center">Yes</p>
<p>❖ The classification and numbering systems are very confusing to the staff in that there is no differentiation in terms of the classification numbers for the different type of personnel and this can cause misfiling. Each category of personal record is subdivided into the salary division and numbered sequentially.</p>	<p align="center">Yes</p>
<p>❖ There are contradictions in the way current personal records are being managed in the organization, particularly on the aspects of information storage and retrieval systems. Records are also searched for using an index book which is a popular means of searching though some used indexing cards.</p>	<p align="center">Yes</p>
<p>❖ The organisation needs to give greater priority to the storage and retrieval system of the closed files. It should not be abandoned, but be given proper recognition as one of the important sources of information.</p>	<p align="center">Yes</p>

Comments on real world situation (stage 2)	Include on the agenda?
<ul style="list-style-type: none"> ❖ Subject indexing systems for the management of files is rare in most departments. In addition, the alphabetical indexes available are not systematically done. In some departments the location numbering or classification guides are not available in the cabinet in this situation, relevant files are searched for and retrieved by scanning through the arrangement. ❖ The filing classification systems are different from one department to another. ❖ Some do not have personal record indexes. ❖ The staff do not have a systematic technique for identifying the incremental dates except by browsing through arrays of personal records. 	<p style="text-align: center;">Yes</p> <p style="text-align: center;">Yes</p> <p style="text-align: center;">Yes</p> <p style="text-align: center;">Yes</p>
Activity in the conceptual model (stage 4) : To Browse Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
No significant issue which arises.	Yes
Activity in the conceptual model (stage 4) : To Use Duplicate file Present in a real world situation (stage 2) : No	
Comments on real world situation (stage 2)	Include on the agenda?
i. The use of temporary files can cause delays as some decisions cannot be made without referring to the main file. Temporary files deprive executives of earlier information or details for any follow-up action and	Yes

<p>decision making. In addition, information/documents that have been acted upon through temporary files cannot be put into their rightful place in the main file as some staff still use it for other purposes. Staff have to wait for it to be returned. Staff also find it difficult to refile this information due to their heavy workloads</p>	
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To Distribute

**Activity in the conceptual model (stage 4) : To Photocopy
Present in a real world situation (stage 2) : Yes**

Comments on real world situation (stage 2)	Include on the agenda?
i. Some clerical staff in the filing section complain that they have to do photocopying tasks that should be undertaken by other specialized clerks.	No
ii. Duplicating/photocopying a document is done by the clerical staff or may be done by office assistants. In some departments clerical staff do not trust the office assistant to do the job.	Yes
iii. The use of paper for photocopying in the organisation is very significant and needs to be justified.	Yes

**Activity in the conceptual model (stage 4) : To identify recipient/security level
Present in a real world situation (stage 2) : Yes**

Comments on real world situation (stage 2)	Include on the agenda?
i. Issues pertaining to circulation are mainly related to the organisation's personal records and the personal and administrative files of the organisation. Misunderstandings made by the filing section, whereby	Yes

information passed to them that are not related to his or responsibilities.	
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Activity in the conceptual model (stage 4) : To Send Present in a real world situation (stage 2) : Yes	
Comments on real world situation (stage 2)	Include on the agenda?
<p>i. Inefficient co-ordination and communication between departments and the Ministry in terms of operational management is significant in a number of personnel management tasks of the MRA including recruitment, appointments, daily rated employees, contracts, increments, leave, information sources, circulars and standards. It is one of the unfavourable features of personnel management of the MRA. It refers to various elements of information flow from standards, instruction, co-ordination, correspondences, decision making, informational issues and problem solving. In particular, these issues can be described as follows:</p> <ul style="list-style-type: none"> ❖ Vital information sources for recruitment decision making, such as the Job Vacancies Listing (JVL) and the Establishment listing (EL) are not relayed to the departmental directors and executives. The EL and JVL are seen by departmental executives to be important. It is especially important for the EL and JVL to be made available in departments as well, so that it will be easy for them to identify who is filling what position in the organisation. ❖ Important personal information or details of approval on particular applications need to be recorded. Various sources of information failed to be received by those in charge of updating this information. These type of information includes RS, RL, Retirement lists, and extension of service listings. These situations 	<p>Yes</p> <p>Yes</p> <p>Yes</p>

Comments on real world situation (stage 2)	Include on the agenda?
<p>have resulted in a number of wrong decisions being made by executives who only refer to these 'disadvantaged' sources of information. It will also lead to queries or investigation being made by the authoritative government organisation such as the Treasury, Audit and Public Service Department. The information will need to be ratified first before application can be approved and delays will occur. Among contentious details that are often missing or communicated are details of leave, in service training, and the latest salary details, air passage approval, job promotions,. This has resulted in obsolete information resources. Staff can only update information that they received. On most occasions departments have had to consult the PMS to obtain reliable personal details about member of staff.</p> <p>❖ In addition to the above, the failure to provide the right documentation due to staff carelessness and miscommunication will slow down the process and can lead to the authority concerned becoming involved. This always happens in the case of processing the increments and EB where the Treasury became involved due to copies of the approved certificate or the performance appraisal report not being received by the Finance Ministry. In addition, acquiring a Performance Appraisal Record from the department can be frustratingly slow. In addition, in large departments, particularly the DIE and DSA responses from heads of sections are not received promptly.</p>	<p>Yes</p>

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>❖ Carelessness and the ignorance of personnel executives in giving proper instructions to those responsible for records, has resulted in vital information being missed and not updating the records and filing them straight away. There are cases where the responsible officers or staff do not give instructions to the RS staff to update the information. As a result of this carelessness, these vital details will not be recorded properly. Due to this slackness, a number of related processes such as salary increment (Efficiency Bar) and passages applications are frequently delayed.</p>	<p align="center">Yes</p>
<p>❖ The inability of the PMS to inform or notify departments, staff and personnel of any impending expiry of services or financial entitlements has resulted in delayed individual confirmation of appointments, reappointment and salary increases. This can be attributed to the heavy workload and the lack of systematic way of identifying such information</p>	<p align="center">Yes</p>
<p>❖ In processing staff retirements, the organisation has to rely heavily on notification from the PSD. The current information sources, such as the Retirement List of Staff and Personnel on a certain year are not reliable and some of the individual names have incomplete or missing records. There are occasions where the PSD fails to inform about any impending retirement date.</p>	<p align="center">Yes</p>
<p>❖ The top management at departmental level has no way of knowing who in the department is retiring or about to retire. This information can only be obtained from the Ministry or the management is notified by the Public Service Commission of any impending staff</p>	<p align="center">Yes</p>

<p style="text-align: center;">Comments on real world situation (stage 2)</p>	<p style="text-align: center;">Include on the Agenda</p>
<p>ongoing failures to create reliable and complete retirement information records are reflected in the failure of the organisation to plan for its human resource succession planning.</p>	
<p>❖ The lack of co-ordination in the flow of information has also resulted in inconsistency in the information received. The failure of the filing section of the MRA to act as an information co-ordinator has been mentioned by many executives in the MRA. This is perceived to be due to carelessness and misunderstanding in distributing files or information. This can cause vital information to go missing from records.</p>	<p style="text-align: center;">Yes</p>
<p>❖ In some instances the retirement clerk is not informed of staff or personnel who are being transferred or promoted to other departments or is sacked for disciplinary reasons. Due to this problem the retirement clerk was not in a position to up date these information effectively.</p>	<p style="text-align: center;">Yes</p>
<p>❖ Lack of standards in handling the organisation's communication mechanisms. In some departments, including the PMS, only important copy correspondences (cc) is passed to executives for his/her information. The rest will be filed straightaway. The filing staff decides on the action to be taken.</p>	<p style="text-align: center;">Yes</p>
<p>❖ Internal communication between departments and the MRA is known to be slow. Some of their correspondence that is sent via the departmental mail centre is not received promptly. It sometimes takes up to two or three weeks longer to arrive from the departments and is received by executives.</p>	<p style="text-align: center;">Yes</p>

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>❖ In addition to internal communication, the slackness in the external communication between the MRA and the other government organisations greatly contributes to delays in action and decision making. In the case of increments and EB, this problem has resulted in responses to the queries not being received by the finance ministry.</p>	<p align="center">Yes</p>
<p>❖ Slow responses from departmental directors regarding queries and requests for recommendations are some of the reasons contributing to delays in some of the personnel management operational processes. The delay in processing Increments and EB cannot entirely be blamed on the increment clerks who are responsible for handling this information. The delay in responding to requests and queries can be a contributing factor.</p>	<p align="center">Yes</p>
<p>❖ Internal information and document flow is considered by many to be very poorly managed. There are many instances where information on new staff that report for duty is not received by those clerks who are responsible for creating management lists. As a result the name of this person will not be updated within the listing. The Staff cannot do anything about this as they can only update information that they have received.</p>	<p align="center">Yes</p>
<p>❖ The filing clerks believe that the instructions relayed to them are not very clear and sometimes confusing.</p>	<p align="center">Yes</p>

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<ul style="list-style-type: none"> • The changing nature of the leave rules makes it difficult for clerical staff to master this formula. 	<p align="center">Yes</p>
<ul style="list-style-type: none"> • In big organisations such as the DIE the accumulation of leave, which is supposed to be made “automatically” or calculated instantly upon updating every leave record, cannot be done due to the workload. In these circumstances, an accurate record of leave can only be obtained when employees officially apply for their accumulation of leave. 	<p align="center">Yes</p>
<ul style="list-style-type: none"> • Most departments are not able to inform staff and personnel of their leave entitlement in every approval letter due to the frequent inaccuracy of records. 	<p align="center">Yes</p>
<ul style="list-style-type: none"> • The calculation process for the accumulation of leave is considered by some to be very time consuming, which requires patience and concentration. 	<p align="center">Yes</p>
<ul style="list-style-type: none"> • Calculation of the leave entitlement of staff and personnel who are about to retire is also problematic and often receives queries from the PSD. This information has to be updated before the retirement process can proceed. 	<p align="center">Yes</p>

**Activity in the conceptual model (stage 4) : To refer
Present in a real world situation (stage 2) : Yes**

Comments on real world situation (stage 2)	Include on the agenda?
i. MRA information resources, such as the RS, JVL, EL are characterised by many executives and other operational staff in the organisation to be the most problematic area in managing the department and the MRA human resource as a whole. It is one of the contentious areas that needs to be overhauled in order for the organisation to function effectively and efficiently.	Yes
ii. One of the drawbacks of the current organisational information resources is its non current or inaccurate data. As a consequence of this 'non current nature', a number of issues pertaining to inability and delays in decision making activities, queries, etc is the centre of discussion with stakeholders.	Yes
iii. Complete and accurate information sources are vital in the success of many areas of the personnel management process and decision making activities. Currently a number of organisational information sources are experiencing a lack of accuracy and incompleteness including the appointment scheme of services, extension of service listings, personal records, daily rated staff retirement listings, daily rated EL, and performance appraisal reports. The incompleteness and inaccuracy of a number of organisational information sources has caused a lot inconvenience for the organisation.	Yes
iv. Some of the information sources created in the organisation are still insufficient for certain executives in the MRA. Various types of listings are currently required by the organisation for operational and strategic decision making purposes.	Yes

<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>iv. Organisational information resources are prone to be lost or misplaced. These problems are detrimental to a number of operational tasks carried out by personnel management in the MRA. The misplacing or unavailability of the organisation's information sources has resulted in other related issues pertaining to delays in decision making and non responses or inaction on certain processes carried out by personnel management.</p> <p>v. The incompleteness and unavailability of information, which is vital for decision making activities, is one of the unfavourable characteristics of the management of the human resource development training programme of the MRA. These situations are probably due to the ignorance and carelessness of departmental staff in handling the departmental processes. It has caused a great deal of inconvenience to the Research, Training and Planning Section, which is responsible for co-ordinating the MRA's training programme.</p>	<p align="center">Yes</p> <p align="center">Yes</p>
<p>Activity in the conceptual model (stage 4) : To Act Present in a real world situation (stage 2) : Yes</p>	
<p align="center">Comments on real world situation (stage 2)</p>	<p align="center">Include on the agenda?</p>
<p>i. Too much work or long job descriptions are two of the main areas blamed for the inability to undertake a number of personnel management tasks properly. To an extent this is due to shortages of staff in many areas of personnel management in the organisations. In addition, improper or generalised job specifications and the lack of initiatives on the part of those responsible is also one reason.</p>	<p align="center">Yes</p>

Comments on real world situation (stage 2)	Include on the agenda?
<p>ii. Staff shortages are significantly felt in many areas of personnel management of the MRA. It is perceived by many to be one area that adds to the organisation's information management woes. The budget restriction enforced by the authority is one of the reasons for the increase in manpower which failed to materialise. In addition, the top management failed to recognise the importance of having adequate staff in managing organisational information resources. Many considered that the number of those responsible for processing and managing organisational information either at executive or clerical level is still small in comparison to other government ministries.</p>	<p>Yes</p>
<p>iii. A number of issues have been raised pertaining to the operational action and decision making of personnel management at the ministerial and departmental level. These issues are related to the current management complexities of certain groups in the organisation, organisational policies and procedures for decision making, issues on the roles and functions of the many committees, and the non-current nature of the organisation is information resources. Specific difficulty pertaining to the decision making process, such as lack of specific information sources, reason for delays in making decisions are also given. In addition, the intensity and confidence in top management decision making has also been scrutinised.</p>	<p>Yes</p>
<p>iv. The MRA is currently facing a number of contentious issues related to the decision-making on human resources development and strategic planning of the organisation. The human resource development policies, the decision making committees, approval procedures and guidelines, applications, short listing and selection processes are some areas, which need to be addressed in improving the situation.</p>	<p>Yes</p>

**Activity in the conceptual model (stage 4) : To Feedback
Present in a real world situation (stage 2) : Yes**

Comments on real world situation (stage 2)	Include on the agenda?
i. Responses from the departments are usually slow. Among the activities affected are salary increments and efficiency Bar responses for documentation or details are usually very slow.	Yes
ii. No feedback has been given by the head office about the unsuccessful applicants for the local In Service Training Programme particularly the UBD programme.	No
iii. The result of feedback from the Public Service Commission on the Foreign in Service is slow to be received.	No
iv. There is Poor feedback for the Local In Service Training Programme from UBD	No
v. Delayed approval and poor feedback from the National In Service Training Committee in the Public Service commission for those who have been accepted to join the UBD/ Foreign Universities causes chaos in the organisational administration. It is becoming an acceptable practise that staff leave their jobs to attend classes at the UBD until their application is fully endorsed by the PSC.	No
vi. Departments are not notified officially by the Ministry on those selected for the Local HRD programme.	No

Comments on real world situation	Include on
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(stage 2)	the agenda?
<p>vii. Requesting Personal records for staff who previously worked for a different ministry are usually very difficult to acquire. Their former employee is slow to respond to the request for personal records and some do not respond at all. Another problem is that the information may also be incomplete, In some of the cases, the salary information in the MRA is also not updated.</p>	<p>Yes</p>
<p>viii. In the case where departments do not respond to this request, the personal section has to go to the Public Service Department.</p>	<p>Yes</p>
<p>ix. The staff in charge of leave are trying their best to give accurate information about staff and personnel leave entitlement.</p>	<p>Yes</p>

Appendix A7.1
System Requirements Identification
Table

System Requirements Identification Table

Activities	Comments	System Proposed (based on priority)
To Receive	<ul style="list-style-type: none"> The ineffectiveness of the current system due to various prevailing issues affecting the process of receiving information such as the single-copy nature, missing, and the unavailability of retrieval index for the information resources, the issues of temporary and closed files, as shown in information comparison table (Appendix 6.1) of the Appendix A6.6 of the Information Receiving activities. 	<ul style="list-style-type: none"> a) Record Management Programme. b) Computer-based Record Management System
To Create	<ul style="list-style-type: none"> The issues related to the organisational communication activities have created a non-conducive environment for the creation of records. The failure to co-ordinate vital information sources to those responsible for the creation of new records has caused vital records or listings to become easily outdated and unreliable. The unavailability of information standards and guidelines creates different systems of creation of resources. 	<ul style="list-style-type: none"> a) Computer-based communication System b) Record Management Programme c) The Computer based record management Systems. d) Electronic Based Information/Record System
To Retrieve	<ul style="list-style-type: none"> The single and integrative nature of the information resources causes a tug of war between official and staff for access. In addition, the inconsistency and unavailability of proper classification and indexing system for the information resources reduced the effectiveness of the retrieval of the current available resource. In addition the problem with the storage space and storage system for active, inactive and semi active resources are also contributory factors to the slackness of the current 	<ul style="list-style-type: none"> a) Record Management Programme b) Computer-base record management System

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	retrieval activities..	
To Update	<ul style="list-style-type: none">• The carelessness and ignorance of staff in co-ordinating vital information has resulted in failure to update appropriate details on to the resources. In addition the multitasking nature of the jobs given to staff are detrimental to the issues of updating the records	a) Record Management Programme b) Computer-based Integrated Information System.
To Communicate	<ul style="list-style-type: none">• The current inefficient communication system of staff within the organisation has caused a lot of problems to organisational information resources particularly relating to its currency and reliability. This is worsened by the carelessness and ignorance of staff for not co-ordinating important information to those concerned with updating of records. The lack of notification or failure to communicate between concerning parties is another issue that has also resulted in delays in decision-making activities. The unavailability of proper standards and procedures on the type of information to be updated on to records contributes to the failure of the information resources.	a) Information Management Programme b) Computer-Based Integrated Information System.
To Decide	<ul style="list-style-type: none">• The complexities of some of the operational decisions require an in-depth knowledge in the Brunei Government human resource management policies and complex procedural formulae. The unavailability and non-current nature of the organisation information resources makes it difficult for executive to undertake decision making efficiently and effectively,	a) Information Management Programme b) Computer-based integrated information System.

To Store	<ul style="list-style-type: none"> The current shortages of space and accommodation for the organisation's information resources faced by many departments within the MRA has caused information to be improperly organised physically. The abandonment and the unorganised nature of the semi-active and inactive information and records makes it difficult to search for this category of resources. In addition, the unsystematic information retrieval mechanism such as the classification and indexes slows down the retrieval of information from the current storage system. Other recurring problems of the current storage system are the lack of trust among staff on its effectiveness and the lack procedural standards for storing the information needs to resolve in order to have an effective storing system. 	<ul style="list-style-type: none"> a) Information Management Programme b) Computer-based Record Management System. c) Electronic Record Management System.
To Monitor	<ul style="list-style-type: none"> The shortage of staff and equipment (computers), long job descriptions and staff lack of knowledge about their works makes it difficult to effectively monitor and undertake the work efficiently. The attitudinal issues and work cultures can be detrimental to the monitoring activities. In addition the manual nature of tasks and technological illiteracy can be seen as contributing factor to current inefficiency of the information management system. The lack of trusts and confidence among some of the staff towards the information management reflect a negative performance of these resources. 	<ul style="list-style-type: none"> a) The Computer-based information Management Systems. b) Training and Human Resource Development Programme.
To control	<ul style="list-style-type: none"> The lacks of information policy and standards have caused considerable miscommunication of information and confusion of the kind of system to 	<ul style="list-style-type: none"> a) Information Management Programme. b) Human Resource Management

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	<p>be adhered for the current system. In addition more training programme are required on information management knowledge and the government procedural rules and regulations for various levels of executives and clerical workforce in the organisation. The current shortcomings have resulted in the failure of staff to manage their decision properly and extensively poor management of their information.</p>	
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