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A proposal for discursive methods of stakeholder involvement in healthcare project decision-making

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1.0 Introduction

Health is the state of complete wellbeing and not merely absence of disease (WHO 1948). The term healthcare facilities (synonymously used with healthcare buildings) is used here to refer to those structures in which health is restored or nurtured. The Sir Winston Churchill saying "we shape our buildings, thereafter they shape us" is increasingly being validated by empirical evidence. The built environment has been found to influence human behaviour (for example, Bordass and Leamann 1997), while recent research further indicates that healthcare facility design and built environments impact on patient wellbeing and staff performance (Lawson and Phiri 2003). This highlights the need to understand and manage the stakeholders in order to minimise negative impacts of healthcare buildings on the people (health and wellbeing) and to a greater extent the locality (urban sustainability).

Building construction projects are generally divided into several stages representing different activities and levels of building completeness and use (Gambatese *et al.* 2007). The construction industry has been reported to often rush into projects without adequate understanding of the importance of the early phases (Emmitt 2007). It has also been known to make decisions predominantly based on the capital (initial) cost of a facility (Holti *et al.* 2000; Woodhead 2000). However, it is in the less-emphasised pre-design stages that fundamental decisions regarding major issues in the life cycle of the facility are made (Duerk 1993; Yu *et al.* 2007).

This paper is based on pre-design activity. It attempts to portray the worth of spending more time in trying to engage with and understanding stakeholders as part of key planning activity. The paper also relates to how the social facet of sustainability can be utilised in decision support to enhance the other aspects of sustainable development especially in realising the functional value of a healthcare facility. The proposed 'cooperative discourse' and Value Management (VM) methodology, mainly workshop-based activities, heavily relies on the social aspect of communication. This may include *hearing* and *listening*, understanding and sharing of information as well as compromising positions [amongst the three aspects: economic, social and environmental] in order to achieve common good.

1.1 Background and Justification

Sustainability is often defined from the context of the World Commission on Environment and Development report (WCED 1987). This report highlighted the argument that promoted sustainable development that ensures that it meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is believed to address the prudent use of natural resources and human potential, drawing together an even wider set of factors for consideration including global resources, urban design, social development, building and landscape design and engineering as well as operational consequences in terms of staffing, revenue funding and maintenance (Francis, 2004). Construction management literature (for example Kagioglou et al. 2000; Kirkham 2006) along with UK government guidance (OGC 2004) recognise the importance of considering the construction project through a broader whole life cycle perspective. This perspective accounts for all life cycle activities and impacts of early decisions on the finished product, right from its inception, design, construction and through to its use and disposal. However, the whole life cycle debate has mainly been steered towards cost considerations, towards, whole life cycle costing (WLCC). Upon recognising the broader effects that construction activities and products may have on those (stakeholders) who may participate in developing and using the finished product over the long term, theory on WLV is emerging. Bourke et al. (2005) believe WLV of an asset to represent an optimum balance of stakeholders' aspirations, needs and requirements, and whole life costs. They further consider it to encompass economic, social and environmental aspects associated with design, construction, operation, and decommissioning, and where appropriate the re-use of the asset or its constituent materials at the end of its useful life. In principle, the WLV phenomenon shares many tenets with sustainable development, therefore, tracking metrics of WLV can be used to deliver a sustainable solution.

Furthermore, the Government is committed to empowering both individuals and communities so that they can play a greater role in shaping health and social care services (DH 2008a). An ideological shift to representing the public as consumers requiring evidence as a basis for informed choices (Taylor 2005) is demonstrated by the introduction of such initiatives as "*Patient and Public Involvement*" (*PPI*), (DH 2008a) and '*Strengthening Accountability*' (DH 2003). Through the *NHS Plan* (DH 2000) power was devolved to frontline primary care staff, to the Strategic Health Authorities (SHA) and Primary Care Trusts (PCTs). They were henceforth empowered to plan and be actively involved in all matters pertaining to service design. The recently introduced 'consumerism' and 'design quality' agendas for planning primary care premises also focus on the patient as customer (PCC 2008). Similarly, the inclusion of sustainability standards (DH 2008c) to be adhered to in NHS facility planning is also relatively new. All these drive the move towards improved service design and consequently in the planning of healthcare facilities.

It may be noted that such recent NHS initiatives take effect as soon as they are launched. These initiatives, as well as the WLV phenomenon represent an unprecedented challenge to the usual procedures of acquiring and making decisions especially in the pre-design stages. Involving stakeholders in pre-design activity implies a need to improvise ways to make the recent changes viable. The already complex and dynamic healthcare sector (Miller and Swensson 2002) further has to face up to the challenges presented in involving multiple stakeholders in the crucial pre-design phase; that, as noted above, involves making critical decisions. The proposal for a 'cooperative discourse'/VM methodology is envisaged as relevant in attempting to resolve some of the issues surrounding the conflicting differences that are likely to occur when a number of time-bound decisions need to be made by several stakeholders. It seeks to define a balanced way of involving all, but only to an extent such that stakeholder groups are required to contribute to their area of proficiency. The end result of this interactive planning represents an amicable division of labour that seeks to deliver the 'best' final result in the finished facility.

2.0. Literature review

2.1 Sustainable development and healthcare facilities

Construction industry activities virtually impact all human beings. From the threetiered sustainable development perspective, the built environment is believed to provide a synthesis of environmental, economic and social issues through provision of shelter, physical infrastructure to communities and for being a significant part of the economy (Prasad and Hall 2004). Moreover, constructed buildings are usually characterised by a unique physical permanency and fixity (Nutt 1993). Therefore, the impacts from construction activity and finished products may not be reversible and hence are bound to be felt over a long term. With regard to hospitals, that, in scale and complexity sometimes compare to a small town with a service, industrial and residential area all in one (Arntzen 2003), the collective impacts could be colossal. Consequently, the value gained from a built healthcare facility should be based on attempting to minimise the negative outcomes of construction projects while at the same time maximising the positive impacts.

2.2 Sustainable development in NHS facilities

The environment in which people live and work is said to have a key influence on their health. For this reason, the Department of Health (DH 2008a) has decreed that environmental considerations be taken into account when building or adapting facilities in which NHS services are delivered. It has been noted that "for trusts involved in providing NHS facilities, progress towards environmental aims will need to be offset against economic considerations. Whole life costs and life cycle assessment should be balanced against environmental impacts and benefits, giving the three tiers of sustainable development". However, Turner (2006) has noted that, the aspiration to integrate environmental concerns into all aspects of social and economic life brings unexpected cultural, social and political challenges. He further suggests that in order to cope with these challenges, existing systems need to be modified by more participatory systems.

2.3 Capturing value : Stakeholder engagement and involvement2.3.1 Stakeholders

Freeman (1984) defined stakeholders as individuals or groups who may affect or be affected by the achievement of the organisation's objectives. His definition seems to signify that organisational survival and success that is dependent on understanding and engaging with stakeholders. In addition, Johnson et al. (2008) affirm that an organisation depends on its stakeholders. While, Anderson (1982) suggested that managers ought to balance the interests of all stakeholders to optimise organisational effectiveness. These groups or individuals have a stake in the organisation, where, stakes are defined as the interests of stakeholders which can last either a short or long time, and may have cultural or political orientations (Mintzberg et al. 2004). It is believed that, for any organisation, specific interest groups (stakeholders) exist in its business environment and these have an impact on the success and effectiveness of the organisation (Jonker and Foster 2002). Blyth and Worthington (2001) place stakeholders into two broad groups: the demand side and supply side stakeholders. For healthcare construction projects the groups could further be subdivided as shown in Figure 1. The distinction is important in order to recognise that each group has different needs, expectations and objectives. Moreover, it has been noted that conflicting interests are likely to occur in any organisation with multiple stakeholders (Green 1996; Newcombe 2003). Therefore by recognising and identifying all the groups, the organisation may determine the best way to reach out to them and capture their needs and requirements and ultimately their values.

DEMAND SIDE	SUPPLY SIDE (supply chain)
 Users – Full time (staff) Patients Visitors Client Advisors Client Funders Legislators Community/Pressure Groups 	 Designers Consultants Contractors Suppliers Facilities Managers

Figure 1: Health facility stakeholders

2.3.2 Stakeholder engagement and involvement

In the construction industry, client and stakeholder value (needs and requirements) are captured through the briefing process. One way of gaining insight into what the client organisation and its wider stakeholder base value in a project is first identifying who the stakeholders are and then initiating direct engagement with them right from the start/inception. Through engagement and direct involvement with a client organisation, stakeholder needs are identified and prioritised to ensure that the optimum combination of benefit and costs is secured.

The concept of "engagement" is believed to potentially span passive and active modes of engagement which include: disclosure and transparency by organisations to their stakeholders, and direct involvement, consultation or partnership with stakeholders (IISD 2004). Jonker and Foster (2002) recognize stakeholder engagement as a complex multi-dimensional process with multiple components that need to be considered separately and from several angles. The components are 'parties', 'processes', 'stake', and 'connections', from which they construct a useful matrix for analysing stakeholder engagements.

INVOLVE (2005) identifies several benefits of stakeholder participation and engagement. They suggest benefits such as, greater social cohesion; improved quality of service, projects or programmes; and, greater capacity building and learning among others. However, Holt (2001: 149) argues that "involving these stakeholders throughout the facility 'life' can cause costly interruption to service delivery, as well as reflecting unduly the interests of a powerful or vocal minority" Therefore, the challenge is to innovate ways through which to maximise positive benefits attainable from stakeholder involvement or engagement. Appelbaum *et al.* (1999) report that a participative climate, also shown to be related to empowerment, helps staff to believe they are important assets in the organisation and can make a difference.

3.0 Findings and discussion

3.1 Patient and Public Involvement in the NHS

Section 11 of the Health and Social Care Act 2001 (now S242 of the consolidated NHS Act 2006) places the duty on NHS Trusts, PCTs and SHAs to make arrangements to involve and consult patients and the public in service planning and

operation and in the development of proposals for changes. However, the multiple stakeholder characteristic of the NHS has been cited as a major challenge to the procurement and acquisition of modern healthcare facilities (EPSRC 2008). Furthermore, the characteristic healthcare dynamics (Miller and Swensson 2002) that usually result in policy and practice changes call for a 'post-normal' science (Funtowicz and Ravetz 1994). In this, quality is the organising principle and it entails the democratization of knowledge by an extension of the peer-community [all stakeholders] for quality assurance, thereby encompassing the multiplicity of legitimate perspectives and commitments. Such a 'post-normal' science is also understood to provide new forms of discourse.

A discourse is said to refer to a set of meanings, metaphors, representations, statements and so on that in some way together produce a particular version of events (Burr 2003). Foucault (1972) thought that a discourse constructs a topic; governing the way it can be talked about and reasoned about. Therefore, it can be argued that, discourses make it possible for us to perceive the world in a certain way (Burr 2003). Furthermore, Rosenhead (1980) believed planning to be a social activity which therefore necessitates one expression of those social forces which are embodied in the social institution. From a WLV perspective, sustainable decision making may require the consideration of intricate linkages between environmental, economic and social aspects. In addition, sustainable decision processes are said to require the active engagement of stakeholders (Antunes *et al.* 2006) involved in collective discourses in order to construct a collective understanding of a problem or challenge.

3.2 Proposal: Cooperative Discourse Method and VM

Freeman (1984) recognised that organisational interactive relationships with stakeholders could be perceived as a process. It is through understanding these relationships that an organisation identifies how to engage with its stakeholders. This process, he felt could be analysed at three levels: 'rational', that addresses stakeholder identity and perceived stakes in the organisation; 'transactional', focused on dealings between the organisation and its stakeholders; and, 'processional', which is about the processes used to manage the relationships. The proposed 'cooperative discourse'/VM combined methodology targets the processional level in order to attempt to solve the problem with multiple groups of stakeholders each with a varied level of specialty or expertise with regard to pre-design phase knowledge and information. The premise of this proposal to link the two is that "the long-term performance of any construction and its ability to satisfy stakeholder requirements depends on the decisions made and on the care taken by decision makers in stakeholder communication" (Olander and Landin 2008: 554). Applying the synergistic model is envisaged to lead to improved decision making within a refined communication system involving all stakeholder groups and expert guidance but within the limits of their knowledge.

It has been noted that in order for management to take into account the influence of external groups on the process of direction-setting, it requires the introduction of certain internal procedures to ensure that this is done systematically (Jonker and Foster 2002). Direction-setting processes are typical of pre-design project- and design-strategy activities that both NHS internal and external groups must now be involved in.

3.3 A three step model of public involvement: "cooperative discourse"

Renn *et al.* (1997) noted that without a systematic procedure to reach consensus on values and preferences, the stakeholders' position often appears unclear. They perceived that participatory processes that combine technical expertise, rational as well as moral decision-making, and public values are needed. Processes such as negotiation, mediation and arbitration are suggested solutions. They further noted that successful mediation among a wide variety of stakeholders has been attempted through round table discourses (named cooperative discourse).

The 'cooperative discourse' model entails:

(i) Identification and selection of concerns and evaluative criteria

Best accomplished by asking all relevant stakeholder groups (i.e. socially organized groups that are or perceive themselves as being affected by the decision) to reveal their values and criteria for judging different options. At this point, it is said to crucial that all relevant value groups be represented and that the value clusters be comprehensive and include economic, political, social, cultural and religious values – use of value-tree analysis appropriate at this stage.

(ii) The identification and measurement of impacts and consequences related to different policy options

Evaluative criteria derived from the value-tree are operationalized and transformed into indicators by the research team or an external expert group. These operational definitions and indicators are reviewed by the participating stakeholder groups. Once approved by all parties, these indicators serve as measurement rules for evaluating the performance of each policy option on all value dimensions. Experts from varying academic disciplines and with diverse perspectives on the topic of the discourse are asked to judge the performance of each option on each indicator – The objective is to reconcile conflicts about factual evidence and reach an expert consensus via direct confrontation among a heterogeneous (diverse) sample of experts in the field. At the end of this step, performance profiles for each option are constructed which reflect the strengths and the weaknesses of each option on each indicator.

iii) Conducting a rational discourse with randomly selected citizens as jurors and representation of stakeholder groups as witnesses

The last step is the evaluation of potential solutions by one group or several groups of randomly selected citizens (Dienel 1978; 1989) – citizen panels. These panels are given the opportunity to evaluate the design policy options based on the knowledge of the likely consequences and their own values and preferences. The participants are informed about the options and the consequence profile generated by the experts in *Step* (*ii*) before they are asked to evaluate these options on each dimension identified in the value tree process (*Step i*). At this level, stakeholder group representatives and experts – both as witnesses, provide their arguments and evidence to the panels who ultimately decide on the various options.

The deliberation process is said to take time: citizen panels are normally conducted as seminars over 3-5 days. The three groups (experts, stakeholder groups and the general public) play a role in each step, *but they are encouraged to impact the decision process with the specific knowledge with which they are most proficient:*

- •The stakeholder groups have the most proficient and diverse knowledge of evaluative criteria;
- •The experts have the best systematic knowledge about factual performance;

while,

•The citizens have an appropriate and legitimated deliberation potential to weigh benefits and risks.

For healthcare projects, a major benefit of the cooperative discourse methodology is that, this division of labour provides a check-and-balance process and a sequential order for multiple actor involvement. Applied in combination with VM methodology, the benefits of this model will further be enhanced.

3.4 Value Management (VM) and Soft Value Management (SVM)

3.4.1 Value Management

As seen earlier, sustainable development and WLV are closely related to optimal use of resources related to economic, social and environmental aspects of facilities. Likewise, VM is a renowned methodology for achieving value for money in building projects. A building is said to offer value for money when the benefits derived from it, significantly exceed its lifetime costs (Building 2000). These benefits are further said to be derived from the functions that a building performs rather than from the building itself. VM has been defined as "a process in which the functional benefits of a project are made explicit and appraised consistent with a value system determined by the client" (Kelly et al. 2004: 1). Best and de Valence (1999) reported that VM presents an opportunity for project stakeholders to exchange different views and perspectives, hence enabling them to avoid many of the problems typical of building projects, in addition to satisfying the demand for long-term value. As an organised approach towards defining client's value in meeting his needs and in delivering that value throughout the product delivery process, VM helps clients to control their investment (in construction) in order to ensure that the product is valuable and cost effective to use and to maintain.

Hayles (2004) suggests a VM approach to enable clients contribute to a better built environment and ultimately the opportunity to stimulate improvements in the construction process. A VM service is said to involve: Functional Analysis (FA); Life-Cycle Costing; operating in multi-disciplinary work groups; and, establishing the comparative cost in relation to function.

3.4.2 Soft Value Management (SVM)

Not contented with traditional 'hard' VM/VE practice as discussed above, some proponents of 'Soft Value Management' (Green 1994; Liu 2002) thought there was cause for improvement. They thought that the traditional VM was rooted in hard systems methodology which were consequently only effective in solving 'hard' technical problems. Liu (2002) observes that such 'hard' problems are always manifested as a pursuit for cost reductions or function-related values. SVM is founded in, Soft Systems Methodology (SSM) (Checkland 1981; 2000), an accommodating learning system that integrates conflicting interests among participants. SSM emphasises learning, human content, epistemologies and system models using social problems to solve soft and ill-illustrated problems. SVM models have therefore been innovated to take care of the softer intangible issues associated with 'values' in the value alignment process. This is more of the case in the pre-design stages when the project is not completely defined, and one of its aims is to reach consensual agreement with stakeholders (Dallas and Humphrey 2004). Moreover Ward and Chapman (2008) recognise that most project manifest higher 'soft' features early in conception, early design and strategic planning than in the later stages of the project's life cycle. SVM may therefore be thought to be useful in supporting a group of people seeking to make sense of, and collectively act in a situation in which they are empowered (Shen *et al.* 2004); for example when participating in a discourse.

3.5 Benefits of using VM approach

Used in combination with VM, SVM will balance out the inadequacies associated with traditional VM thereby maximising the benefits of the service. Connaughton and Green (1996) reported the main benefits arising from the application of VM as achievement of value for money; improved communication and team working; a shared understanding among key participants; better quality project definition; increased innovation; and, the elimination of unnecessary cost. Alternatively, the Institute of Value Management (IVM 2008) identifies a range of similar but more explanatory merits: better business decisions by providing decision makers a sound basis for their choice; improved products and services to external customers by clearly understanding, and giving due priority to their real needs; enhanced competitiveness by facilitating technical and organisational innovation; and, a common value culture, thus enhancing every member's understanding of the organization's goals decisions which can be supported by the stakeholders.

Furthermore, VM boasts the basic focus of assessing the relationship between function, cost and worth. It is likely that what makes VM a strong integrating method or system, is its application of functional analysis and other problem solving tools and a multi-disciplinary team to analyse a project. It is a good system for integrating the project stakeholders: the end user, the client, design/building team. Dallas and Humphrey (2004) argue that because every building project should have clearly stated objectives expressed in terms of benefits sought by those who commission it, VM is important. It decomposes these objectives into a number of what they call functional 'value drivers', where functional, refers to what things it must do in order to contribute to the objectives. When a VM service is used proactively it has the capacity to align value systems from the outset and to ensure that a project progresses effectively and efficiently and that appropriate decisions are taken in light of the fact that it costs money to retrace footsteps (Male *et al.* 2007).

3.6 VM and discourses

Connaughton and Green (1996: 7) depict VM as a "structured approach to defining what 'value' means to a client when meeting a perceived need, and delivering that value via the design and construction process". It is a structured approach to defining the meaning of client value in meeting a perceived need by establishing a clear consensus [discourse] about the objectives and how they can be achieved. Usually applied as part of structured problem-solving procedure in the early stages, its primary objective is reportedly to develop a common understanding of the design problem, identify explicitly the design objectives and synthesize a group consensus [discourse] about the comparative merits of alternative courses of action (Green 1994).

VM derives its power from being a team approach that uses functional analysis to examine and deliver a product, service or project at optimum whole life performance and cost without detriment to quality (Male *et al.* 2007). According to Kelly *et al.* (2004), VM is distinguished from other management disciplines by three core factors: a value system; a team-based process; and, the use of function analysis to promote indepth understanding. From a discursive perspective, it has been shown to deliver other

benefits for example consensus building among stakeholders (Green 1994); project learning (Barton 2000); sense-making (Thiry 2001); and, participatory goal-setting (Liu and Leung 2002), among others.

An enhanced step-by-step model (Figure 2) of VM/SVM methods embedded in Renn *et al.*'s 'cooperative discourse' is envisaged to improve value definition and understanding in pre-design processes. In the figure, sub-activities (Step 1-3) are carried out in sequence from the left to right, while the main participating groups (actors) are presented from top to bottom on the left hand side. Each step of the process is expected to lead to specific deliverables which are shown at the bottom of the figure similarly represented from left to right. For each step of the process, the lead actor in the particular activity together with their expected task has been highlighted in the diagram. The figure also shows that each of the leading tasks is to be corroborated with a VM/SVM service. Based on VM workshop methods, participants are provided with a forum for communication and for resolving any conflicts. The use of VM FAST will further aid in aligning functional requirements of the facility as well as providing for a systematic way of ensuring that none of the pertinent 'hard' issues are missed in the heat of the 'soft' issues that may take precedence when the various stakeholder groups need their voice to be 'heard'.

It may further be noted that, even with a mediated discourse, stakeholders may still disagree as to what the solutions are. However, it has been noted that, with the established relationships and interactions, solutions remain a possibility (Holt 2001). It has been said that, there is no solution optimising all criteria at the same time, hence compromises have to be found (Antunes et al. 2006). "There is responsibility for those who take part to ensure what they say is relevant to the problem or problems at hand" (Little et al. 2002: 1084), and further that, each party to the discourse has a duty listen to as well as to *hear*. This is said to imply that all discourse participants must bear some responsibility for making the discourse work. Therefore, by engaging all stakeholder groups (through their representatives) in the cooperatively discursive decision making process, they will all be party to the decision taken. Furthermore, involvement of future users as part of the key stakeholder group composition in healthcare projects has been cited as the best guarantee for project success (Arntzen 2003). Renn et al. (1997) and Earl and Clift (1999) observed that an effective stakeholder discourse depends on: sufficient time for debate; the result must not be a forgone conclusion such that the consultation is just a ratification process; and, equal access to debate by all stakeholder groups. Other conditions have been cited as, a willingness to accept the legitimacy of other points of view resulting from various reasoning and forms of knowledge; as well as, the necessity to accept technical, anecdotal and emotional evidence as being equally valid.

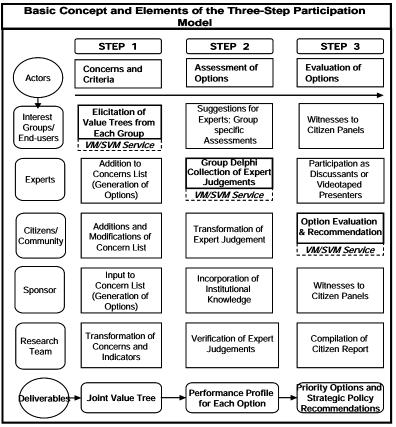


Figure 2: A VM enhanced stakeholder participation model (Adapted from three-step participation model by Renn *et al.* 1997)

4.0 Conclusion

The importance of successful pre-design decision-making in WLV delivery has been highlighted towards the end of *Section 1.0*. As demonstrated throughout this paper, of the three facets of sustainability, there is reason to perceive the social facet as a primary pillar of WLV definition during pre-design activity. Successful WLV definition in the pre-design stages will lead to guided pursuance and achievement of this very WLV through to the end of life of the facility. Firstly, effective briefing and consequently requirements capture will involve the delivery team in social discourses and processes identifying and engaging with the stakeholders to enhance the team's understanding of what the 'real' project needs and eventual use value are. Secondly, social sustainability will also support whole life cycle project information dynamics and decision-making including transparent information exchange throughout the process.

In this paper we have presented the potential of the *cooperative discourse* method complemented synergistically by VM methodology. The resulting methodology has been shown as a powerful way of supporting the implementation of multi-stakeholder participative value definition and decision making. In relation to the WLV phenomenon therefore successful value definition and collaborative decision-making is envisaged to lead to a more sustainable solution over the project's life cycle in the light of all the issues enumerated by WLV definition. Cooperative discourse may particularly be useful in dealing with ill-structured problems, for which there are various possible perspectives, typical of pre-design stages of construction projects. Moreover, with healthcare facility projects, having to deal with several stakeholders

each with their needs and expectations, amidst changing policies, several issues will need to be resolved and multiple feedbacks reconciled in order to agree a common position on how to take the project forward. The use of a combined approach, as suggested in this paper, can have a synergistic effect, combining the advantages of cooperative discourse and the proven benefits of VM in construction projects. Subsequently, improved decision-making processes that fully support amicable stakeholder engagement may be achieved.

The pre-design phase happens early on in the project, at a point when a wide range of opportunities are available for potential value creation and improvement. Consequently, a VM study is most useful then. VM when combined with the cooperative discourse principles of team selection would involve a varied selection in facilitated group discussion thereby benefiting from input of key stakeholder groups. In addition, ownership and commitment to the outcomes of the process and the final product when it is completed would be achieved.

This paper is part of ongoing research work. Following this proposal, the model is to be validated in consultation with relevant individuals in NHS primary care planning management, community representatives and focus groups. Issues raised will then be carried forward to inform an on-going research project.

References

- Anderson (1982) Marketing Strategic Planning, and Theory of the Firm. *Journal of Marketing*, 42 (Spring), 15-26.
- Antunes, P., Santos, R. & Videira, N. (2006) Participatory Decision Making for Sustainable Development - the Use of Mediated Modelling Techniques. *Land Use Policy*, 23, 44 - 52.
- Appelbaum, S. H., Hébert, D. & Leroux, S. (1999) Empowerment: Power, Culture and Leadership – a Strategy or Fad for the Millennium? *Journal of Workplace Learning*, 11 (7), 233-254.
- Arntzen, E. (2003) Buildings from Concept to Use. *Business Briefing: Hospital Engineering* and Facilities Management, 38-45.
- Best, R. & De Valence, G. (1999) *Building in Value: Pre-Design Issues*, London, Arnold Publishers.
- Blyth, A. & Worthington, J. (2001) *Managing the Brief for Better Design*, LONDON and NEW YORK, SPON PRESS.
- Bordass, B. & Leaman, A. (1997) Future Buildings and Their Services: Strategic Considerations for Designers and Clients. *BUILDING RESEARCH & INFORMATION*, 25, 190-195.
- Building (2000) Value for Money Cost Model. Building.
- Burr, V. (2003) Social Constructionism (2nd Ed.) London; New York:, Routledge.
- Checkland, P. (1981) Systems Thinking System Practice, Chichester, Wiley.
- Checkland, P. (2000) Soft Systems Methodology: A Thirty Year Retrospective. *Systems Research and Behavioural Science*, S11-S58.
- Connaughton, J., N., & Green, S. D. (1996) Value Management in Construction : A Client's Guide, London, CIRIA.
- Dallas, M. F. & Humprey, S. (2004) Value or Cost? The value manager, HKIVM, 10 11-14.
- DH (2000) The NHS Plan: A Plan for Investment. A Plan for Reform. London, Department of Health, HMSO.
- DH (2003) Strengthening Accountability Involving Patients and the Public: Practice Guidance. London, Department of Health.

- DH (2008) Patient and Public Involvement. Available from:http://www.dh.gov.uk/en/managingyourorganisation/patientandpublicinvolveme nt/dh_085874. Accessed: 03/08/08 London, Department of Health
- DH (2008c) Sustainable Development in the NHS, Available At: http://www.dh.gov.uk/en/managingyourorganisation/estatesandfacilitiesmanagement/ sustainabledevelopment/dh_4119123, Accessed: 05/11/08. London, Department of Health.
- Duerk, D. P. (1993) Architectural Programming: Information Management for Design, NY, Published 1993
- Earl, G. & Clift, R. (1999) Stakeholder Value Analysis: A Methodology for Integrating Stakeholder Values into Corporate Environmental Investment Decisions. *Business* Strategy and the Environment, 8, 149-162.
- Emmitt, S. (2007) Design Management for Architects, Oxford, Blackwell Publishing.
- EPSRC (2008) Health and Care Infrastructure Research and Innovation Centre (Haciric): Details of Grant. Available At: http://gow.epsrc.ac.uk/viewgrant.aspx?grantref=ep/d039614/1 accessed 02/03/08.

Engineering and Physical Science Research Council (EPSRC).

- Foucault, M. (1972) *The Archaeology of Knowledge; Translated from the French by A.M. Sheridan Smith.*, London, Tavistock Publications.
- Francis, S. (2004) Investing in Design: Developing a Business Case for Good Design for Health. *Business briefing: Hospital Engineering and Facilities Management*, 1 - 5.
- Freeman, R. E. (1984) Strategic Management: A Stakeholder Approach, Boston, Pitman.
- Funtowicz, S. & Ravetz, J. (1994) The Worth of a Songbird:Ecological Economics, as a Post-Normal Science. *Ecological Economics*, 10, 197-207.
- Gambatese, A., Pocock, J. & Dunston, P. (2007) *Constructability Concepts and Practice*, American Society of Civil Engineers.
- Green, S. D. (1994) Beyond Value Engineering: Smart Value Management for Building Projects. *Internation Journal of Project Management* 12, 49 - 56.
- Green, S. D. (1996) A Metaphorical Analysis of Client Organizations and the Briefing Process. *Construction Management and Economics*, 14, 155 - 164.
- Hayles, C. (2004) The Role of Value Management in the Construction of Sustainable Communities. *The value manager, HKIVM,* 10, 15-19.
- Holt, R. (2001) Creating Whole Life Value Proxemics in Construction Projects. *Business* Strategy and the Environment, 10, 148-160.
- Holti, R., Nicolini, D. & Smalley, M. (2000) *The Handbook of Supply Chain Management* (C546): Building Down Barriers, London, CIRIA
- IISD (2004) Issue Briefing Note: Stakeholder Engagement, Iso and Corporate Social Responsibility. Winnipeg, Manitoba, Canada, International Institute for Sustainable Development (IISD).
- INVOLVE (2005b) The True Costs of Public of Participation. INVOLVE.
- John Wiley and Sons
- Johnson, G., Scholes, K. & Whittington, R. (2008) *Exploring Corporate Strategy: Text and Cases. 8th Edition.*
- Jonker, J. & Foster, D. (2002) Stakeholder Excellence? Framing the Evolution and Complexity of a Stakeholder Perspective of the Firm. *Corporate Social Responsibility and Environmental Management*, 9, 187 - 197.
- Kelly, J. & Male, S. (1993) Value Management in Design and Construction, London, E& FN Spon.
- Kelly, J., Male, S. & Graham, D. (2004) Value Management of Construction Projects, Oxford, Blackwell Science.
- Lawson, B. R. & Phiri, M. (2003) *The Architectural Healthcare Environment and Its Effects* on Patient Health Outcomes, London, The Stationery Office.
- Liu, A. M. (2002) Developing a Soft Value Management Model. *Internation Journal of Project Management*, 20, 341 - 349.

- Male, S., Kelly, J., Gronqvist, M. & Graham, D. (2007) Managing Value as a Management Style for Projects. *Internation Journal of Project Management*, 25, 107-114.
- Miller, R. L. & Swensson, E. S. (2002) *Hospital and Healthcare Facility Design*, New YORK, Norton and Company.
- Mintzberg, H., Lampel, J., Quinn, J. B. & Ghoshal, S. (2004) *The Strategy Process: Concepts, Contexts and Cases*, Harlow, Pearson Education Ltd.
- Newcombe, R. (2003) A Stakeholder Mapping Approach. *Construction Management and Economics*, 21, 841-848.
- Nutt, B. (1993) The Strategic Brief Facilities 11, 28 32
- Olander, S. & Landin, A. (2008) A Comparative Study of Factors Affecting the External Stakeholder Management Process. *Construction Management and Economics*, 26, 553-561.
- PCC (2008) Primary and Social Care Premises Planning and Design Guidance. Available at: http://www.primarycarecontracting.nhs.uk/planning-and-designguidance.php?routemap_id=5&process_id=14&sub_process_id=0&activity_id=106. *the process*. London, Department of Health.
- Renn, O., Blattel-Mink, B. & Kastenholz, H. (1997) Discursive Methods in Decision Making. Business strategy and the environment, 6, 218-231.
- Rosenhead, J. (1980) Planning under Uncertainty: 1. The Inflexibility of Methodologies. *Operational Research* 31, 209-216.
- Shen, Q., Li, H., Chung, J. & Hui, P. (2004) A Framework for Identification and Representation of Client Requirements in the Briefing Process. *Construction Management and Economics*, 22, 213-221.
- Turner, R. K. (2006) Sustainability Auditing and Assessment Challenges. *Building Research* and Information, 34(3), 197 - 200
- Ward, S. & Chapman, C. (2008) Stakeholders and Uncertainty Management in Projects. *Construction Management and Economics*, 26, 563-577.
- WCED (1987) Our Common Future. Oxford World Commission on Environment and Development.
- WHO (1948) Preamble to the Constitution of the World Health Organization, Available at http://www.who.int/about/definition/en/print.html, Accessed 15/10/08. *International Health Conference*. New York, World Health Organisation.
- Woodhead, R. M. (2000) Investigating of the Early Stages of Project Formulation. *Facilities*, 18, 524-534.
- Yu, A., Shen, Q. & Kelly, J. (2007) An Empirical Study of the Variables Affecting Construction Project Briefing/Architectural Programming. *International Journal of Project Management*, 25, 198-212.