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THE VALUE MANAGER

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THE HONG KONG INSTITUTE OF VALUE MANAGEMENT

THE VALUE MANAGER

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COUNCIL MEMBERS OF THE HONG KONG INSTITUTE OF VALUE MANAGEMENT (HKIVM)

AIMS AND OBJECTIVES OF THE HKIVM

- To create an awareness in the community of the benefits to be derived from the application of Value Management in Hong Kong.
- To encourage the use of the Value Management process by sponsors.
- To establish and maintain standards of Value Management practice in Hong Kong.
- To contribute to the dissemination of the knowledge and skills of Value Management.
- To establish an identity for the Institute within Hong Kong and overseas.
- To encourage research and development of Value Management with particular emphasis on developing new applications of the process.
- To encourage and assist in the education of individuals and organisations in Value Management.
- To establish and maintain a Code of Conduct for Value Management practitioners in Hong Kong.
- To attract membership of the Institute to support these objectives.

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EDITORIAL

Welcome to the first issue of The Value Manager 2007. While the former Editor, Prof. Geoffrey Shen, has taken up the post of Vice-President of the HKIVM, I have undertaken a new responsibility to be the Editor of TVM. In view of the enduring success of the newsletter, it is really a great honour as well as a big challenge for me to take up the new post. I will try best to preserve the style of the publication and keep the papers presented up to high standard.

Inside this issue, we have selected two outstanding papers describing the use of Value Management in project management, namely "An integrated framework to support best value in the UK public service sector" by Dr. Kirsty Hunter and Prof. John Kelly from the UK and "Aligning value management with construction project objectives" by George Hunter from the USA. Although the two papers cover different areas, the authors have given us a valuable insight into the application of VM at practical level.

Jacky Chung

Editor, The Value Manager

MESSAGE FROM THE PRESIDENT

David Yau
President of HKIVM

I take this opportunity to welcome everyone into a new year with HKIVM. No doubt we shall see many changes this year, especially with new faces in the Council. To me, 2007 will hold many promises. It is 10 years for the establishment of the HKSAR Government since its return to China. Whilst most of us have seen very little change in the way of doing business, construction and property development, apart from some dips due to the Asian crisis and SARS, Hong Kong is still vibrant. The services of Hong Kong professionals have expanded father a field to Macau, China and even Middle East.

So what next for VM? I received an email from a friend working in Macau with a Value Engineering report on how they had change the pile types and reinforcement to save the client millions of dollars. I think that in the construction industry "value" and cost savings have commonly been associated to Value Engineering without a fuller understanding of what is VE. It should be our mission as VE / VM professionals to better educate everyone that we come across on the differences and the benefits.

With this in mind, I look forward to serving you all with the team at HKIVM.

Best regards,

David Yau

President, HKIVM

AN INTEGRATED FRAMEWORK TO SUPPORT BEST VALUE IN THE UK PUBLIC SERVICE SECTOR

Dr. Kirsty Hunter and Prof. John Kelly
University of Glasgow, UK

INTRODUCTION

The primary aim of this doctoral research was to determine if value management (VM) can be successfully applied to the public service sector to support Best Value and therefore exploiting new ground for implementation. The focus was on the service sector because value management has already been proven as a successful value-adding method for the manufacturing and construction industries. Kelly and Male (2002) state that; 'Value management has reached a level of maturity within manufacturing and construction whereby the style and content of the various workshops is reasonably predictable.'

The reasoning behind the public sector focus was due to the introduction of Best Value in Scottish local government which became a statutory duty in 2003 during the course of the doctoral research. This presented a timely opportunity considering that VM and Best Value have the same policy; to achieve maximum value for the customer or client. 'Best Value is a term long used in VM, with the same meaning as for the Best Value policy – i.e. the best relationship between the quality of service that meets users expectations and the price they are willing to pay' (DETR, 2000). The Best Value policy is also described by Bone and Law (2000) as being; 'in essence a broadly-based VM policy.' Therefore, the use of value management could be demonstrated and tested for its support in achieving Best Value.

BACKGROUND ON BEST VALUE

Best Value is a concept that has emerged since 1997 and has been described as; 'representing the greatest challenge local government has ever faced' (Keady, 1998). Its main goal is to improve service quality (Higgins et al., 2004). This challenge and required culture change which became evident in the first few years after the introduction of Best Value is described by Raine (2000) in terms of the importance of; 'embedding Best Value as a philosophy as much as a technical requirement into the thinking and behaviour of local authorities.'

Best Value was first introduced by the Labour government who made a manifesto pledge to repeal Compulsory Competitive Tendering (CCT) and introduce a new regime of Best Value. Boyne (1999) describes Best Value as; 'a process, a long term drive for better quality and lower costs for all council services.' The Scottish legislation on Best Value defines it as a duty that will ensure continuous improvement in the performance of the organisation's functions, maintain an appropriate balance between quality and cost, and pay due regard to economy, efficiency and effectiveness as well as equal opportunities requirements (http://www.scotland.gov.uk). The value for money documentation issued by HM Treasury highlights that government provide and procure services on the basis of value for money rather than lowest cost, in the context of local government this has been badged as Best Value.

VM AND ITS RELATIONSHIP TO BEST VALUE

Value management and Best Value both have the same objectives, to achieve the maximum value for the customer or client (DETR, 2000). In addition to this, they are also about striving for continuous improvement and therefore both have the same goal. Value management has been using the term 'Best Value' since its conception and therefore is familiar with the meaning of Best Value (Bone and Robertson, 2003).

Graham and Sulaiman (2000) present a case for the use of value management to support Best Value. They indicate that the Value Management Standard (BS EN 12973:2000)

published by BSI in June was introduced after the statutory duty of Best Value in England and Wales and prior to its introduction in Scotland. It is stated that; 'the standard is directly relevant to the Best Value and Value for Money Initiatives pursued by UK Government,' and 'BS EN 12973:2000 will support Best Value reviews and the development of programmes to achieve continuous improvement. The description of the Value Management Programme is equivalent in every respect to the Best Value process' (Graham and Sulaiman, 2000). This is supported by Bone and Robertson (2003) who also highlight that VM supports Best Value by ensuring an action plan is implemented as an output of the review.

The standard as highlighted by Graham and Sulaiman (2000) outlines the Value Management Programme which includes the development of procedures, target setting, the construction of performance indicators and the development of an action plan. This is all concluded as being in parallel to the Best Value process. It is stated that the key outputs of a Best Value review are; 'a set of challenging targets and action plans designed to improve delivery of service,' which mirror those outputs expected from the value management service. Graham and Sulaiman (2000) also highlight that similar tools and techniques are used in VM as well as those specified in government literature to support Best Value in the public sector.

Best value is fundamentally about continuous improvement in all local authority services. The Employers Organisation state that; 'the use of effective high performance people management techniques is essential to continuous improvement of local services.' Bone and Robertson (2003) believe that value management is the best tool for the job. Gwynne (2003) outlines that value management provides a structured approach with the use of various tools where it enhances challenge and provides an opportunity to be creative. Corrigan and Joyce (1997) cite Bohret (1993) who suggests that public managers need new, creative tools of public management to involve public participation. It is evident that a decade later the public sector is still in need of these creative tools to manage their services effectively. This research aims to address this through the introduction of three models which can be used individually or in joint application.

SYNTHESIS OF LITERATURE

From the corroboration between Best Value, value management and projects the following was deduced; (1) value management is a project focussed service that relies on interventions or value opportunities within the project life cycle, (2) a local authority will instigate projects to ensure continuous improvement to satisfy Best Value, and (3) value management and Best Value have the same objectives, to achieve maximum value for the customer or client.

VM has many attributes that can support the Best Value regime. The VM methodology satisfies Best Value requirements by;

- Using creative tools to encourage innovation
- Challenging why and how service functions are performed
- Highlighting any areas not contributing value to the process
- Promoting ownership of service decisions
- Ensuring stakeholders and their representative views are voiced
- Identifying options for service delivery
- Delivering what the customer wants by determining the customer values
- Identifying the right team membership to address service planning / reviews
- Ensuring outcomes link to the initial aims and objectives of the service
- Producing an audit trail that includes action plans and KPIs

The VM methodology is also becoming more established in government in other countries resulting in benefits which include cost savings, client satisfaction and improved functionality.

THE RESEARCH AREAS AND OUTPUTS

The literature review examined three key areas which were of fundamental importance to understanding the relationship between Best Value, value management and projects. The issues arising from the reviews generated the research propositions for the thesis and a robust methodology comprising three key research methods was constructed to answer them. The primary research proposition was that; 'Value management is a service which can maximise the value of government services to achieve Best Value.'

Three research outputs have been generated as a result of this research; (1) a predictive framework of generic project issues, (2) a project model for use in local authority service projects highlighting the value management opportunity points; the Service Sector Three-Stage Project Model, and (3) a logical project framework incorporating a VM approach; the Three Wheels of Best Value. The process by which these outputs were derived is illustrated in the research route in Figure 1. Figure 2 illustrates the outputs from the three key areas explored.

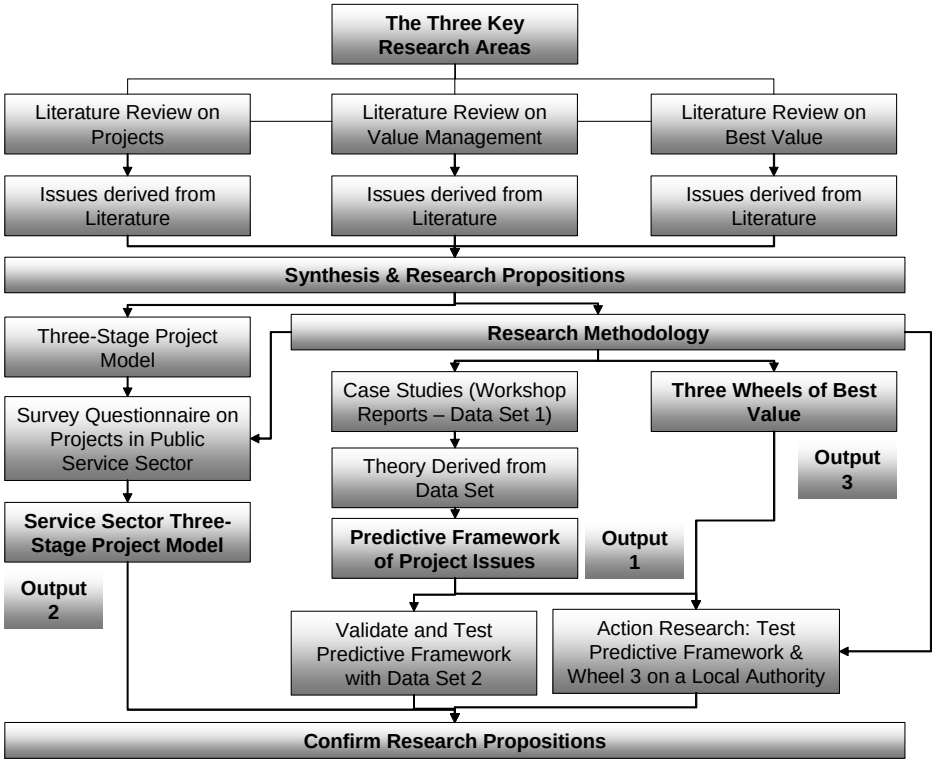


Figure 1 – The research route

The Predictive Framework of Generic Project Issues

The objective of this part of the research was to develop a theory using grounded theory to confirm the research proposition that similar issues appear at similar project stages and these are generic in nature. The research in project issues using grounded theory concluded that similar issues are recurrent at similar project stages irrespective of project type. However, these issues also appeared at different project stages suggesting that the forum for issues identification had not previously been available and issues have not been addressed earlier on in the project life cycle. These issues include; start date, completion date, programme, funding, cost certainty, communications, stakeholders and innovation. Generic issues were identified which are those that apply to any type of project whether construction or service related. The generic nature of the project issues allows value management to be implemented to enhance the value of projects.

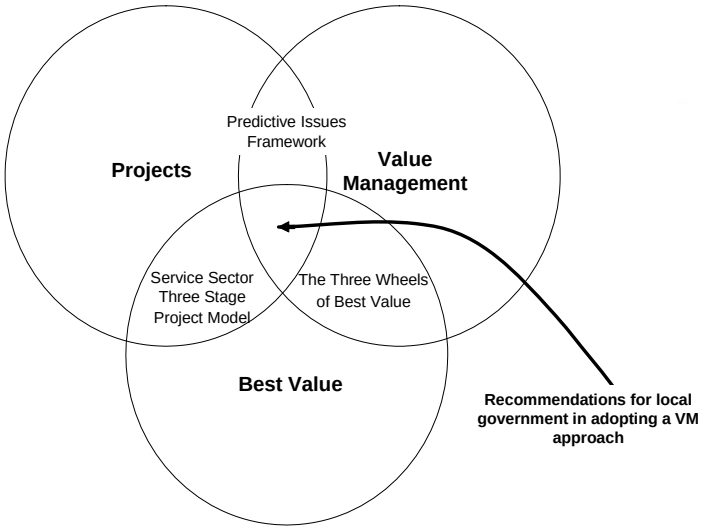


Figure 2 – The research outputs from the three key areas

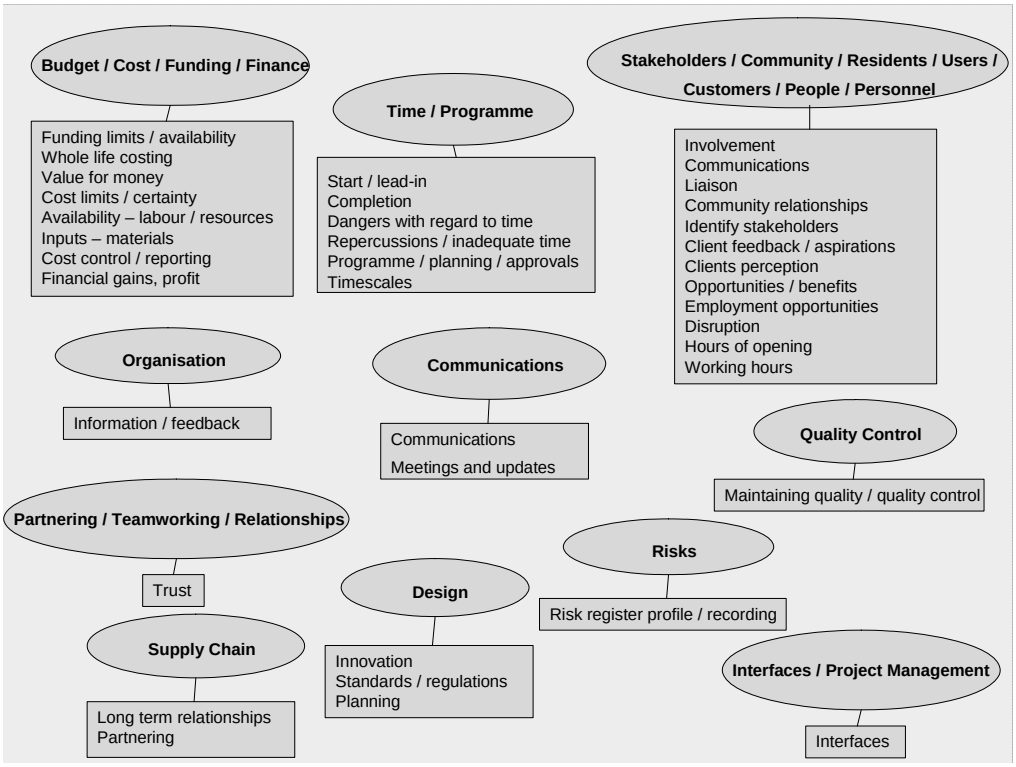


Figure 3 – The predictive framework of generic project issues

The predictive framework (Figure 3) may be used in future value management studies to assist the team in extrapolating the likely issues at the particular project stage and for use by the facilitator in leading the project team when conducting an 'issues analysis' in a workshop. The framework will assist the facilitator by acting as a prompt list to prevent any issues being overlooked and in doing so will benefit the project team by ensuring all important issues have been identified for discussion and solutions found during the course of the VM workshop.

Glaser & Strauss (1967) suggest that; 'The practitioner will have more control and a

better understanding of situations from the explanation derived through theory.' It is anticipated that the predictive framework will instil confidence in the practitioner using the framework as well as ensure a better understanding of the likely project issues.

A review of literature on projects was used to determine if there were any similarities that supported the findings from the grounded theory study. It was discovered that there are many sources of reference in the literature that support the issues identified in the grounded theory study which form the predictive framework. Thus this validates the use of such a framework of project issues in a project environment.

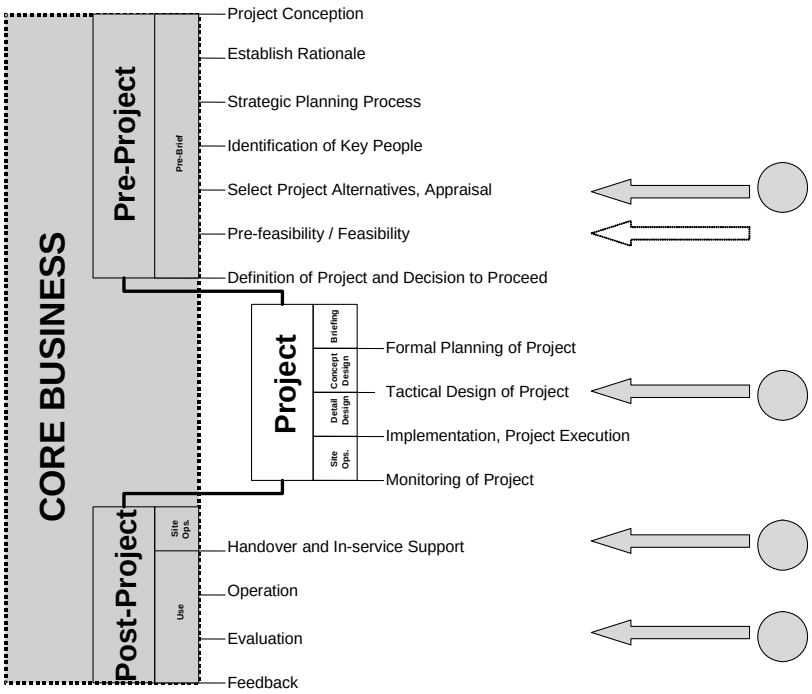
It is evident that if the same tools and techniques associated with VM are being used to extrapolate, analyse and evaluate the issues and these issues are similar regardless of project type then VM may be successfully applied anywhere there is a project whether in construction or in the service sector.

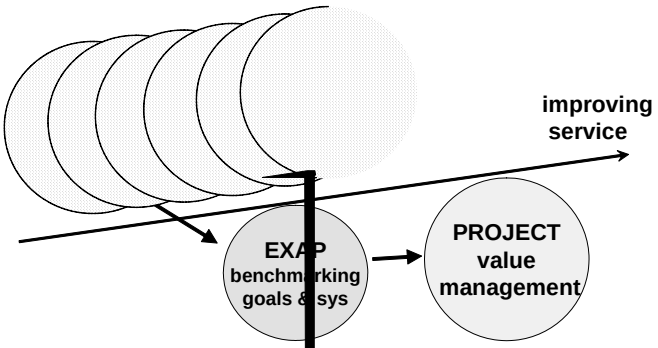
An action research workshop was also conducted to validate and test the project issues that formed the predictive framework and to ascertain the successful use of value management in a local government project. The successful use of value management was determined by asking the workshop commissioner (local authority champion) to comment following the distribution of the workshop report for the project. All the comments made were positive and were very supportive of the VM methodology in local government projects and highlight its usefulness, speed, appreciation of application in the early project stages and the outcome of a VM study; action planning, exploration of a variety of issues and ideas, and a reduction of costs. The action research confirmed the reliability of the predictive framework from the number of similar issues that existed across the predictive framework. Therefore, this can be used to support the identification of project issues in other projects.

The Service Sector Three-Stage Project Model

VM is a project focussed service that relies on interventions or value opportunities within the project life cycle (Male et al, 1998; Bone & Law, 2000; Phillips, 2002; Ellis et al, 2005). The research behind the Three-Stage Project Model explored familiarity with project stages in local government, identified at what stages problems existed, and the project stages where more time was required which resulted in a revised service model which included four value management opportunity points (Figure 4). Local authorities can use this model to identify the best stages in the project to apply value management. Local authorities involved in project work may also use the model to review the stages involved in a generic project. As less than a third of local authorities have used VM and as currently VM is unlikely to be a collective local authority approach education on the benefits of using VM will be required (Hunter, 2006).

Merna (2002) states that; 'An opportunity to improve value may be lost if VM is applied infrequently and likewise if applied too often this may slow down progress of the project.' Therefore, in constructing the model, care was taken to ensure that there were not too many or too few points of application for VM.


CORE BUSINESS
Pre-Project
Pre-Brief
Project
Briefing
Concept Design
Detail Design
Site Ops.
Post-Project
Site Ops.
Use
Project Conception
Establish Rationale
Strategic Planning Process
Identification of Key People
Select Project Alternatives, Appraisal
Pre-feasibility / Feasibility
Definition of Project and Decision to Proceed
Formal Planning of Project
Tactical Design of Project
Implementation, Project Execution
Monitoring of Project
Handover and In-service Support
Operation
Evaluation
Feedback


improving
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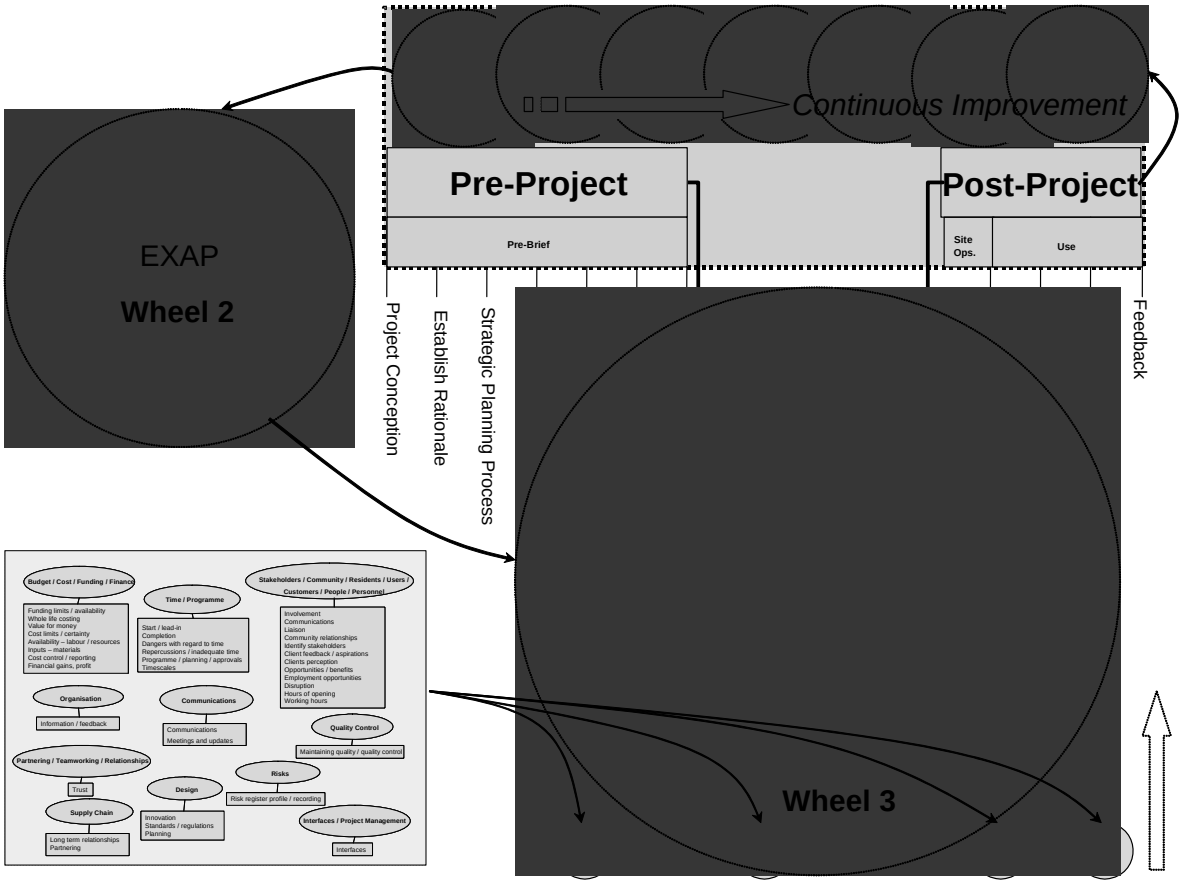

Figure 6 – An integrated framework: Application of the three research outputs

CONCLUSION AND NEXT STEPS

The three streams of research in Best Value, value management, and projects have illustrated how VM can be successfully applied in local government. The Three Wheels Framework includes a VM approach and tools and techniques already used in local authorities to achieve Best Value, and 'The Service Sector Three-Stage Project Model' is a generic model where four VM opportunities for a service have been highlighted to improve project practice within local authorities. The use of grounded theory has derived a theory from the issues which identified that similar issues regardless of project type re-occur and therefore the same tools and techniques associated with VM may be applied.

Overall, the research has contributed three research outputs to the field of knowledge which can be used both independently and as a joint application. The research propositions have been answered by concluding that value management is a management tool of great value in local governments' quest to achieve Best Value.

THE NEXT STEPS FOR VALUE MANAGEMENT IN LOCAL GOVERNMENT

This research work is not simply a promotional activity for the application of VM in the public service sector and has anticipated that there will be a degree of apprehension and a number of obstacles to cross before VM can be successfully integrated into local government projects.

It is evident that Best Value needs to tread carefully to ensure support continues and it does not just become another initiative that tried and failed to win political and public support. Previous tools and techniques introduced in local government such as the well established EFQM model as well as management practices such as value management may be used to support Best Value and ensure its success.

From the literature review and questionnaire study on local government projects, the following areas for improvement have been identified;

- Local authorities have addressed Best Value in different ways. A method of pooling together best practice ideas, models and tools used across all local authorities, with a contribution from each local authority, should be explored to prevent duplication of effort and share best practice. This should then be made available on a local authority best practice web site.
- Current practice within local authorities is diverse and there seems to be little knowledge of how Best Value is addressed across different departments. Research into a central Best Value resource would be beneficial to the local authority in knowledge sharing and communications.
- The benefits of VM need to be shared amongst local authorities to highlight its significance as a method to achieve Best Value. More training is required in its application to promote an understanding of it value and contribution to the achievement of Best Value.
- Performance improvement may be measured in local authorities by using the quality tools outlined in Wheel one of the Three Wheels Framework. This will involve recording the scores from quality tools such as the EFQM model or the Balanced Scorecard as well as the results from key performance indicators. The recording of these scores / KPIs before and after the resulting VM workshop actions have been undertaken will gauge improvement. The ability to do this will only be possible if the local authority or organisation had been using quality tools in the first instance.

From experience in twenty-five live workshops a number of observations have been made that should be considered when applying VM in a service sector project, these are;

- Getting buy-in from senior management / local authority Chief Executives
- Balancing and justifying the cost of the workshop with the benefits gained
- Representation of the client i.e. local authority decision maker
- Determining the customer values using a representative team
- Re-visiting the evolving client / customer values as the project progresses
- Front line staff involvement in pre-workshop information stage or workshop itself
- Use of an independent facilitator not involved in the local authority project
- Lack of knowledge of the use of VM in local government projects

It is recommended that value management may be used as a tool by practitioners instigating projects to support and add value. The Three Wheels of Best Value may also be adapted to suit various organisations wishing to add value to their processes and projects. The Three-Stage Project Model is another tool which may be used by organisations to pinpoint the different project stages and to highlight the likely value management opportunities. In addition to this, the tools and techniques associated with value management may also be used by researchers and academics such as that of the ‘issues analysis’ which is a useful tool described in this paper to extrapolate all the issues pertaining to a subject under study.

Value management is in its early stages of conception in local government and it is hoped that this work will highlight the opportunities of using value management and prescribe a logical framework which can be adopted for compliance with the statutory duty of Best Value.

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ALIGNING VALUE MANAGEMENT WITH CONSTRUCTION PROJECT OBJECTIVES

George Hunter
USA

INTRODUCTION

Worldwide, construction sector value management (VM) still lags it's counterpart in the manufacturing sector. VM was first applied in the manufacturing sector and it was some 20 years later before it began take hold in the construction sector. In fact, the federal mandates in the 1980's were the catalyst that truly allowed VM take root in the construction sector. This begs the question: "What can be done to strengthen the application of VM in the construction sector in order to provide relevant recommendations to the project managers"?

The Harvard Negotiations Project, a foundation dedicated to overcoming disputes between two or more confrontational parties, suggests that the concept of principled negotiation is the key to resolving disputes. Its key elements are as follows:

- Separate the people from the problem
- Focus on the parties' interests, not their positions
- Generate a variety of options before making decisions.
- Objective criteria are needed to evaluate the options.

The above statements should ring true and familiar for those of us involved in Value Management. The project development process for a large construction project involves repeated, arduous negotiations between project stakeholders. Forty years ago there was little or no public input; today it seems there is an endless stream of general public, government entities, politician, the media, etc. providing input and contributing to the decision-making process of construction projects. A project manager (PM) is thus tasked with carrying out a project while obtaining the project stakeholders consensus. How does the PM carry forward a project without finding a solution or so it may appear, that will please all the project stakeholders?

The fourth principle mentioned earlier, the development of objective project criteria, is needed to be integrated into the project decision-making process in order to manage the input from the stakeholders. The successful project managers and value manager, alike, must develop effective and objective criteria in order to have favourable outcomes from our projects and VM workshops.

The identification of these criteria becomes more objective if the criteria can be measured. A criterion with a quantification of measurement in the technical world is called a parameter. A VM workshop should establish project's parameters so that the analysis and output of VE studies are in alignment with the project. This paper describes how to (1) identify key construction sector parameters within VE studies and (2) integrate project parameters into construction sector VE studies. The term project parameter, measurable criteria and project performance criteria will be used synonymously in this paper.

IDENTIFICATION OF CONSTRUCTION PROJECT PARAMETERS

The Project Management Institute (PMI) states: "A project is a temporary endeavour that leads to the delivery of a unique product with definable features and measurable criteria". If we accept that definable features are comparable to the functions in the VM world, then what is the VM equivalent of measurable criteria? As you may have expected- the equivalent is the project parameters previously explained. The next question is how to tie the project functions and these project parameters? The trick is to ask yourself: "How well do the project functions perform?" The relationship between project functions and project parameters is simply that the former defines the objectives of the projects and the latter define how well these objectives are being carried out.

There are two VM methods, in common usage, that tie the project functions and project parameters: (1) Functional Performance Specification (FPS) and (2) the California Department of Transportation (Caltrans) Project Performance Measurements (PPM). Both of these methods recognize that the aforementioned criteria are dependent on the functions. FPS requires that independent criteria be established for every project function to measure the level of performance for each of the project functions. The PPM method establishes measurable criteria for only the basic functions. The FPS method has more application in the establishment of design features and criteria to assist the development of the project while the PPM method is more geared towards providing a system to assist in the intelligent selection of alternatives and other project decision-making processes.

The rest of this paper is based on the PPM function/performance relationship, based on the premise that construction projects on the whole are functionally simple. The basic and higher order, secondary functions of public works projects are identified in the environmental documents' purpose and needs statements. Any substantial changes to the purpose and need, i.e. high-order functional changes, would necessitate an environmental document re-evaluation and the likelihood of substantial delays to the original project. Furthermore the complexity and area of concentration for most construction project lies not in the identification of the functions but measuring the performance (and costs) of those functions.

My initial exposure to project parameters was based on the project management philosophy of managing scope, schedule and budget. This is based on the Project Management Institute literature which explains that project scope drives project costs and project schedule. The PMI approach led to the organization of Caltrans' Project Performance Measurements system. The PPM is a type of quality modelling, also known as WRC (weighting and rating of criteria) which divides the project criteria into project scope components (Highway Operations, Environmental Impacts, and System Preservation) and project delivery components, they are called in performance criteria to distinguish them from cost criteria. The project measurement results in a project value index- a ratio of performance criteria rating to project costs , giving visibility and quantification to project parameters.

Since my initial experience with PPM, I have found a need for a more comprehensive list and organization of the criteria. The following describes comprehensive five categories of construction sector project parameters:

1.0 What are the key operational characteristics?

2.0 What service life is needed and achievable and for the facility?

3.0 How does the project impact the environment?

4.0 What timeframe is required to deliver the project?

5.0 How will the facility be procured?

These parameters identify construction project drivers; the ability to efficiently define them is at the heart of an efficient, organized development of infrastructure projects. Without them the project planning and design can cause an imbalance in the decision-making process for project alternatives.

The following suggested expansion of the five main categories of project parameters:

1.0 What are the key operational characteristics?

1.1 Define the key operational criteria for the users of the facility and how well do they perform?

1.2 Do the established operational criteria represent the benefits to the users?

1.3 What is the variability of this performance over time?

1.4 Over what period of time can an acceptable performance level be maintained?

1.5 Can the desired operational performance levels be phased over time?

This category of criteria measures the project's objectives for the intended users for a list of suggested operational criteria for a highway facility. It should be noted that a

construction project must adapt these operational characteristics to the unique aspects of the site. For example each site constrains the operation characteristics of the proposed facility based on the actual site conditions of water, air and soil

2.0 What service life is needed and achievable and for the facility?

- 2.1 What service life is the facility being designed for?
- 2.2 What annual maintenance must be done service life?
- 2.3 What interventions (major repairs) are needed to keep the facility in a good state of repair
- 2.4 How does the proposed facility's service life compare to the system it exists in (this applies to facilities that are part of a system or network)?
- 2.5 Are there any recent technological breakthroughs that may impact the decision of service life selection?

This category is often categorized as O&M or life-cycle costing. Maintenance investments are required to maintain a certain service life that operates at the designed level of performance for the facility.

3.0 How does the project impact the environment?

- 3.1 What are the regulatory requirements?
- 3.2 How does the project impact the environment (natural environment, physical environment, human communities and social impacts, etc)?
- 3.3 Can the impacts be measured and what procedures must be employed to determine the impacts?
- 3.4 If the project is not built what is the impact to the environment?
- 3.5 If the project is built, can the impacts be avoided?
- 3.6 If the project is built, can the impacts be mitigated?
- 3.7 What long-term regional strategies are in place improve the environment as opposed mitigating the spot impacts of the project?

This category recognizes that the intended users are not the only stakeholders of the project. Project decisions must also include the impact of the new facility upon the non-user.

4.0 What timeframe is required to deliver the project?

- 4.1 When is the project needed?
- 4.2 Are the occupancy conflicts with other projects?
- 4.3 What activities drive the schedule-(CPM)?
- 4.4 What costs are associated with the schedule (escalation, opportunity costs)
- 4.5 What is the construction schedule?
- 4.6 What are the project development (preconstruction) requirements-what are the necessary steps needed to provide the construction bid documents?
- 4.7 Is schedule compression viable? What does it cost in construction costs?
- 4.8 What variances in project schedule can be expected?

This category of parameters recognizes the importance of the time to deliver an operational facility to meet user demands. The timeframe for project delivery should include project planning, design, construction and commissioning. It should be noted that in modern times pre-construction activities are consuming more and more of the projects' capital budgets. In some cases up to 50% of the capital budget can be consumed by pre-construction planning and design

5.0 How will the facility be procured?

- 5.1 What level of capital investments are required to deliver the project scope in the desired timeframe?
- 5.2 Is the investment justified?
- 5.3 How will the project to be approved, funded and carried forward?
- 5.4 How is the project to be funded (public funds, private funds, user fees)?

5.5 What procurement options are available?

5.6 What is the ratio of project development/ construction costs?

5.7 What is the cost to obtain the capital?

5.8 How will the marketplace react to the advertisement of the project?

5.9 How will the maintenance and operations for the facility be procured?

5.10 What marketplace factors will impact the cost (and delivery) of the project?

5.11 What variances in project costs can be expected?

APPLYING THESE PARAMETERS IN VE STUDIES

Pre-study

A good way to begin integrating the parameters into the workshop is to develop and route questionnaires during the pre-study phase. This questionnaire should be directed to all key project stakeholders with a request to identify and determine the hierarchy of project parameters. This in turn will allow the VE study allocate study time and include the involvement of key project development staff according to what is important to the project. The questionnaire can be based on the Table 1, provided above, or based on your own interpretation of the parameters espoused in this paper. It should be noted that the end product of the questionnaire could be the final list of project parameters that in a global sense measure the effectiveness of the project alternatives for the project stakeholders.

Workshop

The application of project parameters can take two paths:

1. use the established defined criteria with quality models traditionally used in VM workshops or
2. apply these parameters in the same manner as described by the Caltrans PPM methodology. This methodology is defined by the following steps:

This category is normally described as Project Cost. However the term procurement is more appropriate as it captures those factors that influence project costs such as: supply and demand, interest rates, inflation and procurement models. It recognizes that there are procurement models and strategies that can impact project costs (and time) as much as the technical scope.

This list is based on the five main categories of project parameters based on the author's background and experience; the author encourages the reader to modify the list based on their experience and understanding.

- Establish the key project (non-monetary) performance criteria for the project;
- Establish the hierarchy and impact of these criteria upon the project;
- Establish the baseline of the current project performance by evaluating and rating the effectiveness of the current design concepts;
- Identifying the change in performance of alternative project concepts generated by the study;
- Measure the aggregate effect of alternative concepts relative to the baseline project's performance as a measure of overall value improvement.
- Divide the Project Performance aggregate score, identified above, by the Project Costs.

The PPM procedures work with the same categories as described in Table 1, albeit organized differently. One key difference is that PPM does not explicitly recognize that procurement strategies impact project costs. Step A to C. occur during the Information Phase with all project stakeholders' present the design concept(s) to the Value Team leading to a consensus by the participating project stakeholders to validate the performance attributes and requirements; defining performance scales; and identifying the performance and value of the baseline concept. Steps D and E take place during the Development Phase while Step F integrates the performance of the selected criteria

organized from the five main categories. It is similar to the scoring of the quality models / WRC procedures with a major difference: costs are kept separate from the other non-monetary criteria.

One performance criterion can be impacted by one or more conflicting performance criteria. A trade off analysis should be carried out to optimize the relationship between them. . This trade-off analysis is often not casually contemplated by Project Development teams, providing an opportunity for the VM workshop to add project value. In the Caltrans PPM system this trade off is made between the non-monetary criteria (categories 1 to 4 in Table 1) and project costs.

CONCLUSION

The VM workshop provides a unique opportunity to assist the project manager with the identification, measurement, integration and trade-off analysis of the key project parameters. In developing these parameters, a good VE practioner must be cognizant of major differences and importance of these parameters within different types of construction projects. In the end, this effort aligns the project objectives with the study objectives for an end result that allows the project designers and sponsors to use the VE workshop to improve and balance the operations, service life, environmental impact, delivery and procurement of the project intelligently and efficiently. If project objectives are aligned with value engineering tools and techniques - VM workshops will be more effective in adding value to construction projects.

DEVELOPMENT AND APPLICATION OF VALUE MANAGEMENT IN KOREA

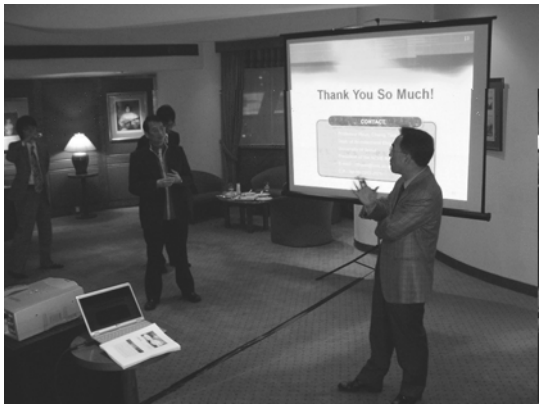
Prof. Chang T. Hyun and Prof. Tae Hoon Hong
University of Seoul, Korea

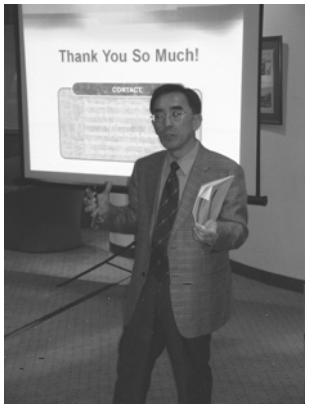
Value Management (VM) has been widely adopted by both manufacturing and construction industries in Korea. The HKIVM invited Prof. Hyun and Prof. Hong from Korea to give a seminar called "Development and application of value management in Korea" in Hong Kong Club on 31st January 2007. The presentation was very informative and interesting.

About the speakers

Professor Hyun is the Professor of the Department of Civil Engineering in the University of Seoul. He is the Vice President of the Korea Construction VE Research Institute (KCVE). He is an expert in Construction Value Management.

Professor Hong obtained his B.S. and M.S. in Architectural Engineering from Yonsei University and has professional experience in Multi-family housing and Plant at GS Engineering and Construction Corporation and Geochun Construction Corporation.





HKIVM news and events

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APPLICATION FOR MEMBERSHIP OF THE HKIVM

If you are interested in knowing or joining the Hong Kong Institute of Value Management (HKIVM), please download the membership application form from the Institute's website http://www.hkivm.com.hk. Alternatively, please fill in the reply slip below and return it to the membership secretary of HKIVM.

Membership requirements are as follows:

Member (MHKIVM)	This classification is available to individuals who can demonstrate an acceptable level of knowledge and experience in the field of Value Management. For admission, details on the Application Form are to be completed and copy of CV outlining professional employment, experiences and value management background enclosed. **Value Management Background** incorporating details of VM training and courses in VM process, application and techniques, number of studies, types of studies, role in process, days and dates should be stated clearly in the CV.
Associate Member	The Associate Member classification is available to any individual who can demonstrate interest in the objectives of HKIVM, but may not have had sufficient Value Management experience to qualify as a Member.

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