Value Management: Private Sector’s Perception

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Abstract

Subsequently to the authorisation of Value Management (VM) Circular 3/2009 by the Economic Planning Unit (EPU) in December 2009, more than 50 public projects which exceed RM50 million, had implemented the VM studies in a month period. The aim of the research is to explore the perception towards implementation of VM among the private consultants of the construction industry in Malaysia during these VM implementation processes. This research consists of two main objectives which are to gauge the perception of private sector practitioners towards VM implementation, and to identify the acceptance level of the construction consultants on VM implementation. This research hopefully will provide a new insight towards VM implementation among the private sector in Malaysia.

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1. Introduction

Perception towards VM among the private sector’s consultants is one of the challenges in practicing VM widely. There is a misunderstanding about VM which wrong interpretation as a cutting tool in reducing the construction cost by the professional on behalf of clients. Jaapar and Abdul Karim (2005) mentioned that many in the industry confused VM with cost reduction exercises. Even though, VM and cost reduction exercises have some similarities, but the methodologies use, the objectives or purposes and

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the end results are different in many ways. Those misconceptions among the professionals happen due to lack of knowledge and disclosure on VM.

Besides, the attitude of the designing team also a part of challenge arises in implementing VM. The consultants are reluctant to get involved in VM workshop. For example, the architects perceived VM studies to be criticism of their competence, seeking faults of their designs instead of an improvement towards their design. Hence, they ignored the benefits of using VM in their design (Jaapar and Abdul Karim, 2005 p.2)

This research aims to explore the perception towards VM implementation among the private sector consultants in Malaysia. There are two main objectives in this research. The first objective is to gauge the perception of private sector’s consultants towards VM implementation. The other objective is to identify the acceptance level of the consultants on VM implementation. The acceptance level includes of awareness and understanding of the private sector’s consultants towards VM.

Literature Review
This section discussed critically on what are development of VM, definitions of VM, role of construction consultants and perception and value.

1.1. VM Development

VM concept evolved in 1940s with the term Value Analysis (VA) due to shortages of materials caused by the World War II (Jaapar, 2006). Hence substitute materials used on the manufactured products, and it decided that the substituted materials had the direct bearing on the cost of overhead as well as it also managed to increase the product performance (Norton & Mc Elligott, 1995).

In 1954, Value Engineering (VE) term had used instead of VA due to its application in the US military (Ashworth & Hogg, 2000). In 1980s, the UK construction industry changed the term from VE to VM due to its core activity to fulfill the requirements for the examination of value instead of cost and by incorporating function analysis as the core activity (Kelly & Male, 1992).

In Malaysia, only a few years ago, Jaapar (2006) stated that the VM is still at the early stage of its evolution as it had only started to be used only in 1986 and were without the support of the Government; hence its application was minimal. On December 2009, the authorisation of Value Management Circular 3/2009 by EPU has made all public projects exceeding RM50 million to implement the VM studies resulted in massive impact to the government projects’ procurements process. In a month period, more than 50 projects which exceeding RM50 million had implemented the VM studies which has resulted in 23.53% savings from the total cost (Ahmad, 2011). On May 2011, the EPU published the Manual of Value Management Implementation for Government Projects in order to provide a proper guideline for the key players of the construction industry to implement the VM studies.

1.2. VM Definitions

VM is a rigorous, system effort to improve the value and optimize the cost of projects, facilities and systems (Che Mat, 2002 p.2). He also argued that VM generates these cost improvements without sacrificing the needed performance levels. This is a creative way of working together in achieving clients’ requirements. This has further supported by Jaapar (2006), who defined VM in the Malaysian construction industry as a multidisciplinary; team oriented, structured, analytical process and systematic analysis function, which seeks best value via the design and construction process to meet client’s perceived needs.
Internationally, VM is an emerging paradigm that focuses on continuously increasing the value provides to the client. VM is accepting widely as an important tool in recent management of construction projects (Ellis et al, 2005).

Hayles et al. (2010) has emphasised that VM has become a proactive, problem solving or solution seeking process, which can be used to enhance the functional value of a project by managing its development from design concept to operational use, and eventual decommissioning through structured, team-oriented and open-dialogue exercise, which recommended alternatives or confirm existing solutions, and appraise subsequent decisions, by reference to the value requirements of the client.

1.3. Private Sector’s Consultants

A team has defined by Hellriegel et al. (1998) and Cook et al. (1994) as a group with complementary skills, competencies and knowledge, which committed to a common purpose, set of performance goals and approach for which they will hold themselves mutually accountable. Male (1991) has stated that, project teams in the construction industry can compromise people either from within the same organisation or from the different organisations. While, the VM team is comprising of both including the stakeholder and project team.

Belbin (1993) has defined a team role as a tendency to behave, contribute and interrelate with others in distinctive ways. As VM is a multidisciplinary approach, the success of the team is lies in the characteristic behaviour of one person to others or to the progress made by the whole team.

Kaufman (1982) stated that working independently; the resolution of a problem by one discipline becomes the problem to another. This issue also had noted by Thiry (1997), by providing the solution of using a multidisciplinary group, which is essential for creating completeness on proposed alternatives. Thiry (1997) added further that a complete VM team includes those who “own” the problem or opportunity (supplier); those responsible for its resolution (supplier’s experts and consultants); and those who be impacted by its decision (buyer).

As VM is a team activity, the consultants are a part of the VM team besides the stakeholder of the project. Hence, for this research, the consultants were the respondents who had experienced the VM studies. They had selected from different disciplines, which are the quantity surveyors, engineers, project managers and architects who have experienced the VM process repeatedly in order to provide better and holistic view towards the VM process.

1.4. Perception and Value

Henstchel et al. (1986) has stated that perception abides by general law, yet it is at the same time a highly individualized phenomenon. The aspects of perception includes view perception as an event over time rather than as an instantaneous reaction to outside stimulation; and consider perception as an event the roots of which are to be found beyond the restricted confines of awareness, often closely intertwined with observer’s private world of memories and emotional experiences.

The same researchers, Hentschel *et al* (1986), also emphasised that perception is not a momentary final product, but a process extended in time and culminating in conscious representation, and meaning. It also mentioned that perception has less of a central role to play in those conceptualizations which emphasize the action of scientific knowledge.

Bell (1994) defined value as the intrinsic property to satisfy. Later, it further added by Gross (1996), on how the impact of attitudes, beliefs and values are notoriously difficult to change because they are so deeply held. Social psychologies argue that individuals seek consistency between their thoughts, beliefs, values and attitudes, attempting to appear rational to others as well as to themselves. The
psychological discomfort occurs when an individual has made a difficult decision or is experiencing hardship which becoming involved in behaviour that is inconsistent with internal attitudes and beliefs. When a person feels strong internal inconsistencies, this will lead to attitude change.

As VM is a multidisciplinary approach, more than one individual involves in decisions about the value and final product, complexity of decision making comes into play. Hence, value decisions then become particularly dependent on the complexity of perception involved; the context within which judgments about the value and satisfaction made; the number of interfaces that exist between individuals, groups of individuals, organisational units, organisations and firms that decide on value and the benefits and satisfaction derived there from; and power of different individuals or organisational units (Kelly et al., 2004).

Kelly et al. (2004) shows attitudes, beliefs and values lies at the core personality and are deeply holding convictions and orientations about who and what an individual is, their place in the world and how they interact with others (Figure 1). It can be summarised that the opinions operate at the surface of awareness and represent attitudes that are at a much deeper level. Usually, opinions are express by using the verbal statement. While beliefs are representing an individual’s knowledge of the world, which group around attitudes with values providing the judgmental component to attitudes.

![A social and psychological framework for value. Source: Kelly et al. (2004)](image)

Drawing from the definitions, and provided an explanation, the researchers believe that perception is in between “the experienced social world” and “an individual’s psychological boundary”. Perception only can be obtained from the individual that already has experienced the phenomenon itself. The perception is almost similar to opinion where it only operates at the surface of awareness. Even though, the perception and opinion only give surface illustration, however, it does affect the belief and attitude of the individual. Hence, give impact towards the final value of the products.

2. Research Methodology

This research is categorising as a qualitative research. According to Lashkari (2010), qualitative research used to answer questions about the complex nature of phenomena, often with the purpose of
describing and understanding the phenomena from the participants’ point of view. Commonly, the qualitative research is more likely to end with tentative answers or hypotheses about what be observed. The instruments of research that used are case study, observation throughout the VM workshops and semi-structured interviews among the consultants that involved personally with VM case studies. The scope of study is limits to the organisations that successfully lead the VM implementation.

The observation process is helpful to determine the difference between theories and practices. The problem can clearly find, and information needed could be specified from the observations related to interviews with the respondents. For this research, all the case studies had observed by the researchers throughout the VM studies. As the result, the VM process and the VM participants’ behaviour towards the process had recorded.

For this research, the semi-structured interviews questions had used as a guide to the researchers during the interview session. However, the order of the questions changed by the researchers when necessary in order to make the interview process to be more conversational. The researchers were able to obtain in-depth information by doing this. At the same time, the researchers observed behaviour of the respondents as they were more open towards the interview process. The interview process carried out twice to the selected VM participants which were before the workshops start and when the VM process end in order to gather their perceptions before and after the VM process.

3. Finding and Discussion

The following are the summary of the observed projects that had implemented VM studies and summary of the VM participants’ behaviour throughout the workshop.

The five observed projects owned by one of the Malaysian Government Link Companies (GLC). The details outcome for each project is shows in Table 1. It shows that the saving percentage is different for each project, and total saving for five projects is 29.37%.

For example in Case Study 5, according to the VM facilitator, the cost for the project can be more optimised parallel to the function of the each element in the project. However, due to the key personnel of the project did not attend the workshop; it was not able to be discussed thoroughly. The VM facilitator believed that there were more unnecessary cost that hidden in the project.

For Case Study 2 and 4, the percentage of saving is higher than other projects due to highly committed VM participants. The VM participants dedicated their energy in ensuring that unnecessary costs be eliminated hence resulted in cost optimisation.

Even though, the almost all of the key personnel for the Case Study 1 and 3 participated in the workshops; however, the percentage of saving is not high as the Case Study 2. This is because, the advice from the expertise during the workshop to stick with the original specification for the certain elements. Other alternatives that had proposed by the participants were not suitable for the projects due to the conditions and nature of the site. This shows the important for the right person to be in the workshop that was able to the advice accordingly.
Table 1. Summary of Case Studies

|                  | Case Study 1 | Case Study 2 | Case Study 3 | Case Study 4 | Case Study 5 | Total  |
|------------------|--------------|--------------|--------------|--------------|--------------|--------|
| Participants     | 25           | 23           | 23           | 10           | 7            | 88     |
| Before VM (USD)  | 106,909,441.50 | 89,730,050.63 | 19,990,322.04 | 157,660.67   | 346,885.67   | 216,849,247.00 |
| After VM (USD)   | 80,667,582.90  | 54,855,049.52  | 17,452,107.48   | 104,056.04   | 291,257.82   | 153,064,085.26 |
| Saving (%)       | 24.55        | 38.87        | 12.65        | 34.00        | 16.03        | 29.41% |

Note: RM / 3.17 = 1USD

The following Table 2 has details the behavioural observation of the VM workshops’ participants for the five observed projects that had implemented VM in accordance to the social and psychological framework for value by Kelly et al. (2004).

Table 2. Summary of Behaviour

| Factors   | Behaviour                                                                 |
|-----------|---------------------------------------------------------------------------|
| Opinions  | In all the observed VM workshops, the participants were truly dedicated and responsive towards the process by ensuring their opinions and experiences incorporated with the VM process. |
| Beliefs   | There were participants that believed they cannot fully participate during the VM workshop as it was their first time experiencing the VM studies. |
| Attitudes | In general, mixed attitudes were discovered. Even though, they were positives towards the VM process, but towards the end of the workshops, it observed that a few of the participants leave before the workshops end due to their other commitments. |

For semi structured interviews process, eight key personnel selected from the five observed projects. The reason why these eight key personnel chosen for the interview is because they were the VM workshops’ participants that repeatedly involved in the VM workshops for the five observed projects.

Through the interviews, it discovered the reasons why the private sector’s consultant not interested in VM. During the first round of the semi structured interviews which conducted before the VM workshops were carried out, 63 percent of the private sector’s consultants did not fully understand the VM concept as their impression of VM were more towards cost cutting exercise which will eventually reduce their fees. The rest of the interviewees or 37 percent of the interviewed consultants understood the VM process and philosophy and determined the meaning of VM on their own views. The following Table 3 has details the reasons why the private sector’s consultants not interested in participating VM process.

Table 3. Summary of Reasons

| No. | Reasons                                                                                         |
|-----|-------------------------------------------------------------------------------------------------|
| 1   | Many consultants do not understand the philosophy of VM and misunderstood VM study as a cost cutting tool |
| 2   | Involve a long time for the fully participate                                                   |
| 3   | VM workshop does not give immediate benefits to the consultants                                 |
| 4   | The VM exercise eventually will reduce their fees                                               |
| 5   | The consultants usually busy and do not have time to attend the VM workshop                    |
However, after the VM workshops completed, all of the respondents agreed to implement VM in their future projects because of benefits that their future projects could gain. From the respondents’ opinion, it discovered that time constraint was the most popular reason why the private sector’s consultants did not want to get involve in VM workshop. VM workshops have known to take up to a week for the process. Only 37 percent of the respondents aware about the VM circular and they said that it was a tremendous achievement for VM in Malaysia and a reliable guide, for the key players of the construction industry to learn more about VM. Most of them has involved in VM only because of the requirement from the client of the projects. Based on the respondents’ experience, most of the private sector’s consultants had negative and sceptical perception towards VM implementation or workshop during the initial stage of implementation. However, they would change their perception after the VM process completed and support the VM studies.

In Table 4 below has details summary of the consultants’ perception towards VM from the VM facilitators’ point of view.

Table 4. Summary of the Consultants’ Perception

| No. | Perceptions |
|-----|-------------|
| 1   | Before attend any VM workshop, the consultants’ perceptions are negative; they thought that VM workshop is only in cutting their project budget. Towards the end, they understand that VM has optimized their project cost. |
| 2   | Initially, the consultants are sceptical, and some did show their negative feedbacks. They turned around after the study completed. |
| 3   | Various perceptions accept from the consultants, but they will change their perception after the VM process completed. |

4. Conclusion

As a conclusion, it discovered that the perception of private sector’s consultants towards VM is sceptical and negative during its initial. This is due to lack of VM knowledge and do not have experiences with the VM workshops. However, once they experienced the VM studies, the perception towards VM will change due to its benefits produced by the VM process. Based on interviews with the key personnel, it can be concluded that the acceptance level of VM among the private sector’s consultants differs compared to public sector agencies due to lack of understanding and knowledge on VM. The understanding from the private sector’s consultants towards VM is minimal due to the misconception towards VM that the exercise purely concentrates on cost cutting. Most of them also do not aware about the VM circular that has been published by the EPU on 2009. This is because they only involved in the VM studies due to the requirements stipulated by the client. It was discovered that the perceptions of the private sector’s consultants changed after they experienced the VM study. Hence, learning by experiences plays a crucial role in ensuring better understanding towards the VM concept and applications. It is recommended that, in order to get a balance VM practices between public and private sectors, more exposure are required towards VM in term of information, knowledge and VM experiences. Even though, this research had discovered the perception of private sector’s consultants towards VM, however, it was only focused on one organisation and not covered other consultants that had experienced VM within other organisations. For further research in the future, it is recommended to undertake to study the acceptance
of VM among the project team that undergo the VM process either in public or private sector with wider sample of respondents.

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