The Development of Value Management Implementation Plan for Sustainable Facilities Management Practices

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ABSTRACT
This research basically is to understand and identifies the contribution of Value Management (VM) Practices for Sustainable Facilities Management (SFM) in Malaysia. It is believed that VM has been practised for many decades all over the world, however, an assumption was made that VM is not a widely used practice in SFM in Malaysia based on the preliminary literature review conducted. However, subsequent to the issuance of the VM Circular 3/2009 by the Economy Planning Unit of the Prime Minister’s Department, Malaysia, VM has received better acknowledgement in Malaysia. SFM on the other hand, is important because typical buildings consume more resources and energy than necessary, consequently it will negatively impact the environment and generate lots of waste. Thus, this research is to examine VM characteristics that relate to facility managers’ objective to implement SFM practices in order to establish a systematic framework of VM specifically in the context of SFM practices. It can be summarized that this research has a great potential and benefits to the society, industry as well as the public especially in Malaysia. This research also would serve as a crucial point in developing the evolution of the VM aspects in a facilities management (FM) activities which would support the government transformation plan.

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INTRODUCTION

According to Olanrewaju, A. A. [13], one of the major functions of facility management is to ensure that building projects receive adequate maintenance in order to continue to function efficiently and effectively to support the organisation’s corporate objectives. Therefore, the VM characteristics that related to facility managers’ plan should be understand in order to implement SFM practices. According to Jaapar, et al. [3], VM has received better acknowledgement in Malaysia subsequent to the issuance of the VM Circular 3/2009 by the Economic Planning Unit (EPU) of the Prime Minister’s Department, Malaysia recently.

Thus, this research aims to identify the barriers and commitment of FM professionals to the sustainability agenda through the practice of SFM and to determine the understanding of sustainability discourse among facility managers. The end result is to develop the VM characteristics and propose the implementation plan for SFM practices. In other words, identify the VM characteristics are significant to establish the SFM practices. There is therefore the need for research to examine those aspects that has not been studied in the diverse environment of Malaysia. Furthermore, results from this study is to contribute towards gaining insights into organisational in Malaysia in relation to sustainable values, governmental initiatives and environmental legislation. In addition, the results will provide information on SFM practices such as advantages, difficulties, conflicts and barriers in using sustainable design and management guidelines and in implementing sustainable strategies. Moreover, the results of the study is to suggest effective methods and supporting systems to implement a sustainable workplace and environment from the perspective of facility managers who are executing sustainable practices in the field. Finally, the results will lead to the diffusion of SFM practices especially in Malaysia.

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2.0 Problem Statement:
In 2014, Elyna and Pitt, described the application of traditional management as lack of understanding in FM procedures and this continue to hamper the growth of the FM industry especially in Malaysia. In accordance, Elmuallim et al. [6] argue in their article about the practice of SFM that “facilities managers are in the forefront of delivering sustainable assets management and hence further the venture for mitigation and adaptation to climate change. But the overwhelming barrier for implementing sound sustainable FM is the lack of consensual understanding and focus of individuals and organizations about sustainability”.

Surprisingly, the sustainability movement has spread throughout various communities, industries and organisations. As mentioned sustainable issues are become important in FM since typical buildings consume more resources and energy and negatively impact the environment and generate a large amount of waste. As Atkin and Brooks [4] explain, the element of sustainability is the biggest impact of the application of FM process, which with the strong management and strategic facilities, the infrastructure and resources of an organization can be guaranteed to function and durability in the long run. Shen and Yu [8] stated that “VM is a proactive, creative, problem solving and problem-seeking task, which maximises the functional value of a project by managing its development from concept to use”. Thus, responsiveness of FM teams on sustainability issues can be raise by VM practices and especially has built confidence in Malaysia scenario that VM is crucial in sustainability management.

3.0 Objectives of the Research:
This research is designed to study on the VM characteristics and how it can be apply for the SFM in Malaysia. Thus the aim of this study is to establish a systematic framework of VM specifically in the context of SFM practices. In order to achieve the aim of the research, the objectives are stated as below:
1. To identify the value management practices characteristics.
2. To investigate the importance of value management to the SFM.
3. To propose the implementation plan for executing the VM characteristics for SFM practices.

4.0 Literature Review:
To find the predictable VM characteristics, this research is to examine what aspects that facility managers perceive as the relative merits of sustainability and what kinds of difficulties they deal with when they implement sustainable strategies in public FM. In addition, the degree of importance of SFM and facility managers’ intentions of adoption of SFM will be investigate. Thus, this research is to study the recent development of the VM characteristics, and recommends probable techniques forward for improvement by focussing on its use specifically in the SFM.

VM was first used in 1986 and Jaapar [2] identified that the use of VM in Malaysia is still in its infancy. It can be stated that the use of VM (VM) is the least (perhaps in Malaysia) without government support. In order to deliver a proper guideline for the key players of the construction industry to implement the VM, the Malaysian Economic Planning Unit (EPU) has issued the Manual of VM Implementation for Government Projects in May 2011. It can be seen after the implementation of VM studies, caused in huge impact to the government project’s procurement process due to the approval of VM Circular 3/2009 by EPU. This VM has made to all public projects exceeding RM50 million started on December 2009. Ahmad [1] identified the 23.53% of the overall cost savings of over 50 projects exceeding RM50 million during the execution of a VM within a month.

4.1 VM Definition:
VM in a broad term by Oke and Ogunsemi [12] is “a systematic and multi-disciplinary process directed towards analysing the functions of projects from its inception to completion and commissioning (through auditing or examination)”. In the following year, Shen and Yu [8] claim that “value management is an structured function-oriented systematic team approach directed at analysing the functions and costs of a system, supply, equipment, service or facility, for the purpose of enhancing its value, through achieving the required functions specified by the clients at the lowest possible overall cost, consistent with requirements for performance”. Thus, it can been stated that VM as an integrated practice was important to reach better a cost and return on investment at lowest possible of overall LCC. In other words, VM is a systematic multidisciplinary works or means made to enhance the value of a construction project in many other ways than just cutting on costs. The more interesting is that the aspect of VM is currently attracting more and more attention in the construction industry. Many stakeholders are increasingly enquiring and demanding the use of VM during the key stages of the construction projects.

4.2 SFM Definition:
Definitions of sustainability on the other hand, in the context of FM operations are sparse. Price [14] considered SFM to be a method of managing facilities that meet the needs of the current client and end user
without compromising the ability of future generations to meet their own needs. SFM includes work to ensure functionality of the built environment by integrating people, place, process and technology to withstand desired conditions, uses, products, values and services from long-term and ecological views. According to Koukiasa [10], SFM can be implemented to turn result in lower operation and maintenance costs for the facility by using energy-efficient lighting to control and reduce energy usage and greenhouse gas emissions. Moreover, SFM practices may also include using low-flow plumbing fixtures to reduce water use and using recycled and locally sourced building products in the construction of the facility. In this study, SFM refers to sustainable management practices in FM work areas. According to the International Facility Management Association (IFMA), FM is a profession to ensure functionality of the built environment by integrating people, place, process and technology. Therefore, effective SFM practices will provide enormous benefits to the environment and its sustainability.

4.3 Facilities Managers' Sustainability Responsibilities:

Recently, it was noticed a change towards the necessity for FM to create added value previously the main focus of FM has for a long time been on cost reductions. Hence, there is a need to improve our understanding of in what way FM can become more effective and add value to the core business and different stakeholders both from an academic point-of view as well as in daily practice. Therefore, Elmualim et. al in 2010 points out that there is a need to develop new ways of working to meet sustainability criteria is of increasing importance and the need for sustainable FM and skilled facilities managers to carry out this function.

"Malaysia has put great focus and emphasis on the development of FM particularly in public sector. Encouragement towards resolving FM issues and problem are being seriously looked at for better realisation. A proper and more systematic monitoring of facilities are also in the final implementation. Holistic approach towards integrating effort and collective responsibility is now the main agenda for greater performance of FM in Malaysia." Kamaruzzaman, S.N. and Zawawi, E.M.A. [9]

As mentioned, facilities managers are in the forefront of delivering sustainable assets management thus the lack of consensual understanding and focus of individuals and organizations about sustainability must be urgently addressed. Therefore, it is important to investigate how exactly public facility managers have adopted SFM practices in the field.

5.0 Methodology:

Research methodology explains the techniques used to collected and analyse the data. In the collection of data of this research, mixed method approaches are used. Primary data collection such as interviews and questionnaires are necessary in order to identify and analyse VM practices.

5.1 Literature Review:

To observe the fundamental elements of VM, literature survey will be conduct together with related framework, tools and guidelines as well as research reports published in journals and professional bodies.

5.2 Interview:

In depth interviews were conducted with professionals from VM and FM fields respectively. The questions are designed mainly in determination of the VM characteristics for SFM practices.

5.3 Questionnaires:

Subsequently, questionnaire survey will be using purposive sampling. Expertise in FM organisations will be respondents. Purposive sampling are useful for study in looking for fundamental elements or specific purposes.

6.4 Analysis Data:

Data from the questionnaires will be analysed through quantitative methods of SPSS (Statistical Package for the Social Sciences) in order to identify, classify and sort the elements of the VM into major categories in meaningful sequence and equal distribution weightage. Results from the interviews and literature will also be interpreted to achieve the objectives of the study. The outcomes are expected would be useful in determination of the VM characteristics for SFM practices.

Conclusion:

"VM is a structured and organised process which involves multiple disciplines. It is an analytical process which seeks to achieve value for money by analysing the functions of a project and it is not merely a cost cutting exercise. VM can be introduced at any stage of the project development life cycle but it is more beneficial if it is implemented early on. The reason is that the cost to make changes is less and the cost reduction potential is greatly increased." Coetzee [5]
By having this framework, it is expected that the results of the research is to propose an effective approaches and supporting systems to implement for a better sustainable workplace and environment from the perspective of facility managers who are executing sustainable practices in the field. Basically, this research hope to provide information on SFM practices in terms of advantages, difficulties, conflicts and barriers in using sustainable design and management guidelines and it’s implementing sustainable strategies. In addition, the results of the research sought to propose effective approaches and supporting systems to implement a sustainable workplace and environment from the perspective of facility managers who are executing sustainable practices in the field. In other words, the results of this research hope to contribute to gaining insights into organizational in relation to sustainable values, governmental initiatives and environmental legislation.

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REFERENCES