The Importance of Facilities Management in Value Management Process in Malaysia

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Abstract—This paper reports a systematic review of the importance of facilities management in the value management process in Malaysia based on eleven papers from 1992 to 2015. The findings identified a wider understanding of facilities management which covers all aspects of the environmental control, safety, health, space, property and support services. In term of value management, it is essential in delivering sustainability to help clients achieve their requirements and maintaining a good relationship between the value and client. This research paper apparently used the qualitative approach. The literature has been collected and compiled from various publications and also previous studies prior to the study area. This review tends to highlight better value for projects, product, and services through the importance of facilities management. This process of value management can be used as feedback and guidelines for the future.

Index Terms—facilities management, Malaysia, value management

I. INTRODUCTION

In a world of rapid change, facilities management (FM) is responsible for coordinating all related to planning, designing, and building management including furniture, equipment and systems in order to enhance the ability of the organization to be successfully competitive [1]. Meanwhile, value management (VM) process is responsible for assuring the process meets the client's requirement. So the process is appropriate for complex projects involving several disciplines and experts as it is an iterative process. The practitioner can practice and learn how to find out under what circumstances the project can safely adopt the value process and under what condition it is not necessary. VM is defined by [2] as a service that maximizes the functional value of a project by managing its development from concept to use through the audit of all decisions against a value system determined by the client. The review question is there a specific guideline in facilities management role and what are the connections between facilities management and value management. Other than that, what steps can be

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undertaken by practitioners such as improve reliability, reduce production costs and reduce time to market.

II. FACILITIES VALUE MANAGEMENT

The strategy that was used to search for primary studies including assessment of facilities management performance in higher education properties paper journal, engineering, construction and architectural management paper journal, development of facilities management in facilities Malaysia, management in Malaysia: practice. Understanding the development and implementations of value management in public projects, value management in the Malaysian construction industry: addressing a theory and a practice gap and lastly value management: the private sector perception. Awang et al. [3] have identified five areas of FM competencies required such as financial control and management of change, support, user interfacing and maintenance operations to realize the organization's mission. In addition, there are thirteen proposed FM competencies for the FM managers should be noted which issues related to the building design visionary, management, environment, marketing, monitoring, project management, process facilities management, real estate portfolio management, relevant laws, research and analysis, risk management, stress management and time management [4], [5].

III. FINDINGS

A. To Assure the Sustainability in the Value Management Process

A balanced approach can be promotes by sustainability with regard to the need to continue in business but not seek profitability the needs of the society or the expense of the environment [6], [7] responsibility for their management allocated to the organization best able to fulfil the role. In link with facilities management, the most important is performance. Beyond the core business, the performance of the facilities must be considered in relation to outcomes. Some types of organizations may require more technical expertise than others and this may have an impact on professional discipline from which the

FM managers selected the vital ingredients are to know the business and be able to manage it well. According to [8], it is important to establish a specific boundary, which limits the influence of VM on the sustainability vision such as time constraints, present scope and interest of study, where different depending on the type of project and the different time of value management are carried out. Abidin & Pasquire [6] have identified that VM practices have the potential to deliver sustainability in projects because of the diverse use of effective processes, facilitated environment, strategic timing, professional disciplines and stakeholders, and knowledge resources. Before important decisions can be made, VM should ensure that sustainability is brought to the forefront. It can reduce conflicting interests between social issues, environmental and cost. Positive interactions between VM facilitators, clients and team members can help with commitment to sustainability. Thereby, knowledge of sustainability can be disseminated faster. VM has many techniques that can be used to meet client's needs and to achieve the best solution at the lowest cost. It is possible that sustainability can be enforced without any increase in cost, with the ability of VM to eliminate unnecessary costs. It therefore shows that sustainability can be economically viable [6].

B. Better Implementation of Value Management in Public Projects

According to Jaapar et al. [9], there were sceptical towards the value management concept but changed towards the end of the value management workshops and accepted needs of value management implementation to the project's benefits. The research also encountered the challenges faced by the value management participants during value management studies such as difficult to handle people with different background, characters, values and perception, difficult to achieve the satisfactory outcome of every party involved in the workshop and the provision of insufficient information. It is clear that the importance of facilities management for continuous improvement of service quality especially in the construction industry is to establishing contracting strategies and effective purchasing, creative systematic service appraisal quality and service partnerships, value and risk, formulating and conveying a facilities policy, identifying business needs and user needs, negotiating service level agreements and planning and designing [10]. management roles also concentrate empowering people within the organization so that they are most effective, organizing services to meet business and user needs and promoting corporate identity as well as leveraging the potential of new technologies. Referring to the findings extract from Myeda & Pitt [11] it is clearly stated that the background of facilities management started in 1974. From the focus of maintenance, in order to promote quality service in public sector, the government disseminated regulations regarding the maintenance of building sewerage systems, public roads, public buildings and responsibilities of the public work department. In simple words, in order to implement value management, first, it needs support or

endorsement from the top means the facilities management so that it can manage the organization, do the planning and forecasting, architectural design, workplace planning, allocation, budgeting, accounting and economic justification. There are five elements of FM competencies area including managing people, leadership and management, managing the working environment and managing resources and operation and maintenance [3].

C. Gaining Influence in Economy

The advantages of VM are usually often surprised those who have been involved in the business for years. It includes major enhancements to the considerable improvements in function, improved business procedures, processes, performance and quality, project lead times and value for money [12]. A cost reduction exercise is not intended to consider the value and involves a sacrifice or a compromise to get a lower total project at the lowest cost possible [13]. The main aim of VM is to optimize the value of a project while improving quality and performance requirements. Indeed, the importance of facilities management is first to be clarified which is to gain recognition. Facilities management issues to providing a healthy workplace for creative people, ensuring full utilization of diminishing resources while minimizing the environmental impact, assimilating the potential of new technologies and increase adaptability to changing business needs [14].

D. Benefits of Facilities Management Involvement in the Value Management Process

It is common knowledge that facilities management (FM) as an industry has drawn the attention of many organizations. With the practices of FM in the value management (VM) study, consequently, both the public and private sectors will remain or highly satisfied. The benefits of FM practices in VM study include address sophistication in modern buildings and reducing complexity [15], [16] improve the design output and increase design efficiency [15], [16] achieve cost savings throughout the facility lifecycle [15], [17] increase accessibility to various equipment for maintenance and replacements [17] and better selection of equipment and materials [17]. The relevance of FM functions will also help to have proper addressing of client and FM requirements to achieve satisfaction [17], [18]. Indeed, a pleasant facility perceived by users is the one that can respond to their needs. Similarly, the reliable functions of FM should always be a priority in the VM study to ensure a smooth taking over of facilities [18]. As organization itself beat the challenge to change itself and respond to the areas of operations, products, and services, it would help to minimize abortive work during construction and operation [15], [16].

IV. DISCUSSION

Facilities management is a multidisciplinary work that includes a wide range of activities, responsibilities and extensive knowledge. It is to be referred before beginning the value management process because the process must be done and require support from the top. The Asia Pacific market generally shows the awareness of the impact of facilities management on the overall business and traditional function of property management in FM are low [19]. Lack of understanding of definition and function of FM may be a root issue for FM passive development in Malaysia. FM practices are not guided and often their interests are neglected in business strategy. Due to that, the lack of understanding the facilities management must be cleared in order to assure the process between value and client meets their objectives. It has to come to mind that VM is not a single method but systematic single methods which brought together to identify better value for the benefit of projects, products, and services. According to Green [20], architects perceive value management studies to be a field of criticism of their competence. Many argue that misleading and the lack of standard definition and inconsistent use of the terminology are barriers to VM's extensive use. Managing the facility properly requires business owners to invest in a software application that will allow their FM managers to work with asset maintenance information, log compliance information and large sets of information and each process through the FM lifecycle. With FM, we can properly align the maintenance of the asset and extend the life span of the components in a building or facility as the FM offers cost-effective working processes in the business within the value management, it also offers a smarter working environment using information technology systems and applications, managing a buildings, people, and assets. Besides that, facilities management also integrates business information into one software platform to improve the overall efficiency of an organization and maintaining complete compliance. The management has to understand the relationships for certain particular services, products or business interest for clients. Even for non-commercial clients, there is a reason, activity or process to provide new or refurbished facilities.

V. CONCLUSION

The use of a facilitated workshop is the most appropriate method that will form the client's statement of needs for accessing core information. The workshop provides the time required to properly discuss the project. There are some speculation, evaluation, development and implementation during the workshop. The workshop brings together all key stakeholders from within the project team and client organization. One of the main reasons FM is important is that when businesses are aligning the health, safety and people responsibilities require you to be fully prepared to handle any situation. Best of all, both FM and VM shall be applied through the whole life cycle of a building starting from the early design stage to equip better solutions and output - simply put, to keep away from the problems.

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REFERENCES

- [1] F. Becker, *The Total Workplace*, Van Nostrand Reinhold, New York, NY, 1990.
- [2] J. Kelly, S. Male, and D. Graham, Value Management of Construction Projects, New York: Blackwell Science, 2004.
- [3] M. Awang, A. H. Mohammed, M. S. A. Rahman, S. Abdullah, M. Z. C. Mod, S. I. A. Sani, and N. Hamadan, "Facility management competencies in technical institutions," *Procedia Soc. Behav. Sci.*, vol. 65, pp. 755–760, Dec. 2012.
- [4] M. S. and I. S. M. A.M. Firdauz, "Facility management knowledge development in Malaysia: Added value in hospitality managerial competency," *Facilities*, vol. 33, no. 1/2, pp. 99–118, 2015.
- [5] E. Clark and L. Hinxman, "Developing a framework of competencies for facilities management," *Facilities*, vol. 17, no. 7/8, pp. 246–252, 1999.
- [6] N. Z. Abidin and C. L. Pasquire, "Delivering sustainability through value management: Concept and performance overview," *Eng. Constr. Archit. Manag.*, vol. 12, no. 2, pp. 168–180, 2005.
- [7] Building Research Establishment, "Profiting from sustainability," in Managing Sustainable Construction (MaSC ALP): Accelerated Learning (BR), IHS BRE Press, 2002.
- [8] N. Z. Abidin and C. L. Pasquire, "Revolutionize value management: A mode towards sustainability," *Int. J. Proj. Manag.*, vol. 25, no. 3, pp. 275–282, Apr. 2007.
- [9] A. Jaapar, N. A. Maznan, and M. Zawawi, "Implementation of value management in public projects," *Procedia - Soc. Behav. Sci.*, vol. 68, pp. 77–86, Dec. 2012.
- [10] K. Alexander, Facilities Management: Theory and Practice, 1996.
- [11] N. Elyna Myeda and M. Pitt, "Facilities management in Malaysia: Understanding the development and practice," *Facilities*, vol. 32, no. 9/10, pp. 490–508, Jul. 2014.
- [12] DTI, "Value management in practice," Dep. Trade Ind. UK, 1997.
- [13] R. S. Kaplan and D. P. Norton, "The balanced scorecard: Measures that drive performance," *Harv. Bus. Rev.*, vol. 70, no. 1, pp. 71–79, 1992.
- [14] K. Alexander, "Facilities value management," Facilities, vol. 10, pp. 8–13, 1992.
- [15] A. Enoma, "The role of facilities management at the design stage," Assoc. Res. Constr. Manag., vol. 1, pp. 421–30, 2005.
- [16] K. Tladi, "Evaluating the facility managers's role in project design," University of the Witwatersrand, Johannesburg, 2012.
- [17] H. B. Jawdeh, "Improving the integration of building design and facilities management," University of Salford, Salford, UK, 2013.
- [18] P. A. Jensen, "Theoretical model demonstrating the value adding contribution of facilities management," in *Proc. EFMC* 2009 *Research Symposium*, 2009.
- [19] D. C. W. Ho, E. H. W. Chan, N. Y. Wong, and M. Chan, "Significant metrics for facilities management benchmarking in the Asia Pacific region," *Facilities*, vol. 18, no. 13/14, pp. 545– 556, 2000.
- [20] S. D. Green, "A participative research strategy for propagating soft methodologies in value management practice," *Constr. Manag. Econ.*, vol. 17, no. 3, pp. 329–340, 1999.



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