

Enhancement of OPM3 Risk Management by Using Learning Practices

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Abstract. Construction projects in Malaysia involved two prevailing risks: delay and cost overrun. A mature risk management approach would be appropriate to overcome these risks. In line with the Malaysia Master Plan, construction organizations have to improve their organizational project management performance in order to be able to reach to the satisfactory level. The organizational maturity attempts, in its main goal, to gain higher performance in different project management aspects including project risk management. Organizational Project Management Maturity Model (OPM3) is a maturity model introduced by Project Management Institute (PMI), which proposes continues improvement including all project management nine areas. The correlation between risk management and organizational learning has been highlighted by various researchers. However, the relationship between the two approaches and OPM3 have not determined yet. Furthermore, literature does not introduce any learning practices useful in order to enhance organizational project risk management. Considering the present literature on the subject, this paper proposes a theoretical framework of the correlation between organizational learning practices and project risk management performance regarding OPM3 point of view. Three moderating factors are also presented in the model, namely I. Employees' experience level, II. The organization size, and III. Technological Turbulence is effecting the correlation.

Keywords: OPM3, Risk, Learning, Maturity, Performance.

1. Introduction

Based on literature review, the construction industry projects are usually exposed to a higher degree of risk and face a significant amount of uncertainties (Hadikusumo & Rowlinson, 2004). Construction industry requires taking advantage of learning practices in order to increase project performance (Tserng et al., 2009). Thus, project performance for the construction project is subject to risk factors and most projects failed to deal with the risk with efficiency (Tah & Carr, 2001). The project/ risk manager needs to possess knowledge in order to successfully conduct risk management (I. Dikmen, Anac, Tah, & Aouad, 2008; Tah & Carr, 2001).

The studies conducted on research literatures from various researchers (e.g. (I. Dikmen et al., 2008), (Kutsch & Hall, 2010), (Jia et al., 2011), *etc.*) guided us towards understanding that the present learning practices are closely influence the level of performance (Maturity) of organizations project risk management (focused on OPM3 regarding the performance in this research). However, the lack of proposed proper learning practices which are clearly pointed out to enhance the performance of organizational project risk management is present which is considered as the gap we aim to bridge. Additionally there are moderating parameters influencing this correlation which need to be considered in order to positively benefit from the presence of their influencing effect.

There are different learning practices that could create great advance for organizations to enhance their project risk management performance. The result of the above mentioned enhancement will be organizations' empowerment to transform projects risks to opportunities and as a result benefit both their project performance and the advancement of the construction industry.

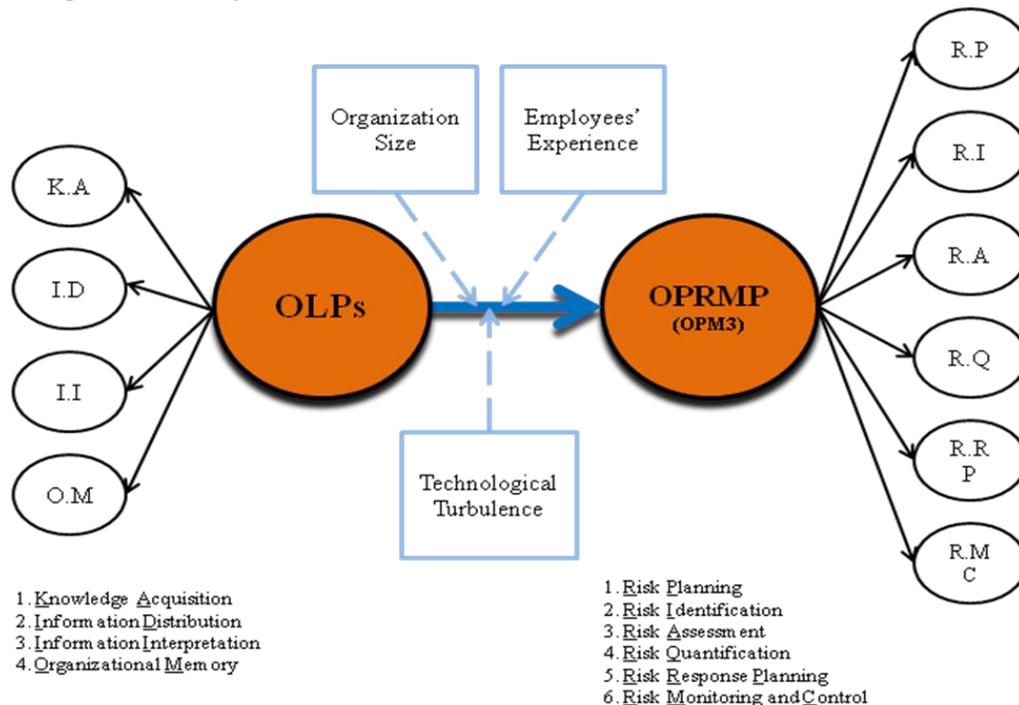
2. Conceptual Framework

Regarding broad research done on the areas of learning and risk management and quite a number of positive results about the correlation of the two areas, it is still not clarified how learning practices can improve the success rate of construction organizations' project management risk performance and improve

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the overall organizational project management performance as a result. Regarding the literature reviews we have come up with a conceptual model of the correlation between learning practices and organizational project risk management performance (OPRMP) whereby three moderating factors, namely I. Employees' experience level, II. The organization size, and III. Technological Turbulence ([Dugal & Roy, 1996](#)), effecting the correlation of the two.

Figure 1 : Conceptual Framework



2.1. Organizational Project Risk Management Performance & OPM3

OPM3 is an acronym for the Organizational Project Management Maturity Model—a standard for organizational maturity developed under the administration of the Project Management Institute. The purpose of this Standard is to provide a way for organizations to understand organizational project management and to measure their maturity against a comprehensive and broad-based set of organizational project management Best Practices. OPM3 also helps organizations wishing to increase their organizational project management maturity to plan for improvement ((PMI), 2003).

Risk is a concept defined in various ways (Wang, Dulaimi, & Aguria, 2004). In the environment of construction industry according to the citations of (Wang et al., 2004) research, risk might be defined as the likelihood of the occurrence of one particular event/factor or composition of events/factors which occur throughout the whole process of construction project to the disadvantage of the project (Faber, 1979), the uncertainty associated with estimations of outcomes – it includes a chance that results would be better than anticipated as well as more problematic than expected (Lifson and Shaifer, 1982), an absence of predictability of final result or consequences in a decision or process endeavor (Hertz and Thomas, 1983), and *etc.*

2.2. Organizational Learning Practice

According to (Santos-Vijande, López-Sánchez, & Trespacios, 2012), an organization's capability to learn is a critical essential component to remain competitive in modern day industries and with no exception for construction industry. Organizational Learning (O.L) acts as a pioneer for an organization's ability to allow room for changing conditions of demands; This critical practice assists organizations to improve customer and project performance. (Santos-Vijande et al., 2012) research results confirm OL to be a significant accessory in present day for organizations to deliver customer value as well as enhancing their organizational performance by means of efficient and effective approach to situations and flexible adaptation to rapid industry growth .

2.3. OPM3, Risk Management & Learning Practices

Organizational Project Management Maturity Model (OPM3) of PMI includes risk management practice in the self-assessment section questions, thus the success of risk management practice is considered a variable for organizational project management maturity. However OPM3 does not focus critically enough on enhancing risk management performance by taking advantage from the learning practices while it is an importantly helpful approach for organizations aiming to improve their project management performance in the societies moving towards being knowledge based. All the same OPM3 insists on the great importance of gaining the knowledge to the proper utilization of OPM3 towards continues improvement of organizational project management performance; however not putting sufficient stress on the utilization of learning practices which are important elements for organizations in the route of project performance improvement. As the construction industry is characterized by its enormous, complex project data, how effective the knowledge dissemination and information sharing functions within the organization are, they would provide high level value for the organization and enhance the Organizational performance (Eshaq & Karboulonis, 2003).

2.4. Moderators (Employees' experience, Size of organization, Technological turbulence)

Employees' experience in how risks are being managed and with what learning practices they are stored for future access is in direct relationship with their direction as project team members towards the arising uncertain situations in future projects, whereby according to (Lankau & Scandura, 2002) there is a continues learning from experience for all the employees no matter what role they carry in project or what level in organizational they are at.

The size of organization indicates the type and size of the projects done by the organization. The greater the projects are, the higher is the level of risks and uncertainties. An organization with large projects gains more learning out come from each project undertaken and as a result the importance of the learning practices is. Where the amount of data and multifariousness of it are present, there would be higher need for proper learning practices to be implemented inside the organization so the valuable data could be retrieved when there is a need to it in future. (Shipton, Fay, West, Patterson, & Birdi, 2005) consider the impact of organization's size on innovation. Innovativeness is a result of learning in the organization, there is more amount of learning out come in large organizations compared to smaller organizations and this shapes the organization's behavior upon the future faced risk in projects.

According to (Florice & Miller, 2001), over the past 20 years, the working environment in which large-scale construction projects (e.g. power plants, highways, bridges, tunnels, and airports, etc.) are developed, has become increasingly characterized by turbulence resulting from technological changes and innovations. Organizations and project managers should cleverly benefit their projects from technological advancements while at the same time need to avoid letting technological developments and turbulences put bring any threat towards their projects.

3. Conclusion

As a conclusion to the studies conducted in this research, the developed hypothetical framework should be put into test in order to be amended or considered reliable. This paper suggests that construction firm organizations can benefit from implementing OPM3 while at the same time put an effort to benefit themselves from learning practices towards a continues improvement of their project risk management performance. The result of this improvement for construction firm organizations in Malaysia would be to overcome the issues of delay and cost overrun and forward to reach to the desired level of performance to meet Malaysia Master plan requirements and even higher.

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