CONSIDERING LEARNING, UNLEARNING IN PROFESSIONAL DEVELOPMENT FOR CONSTRUCTION PROJECT MANAGERS: A PILOT STUDY

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Abstract. As projects face higher degrees of technical complexity and interdependency across functional boundaries, they require a shift towards an information-based organization and a knowledge-creating structure to enable them to integrate the people involved effectively. The essence of 'professional' project management lies in the ability continually to enhance the underlying knowledge base—the learning capacity. Successful business organizations do not just have to learn. Sometimes they have to unlearn. Creating an unlearning organization is the imperative for facilitating the journey of improvements. The purpose of this paper is to explore the level of consideration given to the approach of learning and unlearning during professional development interventions for construction project managers. A self-administered questionnaire was given to a small sample of construction project managers in Jabatan Kerjaraya Malaysia. The quantitative data was analyzed through descriptive statistics which was conducted to identify whether project managers considering the learning and unlearning approach as part of project management professional development. The results revealed that project managers considering learning as a part of professional development because it improves working skill and help in encouraging experiential learning in order to improve the level of professional competence. But somehow, for unlearning approach, it seems they are not considering unlearning as an alternative tool in professional development due to the majority of the respondents who reluctant to give up old habit which is a great barrier in improving and upgrading new skills to supports innovation in the industry. But the low response rate due to the pilot study purpose, the results are not statically generalizable. This paper which reports on a pilot study perspective begins to address the lack of empirical research on the concept of learning and unlearning which indicates a need for further research in this area as one of the competencies which seems crucial in dynamic and uncertain environments for professional development.

Keywords: learning, unlearning, project managers, professional development

1. Introduction

As we entered the 21ˢᵗ century, the practice of project management rapidly having transformation from traditional project based industries and 'hard' projects. It is being adopted as an approach to management in areas of emerging technologies, and of entire organizations [1]. Project success depends mainly on the right combination of the skills and will of the people involved, which itself it is an output of their effective integration. Thereupon, the evolution in project management was triggered by the changes in management philosophy and practices in order to maintain competitive advantage and continuous success in the field. It shouldn't be argued that continuous improvement in project management basically involves continuous learning by project manager and organization itself because of the natural experience of learning process which flows within the projects. In every construction project, there are learning processes occurring directly and indirectly in every stage of project life cycle. The combination of knowledge acquired during training, skills developed through experience and the application of the acquired knowledge are the example of learning process that attained by a project manager from a routine.

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Therefore, to adequately accomplish the important duties as professional project managers, they have to be able to learn, unlearn, and relearn the principles of leadership and growth because only knowledge workers would be competent to meet the requirements of clients who will be operating in an atmosphere of forceful competition, rapid technological change and reducing product cycles. The importance of practicing the concept of 'learn, unlearn and relearn' has been granted by former Prime Minister of Malaysia, Datuk Seri Abdullah B. Haji Ahmad Badawi and current Prime Minister of Malaysia, Dato' Sri Mohd Najib B. Tun Haji Abdul Razak [2,3], where they urged that in a world characterized by globalization, rapid change and information explosion, what one learns can become obsolete very quickly by having the ability to 'learn, unlearn and relearn' quickly and effectively enables one to master change and to prosper in a global knowledge-economy. They agreed that adequate knowledge and skill will not only support people survive but thrive in the new economy. To learn what went wrong, to unlearn the flawed policies or technologies of the past and relearn the right way forward is crucial to the project managers until they can bring back the stability and high performance of construction image which are surely essential for better economy growth. Thus, in this light, this remainder of this paper is organized as follows: providing an overview and amalgamation of the existing literature in the area of learning and unlearning which leads to construction of research questions/hypothesis. This is followed by a description of research design which defines the procedure of data collection which involved during the pilot study. Following this, the results and analysis from the survey is given. Finally, the conclusion and further research in the subject area are given.

2. Literature review

2.1. Individual learning

Learning encompasses two meanings: (1) the acquisition of skill or know-how which implies psychical ability to produce some action and, (2) the acquisition of know-why which implies ability to articulate a conceptual understanding of an experience [4]. Meanwhile, Kolb[5] stated that ," Learning is the process whereby knowledge is created through the transformation of experience." Feza [6] has critically emphasized that the learning is a vital weapon for competitive warfare. It can be a powerful strategic tool and the very basis for developing the core competence of an organization. Nonaka Takeuchi [7] emphasized that one of the key to long –term survival of organizations is through building the organization's knowledge and capability. Without having the right capabilities, the organization cannot deliver a successful project and therefore a series of projects. Three core capabilities of a project environment are the project management, the product (e.g., engineering, design or construction) and the learning process [8]. There is an increased awareness that learning can occur at three levels : (1) individual, (2) team and (3) organization levels [9,10,11,12]. For the purpose of this paper, the focus would be on the individual learning because in early research demonstrates a strong emphasis on the role of individual learning in organizational learning [13]. Furthermore, the main intention of this research paper is to identify whether project managers as leaders do encourage learning process in project environments. Thus, deep consent will be given into the area of individual learning as it has become an increasingly important concept because of its perceived relatedness to organizational performance [14]. Understanding the individual learning process is a good starting point to understand organizational learning and it should be cleared that organizational learning occurs when individuals within an organization experience a problematic situation and enquire into it on the organizational behalf .Furthermore organizational learning has been clarified in a sense of collectively of individual learning within organization [15].

2.2. Unlearning

To be specific, unlearning is the process by which individuals and organizations acknowledge and release prior learning (including assumptions and mental frameworks) in order to accommodate new information and behaviors[16]. Kantrow [17] has opined that though managers can learn from history to appreciate ambiguities and make relevant decisions, they must never rely on it for answers or formulas. Hence, unlearning is the only way to get free from the clutches of past. Becker[16] has clearly defined the meaning of unlearning which brings the better understanding of unlearning approach which showed a precise clarification of the process of unlearning that may encountered by individuals and organization which sounds:

"Unlearning is the process by which individuals and organizations acknowledge and release prior learning (including assumptions and mental frameworks) in order to accommodate new information and behaviors." It is apparent that in this range of definitions the understanding and application of unlearning approach could be a dynamic milestone for individual and organization who looking forward to make change and embrace a vision of the future. This supported by Windeknecht[18] who clarified that the major reason for encouraging or engaging unlearning is to allow the inclusion of new information or behaviors and as a means to assisting learning, innovation and change. It should not be argued that the process of unlearning a challenging mental model because of the human tendency to preserve a particular view is very strong. This agreed by Senge [19] who justified that : " Most changes initiatives that end up going nowhere don't fail because they lack general vision and noble intentions. They fail because people can't see the reality they face. Companies are unable to "see" the threats they face and the imperative change."

2.3. Considering the learning and unlearning approach

As the project management practice is rapidly changing, it requires the practitioner autonomously to be able to refine and update the current practice through continuous learning. The importance of learning capacity among project managers have been emphasized by F.T. Edum-Fotwe [20]where the author has challenged that in order to maintain their professional competency, practicing project managers in construction need to adapt to this changing industry environment by relying on knowledge and skills acquired through training and experience. The questions of whether projects manager's ability to understand and manage their approach of learning and unlearning as one of the competencies which seems crucial in dynamic and uncertain environments for professional development intriguing for future research. Based from the review of the background literature in the area of learning and unlearning, these two topics have been extensively researched in isolation. Thus, in this light, this research would be focusing in discovering whether project managers in Malaysia considering the approach of learning and unlearning in their professionalism in which can inspire innovation in decision making and so that ultimately these issues may be better understood and effectively managed during project management professional development practices.

3. Research design and Methodology

Given the increasing awareness of learning and unlearning in the literature, it is crucial to find out how this approach might translate to project management professional development practises. Thus, this study aimed to identify the extent the project managers considering learning and unlearning approach as part of professional development. As part of this aim, the specific research questions that sought to answer were: 1). Do Malaysian Project Managers practises learning approach as a part of professional development? 2). Do Malaysian Project Managers considering the unlearning approach as an alternative tool to enhance the level of competence in project management professionalism? In an attempt to answer these research questions, a small scale survey is conducted. As the concept of learning and unlearning is totally a new concept to the environment of construction project management, a pilot study is conducted to test the logistics and gather preliminary information prior to a larger study in future due to the limited literature review on the subject matter.

3.1. Method and sample

The survey questionnaire comprised of several validated measures from well-documented studies which stands of, 1) **Individual Learning** - Individual learning orientation (ILO) by Sujan [21] ,adapted version of individual learning instrument by Ames and Archer (1988). (2)**Individual Unlearning** – Resistance to Change Scale by Oreg [22] . Because of the nature of the research which focusing on the learning and unlearning of project managers, the questionnaire is distributed to the construction practitioner (project management background). The survey questionnaire was administered to the respondents in person in a learning workshop conducted by JKR (Jabatan Kerjaraya Malaysia) , Kuala Kumpur,Malaysia.

4. Results and Discussions

4.1. Method and sample

Item	N	Minimum	Maximum	Mean	Std. Deviation
Improve working skill	22	4	5	4.64	.492
Experiential learning	22	4	5	4.64	.492
Importance of learning	22	4	5	4.45	.510
Making mistake	22	3	5	4.36	.581

Table 1 : Individual learning results (high score)

Sub-scale	N	Minimum	Maximum	Mean	Std. Deviation
Routine seeking	22	1.6	6	3.736	1.3784
Emotional reaction	22	1.5	5.25	3.1925	1.08975
Short term focus	22	1.75	5.75	3.6125	1.30875
Cognitive rigidity	22	1.4	5.25	3.275	1.02975

Table 2: Resistance to Change Scale results

4.2. Discussions

Section 1 of the survey questionnaire gathered data about the background of respondent. Of note , 68.2% of respondents are male, meaning that results need to be analyzed with caution when assuming findings apply equally to both genders. In addition to this, more than 50% of respondents were at least post graduate qualified. Furthermore in terms of age, 64% of respondents are in category of age 60 and above, followed by 27% age between 40-49 and only 9% falls between 18-29. At the same time, it was noticeable that more 68% of respondents possessed experiences more than 25 years in the construction industry. This data was gathered to understand the group of respondents and how the age, level of training/qualification and level of accumulated experience may possibly give impact on individual learning and unlearning approach.

Table 2 (high score) shows the results of Individual Learning Orientation (ILO) instrument which were completed by 22 respondents who are the experienced project managers in the construction industry. The Individual Learning Orientation (ILO) instrument is an adapted version of measure designed by Sujan[21] which focus on the learning approach to the group of people in various occupational in hospital environment. The results indicate that respondents on average rated highest on the improving working skill item and experiential learning item in terms of the mean result. The item on the improving working skill refers to the tendency of the respondents in considering the important of continually improving work skill in order to become a good employer/employee. Meanwhile, the item in experiential learning refers to the tendency of the respondents on the importance of learning from each of their job experience.

Meanwhile, the table 3 shows the results of The Resistance to Change Scale [22] instrument which completed by the same number of respondents. This instrument is "designed to tap an individual's tendency to resist or avoid making changes, to devaluate change generally, and to find change aversive across diverse contexts and types of change" [22]. The scale consists of four subscales relating to the level of routine seeking behavior, the emotional reaction, the extent of focus on short term and the level of cognitive rigidity. The results indicate that respondents on average rated highest on the routine seeking sub-scale in terms of the mean results. This factor included items from both the "preference for low levels of stimulation and novelty" and the "reluctance to give up old habits" dimensions which consists of people's inclination to adopt routines [20]. The lower result particularly for emotional reaction provides reassurance that most of the respondents will be able to deal with changes because this dimension reflects the amount of stress and uneasiness the individual experiences when confronted with change [22].

Based from the both findings above on the learning approach, it can be concluded that most of the project managers surveyed considering learning as a part of professional development because it improves working skill and help in encouraging experiential learning in order to improve the level of professional competence in the construction industry. But somehow, as expected, for unlearning approach, it seems they are not considering unlearning as an alternative tool in professional development due to the majority of the

respondents who reluctant to give up old habit which is a great barrier in improving and upgrading new skills to supports innovation in the industry. In the report produced by Malaysian Productivity Corporation[23], the performances of construction industry were nominal during the years 2001-2010 and this low growth of Total Factor Productivity during these years was due to lack of innovation in the industry. Thus, it is clear from the results above that further empirical research is required to inform how learning could be effectively managed in ensuring the process of learning continuously flow within the individuals itself in a larger scale of participants where generalization can be made for further justification on the subject matter Furthermore, it is crucial to investigate the reason of rejection on unlearning among the construction managers in Malaysia because unlearning could be one of the factors of innovation strategies in future development. In addition, discussion on the cultural findings would be a great input to debate about learning and unlearning approach which may provide a basis to develop appropriate training and development programmes that would allow training to be appropriately targeted and delivered for efficient continuous professional development of Malaysian construction managers.

5. References

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