

Preparing Project Managers to Achieve Project Success - Human Management Perspective

E. Muneera, A. Anuar, and A. S. Zulkiflee

Abstract—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. The purpose of this paper is to highlight the practicality of cognitive style and unlearning approach in influencing the achievement of project success by project managers. It introduces the concept of planning, knowing and creating style from cognitive style field in the light of achieving time, cost, quality and stakeholders appreciation in project success context. Further it takes up a discussion of the unlearning approach as a moderator in enhancing the relationship between cognitive style and project success. The paper bases itself on literature review from established disciplines like psychology, sociology and philosophy regarding cognitive style, unlearning and project success in general. The analysis and synthesis of literature in the subject area a conceptual paper is utilized as the basis of future research to form a comprehensive framework for project managers in enhancing the project management competency.

Keywords—Cognitive Style, Project Managers, Project Success, Unlearning.

I. INTRODUCTION

PROJECTS are used as a means to achieve an organization's strategic goals. Critical success factors are important influences that contribute to project success. So, critical success factors are the set of circumstances, facts or influences which contribute to the project outcomes. From the Malaysian Construction Industry point of view, Human Management seems to be dominant in all aspects in achieving the success criteria of projects success which consist of four main factors, quality, time, cost and stakeholder's appreciation[1].

Even though the construction industry is a very technical oriented industry, the Project Manager, Communication, Team and leadership and stakeholder management [1] have been identified as the human factors that contribute to success factor of Malaysian construction project success from the Human management perspective. Hence, for the purpose of this study, the focus will be on the Project Managers factor. In project environment, as a project leader, project manager's primary responsibility is to achieve project objectives. In view of this, leaders need a different attitude regarding the classic

management functions of control, coordination, communication, and the setting of performance standards. Reference [2] have identified that to be successful; leaders need both cognitive and behavioral complexity and flexibility. This means, leaders need a behavioral repertoire and ability to select the right role for the situation. Thus, the cognitive style attribute come into play where it comes to the issue of selecting the right style for the entire execution process includes the decision to allow the project to go forward. But somehow, there are no previous studies that have specifically examined the role of cognitive style towards achievement of project success in the context of construction industry even though there are some studies have been conducted to identify type of cognitive styles being practiced by construction managers and cross-national differences in cognitive styles and its implications for management [3,4,5]. Even though there is a research have been conducted on the implication of cognitive style in project management context, but unfortunately, the focus only on the project managers from financial industry [6].

Furthermore, the uniqueness of this study is the theoretical framework, which suggested unlearning approach should become the moderating effect in the relationship of cognitive style and project success. The main reason in choosing the moderating effect is the importance of the unlearning approaches which crucial for all organizations to innovate and remain agile. According to [7], *most business organizations tend to work with a particular mind-set. Even though some organizations are breaking away from the mould, there is still a dominant frame of reference that influences them. In order to comprehend the gigantic business challenges and grab opportunities, business organizations have to forget the past. They need to come out of the mind-set of yesteryears. It is essential to forget history and the managerial outlook of the past in order to understand the metamorphosing nature of competition and emerging opportunities. For each higher level solution, one may be required to undo and unlearn what one had been doing till now. Unlearning is an inevitable reality, people are bound to encounter while traversing the path to success.* Therefore, in theory, unlearning is the concrete basis to become as the moderating factor that enhances project managers' cognitive style in achieving the project success which is not yet investigated empirically in the Malaysian construction industry.

A. Purpose of Inquiry and Inquiry Questions

This paper is intended to identify possible solutions from the problem statement that being established previously in the introduction phase. Therefore, there are four (4) questions are

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raised in this study. These questions are directed to address how cognitive style influences the achievement of project success by project managers and the effect of unlearning approach as a moderating factor between the cognitive style (Independent variables) and project success (Dependent variables).

1. How do cognitive style influencing the level of project managers' competence in achieving the desired project success?
2. What effects do the approach of unlearning have on the relationship between cognitive style and project success?
3. What are the factors that control the practice of cognitive style towards achieving project success by project managers in a project environment?
4. What are the factors that cause the unlearning approach to manipulate the relationship between cognitive style and project success?

B. Summary of Conceptual Framework

This conceptual paper integrates approach of cognitive style and unlearning towards achievement of project success on project managers perceptions. Reference [8] assert that even though a model is not typically used for explaining complicated process, it does help by simplifying the process and making it more understandable. This proposed conceptual framework is significant because it will explore a number of factors that affect the soft skill of project managers' towards the achievement of project success in human management context and make recommendations for future research. Please refer to the Fig.1 to the summary of proposed conceptual framework.

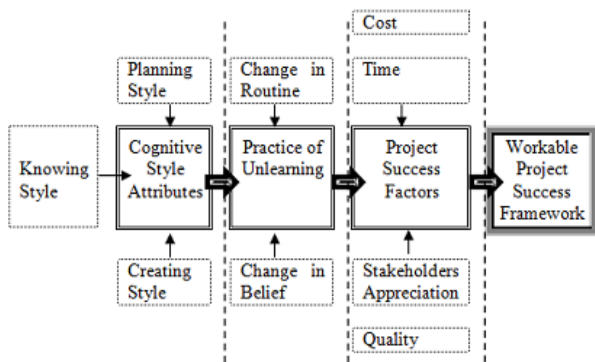


Fig. 1 Summary of Proposed Framework

C. Delimitations and Limitations

This proposed conceptual paper is delimited by several elements. Firstly, is on the cognitive style approach. Considerable attention has been devoted to cognitive style – individual preferences in perceiving and processing information – since the beginning of the previous century. This interest led to the development of a wide diversity of cognitive style theories. Cognitive styles also gained prominence in the organizational behavior and management literature the last decades as they are relevant addition to the personality and ability constructs. The myriad of cognitive

style models and the growing number of cognitive style measures have resulted in a complex field of study. Different researchers have tried to create order by categorizing the diversity of theories [9]. Thus, for the purpose of this study, issues dealt with (1) the theory of cognitive style, (2) the measurement of cognitive style and (3) the practical relevance of cognitive style in project management will be discussed in detail.

Secondly, is on the topic of unlearning approach. The concept of unlearning has not received as much attention; most has been written in the last twenty years. Prior to further consideration of the literature on unlearning, it is also important to define unlearning in terms of what it is not, for the purposes of this particular conceptual paper. This study does not explore in detail the physiological aspects of unlearning. Research has been conducted into the physiological aspects of unlearning, considering issues such as neurophysiologic data and neural networks (for examples, refer to [10,11,12,13]). It is not the intention of this paper to cover the physiological issues that may be involved in unlearning. Taking into account the previous definitions of unlearning offered and the fact that neither the concept of forgetting nor the physiological side of memory will be part of the scope of this research, the definition of unlearning for the purpose of this paper is:

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 [14].

This definition highlights a number of issues. Firstly, it is assuming that both individuals and organizations as an entity are able to unlearn. But for the purpose of this study, the focus will be on the individual perspective only, which means, for project managers per se. Secondly, it highlights that unlearning cannot be viewed in isolations. Unlearning is not believed to exist as an end in itself but as a means to assisting learning, innovation and change [14].

Finally, is on the topic of project success. With respect to project success, the remaining issue remains scarce due to concept of project success which seems difficult to define. The definition of the concept of success remains very broad [15]. Project success has long been considered the ability to fall within time, cost, and quality constraints. The “time /cost/ quality triangle” or “iron triangle,” or the “golden triangle,” that some professionals call the “Holy Trinity” or the “triangle of virtue” sufficed as a definition of project success [15,16,17]. Somehow, in the recent findings by [1] on the project success factors from Malaysian Construction Industry perspective, the author justified time, cost, quality, and stakeholders' appreciation as main four factors effecting Malaysian construction's industry performance. Thus, this paper will be highlighting on the four factors only and how this factors being influenced by cognitive style and unlearning approach by construction project managers.

II. ANALYSIS AND DISCUSSION OF THE LITERATURE

This section will explore the literature review of all the

topics involved which will be conceptualized in a structural flow as shown below:

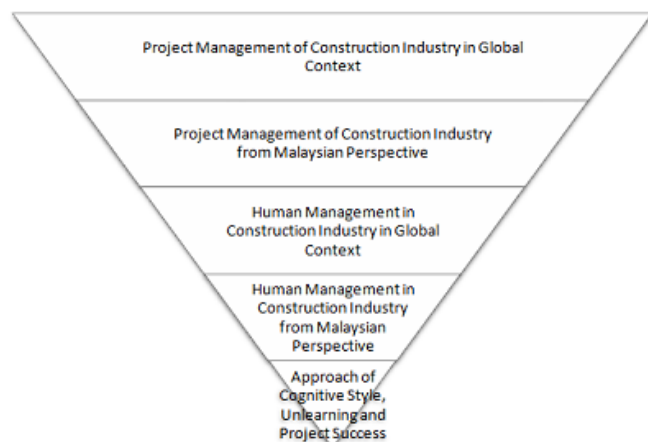


Fig. 2 Structural Flow of Literature Review

A. Project Management of Construction Industry in Global Context

The globalization and almost complete transparency of markets today, increasing competition, growing cost pressure, and the dynamics of customer needs certainly call for an increased use of project management. Increasing globalization calls for greater transparency, shorter product life cycle and an intensification of the competition. Factors such as speed, flexibility and progressive cost reduction move are becoming the focus of business processes. This means, the organizations have to continually react to the pressure of change. Strategies and structure have to constantly be considered and adapted. This development is expressed in the increased orientation towards projects [18].

Meanwhile, from the construction industry point of view, the complexity of today's project environments has created an even greater need to ensure that construction organizations have effective career development programmes to fill project management roles with the 'right' people for successful delivery. Furthermore in the recent article by [19] who stated that to meet this need, organizations have looked to supplement established programmes with impartial methods to profiling employee characteristics. Currently lacking from these approaches is a means to reflect both the structural changes incurred through management by projects and the underlying principles of workplace competency. The traditional management model can be described as consisting of three levels: first line supervisors and managers, middle managers and the executive [20]. Reference [21] suggest that project management has surpassed this traditional model of management in its effectiveness and efficiency for handling the complexity of today's organizational environments. Therefore, project based organizations must work to renounce the traditional model and consider the wider implications of project management as a legitimate, effective and perhaps dominant management model [21,22,23].

Therefore, a competent project manager is vital to project success, and several studies have highlighted critical skills

[24,25,26,27]. Reference [28] also confirmed the industry's growing awareness of the relationship between achieving project success and construction project management competencies. Successful construction organizations now focus on ensuring that project managers acquire the core competencies required to be successful in their assignments [29]. According to [30] the project manager has direct influence over 34–47% of project success. Based on these previous studies, it is clear that project managers play an important role in determining the success of a project in project management field.

B. Project Management of Construction Industry from Malaysian Perspective

Meanwhile, in the Malaysian construction industry, this service sector is the largest contributor to the nation's economy, accounting for almost 58% of Gross Domestic Product (GDP). Under the 10MP, the Government targets this sector to contribute 60% of GDP by 2015 which was announced by the Prime Minister of Malaysia, YAB Dato' Sri Mohd Najib Tun Abdul Razak in budget 2012 speech. Unfortunately, there are many challenges facing the industry today including enhancing quality and productivity besides high labour and material prices, inefficient and ineffective methods and practices, inability to attract and develop local workforce, inability to provide total integrated solutions and difficulty in securing timely and adequate funding. According to [31] the common issues and problems associated with construction process lie in the ill considered procurement selection, traditional separation of design from construction, lack of integration/ organization of the project members and poor communication channels, uncertainties in design and construction, changing internal and external environment, project complexity and characteristics, as well as contractual and commercial matters. In order to overcome those issues and problems so as to achieve excellence in managing construction project, it is therefore paramount that the elements or ingredients in project managing.

There is therefore the need to ensure that the setbacks and problems are eliminated or mitigated by effective management of the construction process in order for the projects to be successful. Furthermore, there is a need for information and assessment throughout the construction life cycle. It is therefore important that there be an evolution in the knowledge and attitudes of all those involved. It has been clearly stated that this will be possible by overcoming traditional boundaries to enhance project performance through innovation in organizations, management, marketing and technology which creates more value for interested parties and end-users and contributes towards a better quality [32].

C. Human Management in Construction Industry in Global and Malaysian Context

In the previous sections, an overview of the current issues of project management in construction industry has been reviewed generally and it can be concluded that the changing markets, new technology and rising clients' expectations are

stimulating reviews on how construction process and practices can be re-engineered to enhance performance. Hence, this section will explore how human management could help in upgrade and enrich the skills and competency levels of construction workforce as an alternative channel to ensure that the construction projects are completed at a reasonable cost and in the specified time frame, using the best practices and processes in planning and implementation.

Recent research has explored successful project management and raised interesting assertions about the competencies of successful project managers that need to be incorporated into any discussion of how to develop master project managers. Shared leadership; social competence and emotional intelligence; communication; skills in organizational politics; and the importance of visions, values, and beliefs have emerged as competencies that are required from project managers in complex environments [33]. Therefore, managing projects successfully therefore requires a mixture of skills including interpersonal ability, technical competencies, and cognitive aptitude, along with the capability to understand the situation and people and then dynamically integrate appropriate leadership behaviors [34]. Reference [35] suggested that effective administration rests on human skills, conceptual skills and technical skills which can be developed independently. Reference [36], adds that the human skills of project managers have the greatest influence on project management practices and technical skills the least.

Meanwhile, the topic of human management in construction industry in Malaysian context remains scarce by its approach and application even though one of the main strategic thrusts of Vision 2020 for Malaysia is to become a fully developed country emphasis the development of the nation human resource, in which both the public and private sectors have important roles to play. Human resource development as an important element was emphasized, as well-trained workforce would have the necessary skills and knowledge to carry out quality, productive and efficient construction works. Furthermore, in the recent findings by [1] on the project success factors from Malaysian Construction Industry perspective, the author justified time, cost, quality, and stakeholders' appreciation as main four factors effecting Malaysian construction's industry performance. Interestingly, among the four factors from the study, the result revealed that Human Management is dominant critical in the construction industry to ensure project success. However there seems to be a knowledge gap on how Human management can be critical in the construction industry to ensure project success. Thus, this will highlight from the perspective of cognitive style in the human management context and how this dimensions can influence the achievement of project success in Malaysian construction industry. The primary focus will be on the Project Managers because the Project Manager is at the centre of everything relating to a project. Furthermore, it has been agreed that Project Manager, at the center of the project network, is responsible for orchestrating the whole construction process. Possessing the core project management competence would help to define the ability of project

managers to deliver good performance towards the attainment of project success[37].

Since project managers play an important role in the success of construction projects, it is therefore essential to identify the critical knowledge and skills that a project manager needs to effectively execute construction projects. Therefore in such situations, the implementation of cognitive style, and unlearning approach in achieving project success by project managers, is crucial in the context of Malaysian construction industry in dealing with human factor. By doing so, the project managers are engaged in the activity that involves them in constructing their own soft skills in facilitating the projects effectively in the achievement of project success through Human Management approach.

D. Cognitive Style and Unlearning from Management Context towards achievement of Project Success

1. Cognitive Style

The cognitive style has been chosen as a one of the important soft skill in project management practitioners because the supremacy of 'intuition' and 'analysis' approach that being explored in the correlation of individual performance. Reference [38] propose that cognitive style are concerned with the form rather than the content of activity and state that they refer to individual differences in how people perceive, think, solve problems, learn and relate to other. Another reason that supported the reason why identifying the type cognitive style is crucial in playing as one of the important factor in enhancing professional performance is because of the long lasting dilemma of whether effective managerial action is better served by analytical or intuitive judgments in project management [6] remains questionable. The cognitive experiential self-theory (CEST) put forward by [39] is helpful in conceptualizing and explaining the rational and intuitive facets of managerial cognition. In this theory , the authors explained that the rational system (analytical) is conscious, deliberative, abstract, and affect free meanwhile the experiential system (intuitive) is preconscious, automatic, concrete, holistic and affect laden .The rational and intuitive systems, and the extent to which an individual relies upon one or the other, may be thought of as preferred ways of processing information and decision making (sometimes referred to as cognitive styles or thinking styles[40]. Interestingly, [41] suggested that the cognitive style have a potential value in the study of organizational behavior and the understanding of management problems. Thus there can be no doubting in evaluating the cognitive style as a crucial factor that promotes soft skill performance in project management professionalism by project managers.

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 [14]. Reference[42] 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. Reference [14] 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 [43] 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 [44] 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."

3. Project Success

Nowadays, companies are increasingly using projects in their daily work to achieve company goals. The only way organizations can be driven to achieve excellence is by keeping an eye on competition and world best practice in all aspects of the business [45]. Recently more and more organizations are recognizing that translating corporate strategies into actions requires project management. Consequently, it is vital that projects are successful [46]. Critical success factors are important influences that contribute to project success. So, critical success factors are the set of circumstances, facts or influences which contribute to the project outcomes. According to [47] to increase the chances of a project succeeding it is necessary for the organization to have an understanding of what are the success factors, to systematically and quantitatively assess these factors, anticipating possible causes and effects, and then choose appropriate methods of dealing with them. Once identified, the success of the project can be achieved. Generally, the success of a construction project depends on a number of factors, such as project complexity, contractual arrangements, and relationships between project participants, the competency of project managers, and the abilities of key project members [48]. Reference [49] in his report said that successful project delivery requires the concerted effort of the project team to carry out the various project activities, but it is the project manager who, at the center of the project network, is responsible for orchestrating the whole construction process. Possessing the core project management competence would help to define the ability of project managers to deliver

good performance towards the attainment of project success. Others researcher, [50] identify a set of project success factors; project team commitment, contractor's competencies, risk and liability assessment, client's competencies, end-users needs and constraints imposed by end user [37]. In the recent findings by [1] on the project success factors from Malaysian Construction Industry perspective, the author justified time, cost, quality, and stakeholders' appreciation as main four factors effecting Malaysian construction's industry performance which will be investigated in detail for future research.

III. CONCLUSIONS

Nowadays, companies are increasingly using projects in their daily work to achieve company goals. The only way organizations can be driven to achieve excellence is by keeping an eye on competition and world best practice in all aspects of the business[45]. Recently more and more organizations are recognizing that translating corporate strategies into actions requires project management. Consequently, it is vital that projects are successful [46]. Critical success factors are important influences that contribute to project success. So, critical success factors are the set of circumstances, facts or influences which contribute to the project outcomes. According to [47] to increase the chances of a project succeeding it is necessary for the organization to have an understanding of what are the success factors, to systematically and quantitatively assess these factors, anticipating possible causes and effects, and then choose appropriate methods of dealing with them. Once identified, the success of the project can be achieved. Generally, the success of a construction project depends on a number of factors, such as project complexity, contractual arrangements, and relationships between project participants, the competency of project managers, and the abilities of key project members [48]. Reference [49] in his report said that successful project delivery requires the concerted effort of the project team to carry out the various project activities, but it is the project manager who, at the center of the project network, is responsible for orchestrating the whole construction process. Possessing the core project management competence would help to define the ability of project managers to deliver good performance towards the attainment of project success. Thus, it is clear from the collection of recent issues on the cognitive style, unlearning and project success that further empirical research is required to inform on how the approach of cognitive style and unlearning could be effectively managed in ensuring the achievement of the project success by project managers in the project management context. Furthermore, it is crucial to investigate how the concept of cognitive style and unlearning could be one of the factors of innovation strategies in future development. In addition, discussion on the cultural findings would be great input to debate about the proposed concepts which may provide a basis to develop appropriate training and development programme that would allow training to be appropriately targeted and delivered for efficient continuous professional development of

Malaysian construction project managers.

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