THE INFLUENCE OF PROJECT MANAGEMENT METHODOLOGY UTILIZATION (PMMU) ON PROJECT SUCCESS IN IT-ENTREPRENEUR PROJECT

MOHAMMAD SABER KAHALIAN

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Faculty of Computer Science and Information Systems
Universiti Teknologi Malaysia

This dissertation is dedicated to my lovely wife for her endless support and encouragement, to my supervisor for his kindly and helpfully guidance and to my parents for their support from my childhood, until now, and graduation in the master.

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ABSTRACT

The purpose of the study, firstly, is to proposed a measurement instrument to measure utilization level of project management methodology(PMM). There are several project management methodologies that Project Managers, base on project's criteria such as size and duration, employ in their project. IT entrepreneurs also try to find out best project management methodology, which is suitable for their project. IT-entrepreneurs in Small to Medium project prefer an informal project Management methodology, whereas there is not any special methodology for them so an ITentrepreneur always customized and utilizes some part of current project management methodology. The study will proposed an instrument to measure utilization level of project management methodology. The Instrument consists of several questions that IT entrepreneur can employ to their project to measure project management methodology utilization(PMMU) level. Then the result of applying this instrument in Johor Bahru and Iran IT-entreperneur find out that there are positive relation between project duration, number of employee and project budget with utilization level of project management methodology. Finally, analysis of IT entrepreneur data identified that there is a cubic relation between utilization level of PMM and Project success.

ABSTRAK

Tujuan kajian ini, pertamanya, adalah untuk mencadangkan instrumen pengukuran untuk mengukur tahap penggunaan metodologi pengurusan projek (PMM) oleh IT-Usahawan (IT-Entrepreneurs) dalam projek itu. Terdapat beberapa metodologi pengurusan projek bahawa Pengurus Projek, berdasarkan kriteria seperti saiz dan tempoh projek, mengambil kerja dalam projek mereka. IT usahawan juga cuba untuk mencari kaedah pengurusan projek yang terbaik, yang sesuai untuk projek mereka.IT-usahawan kecil untuk projek Sederhana lebih suka kaedah Pengurusan projek yang tidak formal, manakala terdapat mana-mana kaedah yang khas untuk mereka supaya IT-usahawan sentiasa disesuaikan dan menggunakan beberapa bahagian metodologi pengurusan projek semasa.Kajian ini akan mencadangkan satu instrumen untuk mengukur tahap penggunaan pengurusan projek. Instrumen ini terdiri daripada beberapa soalan bahawa usahawan IT boleh gunakan untuk projek mereka untuk mengukur tahap penggunaan metodologi pengurusan projek.Kemudian hasil menggunakan instrumen ini dalam sampel kami mendapati bahawa tahap penggunaan metodologi pengurusan projek yang ditunda oleh sebab tempoh projek, bilangan pekerja dan belanjawan projek. Akhirnya, analisis data usahawan IT yang dikenal pasti bahawa antara tahap penggunaan kejayaan PMM dan Projek hubungan yang padu wujud.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

A project is a transient attempt to achieve a goal and having a pre-identified period (Carl and Timothy, 2007). It is defined to carry out a unique goal and objectives (Nokes Sebastian, 2007). Furthermore, Project Management (PM) has been one of the most significant fields, particularly in sustaining a business. Project Manager has been applying different methods and approaches to the project tasks to having appropriate managing the projects and achieved the project goal and completion of project with defined aims. They needed special tools or methods. So project management frameworks developed, which consists of various form, templates and guideline to manage a project.

In recent years, an increasing interest in entrepreneurship development worlds is obvious. Governments and all kinds of institutions are asking for information about entrepreneurs' characteristics, behaviors, and everything related to them. The aim being to understand their mechanisms for creating wealth and to foster entrepreneurship among the population. (Jose Ruiz, Salustiano, Jose-Aurelio, 2008)

1.2 Problem Background

The concept of entrepreneurship has been use pervasively. Entrepreneur is a person that seizing opportunity and try to release their idea into an innovative product on that opportunity within the projects.

Moreover, by spreading the entrepreneurial project in today industry, we should know more about these types of projects and methods of managing those projects. As we know, the entrepreneurs manage their project and activity by themselves (R.T. Hamilton, D.A. Harper 1994). The entrepreneur should be familiar with the project management methodology to manage their project.

In IT entrepreneur project, a project management methodology also needed same as other projects. A lot of project manager customize various project management methodologies to fit them with their business. IT entrepreneur manage their business by an own way (Havinal 2009, Low and MacMillan 1988). Entrepreneur project budget and time are often more limited compare to others. The entrepreneurs always face with several uncertainties; they need to know which PM methodology more fit to their business and in which phase of projects is better to go through formal project management or informal one.

1.3 Problem Statement

There are several project management methodologies such as Prince II (OGC, 2006), Project Management Institute Body of Knowledge-PMBOK (PMI, 2008). Those methodologies have different guideline, products and tasks to manage a project from start-up to closing.

Although, those methodology have sufficient and appropriate guidelines to manage projects, but they were appropriate more in large-scale projects. In IT-entrepreneur project in small size enterprise still there are several problems and issues to implementing those. Current PMM is so time-consuming and need a lot of documentation that will make a challenge for the entrepreneur to employing in the project.

IT-entrepreneurial projects in the small enterprise always prefers lighter project management process and documents to achieve their project goal as entrepreneurs are more achievement oriented(Komives 1972). They don't like too bureaucratic process of managing and too reports. Furthermore, without employing PM methodology, there will be some duplication in their job and tasks through the use of different tools as observed in their projects.

So they should become more familiar with the PM framework process, some of them just going through their sense, managing by their feeling. They are not familiar with project management methodology, and they could not fit PM methodologies tasks to their business. First of all to fit PMM to the project tasks, studying the current process of managing project is necessarily and to achieving this goal the measurement of PMM utilization (PMMU) in IT entrepreneur project is the first step. Thus there is a gap in there to have a measurement instrument for IT-entrepreneurs to measure PMMU level.

Also, whatever IT entrepreneur known how much they utilize standard project management, there is request to know is it improve achievement of success in the project or it cause to failure or variation of their project?

Base on research observation, lack of project management methodology in IT entrepreneur project was obvious. There were several issues were cause to refuse using pm methodology. They believe that their project is small with limit budget, so it is not suitable for them to utilize any PM methodology; some of them do not have

enough knowledge on project management methodology (PMM), so they do not utilize. Project duration was so important because they believe that project time is limited, and the project should achieve goals as fast as possible within planned time, so why should waste time to focus on PM methodology; so it is better going informal PM methodology.

So first of all there should be an instrument or tools to measure how much ITentrepreneur currently utilize PPM and how much this PMMU impact the project management success.

1.4 Research Questions

This research has set to answer these questions:

- How to measure utilization level of project management in IT entrepreneur projects?
- What is the influence of PM utilization on project success for IT entrepreneurs?

1.5 Objectives of the Research

- to prepare a review and make comparison of project management success criteria
- to extract process from PM product template
- to design Instrument to measure utilization Level of project management in the IT entrepreneur project
- to demonstrate relation of budget, number of employee and duration of project to PM utilization level
- to illustrate the influence of PM utilization Level to project success

1.6 Utilization Level Definition

As we know every project to be handled, need a project manager. Nevertheless, some project manager manages their project by applying standard project management and others just goes by informal management. In the IT entrepreneur project, they managed the project by own (Havinal 2009, Low and MacMillan 1988), and going more by sense. Now, how much they go throughout SPM and how much informal it is a level of utilization. So if they go more formal applying SPM process, they will be high in utilization level. In contrary if they going more informal without following any SPM process and documents utilization level would be low.

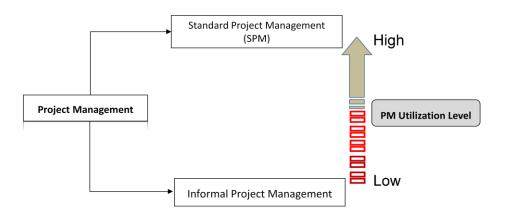


Figure 1.1 Utilization Level

1.7 Conceptual model of study

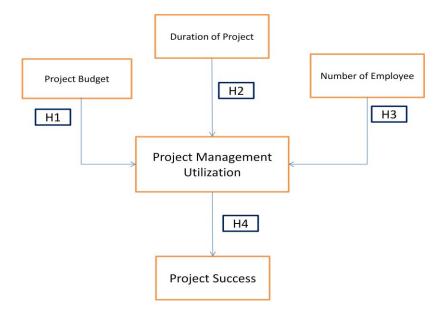


Figure 1.2 Conceptual model

Hypothesis:

- H1 There is positive relationship between Project Budgets to Project Management utilization.
- H2 There is positive relationship between Project Duration to Project Management utilization.
- H3 There is positive relationship between Numbers of Employee to Project Management utilization.
- H4 There is positive relationship between PM utilization and achieves success in the project.

1.8 Scope

The study focused on IT entrepreneurs in Iran and Malaysia. Furthermore, PM utilization level measurement defined based on Project Management Body of Knowledge (PMBOK ® Guide) methodology.

1.9 Significant of the study

The main contribution of the research is to propose an instrument to measure utilization level of the project management methodology in IT entrepreneur projects. Firstly, the outcome of proposed instrument will measure how much the entrepreneur goes through standard project management. Poor project management that causes so many failures in the IT-entrepreneur projects was a start point to arise a request for having specified project management methodology for IT entrepreneurs. The proposed measurement instrument can help researchers to know, how much current standard project management documentation, reports and processes be used in IT-entrepreneur project; then they can design a specified PM methodology for entrepreneurs that be suitable to utilize by IT entrepreneur, improve utilization level and following by that promote project success.

The researchers can determine the IT entrepreneur process on managing their project and impact of that on project success. Finally, IT-entrepreneur can know how much project management utilization impact project to achieve success, which level of utilization is more appropriate for IT-entrepreneur to become more success.

The research will help the researcher and project manager to know what is the relation of project budget, Employee number, and planned duration of a project on utilizing project management methodology.

1.10 Conclusion

High level overview of the study proposed in this chapter. It is started by problem background and statement of problem, and then research questions and objective come out and continued by definition of the relative terms of the study. Finally, the chapter is completed by scope and significant of the study.

Next chapter provides literature review and review map of the research and proposes the conceptual model of the research.

Chapter three represent research methodology that employed in the study. Respondent, instrument of research and more detail of research methodology described.

Chapter four proposed the instrument to measuring utilization level of project management. Method and procedure to design questionnaire to measuring utilization provides in this chapter.

Chapter five consists of analysis of the result and testing the hypothesis, and relation of factors by linear regression analysis.

Final chapter will discuss on limitation of the study, and suggestion for future researches.

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