FEASIBILITY OF SOCIAL NETWORKING MEDIA IN PROJECT COMMUNICATIONS MANAGEMENT BASED ON TASK-TECHNOLOGY FIT

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I dedicated this thesis to my family, love one and friends for their endless support and encouragement.

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ABSTRACT

Conventional communication mediums, such as email have been supporting project communication. However, studies have shown that project failure's rate is high and project communications failure is the main reason due to the failure to support activities that fall in project communication. This study examines the feasibility of Social Network Media (SNM) in Project Communications Management (PCM). PCM activities and SNM essential features have been identified through literature review. Task and technology categorization have been conducted to categorize PCM activities and SNM essential features into fit profile. Fit profile describes the fitness between these two different entities designed by utilizing the theory of Task-Technology Fit (TTF). Survey has been conducted to test the fit profile against respondent's past experiences and opinions. The feasibility result was positive with no significant difference between theory and real-life environment. User behaviour, project type factor and communication channel complexity were excluded from the examination as these factors should be in another study.

ABSTRAK

Medium komunikasi sedia ada seperti e-mel telah menyokong dalam komunikasi projek. Walau bagaimanapun, kajian menunjukkan bahawa kadar kegagalan projek adalah tinggi, dan sebab utama adalah masalah komunikasi dalam projek. Oleh itu, kajian ini telah meneliti kemungkinan Social Network Media (SNM) dalam Communications Management (PCM). Aktiviti dalam PCM dan ciri-ciri penting SNM telah dikenalpasti melalui kajian literatur. Pengkategorian tugas dan teknologi telah diadakan untuk mengkelaskan aktiviti dalam PCM dan ciri-ciri penting SNM ke dalam Profil Fit. Profil Fit untuk menerangkan kecergasan terhadap kedua-dua entiti yang berbeza ini telah direkabentuk berdasarkan teori Task-Technology Fit (TTF). Kaji selidik telah dijalankan untuk menguji preskripsi profil tersebut terhadap pengalaman dan pendapat responden. Hasil daripada ujian yang telah dijalankan, hubungan kemungkinan SNM ke arah PCM adalah positif kerana tiada perbezaan ketara antara teori dan persekitaran kehidupan sebenar. Perilaku pengguna, jenis projek dan kerumitan saluran komunikasi telah dikecualikan daripada skop kerja dan dicadangkan untuk kajian masa depan.

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GLOSSARY OF TERMS

IT	-	Information Technology
PCM	-	Project Communications Management
PCMP	-	Project Communications Management Processes
PMBOK	-	Project Management Body of Knowledge
PMI	-	Project Management Institute
SNM	-	Social Networking Media
GSS	-	Group Support System
TTF	-	Task-Technology Fit
SKIT	-	Master of Science in IT Entrepreneurship
UTM	-	Universiti Teknologi Malaysia

CHAPTER 1

RESEARCH OVERVIEW

1.1 Introduction

Communication simply means speaking, writing, and listening. These actions are categorized as soft skills. These skills include psychology, sociology, humanities and communication, which are important as technical skills in a project. Poor understanding on these skills will lead to wrong information flow between stakeholders. Study has shown that soft skills are most crucial for Information Technology (IT) professionals as in an IT project (Schwalbe, K., 2010).

The failure rate in projects still remain high and the main reason for the failure is communication (Ralf, M., 2003). Communication failures in project occur when project managers were not able to make good communications with their team, as well as key stakeholders from the top management. Problems such as unrealistic schedules and unclear scope often intensify the failure in communication.

As for IT project management, Carvalho, M. M. (2008) has examined several communication barriers. Out of all the barriers, three communication barriers were voted highest votes from the participated respondents. These barriers are

differences in language between systems and business, the difference in perception and lack of a project communication plan.

As a well-established guideline, project communications management, one of the ninth knowledge areas in Project Management Body of Knowledge (PMBOK), provided suggestions for improving communications within a project. There are five processes in Project Communications Management (PCM): Identifying stakeholders, planning communications, distributing information, managing stakeholder expectations and reporting performance. These processes are mainly to support the goal of project communications management. These processes ensure timely and appropriate generation, collection, dissemination, disposition and storage of project information. Besides that, these processes are supported by conventional communication mediums, such as email. However, the failure rate in projects remains high. This result shows that the conventional mediums have failed to support the PCM activities.

With the advancement of communication tools in the Internet, Internet users are utilizing Social Network Media (SNM), which claimed as highly functional communication tools, for their own purpose (Kim, W., Jeong, O.R. and Lee, S. W., 2009). Besides that, SNM is also being used for business purposes and the usage is continuously growing, the same goes with educational programs. Therefore, this research is expecting that by applying SNM as the communication mediums in PCM activities would decrease the risk of project failure that is caused by failure in communication.

1.2 Problem Background

Project failure rate is high and communication is one of the main factors that brings direct impact to project success or failure (Ralf, M., 2003). Out of all project

management knowledge areas defined in the Project Management Institute's (PMI) Guide to the PMBOK, Communications Management has the largest impact on project results (PMI, 2000). Softer elements of a project such as poor planning and executing organization transformation, change management process and not well-prepared and executing communication management among stakeholders have been the reasons for failure in project management (Cegielski, R. W., Chudziak, J. A., et al. 2008). Most information technology professionals passed in technical requirements but poor in soft skills. These soft skills are communication (speaking, writing, listening), humanities, psychology, and sociology (Schwalbe, K., 2010). As for IT project management, three communication barriers have the highest votes by participated respondents. These barriers are differences in language between systems and business, the difference in perception and lack of a project communication plan (Carvalho, M. M., 2008). These communication failures show the conventional communication mediums encounter limitations in supporting those tasks that fall in communications management. Therefore, project managers are facing high failure's risk in handling projects.

As these conventional mediums fail in supporting communication activities in project, SNM that consists of highly functional communication tools may replace the conventional mediums to increase the effectiveness of communication and decrease the failure risk in a project. This can be verified as there are large numbers of Internet users who have registered themselves with SNM. Besides that, SNM has been utilized in a variety of domains such as business and education. However, research for SNM usage in PCM is still scarce. Therefore, the main idea of this study is to propose the utilization of a highly functional communication tools that can be found within SNM as the communication mediums in PCM.

1.3 Problem Statement

Project failure rate is high and the main reason behind the failure is communication failure in a project. This failure remains high even with the support of conventional communication mediums. These conventional communication mediums such as email have been supporting project communication for a long period. However, these conventional communication mediums have some limitations in supporting PCM with regard to complex group tasks. As the result, project managers are facing high failures risk in handling projects.

Therefore, this study proposes the use of SNM as the communication medium toward PCM. The theory of Task-Technology Fit (TTF) has been utilized to define the feasibility of SNM in PCM by examined the gap between the fit profile and real life experiences and opinions. Lastly, a feasibility mapping has been designed to share the fitness results to project managers.

1.4 Research Objectives

The research objectives for this study are as below:

1. To identify Project Communications Management activities and Social Networking Media features for categorize them into listed task type and technology dimension.

2. To design measurement of feasibility of task and technology based on the theory of Task-Technology Fit to describe the fitness between task and technology.

3. To propose the feasibility mapping of Social Networking Media in Project Communications Management by sharing the survey result to project managers.

1.5 Research Questions

Questions have been designed as the following to allow researcher's curiosity toward the research problems.

1. What are the activities that fall in Project Communications Management and the features that fall in Social Networking Media for categorize them into listed task type and technology dimension?

2. How to utilize the theory of Task-Technology Fit as the theoretical support in answering the feasibility of Social Network Media in Project Communications Management to describe the fitness between task and technology?

3. How to represent the feasibility result of Social Networking Media in Project Communications Management by sharing the survey result to project managers?

1.6 Scope of Research

This study will cover the examination toward feasibility of SNM in PCM based on the theory of TTF. Therefore, this study will identify the activities that fall in PCM and the features that fall in SNM. By identify PCM activities and SNM

features, study will categorize these activities and features in listed task type and technology dimension. This study will describe in detail for feasibility of SNM in PCM based on fit profile in the theory of TTF. This study will conduct a survey to examine the gap of theoritical fit profile against real-life environment. The feasibility result from the survey will report in the form of feasibility mapping of SNM against PCM. This study will exclude the factors of user behaviour, project type and complexity of communication channels as these factors should be in another study.

1.7 The Significance of Study

This study proposed the utilization of SNM as the communication mediums in PCM. The theory of TTF were utilized to prove the feasibility of using SNM in PCM. This result shows that SNM is feasible to be applied as communication mediums in PCM activities to increase the group performance. Therefore, by applying these highly functional communication tools that fall in SNM and proved easily adopted by users, project manager and members could effectively communication with each others during PCM activities. As a result, communication success rate in project could increase and lead to increase of project success rate. Lastly, by proposing a feasibility mapping project managers will be able to select the best SNM features for PCM activities. As a result, the usage of SNM features can be optimized when applying in PCM activities to increase group performance.

1.8 Chapter Summary

This chapter summarized the problem background and statements of this study. Several research objectives and questions have been identified for the study to ensure the main purpose is achieved. Scope of research has been discussed to weigh the study in achievable size. Lastly, the significance of study has been defined to

describe the importance of having this research. The following chapter is about the literature review for this study.

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