UNIVERSITI TEKNOLOGI MARA

THE IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) ON THE OPERATIONAL AND MANAGERIAL EFFECTIVENESS OF AN ORGANIZATION: A CASE STUDY AT TELEKOM MALAYSIA

NOOR'AINI BINTI ISMAIL

Thesis submitted in fulfilment of the requirements for the degree of Master of Science

Faculty of Information Management

February 2017

ABSTRACT

The enterprise resource planning (ERP) system is known to be a robust system and is in high demand in Malaysia. With its capabilities to integrate all the core modules like Procurement, Finance, Accounting and Human Resources, this system is able to fulfill all the companies' requirements to have a centralized system which can manage all the operational and managerial tasks in the organisation. This can be seen in the industrial sector such as the telecomunications industries, which are taking a high risk in implementing this system while expecting positive effects to their organisation. Considering the perks that organizations may enjoy, such as better customer satisfaction, improved information accuracy and improved decision-making for the top management, this robust system has become among the most risky investments for an organization. The goal of this study is to investigate the factors which most contribute to the effectiveness of the ERP system by employing five constructs from seven of DeLone and McLean's Updated IS Success Model (2003). The factors are information quality, system quality, service quality, user satisfaction and net benefits. This quantitative study illustrates the experiences of end users from various departments with various privileges in the headquarters of the telecommunication organization. A survey method was conducted to understand the relationship between the constructs and effectiveness of the ERP system. The findings indicate the significant impact of service quality to the net benefits, in both models of with or without mediating factors. While information quality and service quality shows not significant to the net benefits with or without mediating factors. The effectiveness of the system depends solely on user satisfaction. Since ERP system implementation is considered risky to any organization, the reliability of the system and its service are very much depending on the perceptions on the end-users. From the perspectives of business requirements, today's business experts are as well very much relying on tools in supporting them generating revenue for the organization. Hence, IT governance should play their roles for an actionable strategy to improvise the ERP system in the organization and so forth crafting the acceptable fashion of using the system effectively organization itself.

ACKNOWLEDGEMENTS

"In the name of Allah, the most Gracious and the most Merciful"

This thesis would not have completed without the help and the splendid support of many individuals and teams. Firstly, a bunch of thanks goes to my supervisors, Dr. Mohd Razilan Abdul Kadir and Dr. Saiful Farik Mat Yatin for their excellent supervision, knowledge, belief, patience and interest in the work which has encouraged me throughout these four years. My greatest thanks should also go to all staff at the Faculty of Information and Management (FPM), Universiti Teknologi MARA (UiTM) for their understanding and support. I also greatly value all my colleagues for their everlasting friendship, support and care.

Also, I must not to forget to thank my family who have given much precious encouragement through their unconditional love, patience, concern, support and strength for me to reach this stage.

Last but not least, my grateful thanks to the financial support from Kementerian Pelajaran Malaysia (KPM) through the MyBrain program, Prof. Madya Wan Fauziah Wan Mustaffa and Easy Edit Proofreading Services for thesis proofread.

TABLE OF CONTENTS

		Page			
CONFIRMATION BY PANEL OF EXAMINERS		ii			
AUTHOR'S DECLARATION ABSTRACT ACKNOWLEDGEMENT TABLE OF CONTENTS LIST OF TABLES		iii iv v vi x			
			LIST OF FIGURES		xi
			CHAPTER ONE: INTRODUCTION		1
1.1	Introduction	1			
1.2	Background of The Study	1			
1.3	Problem Statement	3			
1.4	Research Objectives	6			
1.5	Research Questions	6			
1.6	Definitions	7			
1.7	Summary	8			
	e e e e e e e e e e e e e e e e e e e				
CHAPTER TWO: LITERATURE REVIEW		9			
2.1	Introduction	9			
2.2	Introduction of Enterprise Resource Planning (ERP)	9			
2.3	Enterprise Resource Planning (ERP)	12			
2.3.1	The Advantages and Disadvantages of ERP System	14			
2.3.2	The Comparison of ERP Products	19			
2.4	ERP in Malaysia	28			
2.5	Information Quality	29			
2.6	System Quality	31			
2.7	Service Quality	32			
2.8	User Satisfaction	34			

CHAPTER ONE INTRODUCTION

1.1 INTRODUCTION

This chapter aims to provide a context review of the research study. The chapter begins with detail explanation of the background of the study and continued with problem statement of the study. Then the third section continued with research objectives of the study and followed with research questions. The definitions of enterprise resource planning (ERP) and a short overview of the Telekom Malaysia were discussed before summary section. A short summary concludes at the end of this chapter.

1.2 Background of the Study

During the 1950s, the development of electronic computers was still growing and the internet started in parallel with the development of electronic computers. It was only years later that companies started using the system for their operations. In those days the manual system was still maintained to run their businesses since the users are convenient with the manual process. As a result, most companies faced the same problems, in which data and information were scattered and redundant and the updated data are difficult to locate. When the computer system was first introduced, most companies were quite worried about its capabilities. The possibilities of data being corrupted or missing were high because of the lack of system expertise or IT competence. As such, the impact of implementing the system to users and organization were taken into account. Therefore, the manual process was still used to avoid these problems and the resistance to use a new technology was existed. Unfortunately, the dual processes might have caused more problems to the company, where the updated data could not be traced as they might have been either in the file or in the system.

Then the situation of used the system was evolved and most companies replaced the manual process with an automated system. However, even though the process and