

USER RESISTANCE FACTORS IN POST ERP IMPLEMENTATION

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This dissertation is dedicated to my family for their endless support and encouragement.

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ABSTRACT

Enterprise resource planning (ERP) systems are becoming mature technologies to support inter- and intra-company business processes. However, one of the factors frequently cited as the major reason for the failure of ERP system in post implementation is “User Resistance”. ERP implementation doesn’t finish after Go-Live, instead the real test of system starts when user begins using the system. The main purpose of this study is to investigate user resistance factors in ERP post implementation stage and the influence between the factors associated with the research model, then to provide recommendations and guideline to avoid user resistance in ERP post implementation. To achieve this objectives quantitative method were conducted with 95 ERP end users. Correlation analysis is used to investigate the influence between user resistances as well as mean, std. deviation and rank. The result shows Resistance due to change, Change in Job content, User Expectations, Increased efforts, Lack of Education and User training, Usability issues and resistance to technology, Lack of user involvement in the development process, and Lack of communication between top management and end users are the factors behind user resistance. Recommendations and guideline to avoid user resistance in ERP post implementation are also presented. An equally important future direction is a psychological understanding of the users’ perspectives, Attitude strength, Attitude structure, and Resistance to change. For the user, there may be negative perceptions towards the ERP systems and the changes; however, the attitude strength and structure has not been examined. The benefits and outcomes of this study shall aid organizations to overcome user resistance in post ERP implementation.

ABSTRAK

Salah satu faktor yang sering dibahasakan sebagai sebab utama bagi kegagalan sistem ERP dalam pos pelaksanaan adalah "Rintangan Pengguna". Pelaksanaan ERP tidak tamat selepas Go-Live, sebaliknya ujian sebenar sistem bermula apabila pengguna mula menggunakan sistem. Tujuan utama kajian ini adalah untuk menyiasat faktor rintangan pengguna dalam peringkat pelaksanaan pos ERP dan pengaruh di antara faktor-faktor berkaitan model penyelidikan, seterusnya memberikan cadangan dan garis panduan untuk mengelakkan rintangan pengguna dalam pelaksanaan pos ERP. Untuk mencapai objektif ini kaedah kuantitatif telah dijalankan dengan 95 pengguna pos ERP. Analisis korelasi digunakan untuk mengkaji pengaruh antara rintangan pengguna seperti pengiraan purata, aras dan sisihan piawai. Hasil menunjukkan rintangan untuk melakukan perubahan adalah perubahan dalam kandungan kerja, Permintaan Pengguna, Penambahan usaha kerja, Kurangnya Pendidikan dan latihan pengguna, isu-isu Kebolehgunaan dan rintangan teknologi, Kekurangan penglibatan pengguna dalam proses pembangunan, dan Kekurangan komunikasi antara pihak atasan dan pengguna adalah faktor di sebalik rintangan pengguna. Cadangan dan garis panduan untuk mengelakkan rintangan pengguna dalam pelaksanaan pos ERP juga dibentangkan. Satu hala tuju masa depan yang penting adalah pemahaman psikologi perspektif pengguna, kekuatan Sikap, struktur Sikap, dan rintangan terhadap perubahan. Bagi pengguna, mungkin terdapat persepsi negatif terhadap sistem ERP dan perubahan, namun kekuatan sikap dan struktur masih belum dikaji. Manfaat dan hasil kajian ini adalah membantu organisasi untuk mengatasi rintangan pengguna dalam pelaksanaan pos ERP.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

ERP stands for Enterprise Resource Planning. Other common names used are Enterprise Information Systems (EIS), Enterprise Wide Systems (EWS) or Enterprise Systems (ES). Enterprise systems are commercial software packages that enable the integration of transaction oriented data and business process throughout an organization. ERP are made up of a suite of integrated software applications that are designed to support a business' core functions (Aldwani, 2001; Amaoko Gyampah, 1999). Despite the advantages associated with ERP systems, their adoption is often problematic (Amaoko-Gyampah, 1999). Approximately 50% of all ERP implementations fail to meet the adopting organisations' expectations (Jasperson, Carter & Zmud, 2005; Adam & O'Doherty, 2000). In

An article entitled "How to Overcome the Most Dangerous Issues Facing Corporations Today", the DA Consulting Group states that one of the major reasons why SAP implementations fail to achieve the business goals intended is because many companies fail to address the user side of the equation (DA Consulting Group, 2006. Aldwani, 2001) identifies end-user resistance as one of the main contributing factors towards the failure of ERP adoption. The implementation of the ERP system may have been successful but end-users often only make use of a subset of the

available features (Boudreau, 2003; Ross & Weill, 2002; Jaspersen et al., 2005; Yi, Wu & Tung, 2006).

User resistance is an issue that could result in problems for organizations. According to (Aladwani 2001,) “Many ERP systems face implementation problems because of workers’ resistance”. People working within an organization are major stakeholders in post-implementation stage and without their support, smooth working of ERP system is nearly impossible. Often organizations spend major efforts in initial stages of the project’s implementation because of different complexities. However, their attention to post-implementation stage is not evident. There is a need to address the issues concerning post implementation of ERP systems. As described by (Nah et al 2006,) “One of the commonly cited reasons for ERP failures is end users reluctance to use the newly implemented ERP”.

1.2 Problem Background

One of the main reasons ERP implementations fail to achieve their predicted benefits is because the system is not completely accepted by end-users, Therefore this research study intends to find out the reasons behind user resistance in post ERP implementation stage, why user resists to the ERP system, what are the causes and reasons behind users’ resistance is the main problem area of this research.

User resistance is identified as one of the major people issue that creates problems in ERP post-implementations. As mentioned by (Yu 2008) ERP implementation is not a technical issue rather it is a people issue. In ERP implementation the major obstacles faced by organization are related to people, 62 % before go-live and it remains as same in post-implementation stage. (Maurer 2005) finds that the reason for low ERP return on investments is user resistance. (Hines 2005) notes that since end user resistance often is cited as an important cause of

organizations failing to achieve projected benefits, PeopleSoft, an ERP vendor, purposely made user-related improvements in version 8.8. Furthermore, a report on 186 companies that implemented the SAP ERP found that resistance is the second most important contributor to time and budget overruns and is the fourth most important barrier to SAP implementation (Cooke and Peterson 1998).

Essentially, an ERP implementation requires organizational change, which often alters the tools, skills, rewards, tasks of the job, organizational structures, and even beliefs and values. After implementation, users' direct interaction begins with the system and they start using the ERP system. At this stage, some employees often resist to sophisticated automatic processing and use only manual functions that may give them a greater feeling of control. (Ross and Vitale 2000) describes how resistance took place in many forms since some users' jobs significantly changed, some lost power, and most had to unlearn as well as relearn.

Most of the previous studies tend to emphasis on the problem of ERP implementation project (before ERP being rollout), focused on an organizational rather end user level of problems in using ERP system but not the real usage issues after the ERP system has been implemented (post implementation phase). (Marakas and Hornik 2006) points out that "few theoretical foundations currently exist in the literature for explaining user resistance". Although studies in other fields have examined resistance to change, the concept of user resistance still lacks a theoretical underpinning as to its cause. Yet, it is important for management to understand user resistance since it indicates an underlying problem with an implementation. Although there are some IT studies which describe user resistance (i.e., Jiang et al. 2005; Shang and Su 2004), IT studies have focused much more on user acceptance rather than user resistance.

As mentioned above, understanding the nature of user resistance is important. A research stream on ERP has developed in the last several years because of their importance to organizations. These systems are important to study not only because

of their contextual differences but also because of the following: 1) ERP implementations are very costly; 2) there have been many ERP failures; 3) an ERP is a long-term investment made to increase efficiencies and provide better management tools necessary for many organizations operating today.

1.3 Research Question and Purpose

Due to the above mentioned problems, this research is intended towards finding the user resistance in post ERP implementation. Hence, the purpose is to identify the reasons behind user resistance in ERP post-implementation. Therefore, in an attempt to explore user resistance issues in post ERP implementation stage, it is to be conceptualized and empirically validated as to what are dimensions that contribute to user resistance.

Q1- What are the factors behind user resistance in ERP system post-implementation (After go-Live)?

Q2- What are the influence between user resistances factors in ERP post implementation?

Q3- How user resistance can be overcome in order to avoid failure in ERP post-implementation stage?

1.4 Project Objectives

Predetermined objectives of the project are to set project goals and to facilitate research study conducted. The project objectives have been identified as follows:

1. To identify the factors and reasons which lead to user resistance in using ERP system (after go-live stage)
2. To identify the influence between the factors toward user resistance in ERP system post implementation.
3. To present recommendations and guidelines for organizations and business owners to avoid user resistance for ERP system in post-implementation stage.

1.5 Project Scope

The research focus is towards investigating reasons behind user resistance in Post ERP implementation stage. This research will identify the causes of resistance after go-live stage, and only intended in finding out the reasons after Go-live stage. This research study focuses on Post-implementation stage where people's issues create obstacles in the project resulting in several consequences for the organization. There are multiple stakeholders involved in implementation phase of an ERP project i.e. top management, managers, consultants, change management team, technical team and users. It is out of the scope to conduct a research, which involves all these stakeholders as it takes lots of time and resources to contact and collect data. For this research, ERP users are selected as stakeholders for study and the factors would be identified which lead to resistance in post ERP implementation

1.6 Importance of the Research

There are several contributions of this dissertation. First, the ERP post-implementation is examined from a user resistance perspective; as user resistance is a reason why a technology is not adopted, this research modifies the current understanding of the user acceptance literature. As the second chapter points out, there are many studies that have examined user acceptance, with user resistance sometimes considered the opposite of user acceptance. This study argues that user resistance is not the opposite of user acceptance and differentiates the two concepts, since user resistance can still occur, even when acceptance appears to have occurred. Based on the user resistance findings of this study, researchers and practitioners can have a better understanding of the difference between user acceptance and user resistance.

A second contribution is conceptualizations of user resistance factors and their interrelationship by providing understandable model that includes factors influencing user resistance in ERP post-implementation stage, it goes with identifying the most critical factors.

A third contribution is this project will provide guidelines and recommendations to the organizations and home business owner in optimizing the usage of ERP system as well as overcome user resistance in using ERP after go live.

1.7 Chapter summary

This chapter presents a brief introduction about the project and how the project is going to be conducted has been discussed. The problem background and statement has also been discussed in this chapter to give an introduction of the project and to explain why this project has been proposed. The objective, scope and the importance of this project have also been pointed out.

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