Impact of Organizational Factors on Successful Implementation of Enterprise Resource Planning Systems (ERPs) in NADRA

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Abstract

The continuous shift with regard to technological up-gradation for improved performance and organizational efficiency is quite evident. Every organization is embracing change in one form or another in order to remain competitive. However, changes at any level is met by some sort of resistance from its workforce. The aim of this study is to explain the reasons that lead to the failure of Enterprise Resource Planning systems (ERPs) implementation and the impact of an organizations' internal factors on user resistance. To support the theory, Nadler's Congruence Model (1981) has also been used. In addition to that, change facilitator's role in managing change effectively was explored.

Implementing a new system is only successful when it is fully accepted by the end users. The Diffusion of Innovation Model presented by Rogger (1983) was used to explain how user reach the decision of accepting or rejecting a new system. Rogger has argued in his theory that whether a user accept or reject a change depends entirely on his knowledge about the system and the perceived value of the system. Hence, a framework was proposed based on the variables defined by Rogger i.e. awareness, perceived value and motivation, to analyze the impact that organizational factors have on user acceptance.

Data was collected from NADRA organization using convenience sampling method for distribution of questionnaires. 160 questionnaires were distributed and correlation and regression analysis was done using SPSS software to verify the proposed frameworks. Cronbach's Alpha was also applied to test the reliability of the data.

In light of findings, the organizations must give attention to the trainings they are providing as well as increasing effective communication. Other than that, organizations must focus on keeping their end users involved during the implementation phases to ensure efficient flow of information.

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Introduction

1.1 Introduction and Background

In the course of recent years, the advancement in technology has transformed the way how today's organizations conduct business. There has been a growing pattern of moving from traditional practices of conducting business towards usage of information systems in order to improve the operational efficiency as well as enhancing the performance and productivity levels of organization by manifolds. Implementing modern technologies in their business processes has become one of the critical factor in defining the success of all the companies in this competitive era. The simulation of information has also become more and more easy hence allowing improved and quicker decision making ability throughout the hierarchy. (Ahmed, et al. 2006) stresses the significance of technological upgrade for the continual of operational excellence and maintaining the competitive edge in the marketplace. Among these latest technological trends is the use of Enterprise Resource Planning Systems (ERPs), due to their vast benefits. Enterprise resource planning (ERP) is business process management software that allows an organization to use a system of integrated applications to manage the business and automate back office functions. ERP software integrates all facets of an operation, including product planning, development, manufacturing processes, sales and marketing. (Davenport 1998) described ERP as "the greatest essential development in the corporate use of information technology in the era of 1990's. This shift has allowed the business processes to be fully aligned with the key targets and long-term goals of the organization, helping them to prepare themselves for better leadership and decision making. As rapidly as the other countries are embracing this change, on the other hand, it is not nearly as rapid and operational in Pakistan as it has been in the other parts of the world. Most of the organizations in Pakistan still depend on the conventional ways because of various reasons, one of them being strong resistance to change.

The most commonly cited explanation behind this inefficient implementation of organizational systems is the resistance towards change. Not just this but change

resistance is also the most cited reason behind worker alienation and difficulties. As employees are the foundation of the organizations and will always be the inevitable clients of the final-product, effective change process implementation is quite significant for their easiness and contribution in the change procedure.

The successful implementation of ERP system is influenced by numerous organizational factors including individual, technical and so on. Execution of any information system in an organizations demands immense changes in all parts of that organization including the culture, politics, quality of systems, strategic alignment, embedded routines, communication and above all the collaboration between the employees and the management. Therefore managing each and every one of this aspect is very important and if they are not managed appropriately, it is always met by strong resistance from within the organization.

While managing something as intricate as ERP implementation, there is an overall agreement among the organizations who handled failure in the past relating to the importance of fully understanding the components of change. However the whole management can avoid all the consequences by completely understanding the underlying forces of change, the probable reasons of resistance and preparing contingency plans beforehand. By being prepared beforehand the organizations therefore can achieve the anticipated results from these implemented systems. Change resistance is not just a notion or a perception of some kind, it is a behavior that challenges or interrupt the change process because of the hindrances relating to suppositions and dread. Most of the times, the employees have this fear of losing the power they have or that their routine might change and they will be left helpless if not finely tuned to the change process.

Most of the organizational high ups fails to fully comprehend that the feedback given to them by the employees are not simply a form of resistance, in fact that feedback can actually prove to be much valuable (Ford, 2009). The managers can thus allow buy in to these systems by just a shift in perspective. It may not be used that properly by the employees but most of the times, resistance is often characterized as an effective tool that can help in understanding the underlying glitches in the system and also completely understanding all of the apprehensions being raised by the personnel. If the

organizational culture allows thorough communication throughout the change process then it can ensure that both the management and the employees are on same page. In this way, resistance incomprehensibly fills in as a fundamental factor towards a definitive success of change as opposed to representing a confusion or any kind of complication.

The ERP systems are famous all over the world not only because of their ability to simulate and propel information throughout the organization but rather how it incorporates elements of business processes to the mix with such finesse. ERP systems don't only offer the automation of processes that are already at play but it also introduces the concept of full integration between all the technological, organizational as well as individual processes which is where the sophistication of this whole system lies. Due to this very nature, ERP implementation demands watchful course of action, clarity of thought and explanations for each one of the issues recognized which must be accomplished by means of strong collaboration with respect to all the stakeholders i.e. technology, business processes, departments and individuals (Al-Mudimigh 2007). Therefore for successful implementation of the ERP systems and to reap maximum benefits from them, one must consider both technical as well as the organizational factors side by side.

1.2 Problem Identification

Change as we know has now become very important and inevitable in the world of business. The organizations must continuously bring change in the way they handle business in order to survive. Although organizations are now taking many change initiatives in order to remain competitive in this world and majority of the organizations in Pakistan are implementing ERP systems in order to modernize their management, yet many fail in bringing successful implementation in the organization. Every time the companies set on bringing change, it is strongly met with the resistance from the employees. That resistance can be caused due to various reasons. Here, most of the times, the main reasons are thought to be employee-centered.

1.3 Problem Statement

It is stated by Adams, Hayes and Hopson (1976) that minimum effort has been made in order to examine the effects of change initiative on employees. Identifying and establishing the perceptions of employees about the change has become a necessity.

In this research, the core purpose is to validate the impact of internal organizational factors on successful implementation of ERP systems by thoroughly studying the fundamental reasons and the effect these factors have on employee decision making that ultimately leads to the success or failure of the implementation of ERP systems.

1.4 Research Objectives

The research objectives for this study are as follows:

1. To identify the impact of organization's internal factors that lead to change resistance towards ERP implementation.

2. To understand the underlying perceptions of employees behind acceptance or resistance towards change.

3. To determine how effective change management facilitators are in reducing change resistance.

1.5 Research Questions

The research questions for this study are as follows:

1. What is the relationship between the organization's internal factors and successful implementation of ERP system in NADRA?

2. What is the relationship between employee's perception about the ERP system and its successful implementation in an organization?

3. How effective change management facilitators are in reducing change resistance?

1.6 Significance of Study

Bringing changes in the business process in organizations have become a necessity in order to stay competitive in the industry. As previously argued by (Graetz, et al. 2010) that in business life, change is quite a normal part. Even those companies who are at the