

Effect of Organizational Culture and Top Management Support on ERP Implementation

MS Thesis



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Abstract:

The sole purpose of this research is to study the relationship and impact of different factors on ERP implementation. Although there are many critical factors influencing in the process of successful ERP implementation. But in this research top management support and organizational culture are studied as influencing factors with ERP implementation because they are mentioned as one of highly influential factors in foreign as well as in local studies. Data has been collected from Sialkot for testing the hypothesis. Organizations representing all major sectors are included in the sample. Responses have been taken from the all employees working on ERP system irrespective of their position in the organization. Few amendments have been made in the adopted instruments in the lights of suggestions of independent reviewers. Cornbach Alpha test is applied on the data to further validate the instruments. Regression analysis is used to study the impact of organizational culture and top management support on ERP implementation. Results suggest that there is sufficient impact of independent variables (individually as well as collectively) on dependent variables and the impact is significant also. It is also found out that the collective impact of both independent variables is greater than their individual impact. Furthermore, there is also a strong positive correlation in independent and dependent variable. The collective variance explained by independent variables on dependent variable is less than 40% indicating that there are many other factors influencing ERP implementation other than the two (organizational culture and top management support) studied in this research. This result also support the literature as there are

approximately 24 factors identified in the literature as critical success factors for ERP implementation. This proves to be a pioneer study in this area of research in Pakistan. The results may help the top managers to consider the factors identified in the research before implementing ERP projects in order to save financial as well as human resources. This study invites other researchers to identify other factors influencing the ERP projects and find out their impact in other major industries of Pakistan.

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Dedication

I would like to dedicate my efforts to my parents whose endless support resulted in the shape of my MS completion. I always found their prayers with me in the time of difficulty. My higher study is an outcome of the dreams of my father who always prefers to fulfill my financial needs by ignoring his personal necessities of life. I am so blessed that I have fulfilled the desire of higher study of my parents. But this is not the end of story, I wish to complete my PhD as soon as possible to see my parents pleasant and it may be a small gift of happiness from my side for them.

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Introduction:-

This chapter provides the overview of present study. Chapter starts with background and then rationale for the research will be discussed that provides a bird's eye view about the inspiration of the researcher towards studying this topic. The research will thereafter progressed towards the formulation of research problem, research objectives, research question, significance of the study and structure of the study. In short, the chapter discusses about the importance, timeliness and rationale of studying the ERP system in context with top management support and culture in a very important industrial city (Sialkot) of Pakistan.

1.1 Background of the study:-

Strategic competitiveness is required by the organizations in order to strive for better productivity and profitability (Gatikker, 2007). Many factors will contribute in competitiveness including globalization, environment pressure, technological change and government etc. In order to cope up with these factors, management required to make sharp and timely decisions and for this purpose, they need to have précised and accurate information. So, today is an era of information management. If management have well-timed and précised information then there is a greater probability of good decisions which may lead towards the success of the organization.

Information systems are available now a day to provide precise information to the management for making their decisions. According to Dai (2008), firms are investing 85% of their capital in establishing Enterprise System environment within the organizations. This fact signifies the intention of today's organizations and significance of information technology in the eyes of management.

ERP has been widely regarded as a source of obtaining the strategic edge and competitive advantage (Zhang et al, 2005) and many firms have shifted from off-the-shelf information

systems to ERP packages in order to maximize their productivity and efficiency (Al-Mashari& Al-Mudimigh, 2003).

1.2 Rationale:-

Enterprise resource planning systems are considered to be an integral part of rapid information processing within the organization and provide specific & timely information to the top management for making strategic decisions (Shah et al, 2011). Growth rate of ERP was 7% in past few years (Michel, 2007) and considered to grow in the upcoming years. Dai (2008) has reported an extensive investment in establishing ERP systems. It means companies have devoted more than half of their budget in improving IT structure within the organization. Above mentioned figure shows that huge investment has been made by the organizations on the ERP implementation and establishing IT environment.

But there is also a very high ratio of ERP systems failure. Past studies showed that ERP system failure ratio ranges from 40% to 90 % (Parr, 2000; Thavapragasam, 2003). According to Fitzgerald (2003), success rate of ERP systems are approximately 33% and many systems are reported as delayed and over budget. According to Zabjek et al., (2009), 90% of the ERP implementations are reported as failures.

ERP is not a new concept in the world but it is in an infant stage in the Pakistani organizations because Pakistan has a very small scale of economy. Pakistan Army, Pak Arab fertilizers, Pakistan Steel mills and Pakistan state oil are one of the few successful implementers of ERP systems in the past (Klaus et al, 2000).

There is a need to work on the factors that may affect the ERP implementation in Pakistan. Especially Sialkot is a highly important industrial city of Pakistan and the concept of ERP is growing in Sialkot. There is a need to look at different factors that may affect the successful

implementation and turn the strategic edge into system failure.

1.3 Research Problem:-

Although ERP has been considered as strategic tool for achieving operational efficiency and taking in time decisions but its successful implementation is still a dilemma for the organizations. According to Thavapragasam (2003) & Zhang (2003), approximately 75% of ERP systems are declared as failed due to different factors and many projects of ERP are over budgeted and failed to meet the time designated for its completion (Parr, 2000). Different factors are identified by scholars like top management support, organizational culture, professional manpower, business process reengineering, organizational resistance and change management etc (Shah et al, 2011; Zhang et al, 2005; Hong and Kim, 2002; Hameed et al, 2012).

High rate of failure in the ERP implementation is a big threat for the organizations that wishes to establish integrated IT environment within the organization. Pakistani organizations are far behind from the international organizations in adopting the ERP systems. The reason may be less awareness, high failure cases, lack of research about factors causing system failure and small economy. Along with above mentioned, ERP implementation required big changes in the organizations work flows, organization communication system and structure (Law, 2007) that lead towards shaping a different culture.

It is hard to find research work in Pakistani context on the field of ERP system, its implementation issues and failure factors. However Shah et al (2011) & Hameed et al (2012) has published their research experiences in the field of ERP implementation and have found many critical factors that are effecting the ERP implementation like top management support, organizational culture, business process reengineering, project scope definition, training, financial support and user involvement. But there is still a need to work on and explain in detail

about the behaviors of the factors that may affect the ERP implementation and which are also considered to be important in Pakistani environment.

1.4 Research Objectives:

This research is to find the relationship & effect of top management support and organizational culture on ERP implementation. Top management support and organizational culture are considered to be one of the most critical success factors from ERP implementation perspective in Pakistan (Hameed, 2012; Shah, 2011).

1.4.1 Objectives list:

Research objectives can be summarized as:

- Identify the effect of organizational culture on ERP implementation.
- Identify the effect of top management support on ERP implementation.
- Identify the effect of organizational culture and top management support on ERP implementation.
- Identify the relationship of organizational culture and top management support with ERP implementation.

1.5 Research Question:

Research questions for the study are:

- What is the effect of organizational culture on ERP implementation?
- What is the effect of top management support on ERP implementation?
- What is the effect of organizational culture and top management support on ERP implementation?
- What is the relationship of organizational culture and top management support with ERP implementation and what will be the direction of the relationship?

1.6 Significance of the study:

Sialkot is big industrial city of Pakistan and contributing handsomely in country`s economy. Most of the organizations have not shifted towards the integrated systems at least in Sialkot. The reason include lack of knowledge about the benefits of ERP systems, need huge financial as well as human resources for its implementation, danger of heavy loss in case of failure of ERP implementation and less information available about the factors that can effect successful implementation of ERP systems.

This research focuses on the organizational culture and top management support that are considered as one of the most critical factors in ERP implementation in Pakistan. The research pays attention on the significance of these factors in the Pakistani environment, their effect and relationship with ERP implementation.

This research can be fruitful for the organizations, industrialists, management, system developers and professionals to learn about the impediments (under discussion) in the successful ERP implementation. It also helps to understand about the extent of relation of these factors with ERP and how they contribute in establishing ERP environment which ultimately encourage the top managers to take care of these factors before implementing the ERP systems in order to escape from financial as well as human capital loss. Last but not least, this research can be a valuable addition in the existing body of knowledge especially from Pakistan`s perspective and may encourage other researchers to work on the impediments in successful ERP implementation in Pakistani environment.

1.7 Structure of the study:

The study has been conducted in 3 broader steps. In the first step literature regarding the variables is provided along with the relationships among each other and other necessary details. In the next step, research methodology is suggested. This chapter includes theoretical model, hypothesis and research strategy, sampling unit, tools used in the research and statistical tools used for the study. In the last chapter, data analysis and discussion is available. This chapter includes data analysis, its discussion, conclusion, limitation, suggestions and implications of the study.