Determinants of ERP Implementation and System Success in India:
A Case Study

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ABSTRACT

Manufacturing industries implement ERP to increase the sales and profit and reduce the legacy system issues in their organization. However, in the implementation stage itself they face lot of challenges, sometimes they even face failure in implementation. The implementing companies need lot of resources and coordination from different areas and without these resources and coordination they cannot succeed. Even though they succeed in implementation, the performance is not up to the expected level in many cases. Since many CSFs are involved in this process, the managers have to identify the CSFs and plan accordingly to achieve system success. In this case, the authors discuss the important Critical Success Factors involved in different stages of implementation of ERP. Furthermore, they have tried to study the extent of system success in the companies and also identify the influence of ERP implementation on organization effectiveness.

Keywords: Critical Success Factors, Enterprise Resource Planning, Organization Culture, Organization
             Performance, System Success

INTRODUCTION

In the present competitive business scenario, apart from working towards survival and development, companies have to face the intense challenges of sky-scraping competition, rising customer expectations, changing customer preferences, high level of need for innovation etc. The intensity of these aspects is high in the manufacturing sector, where substantial importance has to be given to adhering to specifications, designs, schedules, and particularly data integration. Hence, companies have to incorporate some changes to survive and enhance the growth of the

organization. In this context, now companies are looking at Enterprise Resource Planning (ERP) as a readymade solution to various issues in many sectors all over the world.

ERP system is adopted in order to address issues of information storage, retrieval and dissemination in manufacturing units and to achieve a high level of coordination and precision which will result in operational efficiency through the optimum utilization of the resources.

Unambiguous networks of production divisions, suppliers and customers have to be created in order to attain operational efficiency. ERP systems address this issue by integrating complex networks to enable and support the flow of operations (Boersma and Kingma, 2005).

According to Katerattanakul, Lee and Hong, (2014) with higher rates of movement of resources into and out of the organizations and the necessity to coordinate, integrate and monitor these movements, large manufacturing firms with make-to-order production approach have significantly higher perceived benefits from implementing ERP systems regarding external coordination and competitive impact than the benefits realized by other firms.

Literature reveals that ERP implementation is a systematic stage-based process which involves the pre-implementation, implementation and post implementation stages of ERP assimilation (Pishdad and Haider, 2013). These three stages can be further categorized into four phases which accurately specify the activities to be carried out for ERP implementation. These phases require resources like time, money and human efforts in combination with important intra organizational factors which differ at different phases. The phases are as follows:

1. **Planning:** The elaborate planning stage involves important decision making on choosing the appropriate ERP package, budget allocation, scheduling the tasks for implementation, deciding the scope and allocating human resource for the various tasks relevant to the implementation process;
2. **Implementation:** This is the actual phase of execution. It is in this stage that the ERP software is installed, configured and adequate orientation and training programs are organized to help users adopt the new system. Based on necessity, orientation and training programmes may be conducted for the users. It is comparatively a longer phase which requires steady and well organized activities to help the users develop a positive mental frame to adopt such a major change in the organizational environment, which may be sometimes resisted by the employees;
3. **Stabilization:** After the initial problems with starting up and adapting to a new system handled efficiently and appropriately, the stabilization stage starts. This is the stage where the organization focuses on making ERP system adoption and usage as an everyday and routine activity for the users. It is similar to the refreezing stage in an organizational change management process. Depending on the ease or difficulty with which the users adopt the system usage, this stage may take either a short period or a longer period respectively;
4. **Improvement:** Once the system usage has been stabilized, the organization emphasizes the need for ameliorating the system by updating new modules as and where necessary depending on the operations of the organization. However, the ultimate aim is to achieve the objectives for which the ERP system is instigated in the organization. Further initiatives will be taken during this step for furthering the organizational efficiency through using the ERP system to its fullest capacity.

The size and nature of the organization as well as the scope of ERP in the organization are the factors that determine the resources required for ERP implementation.

Available literature on ERP provides sufficient evidence for supporting the fact that ERP enhances the survival, growth and success of the implementing organizations. However, there

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