

ERP Implementation: A Review of Selected Critical Success Factors

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Abstract

Enterprise Resource Planning offers many benefits to the manufacturing industry. Therefore, ERP become major strategic tools in today's competitive global environment. Many firms recognize the benefits associated with ERP implementation; however, they still hesitate to adopt these systems due to high risk, cost and the uncertainties prevail during pre and post implementation. Like the proper planning of project, user involvement and their participation, change management strategies (BPR) and lastly without top management support organizations cannot get the full benefits of such complex system.

This study attempts to identify and analyzes the success factors needs to be considered for successful implementation of ERP.

Keywords: ERP, Critical, Success etc.

Introduction

Critical Success factors (CSF), it is the processes that define what a management team 'Do', processes that can be owned, defined, measured and managed. Therefore, it is necessary to relate the CSF to the ERP implementation processes to have an overall view of the importance of each process.

The successful implementation of ERP systems is considered a very challenging task because ERP attempts to integrate all departments and functions across a company such as manufacturing, Marketing, Human Resource, Finance, Purchase, Material, production and Accounts into a single and common software that fulfil the different needs of particular departments.

Every ERP systems are designed to support organizations business needs and to resolve the problems quickly and efficiently in a proper manner. Therefore, properly implemented ERP will result in significant cost savings and increased efficiency.

The above statement was justified by (Shanks et al., 2000) that ERP implementation requires synchronization at all levels and across all different functional departments of the company which facilitates easy and immediate access to information regarding any query regarding any sort of inventory, product information or data related to

customer .

Kroenke (2008) stated that today, many public and private organizations worldwide are implementing ERP systems in place of the old functional legacy systems because they are no more compatible with modern business techniques and the latest Technology. However, the process of moving from functional applications to an ERP system is quite difficult, challenging, cumbersome, and lengthy process.

As per (Somers and Nelson 2001) Implementation is referred as the whole process of adopting, selecting, implementing and using the ERP system , therefore the implementation phase consists of the customization and adaptation of the ERP package as per needs of the organization”.

In relation to the definition of CSF, each study used a different list of CSF, some CSF is the same but with different names, or different definitions encompass the same CSF. They can be classified as follows:

Business Goals and vision

A proper business plan with clear vision is needed to guide the project throughout the ERP life cycle. In a Project management, there are mainly three components, which are interrelated as namely; scope, time, and cost.

As per (Somers and Nelson 2004) the primary stage of any project should begin with a conceptualization of the goals and possible ways to achieve these goals. Additionally, goals should be clearly mentioned so they should be specific and operational, and to indicate the general directions of the project. It is important to set the goals of the project before even seeking top management support. Many ERP implementations have failed because of clear business plans and vision.

Sustained Top Management Support

The top management support is required from beginning to the end of the project implementation. The reason behind this is that at the beginning senior management should help in the rollout of the project, analyze the business benefits, define the mission and scope of the project, and provide the resources needed for the project.

Senior managers are key persons in any ERP implementation project. Therefore to engaging and communicating with these person is vital to the success of the project. As rightly said ERP implementation is about people, not processes or Technology. They should provide the necessary resources for the project implementation.

top management Intervention has been crucial for the proper resourcing of the project, which can take fast and more effective decisions, resolving conflicts on timely basis

and bringing everybody to the single platform for same thinking, promoting company-wide acceptance of the project, and building co-operation among the diverse groups in the organisation, and in many times across national borders. Top management needs to constantly monitor the progress of the project and provide direction to the implementation teams.

Their commitment can be measured and monitored: typically this 'change readiness assessment' activity would be part of a change management program whereby the project team has a good handle on the readiness, willingness and ability of top management to implement the project.

Effective feedback mechanisms also need to be in place to channel any concerns they may have and to take any relevant actions to address issues that surface – this can be achieved using techniques such as regular stakeholder interviews and surveys. Top management support and commitment does not end with initiation and facilitation, but must extend to the full implementation of an ERP system.

At the end, there is a need to encourage the person involved in system usage and to increase the commitment of user involvement.

Project Team and Work Composition

(Remus 2006) describes the combination of project team as “The ERP team which involve best persons in the projects as per their knowledge, skills, abilities, and experiences” right from project manager to the right team members. In addition, team should not only be technologically competent but also understand the company and its business requirements.

As per (Loh and Koh 2004) An ERP project involves all of the functional departments in an enterprise. It demands the effort and cooperation of technical and business experts as well as end users because both the business experts and technical knowledge are important for success of business. The sharing of information between the implementation partners is essential and requires partnership trust. Moreover, the team should be familiar with the business functions and products so that they know what needs to be improved to the current system.

The project Team must determine the business benefits that can be achieved by implementing the vendors' best practices and the overall maintainability of the software.

Therefore, the comparison of successful versus unsuccessful ERP project indicates that a good idea would be subdivide the project into a smaller and achieve tangible benefits.

As per (willcocks and skyes, 2000) there is often too much focus on technology rather than on the business benefits of

the ERP. Focusing on user needs over technology is a success strategy for ERP implementation.

Some slakes need to be built into the project schedule plans because unforeseen issues will arise in a project. In the successful projects, managers create contingency plan and measure achievements (Scott and vessey, 2002)

Change Management. Change management is a way of preparing employees and executives for the changes that come through ERP. In the change management phase the business blueprint is defined, and the business processes are analyzed, redesigned (some) and documented. There is the need to understand how the organization intends to run its business within the ERP system and to manage the changes in the organization.

The process changes is associated with making Re-engineering works are critical to the success of ERP. With re-engineering the business process is simplified, business rules are improved, and the same provides the new opportunities. At the same time with ERP enables the organizations to be more responsive to changing markets and to shifts in competitor's strategies.

Nah (2003) stated that change should continue with new ideas and updates to take full advantage of the ERP system when the system is in use. Organizations should be willing to change their businesses to fit the software in order to reduce the degree of customizations.

However, many organizations have made unnecessary, complex customizations to ERP software because the person making the changes does not fully understand the organization's business practices and their needs.

As stated (Aldawani 2001) When implementing an (ERP) system, it brings lot of changes in the system and top management faces an unwanted attitude from potential users – for one reason or another, they resist the implementation process. To avoid such problem during the implementation the officials seating at the top proactively deal with this problem instead of reactively confronting it.

change management is designed to help employee, rather than create a fear, from the ERP design these changes. Deciding to invest in ERP should be a time of excitement and optimism.

ERP can change the organisation mainly from three point of view.: change in Job Profile, Jobs Focus,, employee Relationship and ,Employee engagement

Involvement of user

(Esteves *et al.*, 2003). User involvement is one of the most cited critical success factors in ERP implementation projects due to the fact that by involvement of user the level of user

satisfaction and acceptance increases. User involvement is essential because it improves perceived control through participating the whole project plan. According to Zhang *et al.* (2002), there are two areas for user involvement when the company decides to implement an ERP system: user involvement in the stage of definition of the organization's ERP system needs, and user participates in the implementation of ERP systems.

There are certain key benefits associated with user involvement like at what is the level of involvement and what are the approaches being taken consideration to involve the user. The involvement of the user generally brings a positive effect in terms of user satisfaction and if the involvement of user is for the purpose of the primary source of information for the system development than role of user become more powerful and more important. Therefore the user involvement must be carefully considered.

(Beyer and Holtzblatt 1998) defined Four approaches mainly considered for the system development are: User centric design, Participatory, ethnography and contextual design and their main emphasis is on Usability, participation, social aspects and work context respectively.

Training and Awareness

No ERP implementation can succeed without employee training. Because ERP implementations entail significant change to the way, employees work, training must be an integral part of a large system deployment. ERP companies are creating Training documentation that teaches people how to complete transactions in the system. However, running a business needed much more than simply completing transactions in a system. ERP training courses must deliver knowledge in the context of how employees perform their day-to-day jobs, not simply how to complete the new transactions in a system. Proper Training to users to use ERP is an important issue because ERP is not easy to use even with good IT skills. Therefore, the proper training should be provided to the entire person involved at every stage of Time and the continuous monitoring of this should be done at the regular interval to achieve the benefit of ERP.

Nah *et al.*, (2003) argued that sufficient training could assist increase success for ERP systems. However, lack of training may lead to failure. According to them main reason for education and training is to increase the expertise and level of knowledge of the users about the ERP.

(Woo 2007) rightly said that awareness should be made about the applications of ERP and benefits associated with it to achieve the goals of business functions

Conclusion

As far as critical success factors, are concern the Needs Requirement had to be formal, detailed, and lead naturally to an ERP solution choice. However, there needed to be a certain modesty and flexibility so that the benefits of the ERP solution can be optimized. There should be proper coordination between The Customer and the team member of the project team members. So that there should be no mismatch between the perception and expectation of ERP benefits. After the implementation, there should be a continuous up gradation and proper training should be imparted to the user, which will increase the involvement of the end user. A 'failure' factor could be avoided by reducing the gap between the various processes.

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