

ERP Success Factors: A Comprehensive Research Study

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Abstract: *The enterprise resource planning (ERP) schemes have developed a keystone of modern organizations, integrating essential business procedures such as human resource, finance, supply chain along with customer management into an incorporated system. In spite of their tactical importance, ERP employments often face a huge failure rate due to the reasons associated from organizational, technical and human challenges. The present research paper inspects the essential critical success factors (CSFs) that regulate the successful performance and implementation of the ERP systems. By producing results from prevailing literature, the study recognizes key extents like as top management support, user training, project management, organizational culture, technological readiness and business process reengineering. The study accomplishes that ERP accomplishment is not exclusively reliant on software competences but mostly influenced by organizational arrangement and transformation management.*

Key Words: ERP, Critical, Success, Factor, Business, Development.

1. INTRODUCTION:

The times for ERP changes from multiple updates from simple world and spreadsheet data processing, accounting procedure, towards management information system. Nowadays ERP gives a big canvas to support the data processing of the organization in the efficient manner. Similarly, the failure of the ERP in the various organizations are also noticed. The enterprise resource planning (ERP) systems are one of the combined software packages or platforms intended to rationalize and systematize organizational procedures. These systems empower sharing of data across various departments or towards the entire departments and play crucial role in efficiency, increasing decision-making, centralised processing and competitiveness. Since the past few decades, it is observed that ERP acceptance and implementation have augmented significantly as organizations pursue to expand operational routine and improvement a tactical advantage.

Though, ERP employment is a multifaceted and resource-intensive procedure. Several organizations are experience about delays in implementations, increased cost and sometimes comprehensive failure during employment. The studies recommend that ERP developments have a big failure degree due to their complication and the noteworthy organizational work procedure changes. Consequently, understanding the features that contribute to ERP achievement is critical for organizations pointing to exploit return on investment and stop failure of the ERP systems.

The present study discovers the critical success factors (CSFs) of ERP structures and analyses in what way these factors effect implementation consequences and post-implementation presentation.

2. LITERATURE REVIEW:

The ERP is vital of success is constantly not accurate. If there are inappropriate preparation and employment, it springs high grade of disappointment also. From the several case study it is observed that numbers of ERP set-ups are not scope to their projected phase. Rendering to research of D. Cooke et al. (2001), there are 117 organizations which take ERP in practice and consequences were: amid 117 ERP one of is out of budget, 20% were discontinued. 40% did not achieved the target with goal. With various reasons some reasons are technical, social, economic and institutional issues. Chien, S., & Tsuar, S. (2007) observed that now ERP implementation are carefully taken by the organizations, they produced the study of three companies with success. The ERP success factor and implementation are discussed by the Al-Fawaj et al. (2008) which gives positive insides to the successfully implementation of ERP in the modern world. Kailash Totla et al. (2016) provides various aspects related to ERP critical success factor with their two research paper consecutively with Indian industries experience. Ranzhe, J. & Xun, Q. (2007) gives various success factors which are account as the

key factor for successful implementation of ERP. Stephan A. K. et. al (2009) nearly 78 different critical success factors are cited and they were united in the cluster. The possibility to give umbrella terms with 15 key terms.

3. CLASSIFICATION OF ERP SUCCESS FACTORS:

The ERP success factors might be generally classified into five important clusters that cooperatively gives a structured framework for assessing and guaranteeing successful implementation. The organizational factors depict a foundational part, as they regulate the interior readiness of an organization / company. Robust top management backing confirms adequate resource sharing, strategic track and promise, whereas a supportive organizational culture inspires acceptance of novel systems. Operative transformation management assistances minimize resistance and appropriate business procedure arrangement confirms that existing workflows are well-matched with ERP functionalities.

The project management factors are similarly critical, as ERP employment is a multifaceted and significant initiative. Evidently defined project possibility and aims help in avoiding uncertainty and scope skulk, whereas effective scheduling with planning guarantee timely implementation. The risk management is indispensable to recognize possible challenges and mitigate them proactively, thus reducing the possibility of project disappointment.

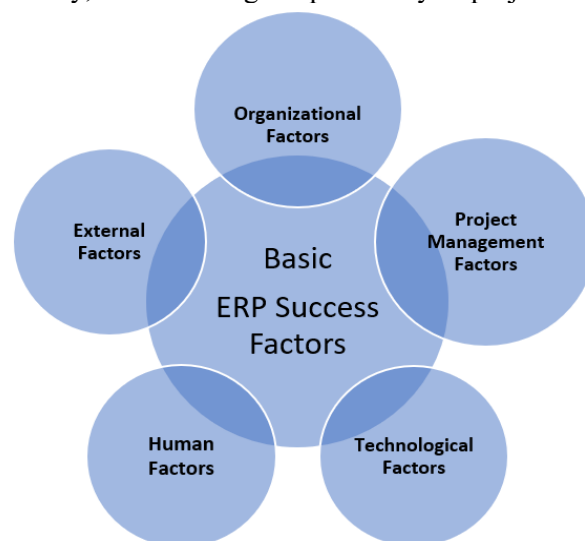


Figure 1: Critical Success Factor ERP

The Human factors emphasis on the people involved in the ERP implementation. The education about ERP and training of the user plays crucial role for enhancing system serviceability and acceptance. Employee involvement nurtures a logic of ownership and decreases resistance to alteration, whereas effective communication confirms that the entire stakeholders endure informed and united during the project lifespan.

The technological factors pact with the technical competences' compulsory for the ERP success. High system eminence and elasticity permit the system to acclimatize to altering business requirements, whereas correct data and appropriate data migration are vital for consistent outputs. A vigorous IT structure supports smooth structure process and performance.

The external factors like vendor support and adviser skill meaningfully influence ERP success. Knowledgeable vendors and advisors deliver practical guidance, best practices and problem-solving support. Collectively, these categories create a complete framework for understanding and attaining ERP success.

4. CRITICAL SUCCESS FACTORS OF ERP IMPLEMENTATION:

There are several key factors which are applicable for the implementation of the ERP in the efficiently and successful manner. Followings are the key critical susses factors.

4.1 Top Management Support

Top management backing is reliably recognized as the utmost critical success factor in the implementation of ERP. The leadership plays a vigorous part in giving tactical direction, assigning resources and inspiring employees. The studies specify that robust managerial support confirms project arrangement and decreases resistance to transformation. Deprived of executive promise, ERP projects frequently lose impetus and fail to attain desired results.



Figure 2: Critical success factor for ERP implementations

4.2 Clear Goals and Objectives

Clearly or well-defined aims and objectives are vital for administering ERP implementation. The organizations must found quantifiable targets like as process efficiency, cost reduction and improved decision-making and decision taking. Uncertainty in project aim might lead to delays, scope creep and augmented costs. So, defining a vibrant vision is crucial for line up stakeholders and confirming project success.

4.3 Effective Project Management

The ERP employment is a big-scale project that necessitates healthy project administration practices. The key elements comprise:

- Proper planning with manageable scheduling
- Appropriate tactic for allocation of resource
- Capacity to management of risk
- Proper and well-established performance monitoring

It guarantees that the project run on track and encounters deadlines. It also assistances in recognizing possible issues early and justifying risks.

4.4 Business Process Reengineering (BPR)

The ERP structures are constructed on standardized procedures, which usually need organizations to reshape their current workflows. Business Process Reengineering (BPR) encompasses analysing and enhancing procedures to line up with ERP functionalities. Research demonstrations that ERP implementation requires noteworthy organizational deviations which makes BPR a critical success factor. Organizations that miss the mark to familiarize their procedures may experience scheme inadequacies and user displeasure.

4.5 User Training and Education

User training is vital for confirming that employees might effectively usage the ERP scheme. Lack of training may cause to low acceptance and underutilization of system landscapes. The studies depict that training of users are one of the key factors impacting ERP success. Constant training agenda assistance employees to adapt the novel processes and expand system usage.

4.6 Change Management

ERP implementation includes noteworthy organizational transformation, including novel roles, workflows and responsibilities. Confrontation to alteration is a key issue in ERP projects. The effective transformation management policies include:

- Clear and proper Communication
- High level involvement of employee
- Regular and required training programs

The above-mentioned change efficiently decreases resistance and confirms proper transition.

4.7 Organizational Fit

Organizational fit denotes to the orientation between ERP structures and business procedures. A mismatch among the organization and system necessities might to implementation disappointment. Research underlines that ERP success relies on the rate of alignment among the system and organizational set-up. Customization or procedure acceptance might be essential to attain this fit.

4.8 Data Accuracy and Migration

The data migration is most critical technical characteristics of ERP employment. The poor data quality might cause to imprecise decision-making and system errors. Thus, an organization must confirm:

- Proper data cleaning process and pre-processing
- Efficient standard for data validation
- Proper mapping of data

The accurate data is important for the effective working of ERP systems.

4.9 Vendor and Consultant Support

The vendors and consultants also play a crucial part in the implementation of ERP. Their knowledge helps establishments to configure the set-up in proper way in order to resolve matters and enhance performance. Selecting the correct vendor safeguards better support, structure reliability, and successful execution.

4.10 Communication

The effective communication amid stakeholders is vital for ERP success as communication supports in the following activities.

- Proper sharing of projects and regular updates
- Better and clear communication resolving conflicts
- Clear and time being communication aligning expectations

The poor communication might be cause of misinterpretations and delays of project.

5. ERP IMPLEMENTATION PHASES AND SUCCESS FACTORS:

There are multiple phases which are enrolled in the complete ERP implementation. The key and typically projective phases are occurring in the following orders.

5.1 Pre-Implementation Phase

In the preimplantation phase there is three key activities are involved as 1) requirement analysis 2) selection of vendor and 3) planning of the project. Proper handling of these phases gives a clear success factor as 1) clear objective of the ERP implementation along with 2) support of top management.

5.2 Implementation Phase

In the implantation phase there is three key activities are involved as 1) system configurations 2) migration of the data and 3) planning of the testing. Proper handling of these phases gives a clear success factor as 1) clear objective of the project management along with 2) support of user training.

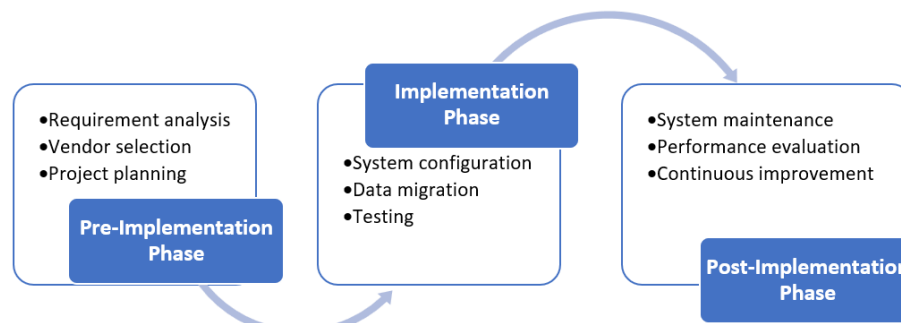


Figure 3: ERP Implementation Phases

5.3 Post-Implementation Phase

In the implementation phase there are three key activities involved as 1) Maintenance of system 2) evaluation of the performance and 3) planning of the continuous improvement. Appropriate handling of these phases gives a clear success factor as 1) clear objective of user support along with 2) support of system optimization.

The studies advise that the significance of success factors differs across diverse phases of ERP employment.

6. CONCLUSION:

In order to implement the ERP system there are a lot of factors which are assumed to be as the critical success factor, despite this some of the factors which play a crucial role depend on the situation or phase of implementations. The present study discusses three main sections associated with ERP critical success factor for classification, implementation and phases of ERP. From the study it is found that planning, clear goal, top management, BPR, user training, vendor support, data management and change management are critical success factors to implement the ERP system.

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