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**COMPARATIVE STUDY OF ISSUES AFFECTING
ERP IMPLEMENTATION IN LARGE SCALE AND
SMALL MEDIUM SCALE ENTERPRISES IN INDIA**

Comparative Study of Issues Affecting ERP Implementation in Large Scale and Small Medium Scale Enterprises in India

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Abstract – Issues which are considered more important for large scale enterprises may not be of equal importance for a small and medium scale enterprise and hence replicating the implementation experience which holds for large organizations will not a wise approach on the part of the implementation vendors targeting small scale enterprises. This paper attempts to highlight those specific issues where a different approach needs to be adopted. Pareto analysis has been applied to identify the issues for Indian SMEs and Large scale enterprises as available from the published literature. Also by doing comparative analysis between the identified issues for Indian large enterprises and SMEs four issues are proved to be crucial for SMEs in India but not for large enterprises such as proper system implementation strategy, clearly defined scope of implementation procedure, proper project planning and minimal customization of the system selected for implementation, because of some limitations faced by the Indian SMEs compared to large enterprises.

Keywords: Implementation, ERP, SME, Large Scale Enterprise.

The dispersion of ERP systems in large and small-medium scale enterprises (SME) has been, by large, the most pertinent phenomenon since nineties in the sector of Information technology (IT). ERP is one of the novel solutions for both large and small and medium enterprises (SMEs) in order to improve productivity, efficiency, and overall business performance. To achieve all of this, large and medium sized organizations have realized the necessity to implement ERP software to achieve integration of business activities. ERP applications constitute well structured, reliable information technology (IT) backbones of fortune 500 companies worldwide.

Enterprise Resource Planning (ERP) built on the framework based on industry best practices, is a packaged software applications that can be configured to meet functional requirements of an organization, which integrate information from various disparate sources such as customers, supply chain, human resources, and financial accounting to make up the value chain of the enterprise allowing an organization to become significantly compliant and effective.

The Indian small and medium scale enterprises (SME) are eyeing the enterprise system solutions for their business in this changing business scenario. Although this shift has been gradual but it is picking up as Indian small and medium business (SMBs) are now competing globally and they need to gain a competitive edge to win amidst global competition. India's SME sector being vibrant, dynamic, flexible and

productive entity containing about to some 12 million units that employing almost around 30 million people. Even though ERP systems were initially thought to run on large scale enterprises, SMEs are increasingly motivated to introduce ERP implementations [4]. A recent study finds SME companies focusing on growth strategies and customer services sometimes balancing between the two, but more often focusing exclusively on one or the other. As companies grow in size and improve performance, they are most likely to have invested in ERP system that will grow with them. As mid size companies grow, they must learn to operate in distributed environment and often experience proliferation of ERP and other enterprise applications. A number of publications have highlighted the failures and the frustrations that enterprises go through in implementing ERP systems. A Gartner group study was carried out in 1300 European and American companies and being found that 32% of ERP projects were delivered late and thus unable to achieve the true benefits of implementation.

Lured by seer magnitude of the SME sector in any country and particularly in India, many ERP vendors have been moving their attention toward SMEs by providing simpler and cheaper solutions from both the organizational and technological point of view, Pre-configured systems based on best practices at a fraction of cost originally required and promising implementation times of 60 days. In spite of such promises there is no general agreement on the

effectiveness of such systems. As a result the current rate of ERP adoption in SMEs is still low.

Such a scenario raises some serious questions: Are SMEs informational needs as well as other issues are different from that of large organizations? Is it possible to identify a relationship between organizational climate and ERP adoption in companies of different size? Can certain factors or issues be identified that can be considered critical in context to SMEs but not for large organizations so that managers can focus on those key issues to make the implementation process smooth? This paper thus attempt to deal with such scenario.

It has been found that 16 issues are identified as the critical issues responsible for ERP implementation success for large organizations and 15 issues for SMEs for developing countries in Indian context as those are contributing more than 80% of the total percentage contribution of issues. But some issues that are found to be critical for SMEs may not found to be critical in case of large organization. The objective of this paper is to find out those critical issues that have appeared exclusively for SMEs but not for large organizations. Those issues that are only critical to the SMEs are listed below:

*Clearly defined the goal and scope of implementation

*Proper project planning

*Proper implementation strategy

*Minimal customization

Clearly defined scope of implementation: It has been found from the past literature study that in the SMEs of the developing countries like China, India, Korea, Malaysia scope of implementation is one of the highly significant issue for the implementation of ERP. SMEs emphasis on the scope of implementation rather than large organizations as budget constraint is one of the limitation of those companies. Although ideally scope of implementation should be all inclusive; but as ERP implementation is a costly affair to implement all modules and functionalities of ERP is not a feasible decision for the SMEs. So, to implement the system successfully within the organization scope of implementation should be clearly defined to the implementation team.

Proper project planning: In SMEs proper project planning is an important issue than large ones as in SMEs budget and time constraints are main the limitations found. If before starting the project the planning is not done thoroughly then the implementation project could be failed. So, it is the responsibility of the team members to do make proper plan of the project regarding the timeline, budget, each members to do list, milestones and critical paths.

Proper implementation strategy: There are different fundamental strategic approaches for implementing ERP system that organizations must decide to adopt based on their budget and timeline. Strategy can be one of the most important strategic factors that can affect the whole implementation project greatly. Although Phased rollout approach is considered as the more ambitious but the researchers believed that Big Bang approach can be the more suitable approach for SME's as it need much less amount of cost and time for implementation. Among the SMEs all over the world are recently trying to adopt Vanilla approach for successful implementation because of their budget and timeline constraints.

Minimal customization: Through a comprehensive review of the literature, Nah, in their study on SMEs in china concluded that minimum customization as one of the key issues in ERP implementation. Numerous studies of the critical issues for ERP implementation conclude that the preferable way to implement ERP software is software modification. One estimate shows 20% of the processes in an organization cannot be modeled in an ERP system without customization. Minimal customization means using of code as given by vendors and to use much as possible to fit the organization needs even if to sacrifice functionality has been associated with successful implementation of ERP. It is to be kept in mind that organization would go for customization only when it is required on qualitative work.

It would be more value achieved to combine the results of both qualitative and quantitative researches in the future. There is a scope to enhance to this study by taking different industries into consideration. The above findings would reflects the perspectives of managers and implementers and holds significance for any organization in the small and medium scale sector who wishes to leverage the utility of integration of business processes by implementing an Enterprise Resource Planning system in their organization. SME's should thus focus on the issues like proper implementation strategy, clearly defined scope of implementation procedure, proper project planning and minimal customization , which are common for SMEs. The managers and users can be benefited from this study by identifying those key issues to make the implementation procedure smooth without any disruption. Further ERP vendors can take inputs from this study to change their implementation approach while targeting small scale enterprises.

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