

ELIXIR TO ISSUES AND CHALLENGES CONFRONTING IMPLEMENTATION OF ENTERPRISING RESOURCE PLANNING IN INDIAN SMEs – A STUDY WITH REFERENCE TO CHENNAI

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ABSTRACT

A robust tool for SMEs in India to take head on the competitions and consequent challenges posed by international players and enhance its productivity and bottom line is ERP. Despite the multifaceted benefits that come along with ERP, SMEs in India are struggling to successfully implement it due to multifarious reasons. On the basis of intense actual observation of implementation of ERP in twenty SMEs in Chennai and in-depth interview with officials and ERP vendors, the authors have tabled the issues and challenges confronting ERP implementation in SMEs and posit a conceptual model for their successful installation.

Key words: Enterprise Resource Planning, Implementation and Challenges, SMEs, Chennai

Introduction

Prior to liberalization in 1990 Small and Medium-sized Enterprises operated in an environment featuring protection, highly regulated business milieu and less competition, which undermined efficiency in business conduct, intensely formalized centralized business structure and dearth of professionalism in management (Ranganathan and Kannabiran, 2016). But the era of liberalization, privatization, disinvestments and deregulation ushered in 1990 have thrown open several challenges to SMEs like compressed production cycle, intense competition at national and international level, highly dynamic changes in customer tastes and demand, foray of MNCs, and dynamism in financial services and markets have place a heavy burden on SMEs to chalk out unique competitive strategies and implement novel business practices to sustain and grow. To this end ERP is considered as an effective tool (Rao, 2015).

Research Gap:

Majority of researches available relate to ERP implementation in large organisations. No researches seem to have done with regard to successful implementation of ERP in SMEs in Chennai. The present research seeks to fill this gap.

Research objectives:

This research entails the following objectives:

- (i) Identify the implementation strategies of ERP
- (ii) Identify the issues and challenges confronting ERP implementation in SMEs
- (iii) Develop a conceptual model for a successful ERP implementation.

Research Methodology:

The authors made an intense actual observation of implementation of ERP in twenty SMEs in Chennai. Of these, only four SMEs successfully implemented and operates ERPs. Thus the success rate is pegged at an abysmal low level of 20%. Based on the actual observation and in-depth interview with SME officials and ERP vendors, the authors have presented the benefits perceived, issues and challenges confronted in the implementation of ERPs and also posit a conceptual model for the successful installation and operation of ERPs,

Panoramic view of ERP, their benefactions and implementation strategies

As a novel high tech electronic solution, ERP ensures all-round operational integration in the organization ensuring quick access to updated information for making decisions on sound footing. In the present business milieu ERP has become a must for operating a business and to remain fasten itself with other firms which permits conduct of e-commerce as B2B (Boykin 2016). It is not uncommon to see several MNCs to limit their business dealings only with those that use ERP (Shehab et.al 2015)

Prior to the birth of ERP, all the departments in an organization developed their required software solution as an answer to their individual needs. This yielded a fragmented information base interspersed across the length and breadth of the organization and globe. Eventually, getting accurate information on time became a daunting task. The immense competition in the post liberalization era made firms realize the need for approaches hovering around customer and reduced production cycle. Companies were forced to essentially glide towards supply production, incessant fine tuning of all modus operandi of business. This

essentially demands integration of production process with supplementary operational areas like sales, marketing etc., thus advancing the march of ERP.

ERP integrates multiple business operations into one unified system as depicted below (Figure 1). It satiates the data requirements of all the departments in the entire organization transgressing geographical boundaries, while facilitating instant communication among them. Once an integrated ERP is put on board, executives can be freed from normal routine decisions to channelize their effort towards more productive work of planning and executing decision of long term dimension very much warranted for sustenance and development of the firm. As the financial and operational health of the firm is continuously monitored and assessed it results in noteworthy cost savings. The exorbitant price of ERP pales into oblivion when the benefits accruing from proper implementation of ERP in the long term is considered.

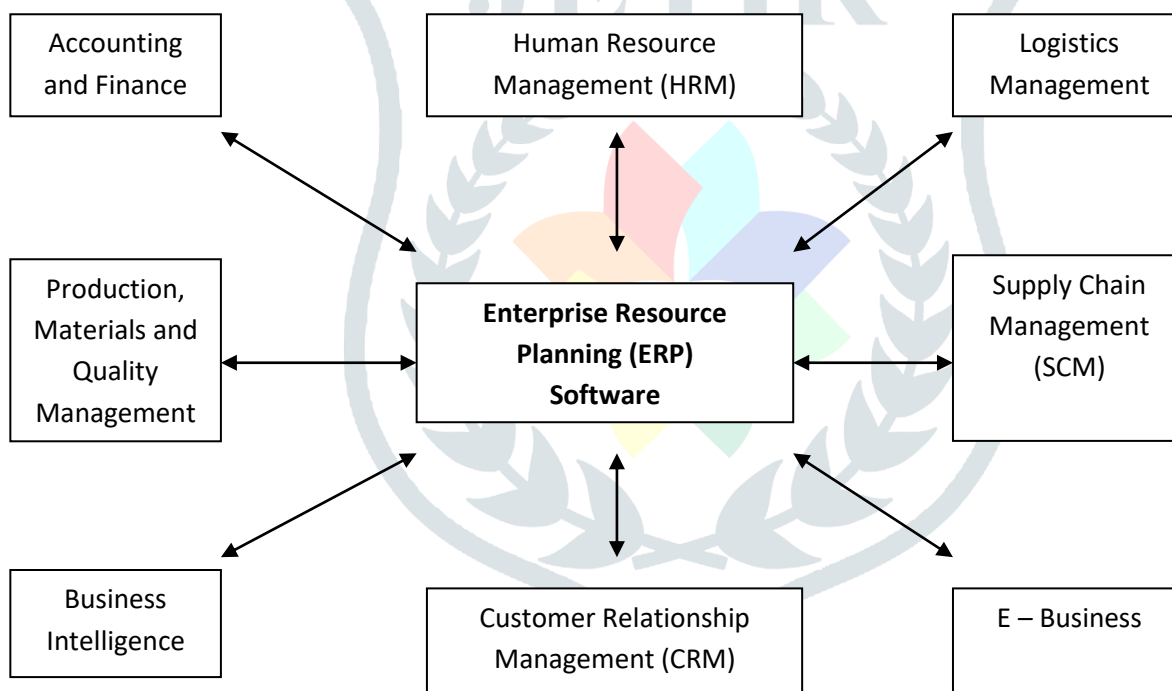


Fig. 1. Components of ERP Business Functions.

Benefactions cascading from ERP

Beyond an iota of doubt, ERP offers an array of benefits to enterprises. A few vital benefits of are listed as follows (Garg et. al., 2014):

- Reduces time required for planning
- Reduces cycle time required for production

- Results in lower inventory
- Diminishes manpower requirement
- Facilitates swifter reaction to market dynamics
- Effective use of available human and non-human resources
- Enhanced satisfaction of customers.
- Improved customer service
- Improved customer relationship management
- Efficient financial management
- Recuperated logistics and supply chain management

Multiple benefits are enlisted below against parameters:

<u>Parameter</u>	<u>Sub-parameters</u>
Operational	1) Decline in cost 2) Reduced production cycle time 3) Enhancement in productivity 4) Improvement in quality standards 5) Elate and elite customer services
Managerial	6) Ensures better utilization of available resources 7) Facilitates robust planning and decision making 8) Greatly enhances performance
Strategic	9) Supports development of firm 10) Bolsters effective alliance of firms 11) Builds innovative practices 12) Facilitates becoming a low cost leader 13) Ensures customization of products with unique features 14) Bolsters external rapo with suppliers and consumers 15) Enables expansion across the globe 16) Enables effective operationalization of ecommerce

<u>Dimension</u>	<u>Sub-dimensions</u>
IT Infrastructure	17) Provides agility for absorbing changes 18) Diminishes cost of IT operations 19) Enhances the capabilities of available IT infrastructure
Organizational	20) Supports in implementing changes in organizations 21) Improves business learning cycle 22) Empowers achievement of departmental goals 23) Builds commonly shared visions 24) Changes employees' attitude and mode of conduct 25) Improves satisfaction and morale of the employees.

ERP implementation strategies

As ERP influences both the operations of an organization, it needs to be carefully implemented for the successful performance and survival of the concern (Markus et. al., 2016). Execution of ERP results in structural and cultural changes. Thus we have to take into account technical, organizational and strategic dimensions while implementing ERP in an organization.

There are two approaches to implementation of ERP. In the first method the modus for the concern to reengineer the existing business processes in order to fit the functionality of the ERP system.

In the alternative strategy, the vendor customizes ERP system according to the business practices followed in the concerned company. This is quite a tedious time consuming process which will not only slow down the implementation but increase the prospects of novel problems getting inducted into the existing system. It may not only render up-dation difficult but also uneconomical.

According to Sirigindhi (2015), one-third of ERP installed across the globe due to multiple reasons. A common reason for a majority of failure in implementation occurs when it is viewed as a mere automation process totally oblivion to the fact that in involves management of changes. A second major reason is taking customization of ERP system to extremes. Hence companies should exercise great caution while going about ERP implementation, if they want to triumph.

Contemporary scenario and future prospects

A fleet of organizations have successfully either executed ERP or they are in the process. Multiple organizations, operating both in private and public realms, have efficaciously installed ERP and have already started enjoying rich rewards. Godrej, HLL, Mahindra and Mahindra and IOC are few among them. Having reached a point of saturation for companies operating in the larger enterprises segment, ERP merchandisers have turned their attention towards the kinetic potential lying in SME sector (Davenport, 2014).

Across the globe, the amount spent on ERP is increasing and is bound to increase further in the coming ten years (Yen et. al., 2016). The factors attributable for the projected progress can be enlisted below as follows (Stensrud, 2015):

- Suppliers are constantly enhancing the abilities by adding supplementary functions like CRM, supply-chain advanced business intelligence, etc. in their ERP systems
- Suppliers are switching to ERPs which are web-based.
- Demand for such web-based systems are likely to go up because of the benefits likely to accrue from e-commerce.
- Numerous virgin market segments are awaiting exploration.

According to Enterprise Applications Market Sizing Report, revenue generated from these sources is likely to go up to \$61.7 billion by 2022 from \$30.8 billion in 2014.

SMEs and ERP

Out of several SMEs launched every year, approximately 50% stop their operations in the first three years itself. Despite SMEs endeavor to grow, only about 40% survive and grow beyond ten years. Many firms remain myopic focusing only on survival without an eye on long term business strategy. They contemplate metamorphosis only when their profits start because of not keeping abreast of changes taking in the market. Companies which sustain and develop are those which possess the capability of taking risks in accordance with mutating milieu (Levy et. al., 2016).

SMEs are keen on adopting ERP systems for various causes as enshrined below:

- Undue pressure from large companies: Because of globalization, SMEs function in a dilated field. Quite a few have multi-nationals as their clientele. They require SMEs to install an ERP similar to theirs' to facilitate better integration in their supply chain.
- Peer pressure: Several SMEs are embracing ERP as their counterparts have done so.

- Gain competitive advantage: To secure combative edge and respond quickly to the market dynamism.

ERP system would allow SMEs to integrate their business functions, thus facilitating them to carry out their business transactions in a highly disciplined way. This would enable SMEs ensure efficiency and productivity in their multifarious operations.

Issues and Challenges confronting ERP implementation in SMEs

Despite the growth in ERP market, SMEs have to contend with several issues and challenges while implementing ERP system. These are listed below:

- **Low level of understanding of ERP and the benefits accruing there from:**
- **Misplaced notion:** SMEs carry a notion that these are meant only for big organisations because of the high costs involved in their acquisition, implementation and maintenance. A few SMEs opine that they don't require ERP.
- **Negative experience of others:** The negative experiences of other SMEs with ERPs have made other SMEs believe that implementation of ERP is a waste of resources and may even lead to the annihilation of the company.
- **Availability of funds:** The capital available with SMEs is far lesser than what is available with larger companies.
- **Change management:** Many SMEs consider ERP installation a mere automation project instead of looking at it as a project that warrants change management. Consequently, employees will not be prepared to accept and absorb changes.
- **Limited IT resources:** As many SMEs do not have captive IT team, they rely on external agencies which in turn shoot up their execution costs.

Panacea to the illness confronting ERP implementation in SMEs

Following points should be deliberated and pondered over before launching on ERP:

- Planning for infrastructure resources.
- Educating employees on the benefits of ERP
- Planning for human and non-human resources
- Financial resource planning
- Change management
- Top management commitment
- Training facilities and modus operandi for training

- Engagement of right people for implementation

The above factors will enable an organization to comprehend their degree of readiness for executing anERP system.

Once an organization ensures that it is ready for ERP, it can proceed towards its implementation. A conceptual mode tailored to suit SMEs’ requirements is given below.

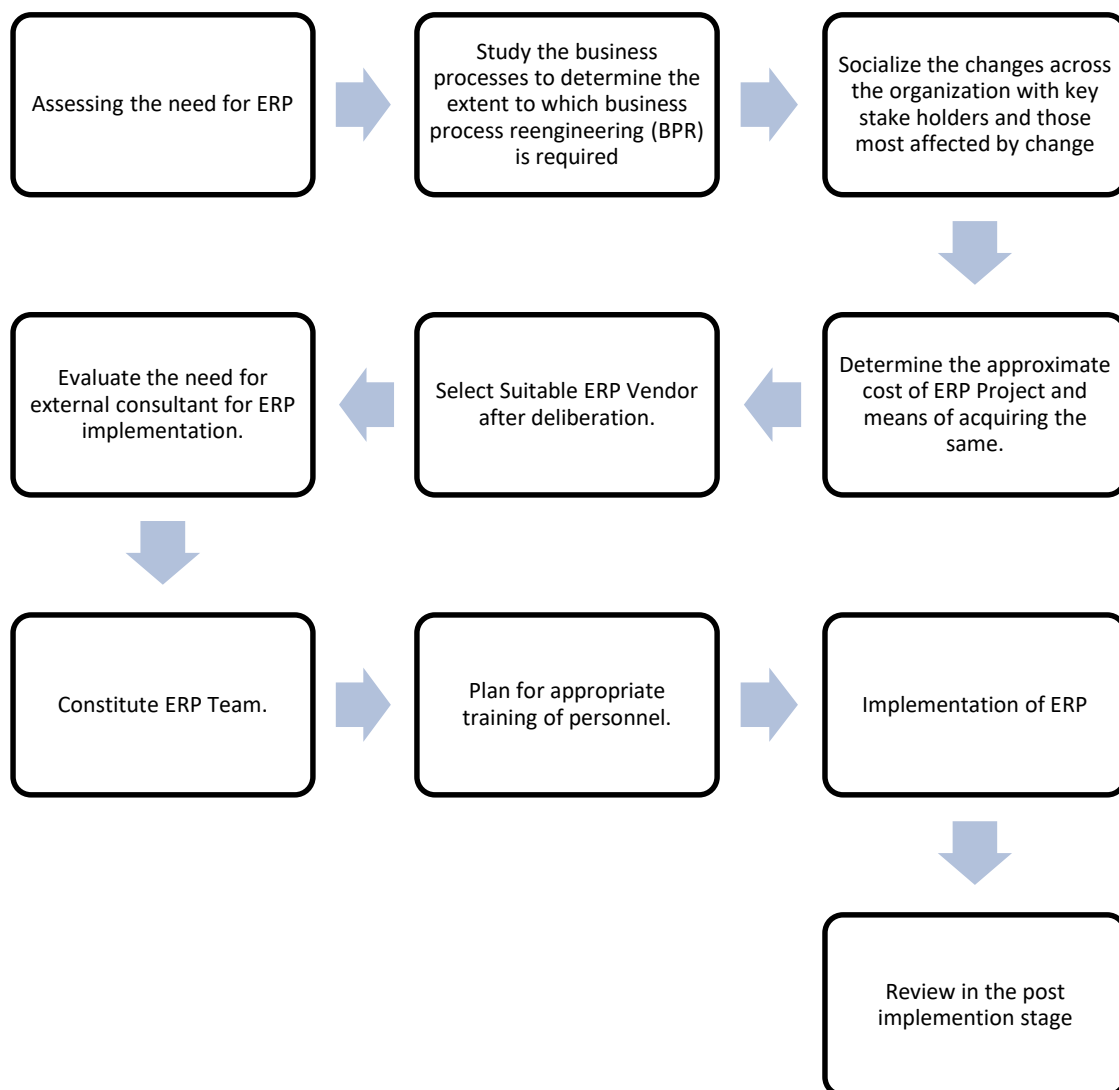


Fig. 2. A conceptual model for executing ERP

Conclusion:

In our country, SMEs constitute the backbone of the economy. Presently, after liberalization, they face stiff global competition in a deregulated economy. They need to seek means for adjusting themselves to

the markets dynamism. As ERPs are being used by several big companies, SMEs also seem to gradually fall in line. Instead of considering it as a mere IT execution, they should consider it as a business solution to dynamic market situations.

Though the ERP vendors have stated focusing on SME segment, several things remains to be addressed . First, all SMEs should be rendered “ERP Aware”. Vendors should tailor solution to according to the requirements of SMEs. As SMEs are fund starved, the price of such systems should be brought down further. SMEs should cautiously document the shortcomings of the existing system and specify in clear cut terms as to what they expect from the proposed new ERP system. Implementation of ERP systems in SMEs need to be cautiously tackled on the lines of the conceptual model set forth.

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