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STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

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SCENARIO OF ENTERPRISE RESOURCE PLANNING IMPLEMENTATION IN SMALL AND MEDIUM SCALE ENTERPRISES

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ABSTRACT

The study focuses on the application of ERP in the corporate organizations, particularly Small and Medium Enterprises. The research finds its interest on identifying the organizations which are already implemented ERP and its future course of plan. In this paper, we have been drawn the 100 companies for the sample, which are located the major parts of Tamil nadu. This paper emphasis that ERP implementation in Indian SMEs should extend its scope beyond the configuration to the process, enterprise, technology, vendor, end-user, performance, and quality. From this study, we found that the trend in ERP is attractive among SMEs; as the economy emerges from the recession and the organizations expect customized ERP applications in the affordability cost. Affordability is the first and foremost concern when it comes to ERP implementation in small and mid-size companies.

KEYWORDS

ERP, SMEs, Scenario of ERP

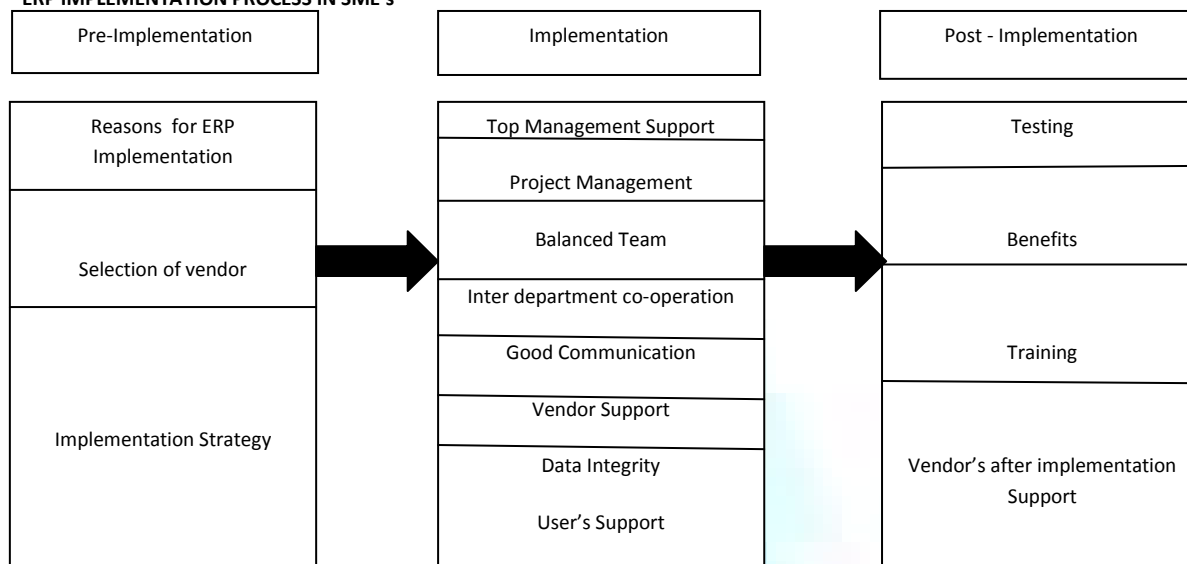
1. INTRODUCTION

Information Technology (IT) industry in India is one of the fastest growing industries. Indian IT industry has built up valuable brand equity for itself in the global markets. Enterprise resource planning (ERP) systems integrate internal and external management information across an entire organization, embracing finance/accounting, manufacturing, sales and service, customer relationship management, etc. ERP systems automate this activity with an integrated software application. Now, with the bigger firms in their net, the future growth of ERP vendors will depend on the Small Medium Enterprises (SMEs). In any country, SMEs are the largest contributors to the economy. This year, in India, the SMEs have made a huge contribution to the IT industry. The study focuses on the application of ERP in the corporate organizations, particularly Small and Medium Enterprises. The research finds its interest on identifying the organizations which are already implemented ERP and its future course of plan. This gives an overall picture about the impact of ERP in SMEs. It also gives an idea about the pain areas / difficulties the organizations are facing after implementing ERP. On contrast, it also observes the reasons for not implementing the software. Hence, the utilization of ERP in organizations can be found out. The research study also gives inputs to the organizations in terms of pain areas / issues the SMEs in the industry come across. From the information gathered from the C-level executives, the major issues organizations face in ERP are highlighted below,

- Security issues being the prime concern, while organizations switching ERP applications because of the security factor
- Poor support from the vendors

SMEs due to their specific characteristic and functioning, as suggested by some scholars, cannot be considered scaled-down larger ones, and theories applied and proved in large enterprises.

ERP IMPLEMENTATION PROCESS IN SME'S



2. REVIEW OF LITERATURE

The following summarizes the review literature of ERP implementation issues of SMEs in the context of developing countries.

Van Hillegersberg et al (2000) has analyzed ERP systems as configurable information system packages that integrate information and information based process within and across functional areas in organizations, however, ERP implementation is an broad, precise and a costly process. The complexity and high cost of these systems have meant that their implementation have been restricted to larger companies as the smaller SME's are unable to invest in these systems.

Nau and Lau (2001) identified certain factors by analyzing selective articles for successful implementation of ERP which are as: ERP team composition, support from top management, business plan and vision, proper communication, project management, business and legacy systems, S/W development, testing and troubleshooting, effective decision making, effective training.

Muscattello (2002) has surveyed the essential factors for the implementation of ERP: Business-oriented ERP strategy, leaders' support, complete ERP plans, clear and stable project range, restructuring business process before ERP taking effect, and training, proper ERP module, assessment of current Sub-system and hardware facilities, definite project target, performance evaluation system, and Full-time project manager. Organizations of any magnitude select a package that is user friendly having adequate scope for scalability and covering wide array of business processes.

The selections of ERP package always need to have proper and careful attention (Kraemmergaard and Rose, 2002; Yusuf et al., 2004; Al-Mashari, 2003; Somers and Nelson, 2001, 2004). Several researchers and practitioners analyzed and focused on the issues that contribute to successful implementation of ERP (Ewusi-Mensah, 1997; Stapleton & Rezak, 2004; Weightman 2004; Anexinet, 2006; Kimberling, 2006; Ibrahim et al., 2008; Jafari et al., 2006).

Jafari et al. (2006) have analyzed in ERP implementation in SMEs and identified ten important issues for the success of ERP implementation. These issues are commitment and support from higher management, proper and clearly defined goals and objectives, effective communication, proper project management, business process reengineering, data accuracy, suitability of hardware and software, vendor support, user education and training and involvement of user in the process.

Upadhyay and Dan (2008), carried out research study for Indian SME organizations where the researchers empirically assessed and, on the basis of responses received from the respondents, identified certain issues that actually would lead to the success of ERP implementation. The issues include properly defined goals and objectives, adequate user training and education, competency in project implementation team, acceptance of change brought about by implementation, proper assistance from vendor and role of external consultant.

Noudoostbeni et al. (2009) assessed important success factors and failure factors in Malaysian SME companies and tried to recognize the most effective ones. From the research, the critical issues identified for successful implementation are proper team composition and effective training of users. In addition, two issues identified responsible for the failure of the implementation are poor project planning and inappropriate training method.

Poonam Garg (2010) has detailed the discuss about the critical success factors empirically for ensuring successful implementation of ERP packages in the context of retail industry in India. The identified top management commitment, product selection, project management, team composition and training and education as the most important issues.

3. RESEARCH METHODOLOGY

Research Design:

The research design implemented in the study is "Descriptive Research". As such, the parameters for the analysis are clearly defined and the study focuses on deriving the factors and considerations associated to those parameters.

Types of data collection:

Primary data were used for this study. The respondents are surveyed in both Phone and Email based on the convenience of their availability. About 100 responses are gathered, of which the majority (99 out of 100) of responses are from phone survey. For the purpose of collecting Email questionnaire, the web portal 'www.surveymonkey.com' has been used.

Population:

The research has been focused on southern part of Tamil Nadu, and the significance is given to cities like Coimbatore and Chennai. While Tier-II cities like Trichy and Hosur are also under the purview. Hence the small and medium size organizations situated in these places will come under the sampling population for the study. As the organization focuses on selected industry verticals like Automobile, Foundry, Pumps & Motor manufacturers, these regions have abundant mid-size companies.

Sample Size:

The sample size here implies the selected Small and Medium Enterprises across Tamil Nadu. As such, 100 organizations are covered in the areas of Chennai, Coimbatore, Tirupur, Hosur and Trichy, for the research study within the stipulated time period.

Sampling Technique:

The 'Judgment Sampling' technique has been used for the research purpose. As the organizations are chosen based on the category of SMEs, target annual turnover generated and also having sound presence in the industry, the sampling technique implemented was 'Judgment' basis.

4. OBJECTIVE OF THE STUDY

The prime objective of the study is to analyze the scenario of ERP being implemented in the selected Small and Medium Business organizations across Tamil Nadu. Moreover, the research gives rise to secondary objectives which are listed as below,

- To observe the trends and patterns in the implementation of ERP
- To find out the pain areas / difficulties in the ERP implementation and usage from the Organizations.

5. RESULTS AND DISCUSSIONS

1. Companies in the annual turnover below Rs.25 Cr, tops the chart with majority of respondents such that 46 organizations fall in that cadre. Also 41 companies are surveyed from the annual turnover range of Rs.50 – 250 Cr. Hence there is motley of responses from wide range of organizations.
2. In the category of annual sales turnover lies below Rs.50 Cr, nearly three – fifth of the organizations do not have implemented ERP. Of the few organizations which have ERP enterprise applications, SAP and Oracle are the popular.
3. 7 of 8 companies in the industry of Pump and Motor manufacturers have implemented ERP business solutions. This shows the significance of enterprise applications in the pump manufacturing organizations.
4. Focusing the organizations with turnover Rs. 50 – 250 crore 43 companies out of the survey falls in this category. In which, 29 are using ERP applications which is a sound figure. Moreover, 48% of organizations in this category have their own tailor made in-house ERP solutions. Hence there is greater scope for customized applications. Also 15 companies have implemented ERP from major vendors in the market, like SAP, Oracle, Microsoft and Ramco ERP.
5. Security, cost and vendor support are the primary reasons, the most of SMEs is not coming forward to implement the ERP system in their organisation.

6. CONCLUSIONS

India is an Information Technology hub where leading IT organizations compete to provide Enterprise Resource Planning (ERP) software which is a niche segment in the market. From this study, we found that the trend in ERP is attractive among SMEs; as the economy emerges from the recession and the organizations expect customized ERP applications in the affordability cost. Affordability is the first and foremost concern when it comes to ERP implementation in small and mid-size companies.

REFERENCES

1. Al-Mashari, M. (2002). Enterprise resource planning (ERP) systems: a research agenda. *Industrial Management & Data Systems*, 102, 165-170.
2. Al-Mashari, M. 2001, Process orientation through enterprise resource planning (ERP): a review of critical issues, *Knowledge and Process Management*, Vol.8, No.3, pp. 175-185.
3. Anexinet, R. B., (2006). Top 10 ERP implementation pitfalls Retrieved 11th February, 2010, http://www.anexinet.com/pdfs/ERP_top10pitfalls3-2006.pdf
4. Brown, C. V. and Vessey, I. 1999, ERP implementation approaches: toward a contingency framework, in *Proceedings of the 20th International Conference on Information Systems*, Charlotte, North Carolina, pp. 441-416
5. Davenport, T.H. 1998, Putting the enterprise into the enterprise system, *Harvard Business Review*, Vol. 76 No. 4, pp. 121-31.
6. Ewusi-Mensah, K. (1997). Critical issues in abandoned information systems development projects. *Communications of the ACM*, 40(9), 74-80.
7. Huin, S. F. (2004), Managing deployment of ERP systems in SMEs using multi-agents, *International Journal of Project Management*, Vol. 22, No.6, pp.511-517.
8. Ibrahim, A. M. S., Sharp, J. M., & Syntetos, A. A. (2008). A framework for the implementation of ERP to improve business performance: A case study. In Z. Irani, S. Sahraoui, A. Ghoneim, J. Sharp, S. Ozkan, M. Ali & S. Alshawi (Eds.), *Proceedings of the European and Mediterranean Conference on Information Systems (EMCIS)*
9. Ifinedo, P. 2006a, Enterprise systems success measurement model: a preliminary study, *Journal of Information Technology Management*, Vol.17, No. 1, pp.14-33.
10. Jacobs, F. R. and Bendoly, E. (2003), Enterprise resource planning: Developments and directions for operations management research, *European Journal of Operational Research*, Vol. 146, No.2, pp. 233.
11. Kothari, C.R. 1991, *Research Methodology: Method and Techniques* Second Edition, New Age Publications (Academic), India.
12. Kraemmergaard, P. and Rose, J., (2002). Managerial competences for ERP journeys. *Information Systems Frontiers*, 2(4), 199-212.
13. Markus, M. L. C. and Tanis, C. (2000), Multisite ERP implementations, *Association for Computing Machinery, Communications of the ACM*, Vol. 43, No.4, pp. 42.
14. Martinsons, M. G. (2004), ERP in China: One package, two profiles, *Communications of the ACM*, Vol.47, No.7, pp. 65-68.
15. Muscatello, J. R., Small, M. H., Chen, I. 2003, Implementing enterprise resource planning (ERP) systems in small and midsize manufacturing firms, *International Journal of Operations and Production Management*, Vol. 23, No.8, pp.850.
16. Nah, F. F., & Lau, J. L., (2001). Critical factors for successful implementation of enterprise systems. *Business Process Management*, 7(3), 285- 296.
17. Noudoostbeni, A., Yasin, N. M., & Salarzadeh, H. (2009)., To investigate the success and failure factors of ERP implementation within Malaysian Small and Medium Enterprises (SMEs). *The International Conference on Information Management and Engineering (ICIME)*, 157-161. Kuala Lumpur, Malaysia: IEEE.
18. Relevant Business Systems, Inc. *The ERP Selection Process Survival Guide*, 2010, pp 1-8
19. SAP, Inc. *Comprehensive Business Solutions for Midsize Companies*, March 2009, pp 1-4
20. SAP, Inc. *SAP ERP Solution Overview*, March 2009, pp 1-16
21. Stapleton, G. & Rezak, C. J., (2004). Change management underpins a successful ERP implementation at Marathon Oil. *Journal of Organization Excellence*, 23(4), 15-21.
22. Upadhyay, P., & Dan, P.K. (2009). ERP in Indian SME's: A Post Implementation Study of the Underlying Critical Success Factors, *International Journal of Management Innovation System*, 1(2), 1-10.
23. Weightman, C. (2004). The top 10 ERP mistakes. *Business Management* (February), 36-40.
24. Yusuf, Y., Gunasekaran, A. & Abthorpe, M. S. (2004). Enterprise information systems project implementation: a case study of ERP in Rolls-Royce. *Journal of Production Economics*, 87, 251-

TABLES

TABLE NO. 01: SIZE OF THE ORGANIZATION: BASED ON ANNUAL SALES TURNOVER

Organization Annual turnover (in Cr.)	No of Companies surveyed
Less than Rs.25	47
25 – 50	10
50 – 100	19
100 – 250	24

TABLE NO. 02: COMPANIES SURVEYED BASED ON THE INDUSTRIES

Industries	No of Companies surveyed
Automobile	13
Chemical	2
Foundry	11
Granites	2
Industrial Engineering	46
Paper Mills	1
Pumps & Motors	15
Textile Mills	10

TABLE NO. 03: ERP SOFTWARE IN THE ORGANIZATIONS

ERP Software	No of Users
Oracle	11
SAP	12
Microsoft	4
Ramco ERP	3
BAAN	2
Own/ In-house	29
No ERP	39

TABLE NO. 04: ERP SOFTWARE USERS BASED IN THE ORGANIZATIONS TURNOVER

Description	No. of Organizations			
	Less than 25 Crores	25-50 crores	50 -100 crores	100-250 crores
Own ERP / Software	11	5	4	8
Using Trial version / Evaluation	3	-	1	1
Using ERP	12		11	13
No ERP	21	13	3	2
Total	47	10	19	24

TABLE NO. 05: ERP SOFTWARE USERS BASED ON ANNUAL TURN OVER

Organization	Annual Turn over				NO ERP
	Less than 25 crores	25-50 crores	50-100 crores	100-250 crores	
Auto Mobile	3	1	3	3	3
Chemical	-	-	-	-	2
Foundries and Casting	5	2	3	1	0
Granities	-	-	-	-	2
Industrial Engineering	8	4	5	9	22
Paper Mills	-	-	-	-	
Pumps and Motor Manufacture	6	1	3	5	0
No ERP	21	13	3	2	39
Total	47	10	19	24	

TABLE NO. 06: IMPORTANT FACTORS FOR ERP

S.No	Critical Factors	Mean	Ranking
1	Security Factors	4.77	1
2	Vendor Support	4.68	2
3	Cost	4.68	2
4	Understanding system of ERP	4.55	4
5	Quality of Testing	4.53	5
6	Knowledge Transfer	4.50	6
7	Strategy	3.68	7
8	Internal Communication	3.56	8

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