

EFFECTS OF ERP SYSTEMS IN BUSINESS MANAGEMENT.

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Abstract

In modern life, Information Technology is the key term for doing any Business. Technology based Business is easy to expand anytime anywhere. In Business Management, an organization can able to handle large workload effectively through Enterprise Resource Planning (ERP). ERP system is a wide integrated information system of an organization that manages all units like Marketing, Operations, Administration, Finance, Human Resources, R&D etc. Nevertheless, small organizations are investing for ERP with medium and large enterprises over the world for better business management. This study focuses on impact of ERP system in Business Management of organizations. The study also identifies and analyzes the limitations inherent in ERP systems when applied to Business Management practices. Additionally, it seeks to evaluate the efficacy of ERP systems in the management of crucial organizational functions, particularly focusing on inventory and finance management.

Keywords: [ERP System, Organization, Business, Management, Implementation]

INTRODUCTION

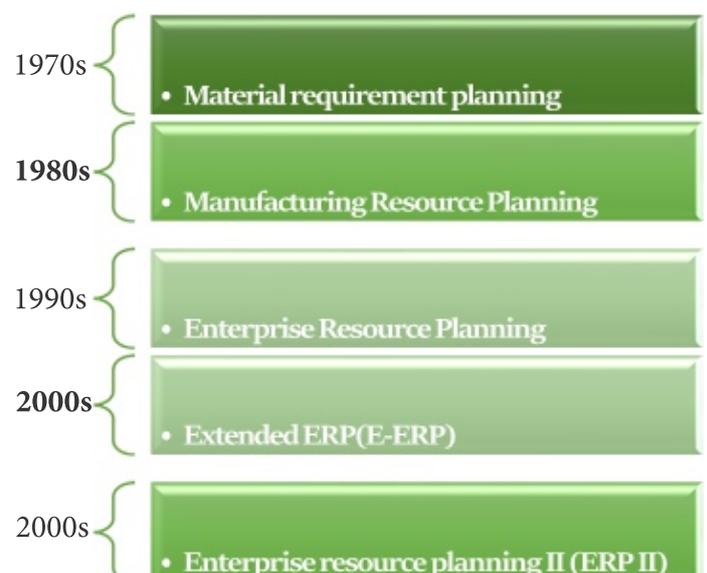
ERP is an acronym that stands for Enterprise Resource Planning. ERP software saw phenomenal interest from the corporate sector during the period 1995-2000. The ERP market is estimated to be in excess of USD 80 Billion in the year 2000 Many analysts feel that today's global business environment - products and services customized to suit the individual needs of millions of customers, delivered over multiple timelines in a 24X7 basis - would have been impossible without such enterprise software. Undoubtedly ERP represents one of the most complex and demanding application software in the corporate environment.

ERP is a package software solution that addresses the enterprise needs of an organization by tightly integrating the various functions of an organization using a process view of the organization. ERP software is ready-made generic software; it is not custom-made for a specific firm. ERP software understands the needs of any organization within a specific industry segment. Many of the processes implemented in an ERP software are core processes such as order processing, order fulfillment, shipping, invoicing, production planning, BOM (Bill of Material), purchase order, general ledger, etc., that are common to all industry segments.

ERP does not merely address the needs of a single function such as finance, marketing, production or HR;

rather it addresses the entire needs of an enterprise that cuts across these functions to meaningfully execute any of the core processes. ERP integrates the functional modules tightly. It is not merely the import and export of data across the functional modules. The integration ensures that the logic of a process that cuts across the function is captured genuinely. This in turn implies that data once entered in any of the functional modules (whichever of the module owns the data) is made available to every other module that needs this data. This leads to significant improvements by way of improved consistency and integrity of data.

EVOLUTION OF ERP



MARKETING SCENARIO OF ERP SOFTWARE

In today's dynamic business landscape, the marketing scenario for ERP (Enterprise Resource Planning) software is marked by a convergence of technological innovation and evolving customer expectations. Cloud-based solutions have emerged as a dominant force, offering businesses the flexibility, scalability, and cost-effectiveness they seek in managing their operations. Vendors are emphasizing the benefits of cloud deployments, highlighting features such as real-time data access, reduced IT infrastructure costs, and seamless upgrades.

Moreover, there's a noticeable trend towards industry-specific solutions, with ERP vendors tailoring their offerings to meet the unique needs of various sectors, including manufacturing, healthcare, retail, and professional services. This industry-focused approach enables vendors to provide specialized features, compliance support, and best practices tailored to specific business domains.

Integration capabilities remain a critical aspect of ERP marketing, with vendors emphasizing their solutions' ability to seamlessly integrate with other business systems and applications. This integration enables organizations to create a unified platform for data management and decision-making, enhancing operational efficiency and agility.

REVIEW OF LITERATURE RELATED TO THE STUDY

Wen-Hsien Tsai (September 2010), This study examines system and business process are related. Analysis results demonstrate that companies should consider consistency between system and business process in ERP package selection.

Somers and Nelson (2001) stressed that package selection involves budgets, timeframes, goals, and deliverables. Besides, companies should attempt to reduce the gap between system and business process. Our results further demonstrate that companies with no gap between system and business process will achieve

better ERP system performances.

Gede Rasben Dantes and Zainal Arifin Hasibuan (2011), ERP can give both strategical and tactical impacts. Strategical impacts will affect strategic things in the company as well as the company's future business. Tactical impacts will affect the internal affairs of the organization, both on the managerial and operational level. The study found out that ERP implementation in Indonesia gives more significant tactical impact rather than strategical impact. The present study is expected to give holistic view of the impacts of ERP implementation both strategically and tactically in order to motivate the companies to gain strategic as well as tactical impact in their ERP implementation. Strategic impacts can be gained by applying specific modules like BW, BI, SCM, CRM, etc., and by doing BPR before implementing ERP. The findings are also expected to improve knowledge in Enterprise System, especially impact on ERP implementation and Management Information System.

Ashim Raj Singla (2008) his Empirical data results have provided general support for hypotheses.

They find that ERP adopters are consistently higher in performance across a wide variety of measures than non-adopters. Overall, this suggests that indeed ERP systems yield substantial benefits to the firms that adopt them, and that the adoption risks do not exceed the expected value,

Muscatello, Small and Chen (2003), stated that ERP systems promise to computerize an entire business with a suite of software modules covering activities in all areas of the business. Furthermore, ERP is now being promoted as a desirable and critical link for enhancing integration between all functional areas within the manufacturing enterprise and between the enterprise and upstream and downstream trading partners.

O'Leary (2004), found 43 tangible and 70 intangible benefits of ERP system in his study. He also identified three contributions of ERP. First, gathering data and a way of analyzing that qualitative data to provide insight in to ERP benefits. Second, empirical into the most

important benefits deriving from ERP systems, in general and on an industry basis. Third, ERP provides a basis from which to argue that the benefits are often industry-based.

Bosilj-Vuksic and Spremic (2004), stated the right management decisions and actions, through the simultaneous and coordinates projects of business process reengineering and the development of the integral information system, the poor effects of the listed problems can be minimalized or eliminated, which is clear from the tangible and intangible benefits outlined.

Elragal and Al-Serafi (2011), describe in their case study that the general business performance improvements according to the financial were met successfully by the ERP system. The financial manager said that the information in the ERP very important and in general has a great effect on business performance. It also helps to integrate within business units and teams.

Tambovcevs and Tambovceva (2013) mentioned that ERP systems are becoming more necessary for almost every firm to improve the competitiveness. According to the success of the implementation of ERP system; companies can obtain a competitive advantage in the global market rapidly. A growing number of companies are investing in ERP systems for better performance. Many ERP projects have resulted in substantial tangible and intangible improvements in a variety of areas of the business organizations.

Simunovic, Havrlisan, Pezer and Svalina, (2013), By the introduction of ERP system most adaptation is done in the following departments: Purchasing, Finance and Accounting, Sales and Production and least in Maintenance and Project management. 89% of respondents agreed that the use of ERP system shortened the operation time effectively is demonstrated.

Lecic and Kupusinac (2013) stated that ERP systems have become a means to support and speed up the whole process to satisfy orders, including product distribution. By registering changes in computer storage, ERP

systems monitor resources - material, facilities and workers, which are typically used in financial management, production and distribution.

Almgren and Bach (2014) narrated in their conference paper that the ERP system could improve organizations immensely, but only when implemented correctly. When the system is not implemented correctly, it could affect organizations very badly. ERP system effects operational and managerial part of the businesses strongly, they added.

Lambert, Jansen, and Splinter (2000) 4Companies should adopt BPR to adapt to ERP system, and should not modify the package to adapt to business process.

Md. Tareq Hasan (October 2018), This study states that ERP system implementation was highly risk for the organizations and also may not change the business situation. But it makes the business easier and smooth through the central database of the organization internally and externally. It states that to establish a complete ERP system, the organization needs to invest more and it was really difficult for small and medium enterprises. Nevertheless, the small and medium enterprises are investing on ERP system now a day with large organizations. All multinational companies, all financial institutions and most of all large organizations of Bangladesh are using ERP and it's increasing with time. Bangladesh government also has emphasized on it and has implemented ERP system to many public sectors to maintain national database system. In India, from juice shop to large organizations are trying to use ERP system and comparatively ERP solution was cheaper there. To make a hassle-free business in the competitive market ERP system was one of the most important solutions.

Dr M Nishad Nawaz (June 2013), This article exhibits the impact of ERP systems on business performance. The relationship between ERP systems adoption and business benefits was also reviewed. It was found that with ERP architecture make better smooth functioning of operational level activities can be achieved. Different

factors like why is ERP needed in organization, why firms investing ERP systems, ERP model was discussed.

OBJECTIVES OF THE STUDY

1. To study the demographic profile of the respondents in Power Electro Products Pvt Ltd, Cochin
2. To show the impact of the ERP systems in business management.
3. To find out the limitations of ERP system in business management.

RESEARCH METHODOLOGY

The type of research design adopted for this study is likely a cross-sectional design. A cross-sectional design

involves collecting data from a sample of participants at a single point in time to examine relationships, trends, or differences within a population. In simpler terms, a cross-sectional research design involves gathering information from different individuals or groups at one specific moment in time. This approach allows researchers to analyze and understand various aspects, such as behaviors, attitudes, or characteristics, across different segments of a population simultaneously. From the population of 600, the data were only collected from 105 which includes employees from low, middle and top-level management.

RESULTS AND DISCUSSION

TABLE 1: IMPACT OF ERP SYSTEMS IN BUSINESS MANAGEMENT OF POWER ELECTRO PRODUTS PVT LTD.

S.NO	PARTICULARS	TOTAL SCORE	MEAN	RANK
1	The overall implementation process of the ERP system is useful for the organization	444	4.22	I
2	The ERP system improved efficiency in daily business operations	385	3.67	IV
3	The ERP system streamlined communication and collaboration among different departments	440	4.19	II
4	Implementing an ERP system could address the challenges and needs identified in current business management practices	334	3.18	VI
5	ERP systems are very user-friendly	357	3.4	V
6	The ERP system enhanced data security and compliance within your organization	316	3	VII
7	The ERP system integrate well with other systems or tools used in your organization	240	2.28	VIII
8	The accuracy of data improved since implementing the ERP system	387	3.68	III

The table above demonstrates the overall implementation process of the ERP system is useful for the organization with the mean score of 4.22, followed by the ERP system streamlined communication and

collaboration among different departments with the mean score of 4.19, the accuracy of data improved since implementing the ERP system with the mean score of 3.68, the Erp system improved efficiency in daily

business operations with the mean score of 3.67, the ERP systems are very user-friendly with the mean score of 3.4, implementing an ERP system could address the challenges and needs identified in current business management practices with the mean score of 3.18, The

ERP system enhanced data security and compliance within your organization with the mean score of 3, and the ERP system integrate well with other systems or tools used in your organization with mean score of 2.28 respectively.

TABLE 2: LIMITATIONS OF ERP SYSTEMS IN BUSINESS MANAGEMENT

S.NO	PARTICULARS	TOTAL SCORE	MEAN	RANK
1	Complexity of Use	203	1.93	VIII
2	Customization	380	3.61	V
3	Integration	410	3.90	IV
4	Cost	434	4.13	I
5	Performance	350	3.34	VI
6	Training and Adoption	428	4.07	II
7	Flexibility and Scalability	280	2.67	VII
8	Vendor Support	422	4.01	III

Above table show that cost is the main limitation of ERP systems with the mean score of 4.13, followed by training and support with the mean score of 4.07, vendor support with the mean score of 4.01, Integration with the mean score of 3.90, customization with the mean score of 3.61, performance with the mean score of 3.34, Flexibility and scalability with the mean score of 2.67, and Complexity of use with mean score of 1.93 respectively.

CONCLUSION

In conclusion, the findings underscore the profound benefits of implementing an ERP system within organizations. Respondents consistently highlight the transformative impact on the working culture, indicating a significant shift towards enhanced collaboration and efficiency. Furthermore, the system's contribution to cost reduction and increased productivity is widely acknowledged, marking it as a valuable asset in modern business management. Moreover, the ERP solution plays a pivotal role in resolving operational challenges efficiently, further solidifying its importance in organizational processes.

The overall implementation process of ERP systems proves beneficial, facilitating improved communication, data accuracy, and operational efficiency across departments. Notably, the user-friendly nature of ERP systems aligns well with addressing current business management needs and challenges. Additionally, the system enhances data security and compliance while seamlessly integrating with existing tools and systems within the organization.

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