Enterprise Resource Planning (Erp)

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ABSTRACT:
Technology innovation has been a prime and most happening inventions in this era. It has transformed the manufacturing sector which has undergone sea change in its productivity and efficiency, which is completely computerized gaining flexibility and quickness enabling to reach great levels. Enterprise resource planning is the technology that has helped the manufacturing sector to achieve this. Enterprise resource planning (ERP) has over the years gained a lot of importance for strategic Information Systems. Due to its flexibility in usage most large and medium organizations are adopting ERP solutions that integrates all aspects of a business. Organisations are getting all solutions under one roof which helps them for quick recovery, meeting competitive pressures , maintaining inventory and many more applications needed in the organizations.

Keywords: ERP, Importance, Communication, Top Management

Introduction

Enterprise Resource Planning (abbreviated to ERP) solutions are now commonplace in the day-to-day business of industrial, commercial and service-providing businesses. Also referred to as company software, business software, business management or commercial software, these solutions support and manage all the important business processes in communication, development, production and sales, and provide transparency in stock and the flow of goods.[1]

ERP evolution

In the 1980's software companies came out with MRP systems that ran on mainframe systems initially. Materials Requirement Planning(MRP) focused on reducing material shortages and excesses on the manufacturing floor. MRP focused on demands supplies, bills of material and other planning parameters and then suggests that buyers and planners take actions to place, adjust or cancel purchase orders and manufacturing orders. They also linked inventory related activity to the accounting systems so that there was a closed loop, integrated system which enabled manufacturers to better manage and account for the business.

In the 1990's Customer Relationship Management, or CRM, systems started to catch on. These systems allowed companies to manage the sales process and track activity with customers. They started as standalone products but eventually MRP companies and CRM companies merged, or MRP companies developed their own CRM systems. .[2]

Benefits of ERP for your Business

- Automation – leads to efficiency and effectiveness which enhances the productivity and gives good return of investment. It helps the people to balance their work without human interference.
- Performance – It avoids duplication and discontinuity in working as the ERP setup is across departments having common parameters using dissimilar business processes. This helps in accuracy, completeness and cost in speed to accomplish a given task.
- Integration – leads to bringing customers, suppliers and employees to realize complete benefit in all aspects of business through planning, organization, scheduling the production and distribution of the products in the organization.
- Reports – It helps policy makers get quality reports to conduct analysis and performance of the organizations.

Advantages & Disadvantages of ERP (Enterprise Resource Planning) Systems

ERP Systems make it easier to track the workflow across various departments. They reduce the operational costs involved in manually tracking and (perhaps) duplicating data using individual & disparate systems. In this article, let us have a look at the advantages and dis-advantages of implementing ERP (Enterprise Resource Management) Software Systems.

Advantages of ERP (Enterprise Resource Planning) System:

1. Complete visibility into all the important processes, across various departments of an organization (especially for senior management personnel).
2. Automatic and coherent workflow from one department/function to another, to ensure a smooth transition and quicker completion of processes. This also ensures that all the inter-departmental activities are properly tracked and none of them is 'missed out'.
3. A unified and single reporting system to analyze the statistics/status etc. in real-time, across all functions/departments.
4. Since same (ERP) software is now used across all departments, individual departments having to buy and maintain their own software systems is no longer necessary.
5. Certain ERP vendors can extend their ERP systems to provide Business Intelligence functionalities, that can give overall insights on business processes and identify potential areas of problems/improvements.
6. Advanced e-commerce integration is possible with ERP systems – most of them can handle web-based order tracking/ processing.
7. There are various modules in an ERP system like Finance/Accounts, Human Resource Management, Manufacturing, Marketing/Sales, Supply Chain/Warehouse Management, CRM, Project Management, etc.
8. Since ERP is a modular software system, its possible to implement either a few modules (or) many modules based on the requirements of an organization. If more modules implemented, the integration between various departments may be better.
9. Since a Database system is implemented on the backend to store all the information required by the ERP system, it enables centralized storage/back-up of all enterprise data.
10. ERP systems are more secure as centralized security policies can be applied to them. All the transactions happening via the ERP systems can be tracked.
11. ERP systems provide better company-wide visibility and hence enable better/faster collaboration across all the departments.
12. It is possible to integrate other systems (like bar-code reader, for example) to the ERP system through an API (Application Programing Interface).
13. ERP systems make it easier for order tracking, inventory tracking, revenue tracking, sales forecasting and related activities.
14. ERP systems are especially helpful for managing globally dispersed enterprise companies, better.

Disadvantages of ERP (Enterprise Resource Planning) Systems:

1. The cost of ERP Software, planning, customization, configuration, testing, implementation, etc. is too high.
2. ERP deployments are highly time-consuming – projects may take1-3 years (or more) to get completed and fully functional.
3. Too little customization may not integrate the ERP system with the business process & too much customization may slow down the project and make it difficult to upgrade.
4. The cost savings/payback may not be realized immediately after the ERP implementation & it is quite difficult to measure the same.
5. The participation of users is very important for successful implementation of ERP projects – hence, exhaustive user training and simple user interface might be critical. But ERP systems are generally difficult to learn (and use).
6. There maybe additional indirect costs due to ERP implementation – like new IT infrastructure, upgrading the WAN links, etc.
7. Migration of existing data to the new ERP systems is difficult (or impossible) to achieve. Integrating ERP systems with other stand alone software systems is equally difficult (if possible). These activities may consume a lot of time, money & resources, if attempted.
8. ERP implementations are difficult to achieve in decentralized organizations with disparate business processes and systems.
9. Once an ERP systems is implemented it becomes a single vendor lock-in for further upgrades, customizations etc. Companies are at the discretion of a single vendor and may not be able to negotiate effectively for their services.
10. Evaluation prior to implementation of ERP system is critical. If this step is not done properly and experienced technical/business resources are not available while evaluating, ERP implementations can (and have) become a failure.[3]

Common Modules

There are various modules in an ERP system like

- Finance/Accounts,

- Human Resource Management
- Manufacturing, Marketing/Sales
- Supply Chain/Warehouse Management
- CRM, Project Management [4]

Implementation Concerns
Several issues must be addressed when dealing with a vast ERP system namely:

Role of Senior Management :
- Senior managers are the key persons to any ERP implementation project.
  They are responsible for the successful working of the systems. Their commitment can be measured and monitored: typically this 'change readiness assessment' activity would be part of a change management program whereby the project team has a good handle on the readiness, willingness and ability of top management to implement the project. Effective feedback mechanisms also need to be in place to channel any concerns they may have and to take any relevant actions to address issues that surface – this can be achieved using techniques such as regular stakeholder interviews and surveys.
- Senior management supports the project manager in planning realistically by endorsing the decisions made.
- Deal with unexpected difficulties – this can be done by regular steering team meeting. The steering meeting is typically attended by the project sponsor (who should be one of the senior management team). The role of the sponsor is to underpin the work of the project manager and to assist in the resolution of contentious issues. [5]

Training
Training and updating employees on ERP is a major challenge. People are one of the hidden costs of ERP implementation A lack of proper training is one of the most common reasons that ERP projects fail, and it can also result in employees resenting the new system because they don't understand it.Making sure employees have a chance to become comfortable with the new system before it goes live will do wonders for your chances at ERP success. ERP systems are extremely complex and demand rigorous training.Training and frequent communication with users should be a top priority in the organizations.[6]

Selecting the right people
Organisation who want to implement an ERP system must be willing to dedicate some of their best employees to the project for a successful implementation. Often companies do not realize the impact of choosing the internal employees with the right skill set. The importance of this aspect cannot be overemphasized. Internal resources of a company should not only be experts in the company's processes but also be aware of the best business practices in the industry. Internal resources on the project should exhibit the ability to understand the overall needs of the company and should play an important role in guiding the project efforts in the right direction. Most of the consulting organizations do provide comprehensive guidelines for selecting internal resources for the project. Companies should take this exercise seriously and make the right choices. Lack of proper understanding of the project needs and the inability to provide leadership and guidance to the project by the company's internal resources is a major reason for the failure of ERP projects.

Conclusion
An ERP implementation is a huge commitment from the organization, it takes several years and costs in lakhs to complete. ERP solutions benefits an organizations to integrate various departments. Meticulous planning and proper implementation can help the organizations to get a good ROI. A well-designed and properly integrated ERP system allows the most updated information to be shared among various business functions, thereby resulting in tremendous cost savings and increased efficiency. Top management plays a driving force in its implementation process. They play major role in selecting the right vendor, right software pertaining to the business needs. While migrating to new systems issues such as sudden change, key business processes should be considered and adequate training to be given to employees. Top management should restructure the organization and job responsibilities accordingly to face the implementation issues of ERP.

References
1. Lobel Ben(2015) Why ERP solutions are essential for your growing business -http://www.growthbusiness.co.uk
2. http://pcbennett.com

3. Rajesh K (2011) Advantages & Disadvantages of ERP (Enterprise Resource Planning) Systems, http://www.excitingip.com/

4. Rajesh K (2011) Advantages & Disadvantages of ERP (Enterprise Resource Planning) Systems, http://www.excitingip.com/

5.Donagher John (2013) The Importance of Senior Management Commitment to ERP Projects, http://www.lumeniaconsulting.com/

6. Schiff Jennifer (2012)13 Common ERP Mistakes and How to Avoid Making Them www.cio.com