International Journal of Advanced Research and Development
ISSN: 2455-4030, Impact Factor: RJIF 5.24
www.advancedjournal.com
Volume 2; Issue 2; March 2017; Page No. 59-61

Challenges and issues of ERP implementation in manufacturing industry

[1] Dr. C Thirumal Azhagan, [2] S Dhatchayani

[1] Assistant Professor, Department of Management Studies, Anna University (BIT-campus), Tiruchirappalli, Tamil Nadu, India
[2] Final year PG student, Department of Management Studies, Anna University (BIT-campus), Tiruchirappalli, Tamil Nadu, India

Abstract
Enterprise Resource Planning (ERP) system support integrated data that is of great key importance to the business. Understanding the challenges by identifying the power forces and improving the rate of adoption is the prime objective of any technology implementation program. By implementing an ERP system all the business activities will minimised. When the ERP is implemented successfully then it will give more benefits as well as when the implementation of ERP is failed it will affect the whole business and it cause to shut down the business. So, while implementing an ERP that company should aware of ERP systems and they have to study and understand more about ERP to implement it successfully. After the successful implementation of ERP that company start to earn more benefits and they will easily receive the feedback from customers about their product drawbacks. Advanced products will satisfy the customers. So, this ERP will helps to adopt the new technology to produce to satisfied products for customers.

Keywords: enterprise resource planning (ERP), ERP implementation, critical success factor (CSF), system issue, customization, and technology

Introduction
Enterprise resource planning (ERP) is business process software that allows an organization to use a system of integrated applications to manage the business and automate many back office function related to technology service and human service. Today, industrial information systems are mostly implemented through enterprise resource planning (ERP) systems. Many researchers assert that ERP systems are standardized systems, utilizing a single powerful database across the company. Although the excellent benefits of ERP systems have led firms to move toward adopting them, many have cited failures in ERP implementations that invoke concentration to the nature of ERP implementation.

ERP Life Cycle
There are different levels of the ERP implementation. They are:

- Pre-evaluation Screening
- Evaluation Package
- Project Planning
- GAP analysis
- Re-engineering
- Team training
- Testing
- Post implementation

i) Pre evaluation Screening
Once the firm has been decided to go for the ERP system, the service for the package must start as there are hundreds of packages, it is always better to go through and full evaluation of a small number of packages, than doing the study of dozens of packages. This step will be useful in reducing those packages that are not suitable for the business process.

ii) Evaluation Package
In this step, important phases of the ERP implementation, as the package that one choose the success or failure of the project. Implementation of an ERP includes huge investments and it is not easy to switch between dissimilar packages, so the right thing is 'do it right the first time'. Once the packages is to be evaluated are identified, the company requires to develop selection criteria that permit the assessment of all the available packages on the same scale.

iii) Project Planning
In this phase the design is implementation is considered. It is in this phase that the details of how to go about the implementation are decided. Time schedules deadlines for the project are arrived at. The plan is improved, roles are found and specific care assigned. It will also conclude when begin the project, how to complete it. A group of people working for project by the team leaders of each implementation group regularly does such a planning.

iv) GAP analysis
This is considered the most crucial phase for the success of ERP implementation. This is the method through which the firms create a complete model of where they are now, and in which direction will they opt expected in the future. It has been supposed even the best packages will meet only 80% of the company's requirements. The remaining 20% presents problematic issues in the company's re-engineering.

v) Re-engineering
The life time human factors are taken into consideration. Every implementation is going to involve a significant change in number of employees and their job often assigned,

as the process becomes more automatic and efficient, it is best to treat ERP as an investment as well as cost cutting size.

vi) Team training

Training is very important phase while implementation, which takes place along with the process of implementation. This is the phase where the firm trains its employees to implement and later, run the system. Thus, it is plays a main role for the company to select the right employee who has the just attitude- people who are interested to change, learn new belongings and are not fearful of technology and a good knowledge.

vii) Testing

This is the phase where one tries to crack the system. One has reached a limit where the firm is testing the real case scenarios. The system is constructed and now you must come up with extreme cases like system overloads, multiple users logging on at the same time, users entering standard data, hackers trying to access limited areas and so on. This phase is completed to find the weak link so that it can find before its implementation.

viii) Post implementation

Once the implementation is accomplished, the vendor and hired consultants will go. To reap the fruit of the implementation it is very essential that the system has wide receipt. There should be enough employees who are trained to handle the problems and those crops up time to time. The system must be updated with the change in technology. The post implementation has a different set of roles and services than those with less cohesive kind of systems.

Use of ERP in Manufacturing Industry

Here are some reasons today's manufacturing need a modern ERP system:

1. Real Time Information: ERP operating software automates all business operations, delivering of accurate result, real-time information. ERP will improve efficiency and productivity by helping users and navigate difficult processes, preventing data re-entry, and increasing the functions such as production, order completion and delivery.
2. Reduce Cost: With one source of accurate, real-time information, ERP software cuts an administrative and operations cost. This will allow the manufacturers to proactively manage the operations, avoids disruptions and delay, cracks up the information logjams and helps users to make conclusions more quickly.
3. Flexibility: Modern ERP software systems are very vast, robust, flexible and configurable. They are not a proposition, but can be tailored around the unique needs of a firms. ERP systems also have the capability to adjust with the ever-changing requirements of a growing firms.
4. Competition: ERP systems may need an investment, but there's also a money to do nothing. Operations cannot afford to put off an ERP implementation while their competition invests in ERP and starts raping the profitability.

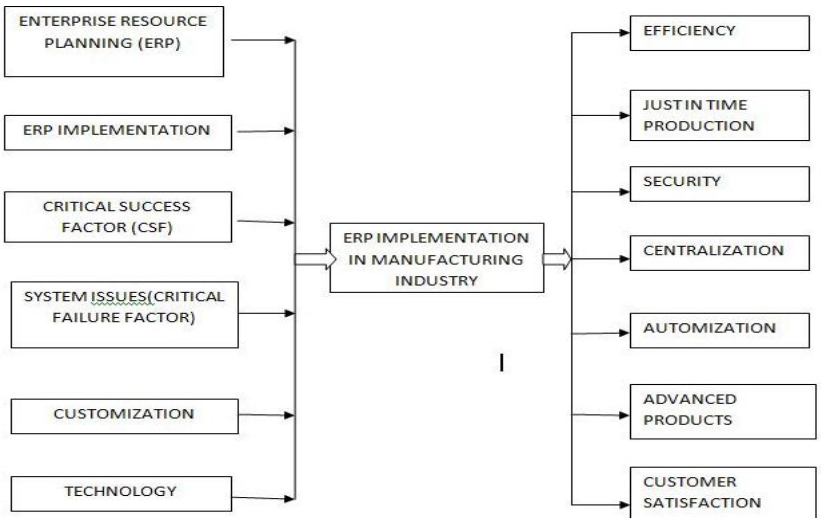
ERP Implementation Issues

- It is very essential that implementation is done in steps. Trying to implement all at once will lead to a lot of mistake and chaos.
- Appropriate training is very important during and after the implementation. The staff should be easy in using the functions or else, it will backfire, with redundant work and applications inefficiencies.
- Lack of proper assessment of need will lead to non-availability of certain requires functionalities. This influence the operations in the long run and decrease the productivity and profitability.
- Lack of support from senior management will lead to gratuitous frustrations in work place. And also, it will delay the operations and ineffective decisions. So, it is needed to ensure that the senior management supports the transformation.
- Compatibility issues with ERP modules lead to subjects in connecting the modules. Companies associate different vendors to implement different ERP modules, established their competency. It is very important that there is a way to handle compatibility issues.
- Cost expenses will result, if requirements are not properly discussed and clear-cut during the planning phase. So, before execution, a detailed plan with a complete failure of requirements should be worked out.
- Investment in infrastructure is very important. ERP functional modules will require good processing speed and adequate storage.

Not assigning suitable budget for infrastructure will results in less application speed and other software issues. Hardware and software security is also very important.

Conceptual Framework

This conceptual framework describes the inputs enterprise resource planning (ERP), ERP implementation, critical success factor (CSF), system issues, customization and technology will processed in ERP implementation then the expected outcomes will be efficiency, just-in-time (JIT) production, security, centralization, automization and advanced products.



Conclusion

In this paper, we have discussed about the purpose of ERP and saw the importance of ERP implementation. This ERP implementation will achieve more benefits to organization when it is succeed. So, this paper will prioritize to implement ERP with a keen study of the process and challenges of ERP adoption in the manufacturing industry. Implementing an ERP system successfully itself will became a technology in present scenario.

References

1. Mohammadreza babaei, Zahra gholami, Soudebeh altafi. Challenges of ERP implementation in Iran large organizations. Journal of Information Systems. 2015; 12:15-17.
2. Worley JH, Chatha KA, Weston RH. Implementation and optimization of ERP system A better integration of processes, roles, knowledge and user competencies, Computers Industry. 2005; 56:610-630.
3. F F-H Nah, J L-S Lau, J Kuang. Critical factors for successful implementation of enterprise systems. Business Process Management Journal. 2001; 7(3):285-296.
4. Bingi P, Sharma MK, Godla JK. Critical Issues Affecting an ERP Implementation. Information Systems Management. 1999; 16(3):7-14.
5. Al-mashari M, Al-mudimigh A, Zairi M. Enterprise resource planning: a taxonomy of critical factors. European Journal of Operational Research. 2003; 146:352-364.
6. Adam F, O'Doherty P. Lessons from enterprise resource-planning implementations in Ireland: towards smaller and shorter ERP projects. Journal of Information Technology. 2000; 15:305-16.
7. Amoako-gyampah K, Salam AF. An extension of the technology acceptance model in an ERP implementation environment, Information & Management. 2004; 41:731-745.
8. Niv A, Neumann S, Zviran M. A system development methodology for ERP systems. The Journal of Computer Information Systems. 2002; 42(3).
9. Bradford M, Florin J. Examining the role of innovation diffusion factors on the implementation success of enterprise resource planning systems, International Journal of Accounting Information Systems. 2003; 4(3):205-225.
10. Ehie I, Madsen M. Identifying critical issues in enterprise resource planning (ERP) implementation, Computers in Industry. 2005; 56(6):545-557.