

Case Report Study on Importance and Challenges of Enterprise Systems in an Indian Companies: Tata

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Abstract: The success of any organization mainly depends on effective communication and mutual data exchange between the departments associated with third party members like customers, vendors, and outsourcers. However, it is not easy to exchange data between the departments with no time elapse. Sometimes it is hard to maintain active data exchange between departments located in different areas around the globe. To overcome problems like effective communication and improved working efficiency in the company, Enterprise Resource Planning (ERP) makes controlling all parts of the business with a single software. This report presents opportunities and challenges of the implementation of the ERP System in multinational companies of Indian economies.

Keywords: ERP, Organization Planning, Resource Management, TATA Company.

1. INTRODUCTION

The world has changed day to day with technical intelligence, make things easier and simple. Technology makes fast communication between people and makes effective data transfer within a few seconds; mostly, this is visible in multilayered companies. Any company growth or development mainly depends on the effective utilization of the data, or exchange of information between the customers and suppliers, but it is not possible always to do (McGaughey and Gunasekaran, 2007). For example, consider a typical business process of manufacturing company. A customer approaches the sales team to buy a particular product, and then the sales team contact the inventory department to check the availability of a product (Shih and Huang, 2009). If the product is not available in the sales department, then they consult the production-planning department to manufacture the product. Later production planning team checks with inventory department for verification with the availability of raw material. If the raw material is not available with the inventory department, the production planning team buy the content from the vendors, after that they transfer the material to the manufacturing department. Once the article is ready from the manufacturing team goods will move to the sales department, sales team deliver the product to the client (McGaughey and Gunasekaran, 2007; Shih and Huang, 2009). At the same time, the sales team update to the finance department revenue generated by the sale of the product. Besides, the production planning team update the payments made to the different vendors, and then finally, all the departments approach the HR team for any human involvement issues. Therefore, it is evident that any enterprise or company had some departments, and these departments need to work effectively and communicate with each other. For achieving effective data management between departments, Enterprise Resource Planning (ERP) is introduced into companies. By implementing the ERP systems, there is no duplication of data, and Labor cost will be reduced (Wilkinson and Leifer, 2007). Besides, there is no discontinuity and redundancy of data, and it increases productivity, effective human resource management, etc. Therefore, the present paper explains the ERP systems and a company while incorporating ERP techniques can achieve what benefits are. It would be a fascinating topic to gain in-depth knowledge about the ERP systems that related to the utilization of software mainly useful to fruitful business transactions

2. BACKGROUND

The planning and controlling functions of the company is widely based on the managing system of extensive information and its generation. The ERP has the aim to provide the information for supporting decisions of the organizations to implement operational functions. The ERP software-based system that can integrate the programming applications of the business functions including manufacturing, logistics, sales and marketing, finance, human resource management, etc. of the company (Kanellou and Spathis, 2013).

ERP system integrates all organization functions for the purpose to enhance efficiency and to establish a competitive advantage of the company. According to (Al-Mashari, Al-Mudimigh, and Zairi, 2003) companies implement an ERP system for the purpose to enhance productivity, maintain competitive advantage, and to manage their customers in a best-satisfied manner. In the modern business environment, every organization is implementing an ERP System to manage change and force of global business pressure. Implementation of the

ERP system means shifting from functional applications to an ERP system is not an easy task, and is associated with various challenges. In the view of (Pereira and Sousa, 2005) a large amount of investment is required in the implementation of the ERP systems and multiple developments, procedures and pieces of training are needed to accomplish it. ERP system is the combination of the management tools that can balance demand and supply and capability of the company to enhance the decision-making process (Al-Mashari, Al-Mudimigh, and Zairi, 2003; Pereira and Sousa, 2005).

2.1. Evolution of ERP:

In 1960, the information system of the company was only focusing on the control of the inventory to manage the company inventories. Later, in the year 1970, companies were focusing on the MRP system (Material Requirement Planning) that was structured for the purpose to manage raw material of the company through planning and procuring. In 1980, MRP II was developed, and it was able to manage the entire production plan of the plant in an optimum manner (PAN et al., 2011). MRP was designed to manage activities of distribution management. Later MRP II was developed for the user to manage Finance, HRM, Production, Planning, Engineering and Marketing Sales, and many more (PAN et al., 2011) (Mabert, Soni and Venkataramanan, 2003). Later the ERP system was developed, and that can cover functions of the organizations in an integrated manner with the support of the process of the production of the company (Sanyal, Bhadra, and Das, 2012).

2.2. ERP Implementation:

Recently various companies have implemented ERP systems with the utilization of software packages such as SAP, Oracle, BAAN, etc. ERP System can provide an information system to the companies in a standardized and centralized manner, and it can save the cost. Hence, ERP System is a cost-efficient technique for the company that can manage every function of the companies, including Finance and Accounting, HRM, Supply Chain Management, Marketing, and Sales. The ERP System has become the successive technique of the company's success in the modern business environment. This means companies are taking more comprehensive advantages of innovative technology (Sanyal, Bhadra, and Das, 2012; Kappelman and Zachman, 2013). ERP has become an essential part of business technology, and it is an integrated software responsible for managing the company resources. Companies such as TATA Group is utilizing ERP System for product planning, purchasing of material, manage inventory level, coordinating with suppliers, offering services to the customers, and managing orders. Thus, ERP System is providing the cost-efficient feature to the companies in terms of minimizing the cost and time. Despite it, companies such as TATA Group can manage their business functions in an efficient way and maintaining their useful competitive advantage in the marketplace. Generally, implementation of the ERP System in big companies such as TATA Group takes one to three years to complete the implementation process (Kappelman and Zachman, 2013)

2.3. Opportunities of the ERP Systems:

Companies are investing a considerable amount of capital in developing a data system to achieve information system benefits (Holland and Light, 1999). Generation of the new knowledge that is the combination of the organization efficiency, and this efficiency can enhance the strategic value of the company (Calisir and Calisir, 2004). The company can achieve a competitive advantage on behalf of three theoretical backgrounds. It can develop the two-stage value model for the purpose to establish sustainability within the company. The strategic value of the company can maintain on behalf of the planning and implementation of the ERP system in the best possible manner (Shehab et al., 2004). On the other hand, if a company is not able to formulate proper planning and implementation, and it cannot establish the strategic value that can lead to losing the competitive advantage in the marketplace. Thus, adequate formulation of the planning and implementation can provide success to the company in an efficient manner. However, the ERP system of the company is a critical infrastructure that is based on technology, and it can improve the ability of all available tools and procedures (Rashid, Hossain and Patrick, 2002; Shehab et al., 2004). Implementation of the ERP system can provide an active process in a standardized manner, and it can provide speed to the business operations of the company. It can provide information in a standardized way to the HRM, it is also able to integrate the knowledge of the financial and accounting, it integrates information of the customer's orders and reduction of the inventory is the cause of the ERP system. The ERP system can provide efficiency to the business in terms of the operational efficiency and delivery efficiency, and also it can enhance order management of the customers (Hossain, Patrick, and Rashid, 2002). Control of the ERP system manages by the trained people of the company. Customers can get information about their order management, invoice, and level of inventory through the website of the company. The ERP software jargon can provide all such features to the company.

Implementation of the ERP system should fit as per the way of the organization for the purpose to ensure a smooth flow to the market. The implementation process of the ERP system is based on the size of the company. Nearly this process takes one to three years to establish the ERP system within an organization for the purpose to provide the critical infrastructure of the technology (Maguire, Ojiako and Said,2010).

2.4. Challenges in Implementing the ERP System

Various problems are facing by the companies in developing countries in terms of implementation of the technologies such ERP System, lack of resources including financial and human to establish this system (Abd Elmonem, Nasr and Geith, 2016). According to the Master Plan of India 2006 to 2020, the government made various commitments, and the government is putting its efforts to develop technological infrastructure. Government of Indian has stated that it is the vision of the Master Plan to develop the technology sector in a significant manner. Besides, for this purpose, various policies and strategies are implementing by the Indian government to provide support to the value chain and industrial growth. Multiple researchers are developing techniques to execute implementation procedure for the purpose to enhance the productivity and competitive advantages of the organizations. Development of the ERP system in Indian is 40%, and it will increase in the future (Kale, Banwait and Laroia, 2010). The rising environment of globalization is also giving a boost to the implementation of the ERP system in a substantial manner, and for the implementation procedure, there is need to sort out the complex problems of the implementation process. Process of the business is directly linked with the relational database and reengineering of the process. Poor planning and management, changes in predetermined goals and objectives of the market, lack of support from the business management are the major factors those are responsible for the failure of the ERP System (Kale, Banwait and Laroia, 2010; Abd Elmonem, Nasr and Geith, 2016). Companies invest a large amount of investment in the establishment of the ERP system, and they are not able to take advantage of it in a proper manner. It happens due to software and business process is not aligned with each other. Software and business process are the combination of software configuration and designing of the business process. Therefore, technology is not sufficient to establish an ERP system conclusively. There is a need to use effective communication process for the purpose to manage the reengineering impact of the ERP system, and it can lead to various other problems. In addition, there is a need to analyze and check the feasibility of the cost, integration of the system, license of the user and training, and many more. The interface of the design and planning of the process is an integral part of the ERP system and its integration (Kale, Banwait, and Laroia, 2010).

3. IMPLEMENTATION OF THE ERP SYSTEM IN TATAINTERNATIONAL

TATA International is the part of the TATA Group and was established in the year 1962. Company is generating an annual turnover of \$ 3600 million. TATA Group is generating revenue of \$ 48 billion annually. TATA International is managing the trading business of leather, pharmaceuticals, and engineering products. Despite it, the company is also having mining, hospitality business, manufacturing of the railway wagon and IT facilities. This company is also providing support to TATA Motors in terms of designing the production of vehicles and warehouse management in all across the globe (Helo et al., 2014). Legacy systems are already established in total seventeen locations of the company that is including marketing and sales, manufacturing and purchasing and distribution of the company. TATA has established the ERP system for the purpose to integrate all seventeen locations of the company and to organize a management system for the management of the company. For the use to implement the ERP system within TATA international, and infrastructure. The company analyzed the SAP system of the company. Successful implementation of the ERP system is based on the SAP system, and this is the reason the team of the company investigated and evaluated the SAP system of the company. TATA Technology and IBM accomplished this research. Big Bang was the name of the strategy that was implemented within the TATA. The implementation process was performed within eleven months from August 2005 to July 2006. Total six models of the ERP system was implemented within the company. Those are included Management of Material (MM), Planning of Production (PP), Distribution of the Sales (DS), Finance and Accounting Control (FICO), Management of the Quality (MQ) and Warehousing of the Business (WB). SAP 5.0 was responsible for providing the database for the database management of the warehouse. This particular project was achieved success in a significant manner. Thus, it resulted in the successful implementation of the ERP system due to effective project management.

4. CONCLUSION

The present study has presented opportunities and challenges of the implementation of the ERP System in Indian economies. ERP System effectively integrates business operations. Services of the business included Procurement, Production, Marketing and Sales, Distribution, Human Resource Management, Finance, and

Accounting. ERP System provides efficiency to the industry, and it is the cause of the speed functioning of the business operations. In this report, TATA International, that is the part of the TATA Group has taken as a case study. TATA International implemented ERP System in 2006 for the purpose to integrate their different functions including procurement, purchasing of raw material, marketing and sales, distribution, order management and customers' management of all seventeen locations. The main aim of the ERP implementation was to provide an organized environment for the top management of the company. Thus, proper planning and execution, along with the support of senior management and user enable TATA to establish their ERP System successively.

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