

Enterprise Resource Planning (ERP) Systems in Banking Industry: Implementations Approaches, Reasons for Failures and How to Avoid Them

Salim Ahmad^{1*}, Suleiman Ibrahim¹, Salisu Garba²

¹Department of Computer Science, Federal University Dutse-Jigawa State

²Department of Mathematics & Computer Science, Sule Lamido University, Kafin Hausa-Jigawa State

*Corresponding author: salim_mgr@yahoo.com

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Abstract Implementing an enterprise resource planning (ERP) system proven to have visible benefits (business integration, reduce operational cost, business flexibility and much more) that can be seen by many organizations, but the success of its implementation can only be realized by avoiding the common motive that lead to its failure. This paper explained various aspects that lead to ERP system implementation failure which includes inadequate requirements definition, end-users resistance to adapting to new methods, lack of top-management support. Different approaches are used in the implementation of ERP system such as comprehensive, pilot, and phased approach but the successful implementation of ERP system depend on the organizational nature. Enormous amount of time and money have been invested on ERP implementation by many organization only to see the performance remain stagnant due to the incompatible approach to the implementation process. ERP system is a long process and for the duration of implementation the performance of daily organization activities can degenerate, there are a lot of risk that are involved in new business process; therefore various recommendation on how to avoid the ERP failures are discussed.

Keywords: ERP, approaches, implementation and failures

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1. Introduction

Information Technology is having a profound effect on today's banking institutions, Banks and customers are being forced to adjust to this new reality by applying IT-based solutions that have proven to be effective in accelerating business operation while improving productivity. Therefore, to further maximize the benefits of IT-based tools, integrated systems such as Enterprise Resource Planning (ERP) should be implemented.

ERP systems in an organisation is associated with a very wide range of software products, which encompass and support the day-to-day business operations and business decision-making, ERP generally serves in many platforms and many useful areas in an integrated approach, thus automate most operations from supply chain management, sales support, customer relationship management, manufacturing scheduling and production, inventory control, human resource, financial and cost accounting to mention not but a few and indeed almost all the data oriented management process, all these made the system more prevalent and keep on increasing for many years.

According to Jiang Yingjie (2005), ERP systems are configurable information system packages that integrate information based processes within and across functional areas in an organisation, which is to say, ERP incorporates in-house and peripheral information across a whole organization, implementation of the finance/accounting, manufacturing, sales and service, customer relationship management, and the likes. An ERP system computerizes this action with an incorporated software function. Its main function is to make easy the current of information between all the business functions in an organization and manage the connections to outside stakeholders.

ERP systems can run on a range of hardware and network configurations, usually employing a database as a repository for information and controls and incorporates the important parts of its company ERP is most commonly used in the perspective of software.

With ERP, each and every department in the organization has their own system, but they can correspond and allocate information easier with the other company at the same time, and has many modules associated with it like: Customer Relationship Management, Supply Chain Management, Financial Management, Manufacturing Resource Planning and Human Resource Management.

2. Approaches of Implementing ERP Systems in Banks

ERP implementation support many approaches, it may varies from one organization to another depending on the capabilities and the requirements of the organization. Implementation approaches includes; the comprehensive implementation, pilot implementation, phased implementation.

The bank uses an approach which best suites its business needs and operations, since the banking systems make use of almost all the modules of ERP. Therefore, it has to look for a method that will encompass the business activities.

Organizations that are ambitious and big use comprehensive approach to implement ERP system. It is unusual for organization to implement all modules at the same time but several organizations are willing to take the risk.

By adopting this approach organization can save cost, minimize the time taken to complete a business process, facilitate day-to-day working and decision making. However; several resources have to be allocated, the implementation cost and time are economical and not very high but filled with a high risk and uncertainty.

The pilot implementation approach involves implementing the complete ERP system at a selected site, branch or location of an organization. The legacy system continues to function in the organization, subsequent to the success of the ERP system at the pilot site, it is implemented in the outstanding branches or locations of the organization, typically using direct comprehensive implementation approach (S Chien and S Tsaur, 2007).

The risk of system failure is reduced by using pilot implementation approach since it will act as a testing procedure of the ERP system. Pilot implementation approach is expensive compared to the comprehensive ERP implementation approach and also keep organizational data safe with horizontal operation (Richard G. Ligus, 2006).

In phased implementation approach, ERP modules with high priority typically Financials, Controlling, Asset Management and Project System are implemented in one or more branches or locations of an organization; it's also considered to be a significant level of business process re-engineering where organizations align business process with ERP system instead of modifying the ERP system to imitate a distinctive business process (R. Michael Donovan, 2001).

Only the core modules of the ERP system are implemented which minimize risk and uncertainty compare to comprehensive approach, failure can be limited to the implemented ERP module, although integration of ERP modules is used at the later stage of the project. However, this approach cost more than a pilot approach as it involves a large number of different modules such as Financials, Controlling, Asset Management.

On the downside; the potential problems with phased implementation approach includes, less institutional control when compared to comprehensive approaches. Although most researchers accept the above problems, a few have criticized its main points as long as the goals of

the ERP implementation are achieved e.g. Vedabrata Basu, Al Lederer (2011).

3. Reasons for ERP Implementation Failures in Some Banks

Where there are vast opportunity for growth and value creation like ERP implementation there are also vast opportunities for risk, high cost of IT infrastructures, system updates, application maintenance, customization as well as consultation.

The common reasons behind ERP implementation failures in any organization are more or less due to weak organizational structure and governance which are critical business issues in implementation as explained in the publication of Christian Vogt (2002).

In a survey conducted by Shari S. C. Shang and Tsung-Lin Wu (2004) shows that 60% of the ERP system implementation fails due to the inadequate review of the causative agent for the failure as many researches focus on its strategic benefit, advantages rather than identifying the motive behind its disappointment after implementation. Therefore, some of the reason associated with ERP implementations failures include:

- a. Inaccurate data
- b. Non corresponding of Software with business requirement
- c. Eagerness in implementation
- d. Long term finance
- e. Exit of guarantors
- f. Ineffective consultation

Many study (Silja Eckartz, et al 2009), shows that many organizations willing to implement ERP systems in organizations make use of incorrect data which tempered with the record. Therefore, data inaccuracy affects the record of information and data that need to be integrated with the ERP systems, thus, is make the records to be inactive in terms of confirmation of records to which will be integrated.

ERP system software misfit because of poor selection and estimation process of the integrated ERP system for the bank, in the sense that the software found to be not suitable with the bank business requirement and inefficient in managing high quantity of product, incapable of planning complex bills of materials and inventing of planning formulation. The ERP system was develop in a limited way because of misfit problem. Lack of compatibility between organizational business processes and ERP system can cause a severe loss of definite or anticipated benefits, the fundamental business processes flow will duly depend on the integrated ERP system; oddity between them can guide organization to slow productivity and finally failure of the ERP system.

ERP system implementation can fail due to lack of well-defined functional requirement, almost 60% of the ERP systems implementation that lack broad requirement definition fail. Inadequacy of specification and description of required modules definition as well as the level of understanding the business process can lead to collapse of ERP system implementation as communicated by Vedabrata Basu, Al Lederer (2011). Over-reliance on intense customization because of ERP software inequality, intense customization was required in the program

customization which leads to project delays, budget overspent and even unreliable system.

The time taken for the new business process to pay on its own, which sometimes is referred to as Return on Investment (ROI) also affect ERP systems implementation success in the organization and leads to overall failure. Another considerable cause of ERP implementation failure is the overestimation of return on investment (ROI) and other benefits mostly due to the ERP vendor's exaggeration about the quality and benefits of their ERP system software. Lack of understanding other cost such as training, testing, and data conversion takes-away the possibility of organization achieving the predicted return of investment.

Exit of guarantors is another problem associated with the implementation system failures in some organizations. Because ERP implementations usually take place within the period of one and half years approximately, in case of the people and management who initiated the plan for the project implementation which may encounter during the implementation processes, critically distracting the performance process and leads to overall system failure. Therefore, their exit or change in management positions may hinder the success of ERP systems implementation in the organization.

Ineffective use of consultants by most organization who implement the ERP systems whereby the consultation happens once or twice throughout the process. The consultation should be as many as possible so as to keep track with latest information regarding the project many organizations think of implementing process without proper consultation from expert and therefore leading to its total failure.

4. How to Avoid the ERP System Implementation Failure

ERP implementation is a bizarre that comes with challenges and problems therefore any organization must either prepare to deal with the common reasons for implementation failure or risk undesirable failure.

Support and commitment from top management is identified by () the major reason that guide ERP system implementation to failure. Therefore commitment and support from the top management; and effective project management practices are used to make sure that the ERP system implementation is a success not a failure.

The unavailability of the required level of expertise, among staffs for the ERP implementation is another problem which required special consultant to help in training the staffs that uses the system. Therefore hiring a team of consultants to assist in the ERP system implementation is very vital in order to avoid failure.

Most of the employees and customers of are too anxious to the new ERP system due to their own perception of its complexity, lack the necessary credentials to operate the system; This creates a protest, objection and complains from the customers as they are more used to the old payment system. Therefore Banks have to use training to allow users get acquainted with the changes introduced by the system; the endorsement by key personnel is also used to help in acceptance of the ERP

system, which aids the users to understand the excellence element of the system and its impending benefits.

The expectation levels of services may not be as anticipated by Banks and the customer's expectation toward the ERP implementation is higher than what is in the initial stage. Therefore Banks have to analyze the intangible benefits of the ERP system implementation, and by margin the tangible and the intangible benefits, combine with future benefits, the return on investment can be realized.

Banks should know that inadequate resources, lack of financial and technical support can cause failure, therefore; Planning and monitoring human resource mobilization from various teams to various locations can be used to ensure the availability of sound technical infrastructure and a successful implementation.

Setting up an agile and flexible governance framework and dynamically managing all implementation activities is a very big issue for Banks. This defines what to do, how to do it, who should do it and addresses the rules, processes of the implementation between the external and the internal team. A governance model can be set-up to provide an overarching structure and helps to support the business objectives of the Bank on strategic, functional and operational level by collaborating the internal team members and external team.

5. Conclusion

ERP system implementation proven to be a good idea that presents many challenges and concern, but come with it an endless opportunity that help increase organizational performance such as business integration, support strategic planning, reduce operational cost, facilitate day-to-day management, business flexibility and elasticity.

In general, this suggests that indeed ERP systems give way to significant benefits to the organization that implement the system, and that the implementation risks do not exceed the expected value, although there are cases discussed in the assignment that the ERP projects implementation can be risky and even failed.

Many organisations had several software component that performs some ERP functions, but the standardized and integrated ERP system provide a degree of interoperability that was difficult and at the same time expensive to achieve with standalone and customs-built systems.

Due to the benefit of ERP system, many organizations consider it as essential information system infrastructure to be competitive in today's business and provide a foundation for future growth but the rate at which ERP system fail in some banks is alarming.

However; with top management support, excellent management structure, high-quality organizational culture any of the ERP system implementation approaches can be efficient and beneficent.

6. Recommendations

However; the success of the implementation to four main factors - the expertise of the internal team; the right implementation partner; commitment and support from the

top management; and effective project management practices. Experts from finance who knew the business line brought in that knowledge to add to the expertise of the IT team. This helped the project to gain a macro, company-level perspective.

- From the above discussion about all the ERP implementation approaches, it is very clear that comprehensive approach is not suitable for the organization with high traffic business operations because of downside like high risk or total system failure but pilot
- Although an ERP system is much more than a traditional information system, based on the fact that the implementation of ERP always identify for the repositioning of business processes. Many companies involved in ERP software systems are not full time IT professionals. Therefore, full time IT professionals should always be employed, for consultation, implementation, as well as training.
- Process-oriented approaches can serves as a prerequisite to cover the technical scope of the implementation and deal with anticipated problems at early stage of the ERP implementation.
- Banks should employ Strategy implementation phase which involves other procedures such as training and support, endorsement and implementation timing. In most of the accustomed circumstances; experience and perception is what the users used as the attributes in evaluating the quality of the system instead of scientific attributes (Silja Eckartz et al, 2009).
- Status evaluation phase deals with the deliverable of the ERP system itself and minimize of the user resistance. The positive expectations are the building-blocks of the ERP system implementation but the user's anxiety and resistance are very critical to ignore. Feedback will be used in re-evaluation the ERP system as well as the user's requirements.
- More holistic research needs to be done in order to fish-out other micro issues that leads to ERP system failure in some banks and Development of IT

strategy, value chain analysis, and cost benefit analysis can help to better the implementation processes.

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