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EVALUATION OF MAJOR ISSUES RELATING TO THE FUNCTIONAL EFFICIENCY OF ENTERPRISE RESOURCE PLANNING SYSTEMS (ERP) WITH SPECIAL REFERENCE TO LACK OF PROPER HUMAN INTERVENTIONS

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Abstract:The term Enterprise Resource Planning (ERP) is being widely used in almost all level of functions nowadays. This ERP is based on Technology enabled activities for various corporate functions such as distribution, supply chain management, production, finance, HR, materials, etc. There are certain areas in the field of Human Relations which are not being covered by ERP, but it affects the process and implementation of the same such as Interpersonal Skills, Leadership Skills, Communication Skills, Learning, etc., as all these are covered in an umbrella namely Soft Skills. No technology can attain maximum efficiency without the Human Intervention even it is fully automated. This paper attempts to explain the problems faced by the ERP consultants before, during and after the implementation.

Keyword:Change Agent, End user, ERP, Human Intervention, Soft Skills.

1. INTRODUCTION:

ERP is a tightly integrated closed loop business solution package and is multifaceted. Enterprise Resource Planning system is a fully integrated business management system covering functional areas of an enterprise like Logistics, Production, Finance, Accounting, Sales and Human Resources, etc. It organizes and integrates operation processes and information flows to make optimum use of resources such as men, material, money and machine. ERP promises one database, one application and one user interface for the entire enterprise. ERP system enhances a manufacturer ability to accurately schedule production, fully utilize capacity, reduce inventory, and meet promised shipping dates.[12]

1.1. Enterprise Resource Planning (ERP)

Through the technology of ERP the entire functions are being centralized, controlled, monitored, retrieved, etc. There are several ERPs available in the market, such as – SAP, JD Edward, Oracle, Peoplesoft, etc. Any module in the ERP system is implemented by the consultants engaged by the company. After the implementation (installation) the system has to be used by the employees of the company who are called the end-users. They have to be accustomed to the way the system works to get optimum benefit from the system.

1.2. Major issues relating to the functional efficiency of ERP

According to [13] lack of continuous technical support, change resistance, motivation and training are the disadvantages of ERP. As per [14], The five common ERP

implementation problems: The requirements of the company do not match the capabilities of the software; Inadequate planning and lack of an executive sponsor; Poor change management and user training; miscalculation of resources and budget required and a segregated project team. As reported in [15] Customization is problematic, Re-engineering business processes to fit the ERP system may damage competitiveness and/or divert focus from other critical activities,

1.3. Human Intervention

The most critical factors that decide the success of any ERP implementation project are the attitude and cooperation of the people implementing the system and using the system once it is implemented.[10]

2. BACKGROUND

[16] has listed several Disadvantages of Enterprise Resource Planning, some inadequate investment in regular training for users, testing charges, limited customization, reengineering of business process upto some extend, Annual Maintenance Charges (AMC) for the software and updates, difficult to use, etc. The entire system can be expensive for the organization, although they are coming for Small and Medium Enterprises (SMEs) at lower cost too, but organization should be very careful in selecting the appropriate software that fulfills their requirements in a budget. There are some limitations in customizations; some customization may involve changing of the software structure which is usually not allowed.

[17] has pointed out that in spite of rendering marvelous services, ERP is not free from its own limitations. ERP calls for a voluminous and exorbitant investment of time and

money. The amount of cash required would even be looming on the management given the fact that such an outlay is not a guarantee to the said benefits but subject to proper implementation, training and use. In the ever expanding era of information theft ERP is no exception. It is alarming to note the time taken to implement the system in the organization. This means large amounts of workers have to shun their regular labor and undertake training. This not only disturbs the regular functioning of the organization but also runs the organization in the huge risk of losing potential business in that particular period. There are great benefits rendered by the system. On the other hand when one thinks of this information reach in the hands of undeserving persons who could do more than misuse, it is evident that there is no way of ensuring secrecy of information and larger chances of risk will be generated as long as they are in the public domain.

Employee resistance, Lack of top management commitment, inadequate training and education, inadequate resources, Unrealistic expectations of the benefits and the Return on Investment, Poor ERP package selection, Extensive customization, Change management, User acceptance are also identified by [10] as major defects of ERP.

3. METHODOLOGY

The failure rate of ERP implementation calls for a better understanding of its critical success factors (Somers et al., 2000).[1] Through an extensive literature review, the researcher found some articles that provide answers to the question: What are the major issues relating to the functional efficiency of Enterprise Resource Planning Systems (ERP) with special reference to Lack of Proper Human Interventions? A few articles were identified through a computer search of databases of published works and conference proceedings in the information systems area.

The articles were searched by the title based on the following three criteria: it must contain one of the keywords "functional efficiency", "Lack of Proper Human Interventions" and the term "ERP".

The methodology adopted is to search for the basic components/constituents that contribute towards the issues of the lack of human interventions. The objective of the study is to evaluate the issues and failures of ERP with special reference to lack of human interventions. The issues related to ERP are very well being experienced by the Consultants, and so the researcher has taken the responses purely from the consultants.

The researcher has taken the questionnaire method to gather the details. The questionnaire is divided into two major divisions, such as demography and the failure factors related to lack of human interventions. The failure factors related to lack of human interventions is further divided into clients' view on ERP (Qns. 1 to 7) and consultants' view on clients (Qns. 8 to 15). All the fifteen failure factors were supported by different authors in different concepts. The questionnaire was gathered from three hundred ERP consultants through online portal (www.zoho.com) and in person.

3.1. The problems faced by the consultants

This section discusses the 15 factors that are faced by the consultants before, during and after the implementation

1. Client employees feel ERP is very costly (not cost effective)

In reality, ERP implementation is costly. Although ERP software is expensive, an even more substantial amount of business cost is typically spent on consulting to overcome difficult software implementation.[2]

2. Client employees feel ERP is very rigid, not flexible

ERPs are frequently presented as very rigid systems that have little or no flexibility at all. Many times it is argued that it is the organisation, not the ERP, that needs to change for the implementation to be successful.[3]

3. Client employees feel estimating the Cost of ERP is not possible

The initial budgets are very often exceeded and there are still many hidden costs in an ERP implementation.[10]

4. Client employees feel more time is being wasted

Education should be a priority from the beginning of the project, and money and time should be spent on various forms of education and training.[4], and so many employees feel time is being wasted on implementing ERP.

5. Client employees feel resources are being wasted

ERP implementation is a complex, costly and lengthy project.[10], and so many employees feel resources are being wasted.

6. Client employees feel Unable to finish as per the time Whirlpool suffered delays in shipping product after it went live with an SAP system implementation. Even though red flags had been raised late in the testing phase, Whirlpool elected to stick to their schedule. The decision resulted in a crippled shipping system that left appliances sitting in warehouses and stores with six to eight week delays for shipping orders.[18]

7. Client employees feel Unable to match the company's requirement

If the requirements of the new system or what is expected from a new system are not adequately defined, then the implementation team will find it very difficult to plan the project.[10]

8. Consultants feel Understanding the company concept is difficult

Business processes fall into three levels – strategic planning, management control and operational control. Organisational continuously re-align their business processes at all levels in response to the ever-changing market environment.[10] The conceptual clarity about the business will help the consultants to implement effectively.

9. Consultants feel End users resist to change to ERP

The changes from an earlier version of SAP to a new version of SAP met resistance from the users and it could only be implemented with a great deal of compromise between the change managers and the users.[9]. The employees will be comfortable in the legacy system. Normally people resist to change for everything and the same for ERP systems too.

10. Consultants feel lack of interpersonal skill among the end users

Effective business innovation requires high-level support

and a project champion. An efficient team combination is recommended including People with bridge-building interpersonal skills [11]

11.Consultants feel lack of motivation for the end users to adopt to ERP

In most of the time there was a disagreement between vendor and the user. This created a negative impact on the motivation of the users' of the system towards its usage. The resistance of the users' was also amplified. [5]

12.Consultants feel lack of proper leader to explain the concept to the company's end users (Change agent)

A business leader should be in charge so there is a business perspective. Transformational leadership is critical to success as well. The leader must continually strive to resolve conflicts and manage resistance. [2]

13.Consultants feel lack of soft skills among the end users Managers' soft skills (such as communication and team building skills) are among the most important skills required for a successful ERP implementation. [6]

14.Consultants feel Non Cooperation from team members (consultants)

The most important hazards in ERP maintenance are the cooperation and commitment of ERP users and managers. [7]

15.Consultants feel Training the end users are difficult

Donald Kirkpatrick's Training Programs Evaluation Model is one of the most widely used and most popular models for the training evaluation. Although criticized, the four-level model is considered across training communities as an industry standard. The four levels of Kirkpatrick's evaluation model measure: Reaction of trainees (what they thought and felt about the training), Learning (The resulting increase in knowledge or capability), Behaviour (The extent of behavior and capability improvement and implementation / application) and Results (The effects on the business or environment resulting from the trainee's performance) [8]

4. RESULT DISCUSSION

The present study is an attempt to know the responses from the various ERP consultants regarding their issues towards the end users. Based on the information gathered from the consultants the following are the findings through the multiple responses:

| Qn. No. | Problems faced by the Consultants | % of responses (Multiple) |
|---------|---|---------------------------|
| 1 | Client employees feel ERP is very costly (not cost effective) | 47 |
| 2 | Client employees feel ERP is very rigid, not flexible | 33 |
| 3 | Client employees feel estimating the Cost of ERP is not possible | 13 |
| 4 | Client employees feel more time is being wasted | 27 |
| 5 | Client employees feel resources are being wasted | 13 |
| 6 | Client employees feel Unable to finish as per the time | 13 |
| 7 | Client employees feel Unable to match the company's requirement | 13 |
| 8 | Consultants feel Understanding the company concept is difficult | 13 |
| 9 | Consultants feel End users resist to change to ERP | 40 |
| 10 | Consultants feel lack of interpersonal skill among the end users | 27 |
| 11 | Consultants feel lack of motivation for the end users to adopt to ERP | 40 |
| 12 | Consultants feel lack of proper leader to explain the concept to the company's end users (Change agent) | 40 |
| 13 | Consultants feel lack of soft skills among the end users | 13 |
| 14 | Consultants feel Non Cooperation from team members (consultants) | 0 |
| 15 | Consultants feel Training the end users are difficult | 33 |

Table: 1

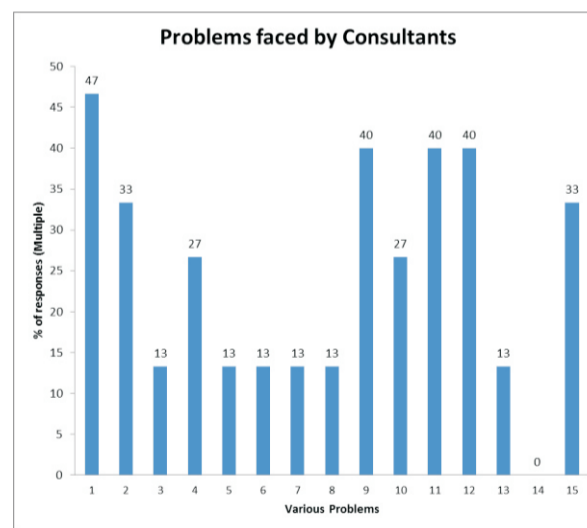


Fig: 1

Nearly 50% of the consultants are of the view that Client employees feel ERP is expensive and not cost effective. 40% of consultants' responded that there is a lack of

motivation for the end users to adopt to ERP; the end users resist to change and lack of proper leadership to explain the concept to the company's end users (Change agent).

All consultants uniformly expressed the view that non-cooperation among the consultants is a non-issue.

More than 30% (33) of the consultants responded that Client employees feel that ERP is very rigid and not flexible; and Training the end users are difficult too.

Less than 15% (12) of the consultants responded as Client employees feel that estimating the cost of ERP is not possible; resources are being wasted; unable to finish the implementation as per the time; unable to match the company's requirements, understanding the company concept is difficult; lack of soft skills among the end users.

More than 25% (27) of the consultants feel that Client employees feel more time is being wasted in implementing ERP.

5. CONCLUSION

A total of 11 critical success factors for ERP implementation had been identified, based on a review of the ERP literature.[2]. If ERP systems are the nervous system of a company, then doing an ERP implementation is like brain surgery: only to be attempted if there is a really good reason and not to soon be repeated. Unfortunately, ERP implementation projects often fall victim to some of the same problems of any large, complex project. However, there are some repeatable problems that good planning early in a project can work to avoid.[19] Based on the recent findings and the information from various sources of literature, it is very clear that there are so many disadvantages in implementing the ERP.

This study has taken 15 important factors considering the Human interventions and found the level of responses. This research study has gone in depth to know the ways and means of failures, especially with the lack of human interventions before, during and after implementing the ERP. The Success or failure of ERP system rests with how the actual users use it. Even the most successfully implemented ERP systems fail to deliver the dramatic performance, improvements that it has promised due to lack of end user cooperation. All these can be solved only through creating awareness to the clients and making them involve in the entire steps of implementations.

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