

Process Innovation Methods on Business Process Reengineering



M. Sunil Kumar, D. Harshitha

Abstract: *Paper Setup must be Software engineering is the approach of a disciplined and systematic approach to the event, performance, re-organizing and maintenance of software. Re-organizing the work process is considered as Re-engineering. The organizations are these days looking for new administration approaches so as to expand their opposition identified with quick changes and mechanical advancements. In response to associate more and more competitive setting the ability to adapt to dynamical market desires and develop innovative processes is important for organizations. The important key behind this evolution is the improvement in the globalization of business, technologies and the expectations of the client. BPR changes the strategies of method organizations, the roles of the practitioners, the structure and order of method levels. One of the current innovations in engineering is BPR (Business Process Reengineering). To optimize the process and the productivity of a corporation BPR represents the quick and radical arrange of strategic, policies and structure. BPR is often pursued to enhance processes, increase productivity, improves service and supply a competitive advantage. To achieve the business objectives business process reengineering supports organizations to elevate their internal functions. Organizational processes can be known, analyzed and improved by developing the different methodologies and applied to the reengineering process.*

Keywords: *Business Process Reengineering (BPR), Business processes, Methodologies, Process Innovation*

I. INTRODUCTION

A scientific approach to analyze, design, implement, testing, maintenance of software is software engineering. Software engineering consists of different categories such as software development process, software management, software re-engineering and so on. For the development of a software product software development life cycle structure can be used which is also considered as a software development process. Software management starts with project planning which is defined as a group of activities collectively. Re-engineering can be generally used to add more functionality or to correct the faults for the improvement of organizations.

BPR is a technique by that organizations basically rethink and improve their work to dramatically improve client service. BPR initiative may be risky and several other factors should be considered for the development of a product. The success factors like high management support,

money and leadership, and the sequence of the modification work. For business process reengineering the chosen of the correct method which can reach the organization/project requirements that can support and known to the team of the project is also necessary along with the success factors. For an efficient reengineering project, the important element is choosing the model that can assist the reengineering process (analyzing, modeling and redesign). In the project, the members who are involved should be known about the model during the reengineering process.

II. RELATED WORK

Hari Lal Bhaskar et al. [1], analyzed on various framework and methodology of BPR and aims to study the factors of the BPR which may determine the performance and to explore the Business Process Reengineering execution level. The different success and failure factors which can affect the business reengineering projects implementation are also identified and prioritized. A quick theoretical assessment is presented for understanding the key factors and business process reengineering which can be used in the development of the Business Process Reengineering.

RituChandna et al. [2], focused on the existing literature on BPR which can be used for understanding the reengineering importance. The definition of BPR, modeling and analysis importance are also discussed. Identification and classification of available tools and techniques for modeling and analysis of BPR are presented. While taking a decision about reengineering the usage of fuzzy logic is also reviewed.

Gunasekaran et al. [3], focused on different tools and techniques, modeling and analysis which may be utilized for business process reengineering modeling. A framework is presented for modeling, and requirements for the choice of tools/techniques of BPR. The importance and a review of Business Process Reengineering modeling and analysis with appropriate identification of techniques were presented.

Tsalgatidou et al. [4], reviewed the different approaches for BPR (Business process reengineering), and also present the different success factors, selection of the correct model that are important for modeling the BPR. Explanation of different methodologies for business process reengineering (e.g. Davenport and short, Hammer) is also presented. A comparison framework for methodologies is reviewed.

III. BPR METHODOLOGIES

A Business Process Reengineering approach place a structure for the enterprise of a BPR effort. The selected methodology for reengineering can be used to support the activities like the project boundaries, project manager, analysis of business processes and the choice of the correct members to authorize the BPR team and so on.

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BPR methodologies are available in various types. Selecting the approach which is suitable for the requirement, considering the organization objectives and economic necessities is the challenge while structuring a BPR project. Now a day's organizations are challenged with complex performance conditions and with endlessly growing competition. In continuous growing and changing, environment reengineering or improvement of business processes in an organization has to be required.

By reconsidering the mission and the vision of an organization, and the services or products it provides the radical alteration needs can be fulfilled in the preliminary level of Business Process Reengineering.

About reengineering, Hammer argues that it attempts to interrupt removed from previous rules and concerning a way for organizing and conducting business. To attain the works reengineering involves that recognizing, rejecting a few and discover the inventive current process.

For an efficient reengineering process, Hammer recommends the successive seven principles.

1. Organize around outcomes, not tasks
2. Recognize all the processes in an organization
3. Subsume data-processing work into the real work that produces the data
4. Treat geographically distributed resources like they were centralized
5. Connect similar tasks rather than group their outcomes
6. Make management into the process and place the selection point where the work is performing
7. Capture data once and at the source.

Radical approach for reengineering process defined by Hammer is opposed by some of the researchers. The principles for reengineering recommended by Hammer look to use normally as they replicate the data essentials and competitive organizations.

A moderate approach for Reengineering Process is suggested by Davenport and Short. According to them "analyzing and designing the workflows and processes of an organization" is the Business Process Reengineering. The choice of the most analytic and necessary processes of the organization, analyzing the present performance and redesigning is the structured approach for reengineering process suggested by them.

A. Hammer/Champy Methodology

Author (s) According to Hammer and Champy, reengineering process is radical reanalyzing and processes redesigning to attain the important crucial, current implementation measures like value, standard, assistance, and speed. The Business system is shown in Figure 1.

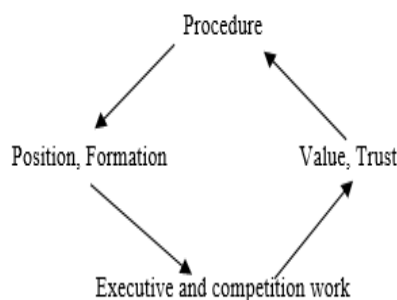


Figure 1. Business System

In Reengineering process, IT has played an important role particularly when BPR used to challenge the implicit within the processes which are existed since long before the arrival of current computer and communication technology.

Identification of current competence technology is the critical component where reengineering process is concerned on reorganization. According to Hammer and Champy, the major problems for Business Process Reengineering success are weak manageability and indefinite objectives.

Hammer and Champy propound an approach for Reengineering process. The methodology comprises of six phases which are of the following:

1. Commencement of Reengineering process
2. Recognition of processes
3. Choosing the processes
4. Knowledge about the selected processes
5. Chosen processes redesigned
6. Execution of Redesigned Processes

Finally, the last phase covers the execution part of the BPR project. Hammer/Champy talks about project planning rather than the implementation part.

B. Davenport's and Short's Methodology

A repeating connection between BPR and IT competence is recognized by them (Davenport and Short), which means that how it supports the redesigned process and method improvement evaluate in terms of ability.

They acknowledge the significance of workforce and organization rather than the technology and the innovation problems which can be used to modify the direction, and propound the utilization of standard approaches such as designing, controlling, decision making and human activity.

The methodology consists of the subsequent steps where the primary three steps are similar to hammer's approach, where the things can vary from the fourth step.

1. Expand the Business perception and methods
2. Determine the processes to be redesigned
3. Perceive and evaluate the current processes
4. Determine IT levers
5. Design and make a model of the process

C. Process Analysis Design Method

At Manchester University, Informatics Process Group (IPG) developed the process analysis and design approach. They develop this methodology as a framework which can be utilized in a BPR work as per the specific environment. Figure2 shows the PADM framework.

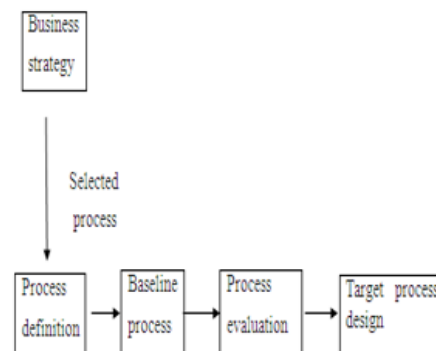


Figure2. PADM Framework

A repetitive correlation between the processes and technology is identified by this method where PADM handles the connection between the organization and the assisted technology.

Methodology doesn't address the difficulty in the selection of a process in its current form. If a process is chosen for improvement it mainly focuses on analysis and design. The methodology consists of the following four phases:

1. Explanation of procedure
2. Standard procedure representation
3. Procedure analysis
4. Designing the target procedure

D. Object-Oriented BPR

Today for the expansion of software systems object-oriented technology is using successfully and presently several experiments are created to utilize an object-oriented method for modeling Organizations. To model organizations, we can use object orientation because it represents the organization in a process that is extremely near to the actuality. Giving attention to work, Jacobson describes that an object contains data and behavior which is significant to the organization. Work tasks can be formed as objects in the organization.

In an organization, the essentials such as their services, products, resources and the way they depend on one another are simplified by the object-oriented method. Within the framework of business development reengineering work is performed. It consists of mainly two steps forward engineering and reverse engineering.

For Business Process Reengineering Jacobson give their approach as Object-Oriented Business Reengineering. Jacobson methodology for BPR consists of the following phases as shown in the figure3.

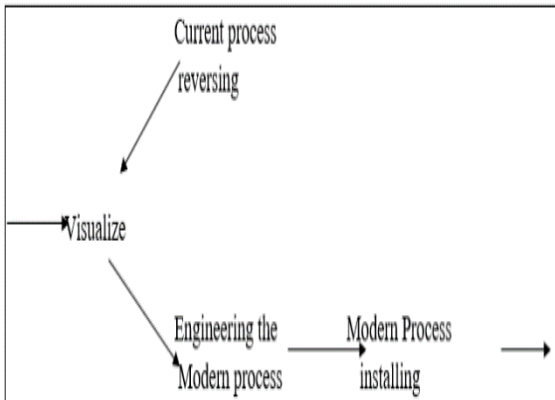


Figure3. Jacobson Methodology for BPR

IV. CONCLUSION

For process improvement Reengineering process is one of the different ways. Different methodologies for Business Process Reengineering are conferred in this work. Selection of the methodology is depending on the organization requirement and it will be suited for competitive necessities. For achieving the enhance performance small scale issues are confronted with slighter forceful. To gain the competitive advantage a well-organized Business Reengineering project can assist the radical changes when an organization faces any

critical issues. A methodology can be chosen based on the business/organization vision and the importance of the problems. Most of the organizations are intended towards endless development, progressive approaches, and restructuring processes.

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