BPR- Organization Culture, Best Practices and Future Trends

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ABSTRACT
Over the last few years, many factors have accelerated the need to improve business processes. New methods, technologies and major changes are rapidly bringing new capabilities to businesses. One approach for rapid change and spectacular improvement is the Business Process Reengineering. BPR is an important way to build organizations more efficient, effective and modernize. BPR is considered to be a perfect tool for all business organizations that want to make feasible qualitative improvements in their business processes. BPR means not only change but radical change within a short period. This paper describes the best practices adopted by business organization for reengineering their business processes and the future scope of BPR in businesses.

Keywords

1. INTRODUCTION
Business Process Reengineering is an area in which lot of research has been done and number of different methodologies and frameworks were introduced. BPR is one of the most prevalent development methodologies used across the globe. It allows organizations to make a quantum leap in the nature and level of their services and processes, by making radical changes and eliminating duplicates and irrelevancies, which cause delays.

BPR started as a private sector technique, which help organizations to significantly improve customer service by cutting the operational costs, and become world-class competitors. Business process reengineering is the way in which organizations become more efficient and modernize. The two cornerstones of any organization are the people and the processes. Business Process Reengineering is the key to transform the way people work in organization. Even the minor changes in processes can have dramatic effects on cash flow, service delivery and customer satisfaction. Even the act of documenting business processes alone will typically improve organizational efficiency by 10%. [1]

BPR is considered to be a perfect tool for all business organizations that want to make feasible qualitative improvements in their business processes. BPR ran up against technological and change management barriers, leading most companies to shy away from process-driven strategies. Instead, they adopted more structured and incremental approaches like Six Sigma, or they handed process improvement to enterprise resource planning (ERP) and other enterprise systems to define. These approaches have all major benefits, but they have also led to challenges of diminishing returns or impossible to improve their business processes. Companies still face many of the market challenges Hammer addressed in 1993, while technology has advanced to where companies are beginning to integrate all their various IT platforms – internal and outsourced – with business processes across their entire value chain. [2]

2. BUSINESS PROCESS REENGINEERING (BPR)

The Keywords for BPR are ‘fundamental’, ‘radical’, ‘dramatic’, ‘change’ and ‘processes’. A business process has to undergo fundamental change to improve productivity and quality. Radical changes, as opposed to incremental changes, are made to create dramatic improvements. Reengineering is not about fine-tuning or marginal changes.

Various researchers have carried out extensive analyses of the essence of BPR (Heusinkveld and Benders, 2001), the differences between its various manifestations (O’Neill and Sohal, 1999), its relations with other organizational approaches (Currie, 1999), and its underlying concept of a business process (Lindsay et al., 2003). The highly competitive market environment that emerged with the 1990’s put many organisations under extreme pressure to improve their performance and reduce the cost of running their businesses and this led to the emergence of Business Process Reengineering (BPR). Most of the business firms became successful in reengineering their business processes. Business Process Reengineering (BPR) is the analysis and design of workflows and processes within an organization. A ‘business process’ is a set of logically related tasks performed to achieve a defined business outcome aligned with their business mission. Re-engineering has been the basis for many recent developments in management. The cross-functional team, for example, has become popular because of the desire to re-engineer separate functional tasks into complete cross-functional processes.

BPR means not only change but radical change within a short period. This change is achieved by complete revamp of organizational structure, business process workflow, job description, performance measurement and adoption of information technology.

2.1 Some of Basic characteristics of BPR are:

- View business as a set of customer-oriented processes rather than a set of departmental functions.
- Processes must have clear cut ownership.
- Non value adding activities within a process should be eliminated.
- Gather information only once at the point of origin [3].

Implementation of BPR project involves one or more of the following aspects: the structure of the process, the participants in the process, the information that is being processed, the
technology to be used and the interaction with the environment of the process.

A successful BPR implementation brings significant improvement to productivity, customer service and bottom-line. There are pain and difficulties during implementation and instances where BPR efforts did not achieve desired result. Notwithstanding, the risk is worth taking. Otherwise, there will be greater risk of being overtaken by competitors who develop and progress rapidly through BPR.

More than half of the early reengineering projects failed in completion or did not achieve bottom-line business results, and for this reason business process reengineering “success factors” have become an important area to consider. Success factors are a collection of lessons learned from past projects. The key factors for the successful completion of BPR in organizations are reflected in figure 1.

![Figure 1](image)

3. BPR AND ORGANIZATION CULTURE

Many BPR writers or researchers address the cultural issues in several ways. It is to be noted that most of the influential writers on BPR are management consultants: Champy is Chairman of CSC Index, Davenport with Ernst & Young, Johansson, McHugh, Pendlebury, and Wheeler are all with Coopers & Lybrand, and Andrews and Stalick with Business Reengineering Resources. Hammer is a professor at MIT and Obeng a doctor at the Ashridge Management College but both also undertake consultancy work [4].

Hammer & Champy (1993): They clearly see a new culture as the outcome of BPR and the process of implementing a new process. These forces change the culture and the characteristics of the organization. They map this out in their “business system diamond”: 1) business processes determine 2) the jobs and structures which are then 3) managed and measured to 4) shape values and beliefs.

Hammer & Champy’s view of organization culture can be classed as an outcome, sometimes an inhibitor, and an internal variable influenced by actions that change behaviour. There is an implication of an integrative culture.

Davenport (1993): He emphasized on innovation and technology. Davenport sees two types of culture: “empowerment or control”. Davenport clearly sees people actively participating in innovative process redefinition.

With regard to leadership, Davenport emphasizes traditional management functions like planning, direction, monitoring, decision making, and communicating are extremely important to managerial success. Change addresses the inner behavior norms and behavior patterns [4].

Johansson et al (1993): Johansson et al views are very much based on the machine metaphor. Their views of culture can be classed as integrative, an enabler and an internal variable. The cultural type is task with a taste of power. Clear and strong leadership sets behavioral patterns and establishes climate and reward systems.

Andrews & Stalick (1994): Andrews & Stalick introduce the technique of process mapping, they emphasised more on the change process and the people involved in the process. Cultural issues were addressed by identifying and managing the impact of the redesign to existing assumptions, to existing power and political bases, and to existing visions.

Obeng & Crainer (1994): They state that change often appears illogical in reengineering. By its very nature, proactive change is harder to rationalise and communicate than reactive change where you can point to specific events which have already occurred and are having a clear effect on the business. Certainly, initial responses are emotional like anger, fear, etc but over time, they may become accepted as logical.

"People think that BPR is an exercise in redesign. We think of it as an exercise in change management". (Morrow in Stevens, 1994)

Though BPR research appears undeveloped, one can, because of its significant organisational impact, refer to other research into organisational change and culture. Many, like Nadler (1993), Nicholson (1993) and Walsham (1993) see culture as a resistor to change but vary if and how it can be changed. Nicholson and Beer et al (1993) see a new culture as an outcome of organisational change, sometimes suggesting shock therapy as a technique for forcing change[4].

According to Huang and Palvia (2001), change management and corporate culture have played significant roles in BPR acceptance in various countries. Factors affecting BPR implementation results can be classified into two categories: national & environmental and organisational & internal. National & environmental factors include such variables as economy and economic growth, infrastructure, and government regulations. Organizational & internal factors describe such firm specific aspects as information technology (IT) maturity, BPR experience, and computer culture [5].
4. BPR BEST PRACTICES

Although the focus on the business process is now a widely accepted industrial attitude, business process redesign (BPR) in practice is still more art than science [6]. Design methodology is primarily the field of consulting firms who have developed proprietary BPR methods (Kettinger et al., 1997).

In last twenty years, best practices have been collected and applied in various fields, such as business planning, education, healthcare services, manufacturing, and the software development process (e.g. Martin, 1978; Butler, 1996; Golovin, 1997). These all are projected to support the redesigner of a business process in facing the BPR challenge: the implementation of an improved process design. A qualitative evaluation can be undertaken to assess the best practices against their impact on time, flexibility, quality and cost issues. Although an ideal best practice prescribes the best way to treat a particular problem that can be replicated in any situation or setting, it is more fruitful to see it as something that “needs to be adapted in skillful ways in response to prevailing conditions” [7].

The best practices support the re-designer of a business process in facing the technical BPR challenge for implementing an improved process design. Best Practices mainly aims at BPR efforts, where an existing business process is taken as basis for its redesign. A best practice can then be applied locally to boost the overall performance of the business processes. Reports on best practices are mainly derived from experience gained within large companies or by consultancy firms in BPR engagements. For example, the best practices as proposed by Peppard and Rowland in 1995 are derived from experiences of the Toyota Company [8]. It should be noted that many of the best practices lack an adequate (quantitative) support. Some of the best practices proved to be more on the strategic level, e.g. on the selection of products to be offered by a company, or were thought to be of very limited general application, e.g. they were specific for a certain industry. Following are few of the best practices that are oriented towards:

- Business process operation, which focus on how to implement the work flow.
- Business process behaviour, which focus on when the work flow is executed.
- Organization, which considers both the structure of the organization (mostly the allocation of resources) and the resources involved (types and number).
- Information, which describes best practices related to the information the business process uses, creates, may use or may create.
- Technology, which describes best practices related to the technology the business process uses or may use.
- External environment, which try to improve upon the collaboration and communication with the third parties [9].
- Restructure to support front-line performance.
- Recognize that IT is only part of the solution: it allows managers to collect, store, analyze, and communicate and distribute information better.
- Bring in internal or external IT experts: their knowledge, skills, acumen, and experience are invaluable.
- BPR must be accompanied by strategic planning, which addresses leveraging IT as a competitive tool.
- Place the customer at the center of the reengineering effort -- concentrate on reengineering fragmented processes that lead to delays or other negative impacts on customer service.
- BPR must be "owned" throughout the organization, not driven by a group of outside consultants.

Information Technology plays an enabler role for the successful of BPR implementation. Therefore, a question is often raised to directly re-engineer business processes by adopting world class IT practices, contained in business information system packages. This approach would avoid embarking on BPR which is expensive, time consuming and often risky. Also reengineered process arising out of BPR exercise may not be best of class. Process orientation and ownership will be lacking from employees which may lead to major implementation difficulties.

BPR, if left unchecked, seems to offer the dismal prospect that competitive advantage lies in constant cost minimization. Forward looking thinkers propose that competitive advantage for the new century lies in a nation's workforce and infrastructure, and the ability to create and deliver new products and services in the global marketplace [10]. Organizations which have become good in implementing BPR gained market share, increased profits, lowered costs and improved quality. They are able to deliver faster, have greater flexibility and, above all, they are blessed by happier, loyal customers. The future lies in moving from traditional practices to more analytical and result oriented approach. Table 1 shows some of the best practices for reengineering business processes used by industries.

Table 1

<table>
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<tr>
<th>S.No.</th>
<th>Best Practices</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1</td>
<td>Task elimination</td>
<td>Eliminate unnecessary tasks from a business process.</td>
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<td>2</td>
<td>Task composition</td>
<td>Combine small tasks into composite tasks and divide large tasks into workable smaller tasks.</td>
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<td>3</td>
<td>Integral Technology</td>
<td>Try to elevate physical constraints in a business process by applying new technology.</td>
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<td>4</td>
<td>Empower</td>
<td>Give workers most of the decision-making authority and reduce middle management.</td>
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<td>5</td>
<td>Order assignment</td>
<td>Let workers perform as many steps as possible for single orders.</td>
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<td>6</td>
<td>Resequencing</td>
<td>Move tasks to more appropriate places.</td>
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<tr>
<td>7</td>
<td>Specialist-generalist</td>
<td>Consider to make resources more specialized or more generalist.</td>
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<tr>
<td>8</td>
<td>Integration</td>
<td>Consider the integration with a business process of the customer or a supplier.</td>
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<td>9</td>
<td>Parallelism</td>
<td>Consider whether tasks may be executed in parallel.</td>
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<tr>
<td>10</td>
<td>Numerical involvement</td>
<td>Minimize the number of departments, groups and persons involved in a business Process.</td>
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Organizations believe that the best practices to implement BPR are appropriate planning and communication. Initiate by creating a high-level business model of various activities, which are potential candidates for BPR and then develop a roadmap laying out the order of projects. Finally, communicate the project plan to management and the organizational personnel and keep them informed the progress, challenges and success metric attainment.

5. FUTURE OF BPR

Organizations are undergoing substantial restructuring efforts in order to cope with a changing competitive environment. Presently, the concept of BPR is very popular in response to the proliferation of disjointed and inefficient business processes. Many of the processes are optimized around a particular department’s goals and objectives. Hammer saw a need to take a ‘big picture’ view of the organization and re-organize the business processes around the organization’s overall goals and objectives. This concept became revolution that caught fire and resulted in rapid increase of various systems such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and Supply Chain Management (SCM) and other package implementations.

Over the last few years, the reengineering concept has evolved from a “radical change” to account for the contextual realism (Caron et. al 1994, Earl 1994), and to reconcile with more incremental process change. (Davenport 1995)[11].

Traditional BPR produced reams of paper documentation. The documentation report which was never read and became obsolete after some time. The new BPR uses social media like wikis and blogs to maintain project documentation and communication. These tools make project management more efficient and effective; also they make it possible for project staff, sponsors and business staff to be kept up to date with project progress. These tools can also be used to maintain process documentation which is always available to all in the organization. These BPR tools are also used to automate business processes which are complex and handled large volume of data.

The future of BPR is revolved around Process Management, advancement in Information Technology and development or change in organizational structure. BPR continues to evolve and adapt in many ways. The most significant shift has been toward technology enabled enterprise transformation. There are several current trends on the cutting edge. These include Architecture Integration Reengineering; smaller projects; fast cycle methods and active bottom up participation [12].

The BPR technology allows the companies to directly deploy complex business processes which earlier could only be designed on paper. It also allows a more modular and “bite-sized” approach to implementing processes that avoid the key pitfalls of previous big-bang approaches [2]. Now redesigning a process from end to end is possible, but deploys it in manageable segments, using the rapid development capabilities of BPR. Over time, organizations will stop looking for packaged applications that helps them to accomplish just one task and move to purchasing platforms that can support any preferred process.

The specific process segments can be quickly integrated as more are developed to manage the overall end-to-end process. The power of BPR technology demands that companies embarking on programmes to “fix the unfixable” in their core operations look to reengineer their processes before rushing headlong into automation.

BPR continues to evolve with emphasis on strategic linkage; smaller projects; Fast-Cycle methods and Active, bottom-up participation. BPR Technologies are now incorporated at the core of all enterprise software suites from the major ERP vendors as companies move BPR solutions into their core architecture.

BPR is successfully adopted by many Indian organizations. An example among them is Bank of India, is rated as one of the top five banks in the country with over 2,650 branches across India and 23 foreign branches. Bank of India went for BPR because all the banks were competing against each other and RBI was bringing about a major change in the banking system by introducing the core banking solutions. Bank of India initiated BPR because they wanted to speed up their tasks, for secure data transfer, for making banking easy for retails and corporate customers and to follow regulations of RBI and other banks [13].

6. CONCLUSION

This paper has provided a review of literature, bringing together the concept of Business Process Reengineering, best practices adopted and its future scope. BPR may be seen as a fundamental approach by the organizations where it is essential to employ radical change to facilitate improvement and this change provide better results when it is implemented in a combination with the information technology as an enabler. It is believed that BPR, because of its complex nature is, difficult to implement. In many projects, this BPR effort is considered a failure as it does not provide the customer remarkable results, which they promised to do. Today, many companies never use reengineering and still record a good improvement performance by using other methodology jointly with BPR. It advocates strenuous hard-work and instigates the people involved to not only to change what they do but targets at altering their basic way of thinking itself. Success of BPR depends on the people.

It has become clear that Business Process Reengineering is now fundamental to any significant business transformation. Many organizations could do a much better job in managing this type of initiative than they do today. Organizations which are good in implementing BPR for their business process have already gained market share, increased profits, lowered costs and improved quality. They deliver much faster in comparison to other business firms and are blessed with loyal customers. The future lies in moving from traditional practices to more analytical and result oriented approach.

7. REFERENCES


8. AUTHORS PROFILE

Deepak Kumar is Assistant Professor in Amity Institute of Information Technology, Amity University, Noida. He is Ph.D., M.S., B.S. from Delhi University. He has delivered Invited Talk in India & abroad and published/presented more than 20 research papers in various International & National journal/Conferences. He was Joint Secretary of Organizing Committee of 4th International Conference in Quality, Reliability and InfoComm Technology (ICQRIT’2009). He has filled patent in Software Engineering. He has authored a book “Software Reliability Engineering – A Brief Description” (ISBN No. 978-3-8454-0939-9). He is life time member of IACSIT (International Association of Computer Science and Information Technology) and SREQOM.

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