

BPR - A Tool for Managing the Change

V. Thyagarajan and Ali Khatibi

INTRODUCTION

The business environment of the present day has become so complex that organisations are necessarily to be alert to respond to the new challenges and opportunities. This involves a continuous process of managing the change. The idea that the change is essential, desirable and constructive within the established pattern of organisation is realistic. The view that the change has the beginning and an end is no longer tenable in this continuum. Top management in its endeavor of reorienting the organisation must recognise the need and set the tone for a change. This kind of change compels either innovation or improvement or both. In such an intricate situation many organisations tend to focus their attention in identifying innovations rather than improvement. However, the latter is considered to be more appropriate in accomplishing the task. Recently, a new concept called Business Process Reengineering (BPR) has emerged as a conspicuous tool for restructuring the organisation. In fact, the process of reengineering not only fosters a favourable climate supportive of desirable change but also improves the organisations' probability of success. The aim of this paper is to highlight the significance of Business Process Reengineering and to discuss the factors that are responsible in its successful implementation.

DEFINITION OF BPR

The Business Process Reengineering is a complete life cycle approach. This provides the scope for problem identification and also solutions to implement the successful business operations. There are many new elements in BPR such as extensive use of IT and new perspectives on organisational structure. There is also more about process redesign, quality improvement and so on. It is a comprehensive method of assessing the current business process planning and redesigning the methods and implementing them for business solutions. Hence, the BPR is defined as "The fundamental rethinking and radical redesign of the business systems to achieve the dramatic improvements in critical and contemporary areas such as cost, quality, service and

speed." It is a comprehensive and complete method, addressing such activities of organising the project, assessing the current business process, designing the reengineered business process, and planning and implementing the solution.

The origin and scope of BPR is derived from the concept of innovation. While the BPR recognises the process innovation, the innovation concept lays more stress on the product innovation. But, the reengineering efforts on business processes, which will improve the customer service quality, the product value, etc. It is notable that redesigning the processes improve the working life of employees which in turn lead to indirectly improved quality and responsiveness to customers.

Early success in many organisations has fueled the growth of the reengineering movement in American Business notables, among them are:

- Ford Motor Company. Reengineering improved its invoice processing so that the process was accomplished by 75% fewer people and more accurate financial information was produced.
- IBM Credit Corporation. A credit issuance process that used to take two weeks to complete now takes only hours with a 100-fold increase in productivity
- Taco bell. They reconfigured their restaurants to increase peak capacity for a top unit from \$400 per hour to \$1500 per hour. At the same time they lowered prices; their average pricing today is about 25% less than nine years ago.

In short the Reengineered processes are designed to be simpler to those they replace, several jobs might be combined into one and the number of checks and controls reduced. In the right sense, more frequently, it is the result that work is performed where it makes most sense, and workers can make more decisions themselves. New information technology (such as knowledge based, expert system and sophisticated telecommunications equipment) is frequently employed in the design of these processes.

Reengineering recognises the following as the important areas

- Emphasize customer satisfaction
- Use performance improvement programs and problem solving techniques
- Focus on business processes
- Use teams and teamwork
- Bring about changes in values and beliefs
- Work to drive decision making down to lower levels in the organisation
- Require senior level commitment and change management for success

The key question for organisations is how the reengineering significantly improves the cost, quality, service and speed simultaneously. To accomplish this, companies are developing new processes to produce the results important to customer. They are looking for ways to become more flexible and responsive. When environment is fairly stable, work is to be divided into simple, repetitive tasks for a largely unskilled, uneducated work force to create efficiencies of scale. Layers of supervision and controls are required to link these simple tasks together connecting people who perform complex, multi-disciplinary tasks by a general understanding and agreement on vision and processes. These phases are collectively called the Reengineering process and it will allow the organisations to grow at a rapid rate. Hence, Reengineering is a holistic solution for companies, which require radical redesigning for quantum improvement in its performance.

THE VARIOUS PHASES IN THE REENGINEERING

Various organisations have provided different approaches to reengineering processes. Thus, there is no distinct methodology for reengineering. A defined process for bringing about change can be useful. Further, it is important to realise that implementation is far more difficult than developing the solution. The reengineering process described here is a simple change process towards the achievement of faultless result. Each step is designed to improve the organisations probability of success in implementing the reengineered business processes. The processes developed and proved to be successful in implementing the change are shown below. It has four phases, each is composed of several stages with its own suggested activities. For each activity, the steps or tasks to be taken toward completion of the activity are also necessary.

1. Position for change
 2. Diagnose the existing process
 3. Redesigning the process
 4. Transition to New design.
1. **Phase I: Position for change:** This phase encompasses four critical stages; they are (a) Establishing the urgency and gain commitment (b) creating process map (c) Selecting processes and assigning owners, and (d) developing project framework. In general, organisations identify the urgency and commitment for change in this phase and it requires an intense effort in communicating the key messages and overcoming the general resistance.
 2. **Phase II: Diagnosing the Existing process:** One can begin the activities in this phase while continuing to establish urgency and gain commitment (Phase I stage (a)) The critical stages in this phase are : (a) Defining key process components (b) understanding the customer needs (c) identifying the current design weaknesses and (d) establishing performance targets.
 3. **Phase III: Redesigning the Process:** This phase may be started before the completion of phases II. For instance, benchmarking and performance measurement activities often extended in phase III. More accurately the reengineering team identifies underlying assumptions and root causes of weaknesses in the existing process design. The stages included in this phase are : (a) Identifying the potential innovations (b) Developing initial vision of the New Process. (c) Identifying incremental improvements and (d) Developing commitment to the vision of new process.
 4. **Phase IV: Transition to the New Design:** In this phase, it may take some time to see the performance from the first release of a newly reengineered process. Cultural changes take time and patience. Identifying and adjusting with compensation systems, career paths, new roles etc. must be a part of the long-term transition plan. The main focus in this phase is on the communication process. The critical stages in this phase include. (a) Beginning transition change management (b) creating the transition plan and teams. (c) Prototype and test initial installment (d) completing transition and continuously improve the

process.

NEED FOR REENGINEERING - WHEN AND WHY SHOULD REENGINEER?

Each organisation must determine itself when it is appropriate for them to reengineer. Reengineering should be done only if it can help in achieving an enhanced strategic position. Some strategic indicators that require reengineering include

1. Realisation that competitors will have advantage in cost, speed, flexibility, quality or service
2. New vision or strategy: a need to build operational capabilities.
3. Need to reevaluate strategic options, enter new market or redefine products/services.
4. Core operating processes are based on outdated assumptions/technologies
5. Strategic business objectives seem unreasonable.
6. Change in market place in the form of
 - Loss of market share
 - New basis of competition/new competitors
 - New regulations
 - Shorter product life cycles
 - New technologies in play.

So, if the company is at the cutting edge of an industry that has just undergone major changes reengineering might not be appropriate. However, if the organisation operates with old models instead of new technologies and approaches used by others, reengineering may be urgently needed. Even if technical performance is adequate, other improvements may be needed – such as training, organisational change, leadership development etc. In such circumstances also reengineering is required.

TYPICAL TIME FRAME FOR THE REENGINEERING

In general all the organisations are serious about the time limit to complete the Business Reengineering process. To achieve the gains it will take some reasonable time to complete the process – typically two to three years to fully transition to new core processes and business systems. Just getting into the beginning of the implementation phase often requires four to ten months. Phase II can take one to five months to

complete. Phase III may require two to four months and the last phase may take up to two to three years to complete. In addition, the amount of time needed will depend on many variables, such as

- Breadth, number, and complexity of the business processes selected
- Top management sense of urgency about change
- Level of resource commitment and participation
- Tolerance level of top management for ambiguity and organisational involvement

WHO IS INVOLVED IN REENGINEERING?

For reengineering to be successful, people from different levels in the organisation need to be involved. In fact, the mandate and inspiration of reengineering must come from the highest leadership. Most critical is the support of Chief Executives. In addition other Champions will have to be identified. They have to be the opinion makers and influence those who can shape the organisation to support the reengineering implementation. Strategic and tactical steering teams also play an important role. Their function is to provide strategic direction to the reengineering process and help the management of change through effective communication in order to resolve organisational issues.

A reengineering czar can also be appointed. This individual typically serves on the tactical steering team. The czar ensures that the project have their required resources – including human, information and technology and change management – and coordinates the various efforts so they will be mutually supportive and move in a unified direction.

A number of teams will be formed. Each team will need a leader, facilitator and members who are committed and ready to hard and creative work. Ultimately many people in the organisation will need to be involved in making, helping or allowing the extensive changes that will need to occur.

SUCCESS FACTORS FOR REENGINEERING

For reengineering to be successful and a sustained change to occur, the following

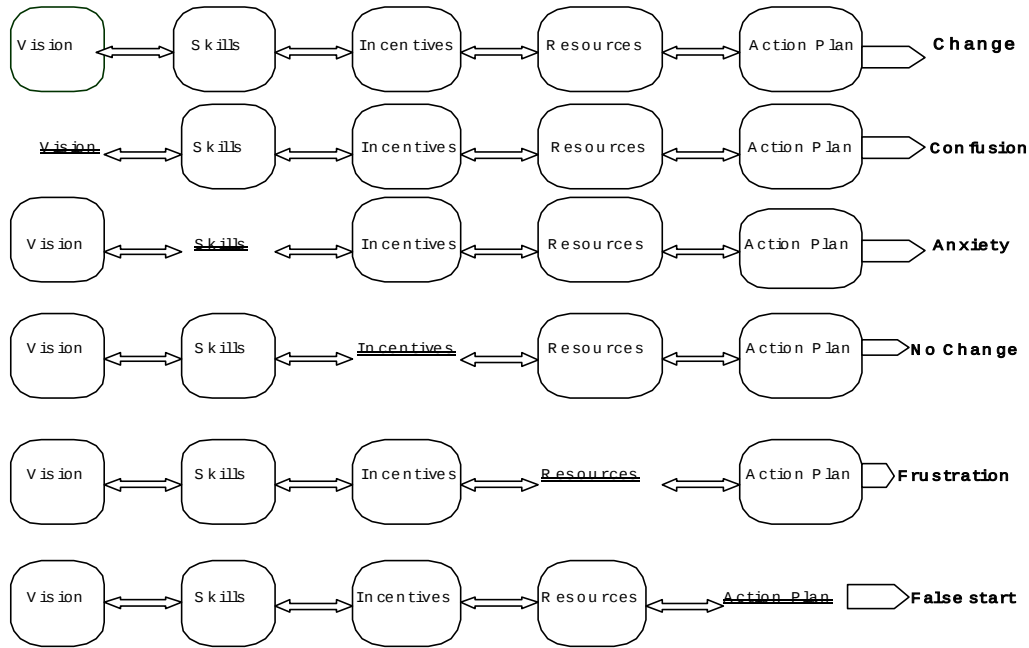


Fig. 1. Diagram showing the important elements necessary for successful implementation of Business Process Reengineering
(word with double strike letters represents the non-presence of such element in the process. The consequence is shown in bold letters)

ingredients must be present.

- Vision
- Skills
- Incentives
- Resources
- Action plan

A vision is required so that all will be aiming towards the same goal. Every one in the organisation must be able to visualise and see what is desired so that all significant decisions and actions will bring the organisation a little closer to that vision. Without a vision an organisation will be confused and unfocused. **Skills** are required so that people will be able to perform the necessary tasks in the new process. Such skills might be technical, leadership, or interpersonal one. Without such skills, individuals will be anxious and unable to perform at the desired level.

Incentives are generally the last element to change. Without incentives, people will not change or will make only gradual changes. Incentives include recognition and rewards,

as well as individual comprehension of what is in it for me? When incentives are lacking in the process, there will not be any change to take place in the system.

Resources include men, money, information, facilities and equipment necessary to achieve change. Without resources the people will become very frustrated with the mandate to change and the expectation will be seen as quite unrealistic.

An action plan with activities, responsibilities and target dates gives the game plan for achieving the change. Without the action plan there will be a false start because, people will not know what to do next and the actions of different groups will move towards different directions frequently neglecting the goal.

To make the reengineering effort successful, each of the above elements should be ensured in its place. The leaders should be very careful to position these elements in its place. Specific success factors and consequence of non-presence

of each element are given in the diagram.

CONCLUSION

The most direct benefit that companies derive from reengineering is significant in the process improvement (50 to 100%). Costs are lowered while speed, quality and service are dramatically improved. Unfortunately, reengineering seldom makes a significant impact on the organisation's bottom line (only 20% of the time.) Reengineering has a greater chance of success if it is viewed as leading to growth and value creation. In addition, there are costs to reengineering that must be considered before deciding for such a right strategy for an organisation. Wayne Code, President of Vallen Inc. explains, "These changes may be traumatic, but the pain is outweighed by the gains made in the move towards the significant goals set. Change occurs when the pain of change is less than the pain of staying the same."

KEYWORDS Information Technology. Commercial. Business.

ABSTRACT The rapid diffusion of information technology into commercial arena has given rise to many organisational

changes. The firms have to restructure and redefine their business strategies to cope up with these changes. Business Process Reengineering (BPR) is a modern tool available for managing the changes. The current paper discuss the importance of BPR, its various important elements which are essential for success, different phases of BPR and its time frame for implementation of reengineering process.

REFERENCES

- BPR Tutorial*, BPR Online Learning Centre @ WWW pro.sci.com
- "*From Strategy to Process Management a Total Framework*", Ankarath Unni, Special paper presented at BPR'97 Conference, conducted by Technology Transfer Institute, UK, (1997).
- "*Human Change Management*", Norman Mushnick, Paper presented at BPR'97 Conference, conducted by Technology Transfer Institute, UK, (1997).
- "*Human Resources : First stop for Reengineers*", Larry G.Wills, Reengineering Resource Centre Web page @ www.reengineering.com
- Process Innovation: Reengineering Work through Information Technology*, Davenport, T.H., Harvard Business School Press (1993).
- Hammer, M., and Stanton, S.A., Harper Collins: *The Reengineering Revolution*, New York (1995).
- Lorentz, C.: "*Process Matters*" *Financial Times*, Oct.13 (1995).
- "*The Change Management Toolkit*", Worthing Brighton Press, @ www.utsi.com

Authors' Address: V. Thyagarajan and Ali Khatibi, Faculty of Management, Multimedia University, 63100 Cyberjaya, Selangor, Malaysia
E-mail: Ali.khatibi@mmu.edu.my