Methods and Approaches in Organizational Re-Engineering

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Abstract

This paper focuses on Organizational Re-Engineering Methods and Approaches. Different researchers and literature from past studies are cited to support the study. Different areas of Methods and Approaches in Organizational Re-Engineering are presented to draw conclusions at the end.

Keywords: Methods; Approaches; Organizational Re-Engineering

1. Introduction

Innovation and change in product and services in industrial societies is so fast that take the ability of choice and purchase of goods and services from clients, in a way that, new, being new of many goods did not last more than a few months. Rapid changing in services and god and globalization of economy, show its effects to all firms in a way that Behavior and culture of all people, have been affected by it. Communities and organizations that are not consistent with the changes they felt retarded and businesses in these communities are facing extinction. Competition in organizations and leading enterprises has speed and acceleration so that it is impossible to achieving them. Hesitate, cause removal or destruction of firms. Rapid change affects economic firm and social norms and if social norms cannot be changed rapidly, may lead to the collapse of those societies. In this competitive market and speed what is solution? Can Firms be solution to prevent the collapse of innovation and change in organization? Is it enough if the organization change? Or behaviors should change, cultures change. We should coordinate our work and effort and innovation to compete with the world to not destroy. How can move coordinate with the developed world and survivor? Do economic and social institutions, organizations and enterprises can take off or not? What obstacles are there for the rebound? The first condition to do everything is accepted that we can. We can change; we can be change or make change. We can be global, think global and live global and have outstripped the competition in order to win and think about balancing human life. The second condition is to accept change and globalization doesn’t have any inconsistent with our beliefs. Jump and changing and globalization in economic firms structure and organization and social institutions to the extent that isn’t opposite to interests of nations And religious belief of people, has Possibility of growth and development. "Lestror" writes: Those who did not awakened by the sound of the industrial revolution, Called current undeveloped nations. Now another voice is coming. Those who shut their ears to the voice clearly would be marginalized poor people of future world. What is that sound?
2. Definition of Re-engineering

Reengineering is an approach for the reconstruction of the management and organizational management literature emerged in the early 90s. Any organization or company is a social institution that is based on objective and is consistent active and coordinate systems and is associated with the external environment. In the past, when relatively stable environment, most organizations take advantage of opportunities for ongoing, satisfy with gradual and slight changes. But over time, across the world, organizations have found that the gradual changes is not the solution of their current problem And sometimes it is necessary for the survival of organization make basic changes in the organization. Today around the world, these revolutionary changes know as reengineering. Reengineering (BPR) is a process in which the current functions of the organization change its place with main processes of business, Therefore organization moves from function-oriented to process-oriented. This led to reduced business costs and the acceleration of business process and, consequently, more competitive organizations. Reengineering mean a new beginning another opportunity to recreate the reconstruction process and working methods. Reengineering means putting aside a large part of knowledge of last hundred years of industrial management that is breaking accepted rules and assumptions within the organization. In this approach, Procedure, in period of mass production and the organizational arrangements of old titles, such as segmentation office duties, and standardization lose the importance. They are made in the period that passed. Reengineering Based on the analysis stage and remove the old rules and assumptions and fundamental imagination that are underlying current business performance. Most companies are filled with blank regulations that have survived from the previous decades. These rules are and created based on assumptions about technology, staffing and organizational goals That has no longer apply; when these companies do not ignore this kind of regulations, Any kind of reconstruction and modernization be ineffective And would be like mop the table and chairs in ruined buildings. Reengineering is the fundamental rethinking and radical processes to achieve exciting developments in critical metrics such as quality and speed of service. If there is only an unacceptable outcome, is that all companies and organizations, including governments are now forced to re-define themselves. New organizations, companies would be explicitly designed for exploitation in the world today and tomorrow and they are not entities who transfer from an early majestic age that have nothing to do with today. In reengineering we believe that reengineering cannot be performing with small cautious steps. This case is zero or one theorem. In other words, does not materialize or change, or achieve from the base. reengineering does not mean that what restored what we have or additional changes And leave original structure intact reengineering means starting from zero, means to abandon old ways and to inspire a new look. Reengineering, is not following minor amendments and tinker or change the status quo and leaving intact the original architectural structure and the extension. Reengineering is not following improve current system and make the result better. Companies must ask themselves if by broad knowledge of current and new technologies wanted to set up a company, how we make it. Reengineering can recognize
with different names, such as Redesign of core processes (Kalpan and Murdoch), process innovation (Davenport), redesigning business processes (Davenport and Short, Ablnsky), organization reengineering (Lvvntal, Hummer and Chmpy), radically redesigned and re-organization architecture (Talwar) are All the names that have introduced the concept of reengineering. So if we asked to have a short define of reengineering we will answer: Start everything from the beginning Improve the organization to achieve organizational improvement, chive by improve the channel of organizational behavior to organizational structure. However, in view of re-engineering, with improve process reach improving organizational behavior.

Therefore, reengineering doesn’t mean, organizational development or organizational behavior based on technology But common meaning can lead to organizational improvement. Reengineering by using identify process and using them to improve organization reform, focus on improving the process and reengineering emphasize on excretory the revolution in systems and process. Organizational Improvement Performance in improve organization theory, pay attention to continuous improvements and competitors. And re-engineering not only focuses on new developments in technology, but designed the process in a way that embraces technology in the future and predicts the possibility that processes continuously re-engineered again.
Here's we have a brief explanation of the two charts above:

3. Organizational Change

Basically, there are a number of perspectives. A view studies selecting change. Changes that provide freely called planned and targeted change. And the changes that will impose by force on the system is called non-targeted that system is forced re-programmed to adapt themselves to new conditions. Another approach studies changes from the effects and simple and deep change. Another approach which count time of change in a method, recommends gradual changes and in opposite method, excretion and rapid and revolutionary, is excretion and rapid and revolutionary changes. Another view believes that each organization in its life cycle is spent five stages of growth. Changes within each stage are controlled and gradual changes between the two periods are or excreted crisis or revolutionary. Evolutionary changes of organization include birth, childhood, adolescence, adulthood, maturity, death. Simple changes such as surface adapted to growth in the number of employees from ten to thirty people is called development change. Or deep like review in structure form and modernization or innovation. Reengineering is purposeful and planned change, it means before the change is imposed from outside organization system, the system is predicting the change. For this purpose improve Processes in re-engineering, is a continuous activity, but changes can be simple or deep. Based on the need for reform within the framework of the process of change can be superficial and can lead to changes in the structure and development and deep. Philosophy of change, in re-engineering is rapid and excretion and is not compatible by gradual changes. And However importance of re-engineering, in the stage among childhood until death, is applicable to any organization. Because organizations are not always pass end of the evolutionary path, many firms in the youth and adult have possibility to mortality.

4. The necessity of re-engineering:

Reengineering is not just a necessity for economic firms but it is essential for the survival of any social institution. All institutions that are in crisis or could predict the crisis and even institutions that are at the pinnacle of power can also stay at the pinnacle of excellence and benefit from re-engineering. In competitive theory strategy all organizations are not only involved in the competition, but are faced by rapid competitive changing. Speed with any advance technology any outer competitors and any new international trade agreements affected and accelerate. Competitive strategy is based on the fact that faces with threats and to invest opportunities. Competitive strategy have emerged As a result response to three questions: 1. What is organization do now? 2. What happens in the organization environment? 3. What does the organization should do in this regard? Reengineering, planning and control change. Ability to assess, plan and implement change is continuously with the ability to analyze the effects of changes. What types of changes resulting from the implementation of Reengineering?
By implementation of Reengineering in organization, radical changes, and dramatic principles will be generated:

1 - Changes in working units, of executive part to process groups:
Companies are Reengineering, actually link work that Adam Smith had long ago divided to smaller components. When they join together again, they will name the group process. In other words, group process is a unit that naturally come together to run a complete task that mean process.

2 - Changes in employment of simple tasks to multidimensional work:
Those who work in process group see their work different with jobs that they were accustomed. Re-engineering eliminates redundant work. Much of the work related to inspection, waiting, removing the conflict, unproductive track and monitor the activities of the organization in order to compensate for the limits of the divided process. Through reengineering is deleted, it means that people are spend more time on actually work. After reengineering work is more satisfying, cause the workers acquire a greater sense of their work And it a feeling of complete and end of the work.

3 - Changes in the roles of individuals, under the supervision of the third claimant person:
Firms that are Engineering do not want employees who be able to comply with the provisions, they want those who to create their own rules.

4 - Changes related to readiness to work from training to formal education
If work reengineering process by which individuals shall not comply with the rules, then employees need to have sufficient education to be able to recognize what is the right thing. Education increase skills and competencies and teaches to staff how to work. Education raises insight and understanding and increase reason of work.

5 - Changes in performance measures and payment of outcome activity:
Payments to employees are based on experience or on the contrary to the principles of reengineering, it must be according to outcome activity.

6 - Changes of the criteria for promotion, from function to ability:
Conventional imagine is that if the element is a good chemist, would be a good manager for Chemists These assumptions are often wrong and can give a incompetent manager to company.

7 - Changes in manager, from supervisor to coach:
Process group that includes one or more do not need a boss they need a trainers. Groups want advice from their trainee, trainers help groups to solve problems.

8 - Changes the organizational structure of the hierarchical to level:
In companies that have been re-engineering, organizational structure is not an issue. Work beside process and Groups will be organizing that perform it. Of employees Communicate with anyone else who may need Control is transferred to the individuals who will perform the procedure.

Organizational approach to re-engineering from what factors is originated?
Reengineering Management Today has become one of the hottest discussions. Engineering experts as the destruction and sinking of ship rescue organizations know, but really, why re-engineering? Thereason of using organization of re-engineering can be related to external factors or internal factors. By Improve the organization's processes in
short term we can save the organization and create a relatively acceptable position for organization. But you should position the organization for long term goals is to bring world class and this will not be achieved except through re-engineering processes. In this step, examine the internal and external affecting factors or reengineering of organizations and choose to save it as a way to organization.

A - External factors:
With observed increase in global competition, the need for innovation in organization will be more tangible to Organizations could produce services or products that could competitive with international standards. Therefore, increase the knowledge organization and coordination of processes is one of from biggest challenges that today will face with it. Re-engineering can be used as a tool to improve the function. The growth of information technology as one of the selection factors are considered in organizational reengineering. The importance of information technology today is such that almost every function in the organization will deal with it somehow. Growth of information technology, such as an agent can facilitate the development of new forms of organization and its architecture. Rapid changes in information technology make organization to be update and communication faster and better. Variable and unpredictable conditions in market enjoinderment. Variable and unpredictable market conditions, in environment, social life technological and organizational issues, economic changes, new regulations and other factors are selected item of reengineering by the organization. In summary, the external factors of choosing re-engineering are:
1 - Increasing levels of competition in global markets
2 - Changes customer needs.
3 - Increasing customer expectations
4 - Obtained advances in information technology
5 - Today's dynamic and uncertain environment

B - Internal factors:
Internal factors can be causes of choosing reengineering process for most organizations. Change strategies of organization, can be a factor to stimulate organization to choose re-engineering for continuing the path. Changes In organizational structure may also make changes to processes more tangible. Another example of internal factor can be the need for simplification. Simplification can be applied such as levels of performance, efficiency and reducing complexity of cases under the microscope. Required changes in processes, skills and attitudes also can be considered as internal factors in choosing reengineering.

In summary, re-engineering internal factors include:
1 - Changes in organization strategies
2 - Change in organizational structure
3 - The need for simplification
4 - Changes in processes, skills and behaviors

What is the difference between redesigning and re-engineering?
Terms (Redesign) and (Reengineering) use instead of each others sometimes although; the desired results may seem the same. But these two words are very different from each other; redesign process is a systematic approach that seeks to simplify and streamlining
current processes. However, reengineering creates new processes and cause radical and innovative changes in the methods of business. Experts believe that redesign process is happened when almost ten to twenty percent of work flow change and reengineering happened when that seventy to one hundred percent of work processes are changed.

<table>
<thead>
<tr>
<th>Redesign process.</th>
<th>Reengineering process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradual improvements</td>
<td>Sudden and radical change</td>
</tr>
<tr>
<td>May be include work modification</td>
<td>Work basically structured again</td>
</tr>
<tr>
<td>Modify the rules</td>
<td>Breaks the rules</td>
</tr>
<tr>
<td>The current process will facilitate</td>
<td>The new process is created</td>
</tr>
<tr>
<td>May be related to technology</td>
<td>Mainly is dependent to technology</td>
</tr>
<tr>
<td>The benefits are typically low</td>
<td>The benefits are typically high</td>
</tr>
<tr>
<td>Percentage of risk is low or moderate</td>
<td>Percentage of risk is high</td>
</tr>
<tr>
<td>Cut costs in it is from short to medium</td>
<td>Reduce the cost is high</td>
</tr>
</tbody>
</table>

5. The role of information technology in reengineering:

A company that fails to change their views about technology, cannot handling its business reengineering, situation in companies which know information technology equal with working or at first are seeking to identify the problem and then required technologies to solve it, is the same. Use of information technology as one of the basic needs of residents is one of basic need of reengineering. Thinking objectively define the problem and then find one or more solutions, more senior managers is easy to use, but in the process re-engineering, information technology, deductive thinking is needed. This means that at first find a strong and constructive factor, then searching for problem that mentioned factor has the ability to solve it’s big mistake most companies is that look the technology with their current process vision. They ask themselves: How can use the potential of a new technology for developing, enhancing and making better what we are doing now? However, such question must be asked: how can we use technology to do that we can’t do it now. Reengineering is seeking for innovation, this process by achieving the latest finding on technology aims to reach new aim. One of the hardest parts of reengineering is recognizing new and unprecedented capabilities, instead of using the known ability. Purchased existing technology is not something so prominent, but should be used to discover new aspects of the latent creativity. New databases provide Possibility of Access to awareness that in the past it was possible only for manager for all employees; Access to information, along with analysis and prototyping tools that are very easy to work provide Extensive capabilities for staff decision making. In engineering, one
must know that relying on technology alone is not enough it is necessary to go from the known toward the unknown.

6. Conclusions

Because reengineering theory, is a relatively new concept to improve the business, its approaches and methods are still developing and because application of engineering concepts, can have different forms, Methodologies are different from each other because emphasis on some factors will vary in a reengineering project to another project. Different approaches and methodologies are provided by researchers for reengineering that Different categories can be considered for them. A method for the classification of reengineering projects, how they focus on factors such as information technology, strategy, quality management, operations and human resources. Another way is their attitude reengineering methodologies and innovative nature of its nature, for example Champe and Hammer know temperature dependence of re-engineering to creativity, innovation and new thinking much more dependent on current and past experiences. So believe that for reengineering the organization should have a fresh start with a blank page. With such a view, the definition of a structured approach to reengineering is impossible, On the other hand, people like Davenport, shorts, Harrison and Fury are believed to define a framework for re-engineering and in re-engineering experience is necessary And believe that the re-engineering projects, plans and programs to provide training and motivating people to work together is essential, This step is to try some structured methodology is briefly described, in general, an organized set of methodologies, methods, techniques and tools in order to achieve predetermined objectives have been developed.
References

Alborzi Sadrollah (1993) - the evolution of competitive strategy - Zamine Magazine - No. 29 - December 13
Abdi Malekabadi, Farshid (2010) - Business process re-engineering - Translated by - Tadbir - No. 90
Asemi Poor Mohammad Javad (1993) - Management as a way to improve the process of administrative reform – Rasa Magazine No. 28 - November 13,
Coil Kohan - Open Engineering Public Administration - Public Management Magazine - Issue 37
Ghadami Mohsen (2003) - reengineering concept Seminar, Iranian Research Organization for Science and Technology
Farshid Mohamadnejad - engineering and information technology and human resources - Tadbir - Issue 94
Gholamreza Nasirzadeh - Reengineering to start again - Tadbir - No. 51
Motaghi Hamed Alireza - experts and improved methods of Scientific and Industrial Research Organization of Iran
Peter F Drucker (1996) - Managing the future - Translated by Dr. Abdolreza Rezaei- Nejad - Publisher Culture Institute of Rasa (Second Edition)
Pesaran Ghader Majid (1993) - Introduction to Organizational Improvement optimizing decisions of the Supreme Council office - Rasa Magazine - No. 28 - November 13
Rajab Beigi Mojtaba - open application on the Engineering of administrative reform - Journal administrative reform - Number 38 and 39
Samsung reengineering Korean style - Translated by Maryam Fatholah Poor - Tadbir - No. 71
Solomonzadeh (2012) - total quality management and reengineering, integration and coordination strategies - management