

# REENGINEERING: ENABLER FOR ORGANIZATIONAL PERFORMANCES

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## ABSTRACT

*In today's environment, a business's road is no longer long and straight. Organizations must be agile and continuously transform their cost structure and work activities. This paper examines whether systems reengineering improves firm performance by analyzing a set of data on different organizations around the world.*

*The paper will cover aspects regarding systems, strategies, culture and ways of working inside organizations in order to increase organizational performances. This research intends to demonstrate that systems reengineering is one of the main conditions to ensure the economical and managerial success of an organization on a long term period.*

**KEYWORDS:** *reengineering, organizational performances, management systems, strategy*

## Introduction

The term of reengineering often refers to radical changes. Different specialists in management have defined reengineering as radical redesign of the business in order to gain improvements in cost, quality and service (Hammer and Champy, 1996). Business reengineering has become a popular management tool used by organizations which have to face big and rapid changes in their businesses due to a very competitive environment.

The article tries to demonstrate, using a series of examples, that reengineering increases firm performances; it delivers extraordinary gains in speed, productivity, and profitability.

Management reengineering is done in four levels: organizational, decision-making, information and methodological and includes a strong component of organizational redesign by using widespread information and communications technology (ERP systems, CRM, Business Intelligence solutions).

Management Reengineering includes the following main areas for action:

- Practicing decentralized management similar to responsibility center management, where the organizational entities are grouped in administrative centers according to several criteria: the geographical area served, the volume of investment needed to boost service quality standards, administrative capacity, the number of customers etc.

- Implementation of project-based management, not only as a mean of efficient management technique for investment projects, but also as a form of functional organization.

- Implementation and application of internal benchmarking as a method of evaluating the performance of profit centers through a uniform system of operational and financial indicators. Application benchmarking must be accompanied by a risk assessment methodology.

- Promoting corporate management principles, particularly regarding: the protection of ownership rights, social responsibility and harmonization of stakeholders interests’.

Another important component of the reengineering process is in our opinion the business reengineering success factors. The factors that lead to successful outcome for reengineering projects include (Prosci, 1999):

- Financial support from top management. Changing processes, technology, culture etc. in an organization requires significant resources like: financial, informational, material and human resources. Without top management sponsorship implementation effort for reengineering projects can be resistant and ineffective.

- Connecting the reengineering projects goals with key businesses objectives and the strategy of the organization.

- Compelling business case for change with measurable objectives.

- The reengineering team should understand reengineering and use an appropriate methodology for their project.

- The reengineering team should be a mixed bag of experts.

### **Examples of reengineering**

There are organizations in USA, which used this method in order to improve different processes and activities. There is evidence which suggest that some of these firms gained benefits from reengineering projects.

For example CIGNA Corporation, an American health for profit insurance company, successfully completed a number of 20 reengineering projects and was able to save \$100 million by improving its customer service and reducing operating expenses (Ozcelik, 2009). Each \$1 invested in reengineering projects has brought CIGNA in the end \$2-3 in returned benefits. Some of the projects which paid off were:

- Operating expenses reduced by 42 %;
- Cycle time improved by 100 %;
- Customer satisfaction up by 50 %;
- Quality improvements of 75 %;

But even though the reward were great, the reengineering process was not an easy one. Reengineering is a complex and difficult change strategy, which is mastered only over time. CIGNA learned that an organization must develop learning capabilities early and learn from failure as well as success. According to CFO of CIGNA “The institutionalization of reengineering requires constant reinforcement. You need trial after trial; project after project. After you have built a critical mass of believers, the management practice starts taking on a life of its own”. For CIGNA the institutionalization of reengineering means that reengineering occupies a big part in the way employees and managers think and also of what a company operation system is (Caron, 1994).

Another example of successful business reengineering is that of Ford Motor Company. The main reason for business reengineering at Ford was to increase quality. Ford passed from manufacturing cars to manufacturing quality cars. Ford managed to save millions of dollars on recalls and warranty repairs. Also due to reengineering the accounts payable process the company increased the speed of payments and improved company relations with suppliers. For example Ford reduced its accounts payable staff by 75 % with business reengineering.

And the examples can continue. When Motorola was faced with high defect percentage and long cycle time, it decided to redesign its parts and tooling processes, by upgrading its manufacturing equipment. This action decreased the total production cost by \$1 billion per year, and cut cycle time by 50 %.

In Romania an example of business reengineering is UMEB (Electrical Machines Plant Bucharest- Uzina de Maşini Electrice Bucureşti). UMEB a company indirectly controlled by American investment fund Broadhurst, has undertaken a process of business reengineering in 2005. For 2005, UMEB has proposed an increase in turnover by 20% compared to the 9.3 million euros from the previous year and an increase in productivity by 40% compared to 2004. UMEB produces electric motors and electric generators.

Changes to the process redesign UMEB consisted in a combination of rethinking from scratch of all processes and acquisition of valuable elements of the former organization. The process was a preparation for more than six months, in which mixed teams of production and design worked simultaneously for the project.

In UMEB change was focused primarily on reducing operating costs (due to reorganization of manufacturing flows), on investments with greater productivity due to new equipment acquisition and on reorganizing staff structure to achieve an optimal formula.

Rethinking the main streams of production involved first, placing machines in manufacturing cells. A manufacturing cell represents a set of machines designed according to the specific type and size of the product made, and also on the natural sequence of technological operations. Such "square with equipment" includes 6 or 7 different machines operated by 4 or 5 multi qualified workers. In this system the extreme division of labor no longer emphasizes. Thus, under the new philosophy, a worker can operate several machines and, if necessary, will move from one machine to another to reduce down time with parts supply. Manufacturing cells are designed according to the product. Before restructuring, the pieces were transported using carts, from machine to machine. The long distances generated significant dead times. By renewing machines, their number is reduced from 700 to 600. But not only will the number of machines be reduced, but also the number of finished products. The range of products and services offered will be slightly modified; unique products will no longer be produced.

But process redesign is not always successful and almost always accompanied by pain or at least unpleasant side effects. Many companies have undertaken reengineering efforts only to abandon them with little or no positive results. The Arthur D. Little consulting firm conducted a survey which concluded that 85 % of executives surveyed were not satisfied with the outcome of their reengineering projects (Ozcelik, 2009). Also in 1990 a series of studies showed that nearly 70 % of reengineering initiatives failed or delivered less than they had promised.

Among the factors which contributed to these failures are:

- Expecting „extraordinary” results in a short period of time;
- Lack of partnership between the IT department and other departments of the firm; in conclusion lack of communication between different departments in the company;
- Not using experts in reengineering in the projects;
- Lack of a cost-benefit analysis in the reengineering project or lack of understanding on how to use that analyze;
- Lack of alignment of the reengineering projects with the company’s strategic direction.

### **Lessons learned from business reengineering projects**

The examples presented highlight a series of lessons that can describe the conditions in which reengineering projects can be successful for the organization. We identified five lessons which can be taken into consideration by all organization regardless of their activities.

*1. Learn from each reengineering project.*

This includes sharing lessons learned from one project to another, but also learning from failure. Reengineering is a management tool which involves radical change in all activities of the organization. Radical change is often very hard to accomplish. This is why, in order to succeed, an organization must also accept failure, learn from it, but remain focused on the end goal.

*2. Foster involvement and commitment on all levels of the organization.*

Reengineering projects can be efficiently implemented where senior management and front line employees are committed 100 % to the initiative. Senior management should set an example to all employees using their involvement, by being visibly involved with the project.

*3. Communication is the key.*

It is important to communicate truthfully with those who will be affected by reengineering in order to understand how the effort will unfold and how it will affect them as individuals. For example at CIGNA employees at all levels were involved in the design and analysis phase. During implementation all employees received a newsletter.

*4. The reengineering team counts.*

It is important to choose the right people who possess the skills required to lead the organization to the desired goal. The process of selecting the team members and the leaders to whom those members should report is lengthy and involves participation from all affected parties.

*5. Before starting a reengineering process take into consideration the characteristics of the environment.*

Senior management should analyze whether such a radical change is necessary and if it can be successful in the light of the characteristics of the organization. It could happen that even though traditional reengineering was applied successfully in US, could not work in other countries.

In conclusion business reengineering can be a powerful initiator for radical change.

## **Conclusions**

In conclusion reengineering projects are very diverse in content, but they all have the same goal, increasing the economic and managerial performances of the organization. Despite the high failure rates, there is an agreement that business reengineering, when done properly can produce significant gains in performances. Organizations need to alter their processes, invest in new technologies, and improve the overall performance in order to combat the challenges posed by competitive environment.

Reengineering implies an orderly sequencing of changes with a clear view of how the end goal should look. What is important today is how firms organize their work, taking into account the fast changing technologies and the rapid development of the market.

We consider that business reengineering can represent for Romanian companies a very good strategy to get out of the crisis.

The purpose of the paper was to underline using practical examples that reengineering can be a successful managerial tool for those organizations which want to gain organizational performances. This article can become a starting base for future research which should focus on finding new lessons for successful reengineering.

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