



Business Process Reengineering, a Crisis Solution or a Necessity

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ABSTRACT

This case study shows that the company decided to implement Business Process Reengineering (BPR) not only because external environment had changed, but also due to its obsolete business processes and organizational structure. The article will highlight the importance of the organizations' focusing on sub-goals, in order to finally reach the desired result in the organization's main goals. When rapid evolution has become the fundamental contemporary coordinate, reengineering is a form of company innovative reaction in terms of intensifying competition and globalization. Remodeling the Company in phases of crisis, when time pressure reduces the type and number of solutions that can be adopted, without effective leadership, can lead in most cases to failure. The effect of redesigning the business processes depends on how well it is implemented, coordinated and monitored.

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1. Introduction

Change has become a fundamental contemporary coordinate. The society and the organizations are going through a continuous process of modification of their structural and functional parameters. Reengineering is a form of innovative reaction to the scientific, technological, economic, educational and cultural changes. It consists of reprojecting the business processes in three directions, in the conditions of intensifying globalized competition: by regrouping the activities in coherent work processes, by business processes oriented reorganization and by firm redesign. Davenport (1993) deems BPR as "the analysis and design of work flows and processes within and between organizations". It emphasizes the perspective of crossing function and department boundaries. [1]

Hammer and Champy (1993) identify three kinds of companies that undertake re-engineering: those that are in deep trouble, those that may not be in trouble but have foreseen some trouble coming, and those that are in "peak condition" and ambitious to maintain their advantage and do better. [2]

Typical characteristics of BPR include: the radical redesign of business processes; the deployment of information technology as an enabler; major disruption to the organization during the process of reengineering; and attempts to achieve organization wide improvements in performance. [3] However, BPR is not always needed or successful. It seems that BPR is not necessary for those companies, which could not afford the high cost and risk of implementing a BPR project, because it does not make sense for an organization to launch a BPR project if it is unable to develop the competencies to implement and make it work. Best practice in BPR has highlighted the need to first get the process 'right' before implementing IT. [4]

The main causes that may determine the organizations to necessarily choose this solution are:

- The insufficient delimitation and dimensioning of certain process components (e.g. functions, activities, responsibilities and tasks), which are vital for objective achievement. At the same time, organizational structural components (such as jobs, positions, responsibilities and tasks) are ambiguously defined, which leads to the replication of responsibilities and tasks, responsibility dilution and other shortcomings in the functioning of the organizational structure;
- The existence of insufficient flexibility, dynamics and efficiency in the organizational structures, which could allow for and determine an „aggressive” corporate response to the national and international environment;
- BPR is often used by companies on the brink of disaster to cut costs and return to profitability. The danger is that during this process the company may slash its capacity for future growth.

Just like Noam Chomsky thought [5] — if you change that one word from *information* technology to *business* technology, you begin to change the way IT people work and the way they think about their jobs.

For example, with a business focus on their core, they would begin to think about technology as a whole and what it means to their business results — rather than thinking about technically oriented goals and metrics like storage systems availability or network and router performance.

I have always believed that by changing that one word, you would get the mentality of the people working in technology to change how they think and ultimately to create different behaviour that is much more business-oriented. [6]

Main organizational changes determined by reengineering: [7]

- change from hierarchic-functional organization to process organization;
- a fundamental change in the jobs, from a strict specialization to multidimensionality;
- an increase in the decisional and operational autonomy at all levels to capitalize the innovative creative potential and to obtain better performances;
- developing a creative environment;
- promoting selfcontrol;
- increase in responsibility to reach the objectives;
- increasing the efficiency of the entire activity and of the employees' satisfaction;
- reconsidering the motivation according to the obtained performances after the ongoing of a process;
- changing the values in the firm by orienting them towards the client, quality and team;
- diminishing the role of the organizational structure, increasing the decisional autonomy of the process team;
- turning the managers into leaders, mentors of the process team.

Reengineering causes enormous change in the organization, therefore it may cause organizational anxiety, without a proper approach to dealing with employees involved, the implementation is guaranteed to fail. [8] The remodelling of the organization, as a complex stage, must follow a gradual methodology which, rigorously observed, is up to ensure the quality and functionality of the new organizational system.

2. Problematic

An important company in the IT services had to analyze and decide which would be the best organizational structure to support the annual increase in the customers and projects numbers while the clients' demands become more and more complex and the competitors' quality standards higher and higher.

The goal is to improve the quality of the support services and technical assistance provided, establishing a closer collaboration with the clients, and monitoring and promptly solving the reported dysfunctions. The solution chosen was to implement a demands management system for bug tracking, issue tracking and integrated with other software project management and mail evidence applications. The software debugging system to be implemented is Web-based and allows for ticketing and automatic notification of problem reception, with the demand's recorded date and time, priority degree allotted, estimated time for problem solving, status modifications being notified along the entire life cycle of the problem. This system will complete the technical support ensured through the existing online support Help Desk which includes a telephonic support line to solve urgent problems.

The advantage of implementing a management system for issues is how to ensure a shorter response time and effectively to any problem raised by the software user. Automatic referral management will reduce the response time to a "Guaranteed intervention time" and, respectively, "Guaranteed solving time" (Time elapsed from a demand registration until it is solved must not be longer than the guaranteed solving time according to the demand's priority degree). Centralized evidence of all the referrals will allow for a correct management of the new demands and the unsolved or just partially solved demands in the project, according to their status. (eg: open source or proprietary software for bug tracking: Bugzilla, Jira, BugTracker.Net)

Issues priority table for Service Level Agreement (SLA)

Priority	Definition	Intervention time	Solving time
1 - Very high	The entire system or a critical element of the business is inoperable for a user or for the entire department. Partial solutions are unacceptable.	1 hour	3 hours
2 - High	A critical element for the business is inoperable for a user or for the entire department, but there are acceptable partial solutions. A critical non-business element is inoperable for a user or the entire department. Partial solutions are unacceptable.	3 hours	6 hours
3 - Medium (Default)	A critical non-business element is inoperable for a user or for the entire department, but there are partial accepted solutions.	1 day	2 days
4 - Low	Peripheral aspects, with no significant side effect on the commercial activities	2 days	5 days

3. Stages of the change process

Burdus E., Caprarescu G., Androniceanu A. point out the essential steps for BPR implementation: [9]

Preparation

Identification of the problems that determine disturbances in the functioning of the organizational structure and thus triggering the process of change. This stage is very important, as the efficiency of the other stages depends on the correct identification of the problems and their causes. The main problem the IT services company is confronted with is the impossibility to manage the increased volume of activity while respecting the time frame and the budget of the projects. The allocation of resources in the context of increased need of resources has become a critical activity both for programming, consultancy and technical assistance and maintenance, the lack of resources becoming critical due to quantitative and qualitative increased demands.

Analysis of the domain to be changed

Investigation and analysis of the structure through the possibilities for achieving the goals. This stage consists of analysing the existing organizational structure, identifying the strengths and weaknesses of the structural organization of the company and rationalizing the organizational structure.

Approach:

- Auditing the department's activity and identifying the causes of the lack of resources that affects the department's efficiency

Nr. crt.	Problem	
1.	Lack of resources	
	Causes	Effects
1.1	Increased activity volume	Failure to meet the deadlines
1.2	Lack of communication in the firm/project	Risk of losing the customers to the strong competition on the IT services market
1.3	High speed of personnel rotation - Unrewarded extra work hours - Difficulty in finding an experienced specialist, the need to form and integrate people in the firm's discipline	The organization could lose its access to information and critical knowledge on activity, projects, clients
1.4	Insufficient motivation and loyalty	Risk that a person formed by the company might offer his/her know-how to a rival firm, the confidentiality clause being unable to totally cover that risk

The auditing report concerning the activity of the consultancy service department revealed the following aspects concerning the department's low results during the last period, due mainly to the impossibility of dealing with the increased activity:

- resources simultaneously allocated to more projects, case in which the work procedure needs to be updated, the tasks need to be solved according to their degree of priority (critical, urgent, normal);
- resources allocated to redoing a task, due to incomplete specifications or particular features undetected in the analysis stage;
- in the case of complex modifications of a module's functionalities or for the devising of new reports and customizations to the customers' specific activity, it is necessary to draw detailed documents with the technical requirements and specifications signed by both parties after estimating the necessary effort.

The conclusion of the report in order to avoid the squandering of resources: The department needs reorganizing in order to make the activity efficient.

In my opinion, the analysis of the identified risks and the result of this stage is essential for the decision making process in order to establish the solution that can be adopted for Remodeling the Company and redesigning the business processes.

Creating a vision

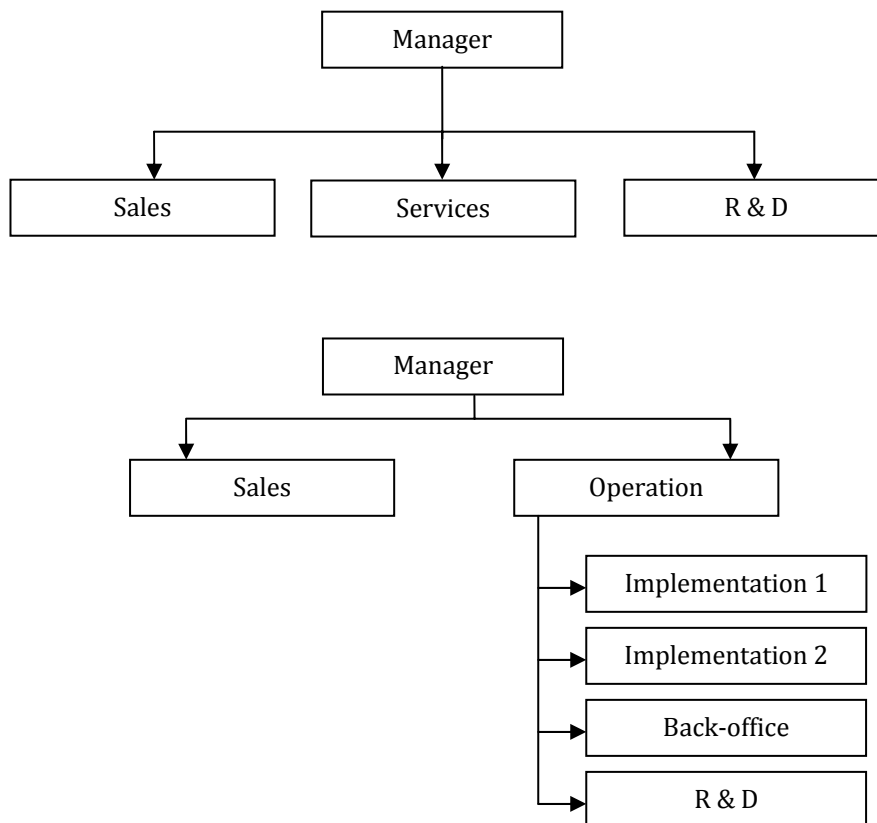
In order to make resource allocation more efficient it is necessary to separate the implementation activity from the post-implementation and maintenance activity. The main solution immediately identified was splitting the consultancy department into two teams: one for the implementation and another one for the maintenance and post implementation services and assigning a different manager for each team. There are characteristics of the current state - realities of how your organization behaves - that will help or hinder the change management deployment efforts. In this second step of the process, it also must investigate the engines that are driving change and patterns in previous changes that were successful, or perhaps unsuccessful.

Projecting and supporting the change measures

The chosen solution was to divide the current service department into three sub-departments – implementation and support for small and medium business; implementation and support for big projects; and the third one: back office support (including help desk, technical team, quality assurance and trainers) and to merge all of them together with the research and developments team under the operations department. Thus, from three independent departments – Sales, Service and R&D, each of them complaining of low collaboration in the detriment of the final customer, there remained only two - Sales and Operations, which were well organized inside in order to assure the scalability of the growing business and were managed each of them by a VP, who was also a partner in the company and served the same interest. The split of the services department aims to diminish the role of the organizational structure and, implicitly, increase the decisional autonomy of the process team.

The chart before and after the change:

Figure 1. Organizational chart



In parallel with the functional reorganization of the company structure and adapting the workflows to the new structure, the firm underwent an internal project of implementing an IT system of information management and issue tracking. An in-house development of the application was chosen, as the outsourced solution would have meant additional unjustified expenses and the purchase of such a turnkey system would not have allowed for further adaptations.

This project required following all the stages, from analysis and design, to development, testing, and implementation, being coordinated as a client- oriented project, and an implementation plan and budget was established. To implement this system, important resources are required, which means more congestion and a load of existing activities. Change requires an extra effort, but carefully phased may lead to the desired result. The transition period is a difficult time, but the involvement of management and departments as a team can lead to success. Such an important project which involves the implication of all the departments can't be unrolled successfully without the sustained intervention of the board.

The involvement of departments has the effect of positive answers to management initiatives and thereby increase employee performance, leading to increased flexibility and long term strategic innovations of the company.

Management Involvement → Staff involvement → Long-term strategic innovation

Change Management

Making the processes and structure, organization of an enterprise more flexible

Implementing the change requires a transition from the existing state of the organization to its predicted state, moving from a functional hierarchy organization to process organization in order to increase efficiency of the entire activity and the employees' satisfaction. This is not possible without a general change plan which includes the planning of activities. The qualities and skills required by a specialist in the organizational development and change: ability to diagnose, basic behavioral knowledge, ability to set goals, solve problems, objectivity, flexibility, methodical approach, reliability and innovative imagination. [10]

The change platform consists of developing a climate of creativity, while the change engines belong to the orientation towards decisional and operational autonomy at all levels, in order to capitalize the creative and innovative potential and to obtain better performances.

Enterprise Change Management (ECM) - is composed of three elements: [11]

1. A common set of processes and tools for managing change.
2. A leadership competency at all levels of the organization from supervisors to senior executives.
3. A strategic capability that enables the organization to be flexible, change ready and responsive to marketplace changes.

These elements take time and focus on the energy to create. It is critical to view *deploying change management* as a change and project that can be managed.

Promoting motivational mechanisms based on performances at the individual, group and enterprise levels

It has been decided to implement a system of bonuses for all employees in order to achieve their long term loyalty in terms of increasing responsibility to achieve the objectives.

- annual bonuses for over three years of activity in the company;
- additional medical insurance for employees with over 5 years old activity in the company.

Reconsideration of motivation based on performances after carrying out a process by rewarding at team level: Bonuses for the successful completion of a project or by organizing events that combine continuous professional training with relaxation, aiming at transforming the company values by orienting them towards customer, quality, team: Innovative Team building activities

Change consolidation

Improving the parameters of organizational culture considerably by organizing festive events:

- Celebrating 10 years of the firm's activity
- Organizing celebrations at Christmas to which employees are invited to bring their families

Professionalizing the management and managers-- transforming the managers into leaders, team process mentors MBA studies programs were organized and sponsored for department managers.

A professional development system was implemented that requires the employees to prepare a personal plan of career development over a one year period, overseen by their direct Coordinators and approved by the head of department, which includes the periods reserved for training and study activities finished by an evaluation of their performances and qualification in the chosen field.

The objective pursued in these actions: fundamental transformation of the jobs, from a strict specialization to multidimensionality.

4. Arguments Pro and Con

After BPR, first of all, work should be done according to the prescribed procedure, and it is much more standard than before. Secondly, with the restriction of SLA, the working pace has accelerated while at the same time the duration of each project has shrunk. Due to the financial crisis, there was an attempt to reduce staff expenses. The number of employees was reduced by 10 percents, from 110 to an average of 100 employees. In order to cover the necessary resources, diminished by this measure, the company chose the solution of subcontracting certain consultancy activities to third party firms in the territory with which there had previously been collaborations and that implemented a similar quality insurance system. By subcontracting activities one reduces costs and efforts with the implementing activity, in order to avoid an overcharge of the services activity, the firm providing the licences for applications, post-implementation and warrant services.

The success of the process was due to the managerial capacity of combining a theoretical model of reengineering with one's own intuition and belief in the two departments managers' ability to put into practice the decision of reorganizing the activity.

5. Conclusions

Escaping outdated patterns of process and structural organization requires a greater decision-making and operational freedom of the industrial enterprises, to allow for a greater mobility of the positions, jobs and departments at whose level the most important work processes are registered and true economic value is

obtained; it also requires the turning of the so-called organizational documents (articles of association, organizational chart, personnel specifications) into genuine managerial tools. [12] Structural and organizational flexibility also implies choosing the best organizational formula – from the hierarchical one to the functional one, with its variants (matrix, divisional or hybrid) – depending on the complexity and diversity of the work processes, on the orientation towards insourcing or outsourcing, on the territorial dispersion of certain organizational subdivisions (business formats) or on the intensity of the competition faced.

In the current economic conditions, characterized by competition and fast evolution of demands, the optimization of the decision-making process depends on how quick the informational systems follow this evolution in order to be capable to provide real-time information and, thus, allow for proper decision making. The competitiveness of the services provided in terms of increased demands on the IT services market and the innovative nature of the products offered in line with the evolution of the technology is a priority for an IT company.

World-wide, the problem of reengineering has become both one of the priorities for theoreticians and practitioners in the field, and also a fundamental condition for efficiency and managerial success. In the Romanian economy, in order to solve the problems organizations are confronted with, such a step is of a high importance for providing functional and advanced systems, adapted to the evolution of the macrosocial context in which the organization operates its activity. On the other hand, of the same importance are the development strategies, the decision making processes the firms, companies or organizations are based on. Transformation is a radical process, which involves finding long-term solutions to strengthen the company's position and to ensure sustainable growth.

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