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Implementation of organizational changes based on reengineering of business processes

The aim of the article is twofold: to describe some theoretical underpinnings of reengineering and to analyze several advantages and disadvantages of reengineering for managers' future consideration. A known definition of such a radical change states that reengineering is the fundamental rethinking and radical redesign of business processes in a company in order to achieve better organizational performance and reach excellent financial results. It is noteworthy to mention that the multiplicative effect of successful reengineering efforts extend not only to the company itself, but also for the whole country, given the impact of redesign results of the national companies, industry organizations and other commercial establishments.

Key words: radical change, reengineering, reengineering of business processes organizational changes, improvement.

М.К. Кенжеғанова

Реинжиниринг бизнес-үрдістері негізінде ұйымдық өзгерістерді енгізу

Бұл мақалада компаниядағы реинжинирингтің теоретикалық негіздері сипатталынып, реинжиниринг енгізудің артықшылықтары мен кемшіліктеріне талдау жасалынған. Ұйымдастыру кезіндегі батыл өзгерістер енгізу анықтамасында реинжиниринг – компанияның бизнес үрдістерін қайта құру, түбегейлі өзгертуі болып табылатындығы айтылған. Мақсаты жоғарғы ұйымдастырушылық әрекет арқылы жақсы қаржылық нәтижеге жету. Реинжинирингтің мультипликативті іргелі өзгерістер ықпалы тек сол мекемеге ғана емес, бүкіл отандық, ұлттық компанияларға және коммерциялық мекемелерге де тарайды.

Түйін сөздер: түбегейлі өзгерістер, реинжиниринг, бизнес-үрдістер реинжинирингі, ұйымдық өзгерістер, жақсарту.

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Внедрение организационных изменений на основе реинжиниринга бизнес-процессов

В статье описаны теоретические основы реинжиниринга и проанализированы преимущества и недостатки реинжиниринга в компаниях. Известное определение такого радикального изменения в организациях гласит, что реинжиниринг – это коренной пересмотр и радикальная перестройка бизнес-процессов в компании с целью достижения лучшей организационной деятельности и получения высоких финансовых результатов. Примечательно и то, что мультипликативный эффект от успешного реинжиниринга распространяется не только на саму компанию, но и на всю страну, учитывая влияние таких фундаментальных изменений на деятельность национальных компаний, отраслевых организаций и других коммерческих учреждений.

Ключевые слова: радикальное изменение, реинжиниринг, реинжиниринг бизнес-процессов, организационные изменения, улучшение.

Management specialists have begun to develop the theme of reengineering in the 80s of the last century. According to M. Hammer and J.Champy «Reengineering – is the fundamental rethinking and radical redesign of business processes to achieve significant improvements, as well as key indicators for modern business performance as cost, quality, service and efficiency» [1]. Despite the fact that the definition refers to the changes in business processes, the subject matter is about a complete change in the enterprise.

The greatest contribution to the theory of reengineering except M. Hammer and J. Champy have been made by: Davenport T., Jacobson, J. Carlson, J. Martin, and Johansson. In 1992–1993 business-process reengineering (BRP) has been successfully used in the insurance, telecommunications, energy, electronics, computer engineering, and production of consumer goods. Since 1994, reengineering was implemented in banks and government agencies in the United States: in 1994, 75% of the 400 largest U.S. banks performed reengineering projects. In addition to many US companies, reengineering received recognition in Latin America and East Asia.

Davenport connects with innovations in reengineering processes. This new approach in organizations combines advanced information technology and human resource management [2].

Causes of reengineering: reengineering causes are many and they are divided into external and internal. External factors include: increased availability of goods and services, which became possible to buy anywhere in the world. In this regard, the competition has increased, as more and more manufacturers are offering more affordable and quality products and services. Further, increased consumer demands for goods and services provided avenues for new approaches in doing business. Consumers have become more demanding for quality, price and terms of the provision of services and goods. Besides the phenomena of reduction of the life cycle of goods and services as well as shortened development and introduction phases of new products contribute to the entry of a huge number of sophisticated goods and services on the market.

Internal factors of reengineering include growth in the complexity of management tasks. Production of new and improved products and services require from management teams modern and effective methods of control and decision making, as the old methods may become obsolete and do not

correspond to the realities and requirements of the time. Further, no increase in the number of staff is always an increase of customer satisfaction, so much attention is paid in the redesign of the organization staff. Backwardness of the organization in the technological sense and inefficient use of computer technology inevitably lead to the efforts of an organization of rethinking its status quo, or it remains in positions of lagging behind ones compared to its competitors [3].

Let us refer to the concepts of reengineering.

Engineering business – it is the methods and management techniques that the organization uses to design business. Reengineering – is redesigning business in order to create a completely new and more efficient business processes, regardless of whether it was before in the organization. This definition contains several key words:

Business processes – is a set of interdependent and repeated actions (functions) that transform the material or information in the final product or service.

Fundamental. Reengineering involves a fundamental rethinking of the current rules and procedures in the company. Fundamental rethinking involves thoughtful approach to business processes that are outdated and do not meet the requirements of the time.

Radical. This means changing all the systems and subsystems of the organization. When designing of all systems are offered completely new methods, forms and methods of performing the functions must be used. For example a change in the sequence of actions and process steps (changing the distribution of tasks between departments and employees are changing communication and information flows that occur within the organization).

Sharp (intermittent). Reengineering goal is to achieve a dramatic improvement of performance of the company by replacing the old methods, approaches and new management techniques. Picture 1 illustrates the abruptness of reengineering.

From this follows several characteristics of reengineering:

1. Reengineering involves restructuring of activities and business processes in the company completely different from what it was before. Due to the fact that organizational changes are dramatic – in the process of reengineering business completely changes (mutates) – including its system activity, area management, human resources, etc.

2. As a result of re-engineering the organization there are new and radical ways of working: that is,

the union of several business processes into a single process can occur, or operating procedures may become a single procedure;

- Team processes replace functional units;
- Employees work becomes multifaceted, if necessary the contractor must be able to perform not one, but several problems;
- Team members make decisions;
- Evaluation results affects the wages of employees;
- Managers are not controlling persons, they only help their employees (team members) to make decisions on their own.

3. Reengineering involves strict time constraints and actions, that is, changes should be sharp.

4. Processes, business processes are subject to reengineering.

As part of the dissertation research seems necessary to analyze the experience of using reengineering, and describe the advantages and

disadvantages of this method is the fundamental organizational changes.

The main goals of reengineering include:

- Increasing the efficiency of the organization and all business processes;
- Complete customer satisfaction;
- Improving the competitiveness of the organization.

Due to the huge risk of failure in the implementation of reengineering, reengineering is used in the following three cases:

– When the organization is in deep crisis (high costs, lack of working capital, overdue utility bills, loss of pay, mass refusal of clients products and services, etc.)

– When in spite of the satisfactory position of the firm, its forecast of future performance and survival is poor (there is a threat of loss of market position, market share is expected to fall in demand for their products and services, etc.).

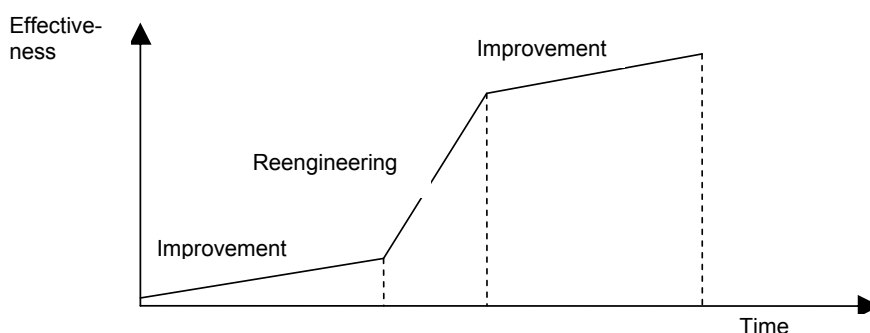


Figure 1 – Business-process reengineering [4]

– Reengineering is also used by aggressive and fast-growing companies that build power through separation from competitors and create a unique selling products and offers it to consumers. Consequently, application re-engineering in this case is the most appropriate, but managers should remember that reengineering requires large financial investments [4].

Reengineering and conduct of reengineering project as a full-scale changes in the organization of all systems usually consists of four stages:

1) Development of a vision of the future organization: at this stage, the organization builds a model of the future state of the company and is making plans about how and how to develop the business to achieve its goals.

2) Analysis of the current state of affairs of the organization: at this stage, the study of current business processes and creating component diagrams for analysis begins.

3) Development of a new organization (new business) at this stage, dramatically changing old processes are tested and new business processes with new technology are performed.

4) Implementation of the project of a new business (real reengineering).

It is noted that the above steps may be performed in a different sequence, some of them may be repeated in parallel and in series flow (Picture 2).

Due to the fact that reengineering is the redesign of business processes in the company, which are very diverse, managers and implementers of this

type of organizational change should meet some requirements. The following principles of business process reengineering must be maintained:

1. Integration of business processes. This is a very complex and multifaceted task that requires a lot of managerial effort and energy to first

understand and identify unnecessary functions and processes, and then to design efficient ways to design and combine them into one or more key processes. For the integration of business processes it is usually created a team that takes responsibility for the process.

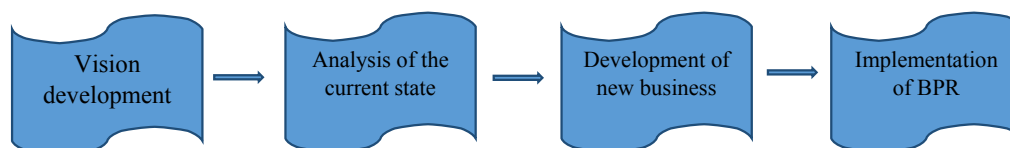


Figure 2 – Business-process reengineering [1]

2. Horizontal compression of business processes. This kind of compression process allows one person to replace a few people and reduce the number of errors at times. Manageability is improved by reducing the number of staff and by providing a clear allocation of responsibilities and accountability for processes.

3. Vertical compression of business processes (decentralization). Decentralization allows performers make their own decisions, which significantly reduces the time spent on business processes and eliminates the need to constantly refer to the manual for help.

4. Implementation of logic of business processes. Logical implementation of business processes (replacing the linear execution) saves time and helps make the trade-works quickly and efficiently.

5. Diversification of business processes. Diversification of business processes means that there are different options for their implementation. Different variants and versions of business processes enables organizations to adapt to the rapidly changing external environment.

6. Rationalization of horizontal connections. This principle means reengineering of linear functional units and the work is done where it is most needed and appropriate.

7. Streamlining of administrative influence. This principle states that the management measures should be only when it is really economically feasible. Reengineering decreases the number of inspections and control of business processes.

8. Culture solution. This principle solves the problem of reengineering –it minimizes various negotiation processes between the performers. This is possible through the reduction of external contacts.

9. Rationalization of Relations «company – the customer». Reengineering creates such an organizational structure in which the person in charge (authorized) manager provides a single channel of communication.

10. Authorized Manager (manager). This person is a buffer between the customer and a complicated process (or a problem) and is responsible to the customer and should be able to solve all the problems of the customer. Accordingly, the authorized manager should have access to all the performers of the process and information systems to meet customer requirements.

11. Saving side management centralization. Information technologies allow to put into effect the principle and serve customers, as this principle allows reengineering departments maintain the autonomy and have the opportunity to centralized data [5].

The process of reengineering significantly influences the following factors.

1. Motivation. Motives and incentives to implement reengineering should be clearly defined. In this important moment, top managers should know and understand that reengineering will give a significant result and lead to significant organizational changes.

2. Guidelines. For successful implementation of reengineering a project manager needed. This person heads the project changes and must be qualified and have an unquestioned authority.

3. Employees. Employees in the reengineering process must have adequate powers and should understand why this fundamental redesign method is important for the organization. Employees should strive to successfully develop new working methods and new patterns of behavior.

4. Communications. Sometimes reengineering projects are unsuccessful, due to the fact that the changes were not properly communicated to the performers. A crucial role in this is played by various means of communication to facilitate a clear and common understanding of the strategic and operational staff of the organization's objectives in the process of reengineering.

5. Budget. One of the most distinguishing characteristics of reengineering – are large costs associated with dramatic changes. Reengineering should have its own budget.

6. Technological support. Another distinctive aspect of reengineering is the intensive use of information technology as the technology needed to support the new business.

7. Consultations. Consulting or expert support is particularly necessary for those organizations that carry out the project of reengineering for the first time.

Besides taking into account the above principles during reengineering the mistakes must be also kept in mind. The following describes some of the mistakes that managers make implementing reengineering:

1. The company is trying to improve the existing process rather than to redesign it.

2. Non-systemic approach to updating. It is important to update and redesign all processes, not just the organizational structure, management and assessment.

3. Incorrect assessment of the corporate culture. In the process of reengineering it is essential that top management explain to the staff not only details of the re-designed process, but also explained why the staff should do it.

4. Inconsistent development of innovations. This item is associated with the first and second paragraphs, since the implementation of reengineering can not stop half way and be non-systemic and inconsistent.

5. Inefficient distribution of tasks for the development of innovation. It is important that reengineering is implemented from top-down.

6. Inadequate provision of resources for innovation. Reengineering requires considerable time paying attention to all processes and financial and all types of resources.

7. Personality update problems. In connection with a fundamental restructuring of all processes – resistance can occur. This is normal, it is important to continue to explain and educate the conversation, and it is important to know if reengineering fails, it is not because of resistance from the staff, and because of improper management practices.

Table 1 – Advantages and disadvantages of reengineering

<i>Advantages</i>	<i>Disadvantages</i>
Deep and fundamental changes that lead to radical and abrupt jumps.	Insufficient use of data of psychology approach to change efforts. RBP being too mechanistic.
There is a significant expansion of powers and competences of employees (there is growth and development, experience, human capacity building and improved economic performance organization).	High resistance to change and RBP and low social acceptance of such radical change.
Analysis of business processes to optimize business operations that are not needed.	The ability of employees in development and their willingness to take responsibility are taken into account.
A steady increase of profitability (cost-effectiveness).	The method is inefficient when the organization needs to carry out small changes.
The rapid introduction of fundamental changes increases the possibility of the organization to increase its profitability.	Rigid time constraints and actions may backfire and stages of reengineering can be tightened.
Improved workflow system sets a clear description of the company and each employee.	The method does not give enough attention to social aspects.
Is the adaptation of organizational structures and regulations, implementing new information technologies.	High complexity of procedures and requirements in order to perform RBP.
Radical redesign of core business processes results in change of value concepts, mission and vision of the company as a whole.	In general, high organizational uncertainty and use the strategy of «top-down» (stricter requirements to perform work for the qualification of personnel, etc.).
Note: compiled by the author based on sources [1,2,3,4]	

Summing up the results of the most common mistakes made by organizations during reengineering, one must say that there are many examples of its effective implementation. The most important point is that if top managers know the basics of organizational transformation and radical ideas they lit reengineering, the chance to achieve full-scale changes is very large. Having abovementioned mistakes and possibilities in place, table 1 presents advantages and disadvantages of reengineering.

According to M. Hammer companies spend up to 32 billions of dollars annually, and 20 billions are thrown to the wind. In other words, not every change leads to a positive result. On the contrary, the statistics is dramatic since 50% to 70% of all organizational changes initiated in 1980 and in

1990s failed to achieve their goals to implement changes [6].

Reengineering is a deep, comprehensive study of the processes occurring within the company, a radical rethinking of these processes, highlighting the main business processes to perform the primary functions of the company, a comprehensive analysis and restructuring in order to optimize, reduce time, eliminate cross-repetitive activities, ensuring clarity, and, as a consequence, better handling of the company as a whole.

Multiplicative effect of successful reengineering extends not only to the company itself, but also for the country, given the impact of redesign results to the national companies, industry organizations and other commercial establishments.

References

- 1 Hammer M., J. Champy. Reengineering the Corporation: A Manifesto for Business Revolution. – New-York NY: Collins Business Essentials, 2003.
- 2 Davenport T. Process innovation, reengineering work through information technology. – Boston MA: Harvard Business School Press, 1993.
- 3 Baranov V.V., Ivanov I.V. Innovacionnoe razvitiye Rossii: Vozmozhnosti i perspektivi/ V.V. Baranov, I.V. Ivanov. – M.: AlpinaPabliher, 2011. – 352 s.
- 4 Shirokova G. V., Upravleniye organizacionnimi izmeneniyami: uchebnoe posobie. – SPb.: izdatel'skiidom Sankt-Peterburgskogo Gosudarstvennogo Universiteta 2005. – 432 s.
- 5 Popov E., Shapot M. Reinginerig bisinesprocessov i infomacionnie tehnologii, 2009.
- 6 Shermet M. A. Upravleniye izmeneniyami. – M.: Delo, 2010.

Литература

- 1 Hammer M., J. Champy. Reengineering the Corporation: A Manifesto for Business Revolution. – New York NY: Collins Business Essentials, 2003.
- 2 Davenport T. Process innovation, reengineering work through information technology. – Boston MA: Harvard Business School Press, 1993.
- 3 Баранов В.В., Иванов И.В. Инновационное развитие России: Возможности и перспективы/ И.В. Иванов, В.В. Баранов. – М.: Альпина Паблшер, 2011. – 352 с.
- 4 Широкова Г.В., Управление организационными изменениями: учебное пособие. – СПб.: издательский дом Санкт-Петербургского Государственного Университета, 2005. – 432 с.
- 5 Попов Э., Шапот М. Реинжиниринг бизнес-процессов и информационные технологии. 2009 г.
- 6 Шермет М. А. Управление изменениями. – М.: «Дело» АНХ, 2010. – 128 с.