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საქართველოს ტექნიკური უნივერსიტეტის პროფესორი

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საკვანძო სიტყვები: ფუნდამენტური, რადიკალური, ბიზნეს პროცესი, რეინჟინერინგია, ინჟინერინგია.

Introduction

Business process reengineering (BPR) involves making radical changes to organizational operations that lead to significant increases in efficiency. Reengineering is a fundamental rethinking and radical redesign of business processes aimed at achieving dramatic improvements in key performance indicators such as costs, efficiency, quality, and service levels.

Discussion

The definition above highlights four key words: “fundamental,” “radical,” “drastic,” and “business process.”:

1) “Fundamental” suggests “rethinking current business rules and regulations,” which are often outdated, inappropriate, or flawed;

2) “Radical” change refers to “the entire existing system, not just its individual parts,” meaning deep, carefully calibrated changes that discard old processes and create entirely new ones in short, radical changes.

3) “Dramatic” indicates that reengineering is not used merely when a 10-100% increase in organizational performance is needed, but when a “surge” of 500-1000% or more is required—when a powerful impact on processes is essential;

4) “Business process” is defined as a coordinated system of targeted, consistent, and regulated activities in which, through control and resources, inputs are transformed into outputs (products) that create value for the customer.

In essence, reengineering is a form of enterprise reform that aims to significantly boost efficiency through transforming business processes and modifying or replacing the existing business model. The core of reengineering involves identifying the enterprise’s primary business processes, studying them in detail, and redefining them. Most modern companies recognize the necessity of reengineering to enhance overall business performance. The following factors also contribute to this:

- The need to provide investors with a description of the company’s operations in accordance with international standards for business process descriptions;
- The creation of new areas of company activity and divisions.

The main advantages of reengineering include:

- The development of optimal ways to implement the company’s core strategy, taking

into account growing competition and technological developments;

- Ensuring control over financial and time costs, as well as assessing their contribution to the final product price;
- Improving the quality of interaction between employees and company divisions;
- Creating a mechanism for developing job descriptions, regulations, provisions, and other documents.

Reengineering is necessary in the following cases:

1. When an enterprise is in a crisis. In such cases, the goal is to resolve the most pressing economic, managerial, and financial issues of the enterprise in the short term. It is considered one of the tools of anti-crisis management, resulting in the creation of conditions for effective functioning. In modern times, this situation is typical for most state-owned enterprises and a significant number of private organizations.

2. In situations where the company's current situation can be considered generally satisfactory, but its performance forecasts are unfavorable, reengineering can be a timely response to negative consequences that have not yet become irreversible.

3. Reengineering can also be implemented at successful, thriving companies seeking to use this process to achieve a higher level, to accelerate their competitive advantage, and create exceptional product or service offerings.

There are two types of reengineering: crisis reengineering and development reengineering. The former is used when the organization is facing extremely complex problems, while the latter is used when the company is doing well, but its growth momentum is clearly deteriorating.

It is equally important to distinguish between business process reengineering and regular improvement, which are based on the same parameters but have distinctive properties (see Table 1).

Table 1. Improvement and reengineering of business processes

Parameters	Improvement	Reengineering
Level of Change	Incremental	Radical redesign
Starting Point	Existing Process	From scratch
Duration of Change	Small	Large
Frequency of Change	Continuous/One-time	One-time
Scope	Narrow - Functional	Broad - cross-functional approach
Risk	Approach	High
Asset	Moderate	Information technology
Type of Change	Strategic Management	Cultural/structural
Direction of Change	Corporate Culture Change	Top-down

In this context, it's also important to note the need to distinguish between similar-sounding, related, yet distinct terms: enterprise restructuring, reorganization, and business

process reengineering.

Enterprise restructuring involves changes to its structure, including adjustments to the order and arrangement of its elements, optimization of its operating system, and the elements that shape its business. More formally, restructuring can be defined as follows: restructuring is a comprehensive, all-encompassing process of optimizing an enterprise's operating system in accordance with its established development strategy, facilitating increased productivity and competitiveness for manufactured products based on modern management methods and approaches, and improved management.

Based on these definitions, three main differences can be identified in the descriptions of reengineering and restructuring processes.

First, the object of the changes being implemented. As previously mentioned, in the case of restructuring, the characteristics of the system's state (the entire organizational structure) are transformed; in the case of reengineering, changes and reforms occur within the internal processes of the system.

The second difference is the scope of the changes being implemented. Reengineering, in its «traditional» definition, is primarily focused on the complete, total replacement of existing processes, beginning with a clean slate, but informed by previous experience. Restructuring, in turn, implies structural transformations of both the entire system and its individual components, subsystems, and elements.

Finally, the third distinction is fully reflected in the primary goal of process formalization. Thus, reengineering, in its traditional definition, implies a mandatory transition to a process-based business model, abandoning the functional structure and introducing autonomous interdisciplinary workgroups. The restructuring process, on the other hand, is less formalized and involves a relatively broad spectrum of final structures.

Reengineering involves addressing the following tasks (Fig. 1).

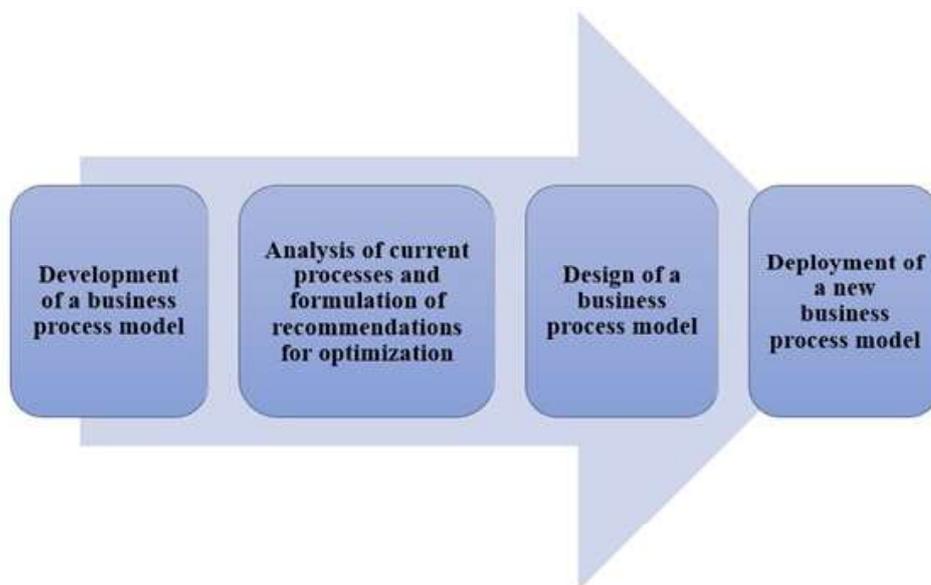


Figure 1. Sequence of solving reengineering problems

Therefore, reengineering is carried out in several stages, each of which aligns with the tasks described above.

1) **Preparatory Stage.** Includes two sub-stages:

- Enterprise survey. The primary goal of this stage is to identify the enterprise's business processes, create a comprehensive list of these processes, categorize them into primary, auxiliary, and developmental processes, and assess the scope and composition of the work. This stage involves developing a set of criteria to evaluate the effectiveness of existing and future business processes, including overall process duration, the number of integrated functions, automation level, and associated costs.

- Development of a business process reengineering project. The work steps and schedule for implementing the company's reengineering project have been prepared and approved.

2) Modeling and assessment of existing business processes.

- Modeling the company's organizational structure and building a business process model, including diagrams and textual descriptions.

- Analyzing business processes. This phase verifies the compliance of current process models and documentation, checks for function overlaps within departments and among employees, assesses the feasibility and efficiency of decision-making, and reviews duration, quality control, and other subjective factors. This work helps identify and analyze organizational problems.

- Developing recommendations and proposals to improve current business processes.

3) Creating a new business process model, which includes three sub-stages:

- Redesign of the current business process model. This involves analyzing the causes of low efficiency and exploring solutions to modify the processes.

- Modeling and development of a new business process model.

- Creating multiple versions, considering changes in process logic, quantitative parameters, organizational structure, and information support. Adjustments are made if performance indicators do not meet targets during the modeling process.

- Developing recommendations for implementing the new process model and integrating it with the company's software.

4) Business process implementation includes:

- Developing an implementation plan covering resource planning, organizational changes, financial planning, and information system development.

- Informing staff through meetings, training, and presentations.

- Securing necessary resources such as funding and logistics.

- Phased and planned deployment of new processes.

5) Quality control. Ensuring quality and making adjustments during the implementation of the new business process model, and ultimately, completing the reengineering process and evaluating the results against the initial goals and project plans.

Conclusion. Reengineering is crucial for Georgian entrepreneurship, as it brings new opportunities and positive dynamics of change.

The weaknesses of domestic entrepreneurship include the weak application, development, and implementation of business processes within organizational structures. Business processes, accounting regulations, and business procedures are practically undeveloped, and without them, successful reengineering is impossible. The change management process involves assessing the company's readiness for change and developing a tailored implementation plan to support it.

Domestic managers are recommended to use the following reengineering potential methodology:

- defining the direction of business development;

- determining the final project outcome;

- competent process planning;
- defining HR policies and the organizational structure itself;
- technological support;
- implementing the company's internal policies;
- attracting resources for the project;
- implementing the project within the organizational structure.

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აბსტრაქტი

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PRINCIPLES AND MODERN APPROACHES TO MANAGING BUSINESS PROCESSES IN AN ORGANIZATION BASED ON REENGINEERING AND ENGINEERING

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Abstract. This article examines business process reengineering, a radical approach to organizational operations that yields significant efficiency gains. It is noted that reengineering is a fundamental rethinking and radical redesign of business processes aimed at achieving dramatic improvements in key performance indicators, such as costs, efficiency, quality, and service levels. The article also notes that most modern companies recognize the need for reengineering to improve overall business performance and identifies the factors that contribute to this.

Keywords: Fundamental, radical, business process, reengineering, engineering.