

Business processes optimization of the enterprise's engineering service

The current state of the theoretical approach to the improvement of business processes at the enterprise and the development trends of business processes in the conditions of changing external environment is analyzed. An algorithm for improving the business process of the enterprise's engineering service was introduced.

In the modern world, in the conditions of constantly changing demand for raw materials, materials, the search for highly qualified specialists, for the introduction of modern management methods in organizations, as well as the diversification of production factors, enterprises are constantly faced with a decrease in competitiveness, the inability and unwillingness to quickly respond to external challenges, which in their turn leads to the loss of sales markets and a decrease in the overall profitability of production. If the organization is not improving, then its competitors are actively improving the efficiency of their business processes.

The constant problems facing modern enterprises require solutions (both from the side of management structures and production) with minimal possible costs to make changes in the system, first of all, to improve the existing business processes of the enterprise. There are many internal and external reasons that have made continuous improvement of business processes in an enterprise critical for today's market. Therefore, a company that wants to survive or improve its position on the market must constantly improve production technologies and the organization of business processes. Effective modern management of any enterprise is impossible without effective management of all processes based on the application of modern management technologies and more advanced forms of its organization.

Such scientists as M. Xammer, D. Champi, M. Porter, V. Millar, A. Blynov, O. Rudakova, V. Zakharov, W. Deming, T. Fokiyeva, N. Yurynova devoted themselves to the issue of business process management. . However, despite the development of this problem in modern research, there are practically no works devoted to the study of the optimization problems of auxiliary business processes at the enterprise, which are responsible for the uninterrupted flow of the main production process, in the conditions of the formation of the development of the enterprise, which makes the research topic particularly relevant.

A modern industrial enterprise has many functions performed by it and ways of implementing new effective management systems. One of the effective and efficient management systems is the formation of an optimal system of business processes that will be aimed at obtaining profit, depending on the requirements of the external environment using a process-oriented approach. The process approach of enterprise management has characteristic properties: repeatability of successive actions; reproducibility; existence of a goal; availability of output (result); the presence of a consumer result; availability of input (resources); the presence of resource providers, and the presence of a responsible person [1]. The core of the process approach at the

enterprise is that each employee ensures the vitality of specific business processes by directly participating in them. Responsibilities, area of responsibility, criteria for successful activity for each employee are formulated and have meaning only in the context of a specific task or process. In contrast to the functionally oriented approach, the process approach of enterprise management maintains the ties between structural divisions much more firmly. The most important difference between the process approach of management and the functional one is that in the process approach, processes are managed, and in the functionally oriented approach, functions are managed.

When organizing a process-oriented management system at the enterprise, the main criterion that must be taken into account is the effectiveness of interaction not only between the structural units of the enterprise, but also the effectiveness of their interaction with the external environment (that is, with suppliers, customers, etc.). It is the process approach that allows you to take into account such important aspects of business as the focus on the final product, the interest of each performer in improving the quality of the final product and, as a result, the interest in the final performance of their work. [2].

The task of the management system with a process approach is to create such conditions that will allow for the effective functioning of all process participants aimed at optimizing or reducing the use of resources, the consumption of which in the conditions of industrial production has a direct impact on the formation of the cost of products and determines the selling price. For the successful operation of the enterprise, management needs to study and analyse all existing business processes in order to most effectively develop a business process improvement program. The business process optimization program will allow the enterprise to occupy a high competitive level.

There are several ways to improve business processes, the most famous are the methods of drastic changes (methods of direct engineering - designing a business process "from scratch" and reengineering), continuous (gradual) methods include: the method of fast analysis of the decision (FAST) and benchmarking process. The use of a specific method of improving the business process within the framework of the appropriate approach depends on the tasks facing the enterprise and on the management. The process approach in management requires the development of the entire system of the enterprise, which will allow to more closely coordinate the activities of functional parts and to respond more quickly to the changes taking place, to organize business processes more efficiently, with a more pronounced focus on customers [3].

By introducing advanced management technologies, the enterprise receives a powerful modern tool that allows the most effective solution of complex tasks in conditions of imbalance, which will ultimately lead to increased competitiveness and strengthening of the enterprise's stability on the market.

In a modern enterprise, in addition to the main business processes, which are aimed at meeting the needs of the external customer, there are auxiliary business processes, which depend on the main process, but which do not directly affect the work with the external customer. Above these business processes are processes that are related to the creation of controlling influences by all other processes. So, for example,

the fact that achieving maximum profit of an industrial enterprise often requires reliable operation of technological equipment with minimization of emergency downtime and reduction of planned equipment repairs does not need proof. Regular maintenance and repair of equipment as a result of the development of its resource always entails large financial investments and the involvement of labor resources. Consider the algorithm for improving the business process of the engineering service of an industrial enterprise, Table 1. (the study was carried out at SVIATO-VARVARYNSKA CONCENTRATING FACTORY LLC)

Table 1.

Algorithm for improving the business process of the engineering service for the conditions of the LLC "CONCENTRATING N FACTORY "SVIATO-VARVARYNSKA"

Stages	Performance features
1	2
<p>Stage 1. The business process of the engineering service (maintenance and repair LLC "CONCENTRATING FACTORY "SVIATO-VARVARYNSKA") "as is"</p>	<p>The organizational structure of the management of the maintenance and repair system of LLC "CONCENTRATING FACTORY "SVIATO-VARVARYNSKA" was built</p>
<p>Stage 2. Analysis of the existing business process maintenance and repair LLC CONCENTRATING FACTORY "SVIATO-VARVARYNSKA"</p>	<p>Disadvantages identified:</p> <ol style="list-style-type: none"> 1. Functional specialization complicates the personification of responsibility for solving a complex problem. 2. Inefficient use of own repair forces. 3. Inefficient distribution and use of PMV. 4. Insufficient management of the process of technical maintenance and ongoing repair of equipment. 5. Specialization of repair forces and units.
<p>Stage 3. Development of the main principles of the management structure of the business maintenance and repair LLC "CONCENTRATING FACTORY "SVIATO-VARVARYNSKA"</p>	<p>Proposed principles:</p> <ol style="list-style-type: none"> 1. Division of tasks for managing production processes and ensuring equipment performance. 2. Transition from the form of maintenance of equipment according to the PMR to maintenance according to the actual technical condition of the equipment and proactive maintenance due to the introduction and gradual improvement of the equipment debugging and diagnostics bureau in the organizational structure of the service, as a result of which unplanned downtime of equipment was reduced.

Continuation of the table 1

1	2
	3. Organization and implementation of equipment maintenance and repair works based on the principle of service maintenance.
Stage 4. Comparison of merits and demerits of attracting external specialists and consultants to the enterprise.	Report on the expediency of involving external specialists.
Stage 5. Approval of the optimization model of the maintenance and repair LLC "CONCENTRATING FACTORY "SVIATO-VARVARYNSKA"	Approval of process connections of structural divisions and responsibilities of engineering service employees.
Stage 6. Evaluation of the results of the implementation of the optimized business process of the engineering service of maintenance and repair LLC "CONCENTRATING FACTORY "SVIATO-VARVARYNSKA"	Approval of the efficiency criterion of the optimized business process, its quantitative assessment. Efficiency criterion: The indicator of reduction of unplanned downtime of the main technological equipment

*Formed and improved according to [4]

The optimization of the business process of the engineering service of the LLC "SVIATO-VARVARYNSKA" CONCENTRATING FACTORY , according to the given algorithm of actions, made it possible to reduce unplanned downtime of the main technological equipment by 50% compared to previous years[4]. This happened thanks to a change in the form of service and the introduction of a diagnostics service into the maintenance and repair structure, which became the foundation for improving the business process of the engineering service of LLC "SVIATO-VARVARYNSKA" CONCENTRATING FACTORY.

Conclusions. Summing up the results of this study, we can come to the following conclusions. Modern enterprises, in accordance with the logic of continuous improvement, evolve, constantly develop in the pursuit of improving their activities and increasing stability in conditions of unpredictability of changes in the external environment. The successful functioning of the business entity is based on the implementation and quality performance of all components of the business process system, the individual effectiveness of which must be evaluated through a specific contribution to the achievement of the goals of the entire organization.

References

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