

**IMPROVING THE EFFICIENCY OF MANAGEMENT SYSTEM
OF MANUFACTURING COMPANIES OF A MARKET ECONOMY****Wenger O.M., Krainik O.M., Sergienko T.I.***Engineering Institute of Zaporizhzhia National University
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efficiency, system, effect, performance,
economic efficiency.

This article is devoted to the research into ways of increasing the efficiency of management in the industrial sphere at enterprises. Also, the essence of the concept of production activity and the concept of the effectiveness of the management system were explored. The article considers the indicators of economic efficiency in the industrial sphere at the enterprises in the conditions of a market economy. The main factors with positive influence on increasing of management efficiency in the conditions of a market economy were investigated. On the basis of the conducted analysis, the recommendations for improving the efficiency of management in the industrial sphere at the enterprises were given. Thus, the article has practical importance for domestic enterprises in the manufacturing sector and contains an improvement of theoretical developments in improving the efficiency of management in the manufacturing sector in enterprises in a market economy.

**ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ СИСТЕМИ МЕНЕДЖМЕНТУ
У ВИРОБНИЧІЙ СФЕРІ НА ПІДПРИЄМСТВАХ
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Україна, 69006, м. Запоріжжя, пр. Соборний, 226***Ключові слова:**менеджмент, виробництво,
підприємство, ефективність, система,
ефект, результативність, економічна
ефективність.

Статтю присвячено дослідженню шляхів підвищення ефективності менеджменту у виробничій сфері на підприємствах. Досліджено сутність поняття виробнича діяльність та досліджено концепцію ефективності системи менеджменту. Розглянуто показники економічної ефективності у виробничій сфері на підприємствах в умовах ринкової економіки.

Досліджено основні чинники, які позитивно впливають на підвищення ефективності менеджменту в умовах ринкової економіки. На основі проведеного аналізу надано рекомендації щодо підвищення ефективності менеджменту у виробничій сфері на підприємствах. Отже, стаття має практичне значення для вітчизняних підприємств виробничої сфери і містить удосконаленні теоретичні розробки щодо підвищення ефективності менеджменту у виробничій сфері на підприємствах в умовах ринкової економіки.

Statement of the problem

Today's reality indicates that in order to investigate the increase in the efficiency of management in the industrial sphere, it is necessary to investigate the increase in the efficiency of the enterprise production. The problem of determining the economic efficiency of production activity is associated with the introduction of management system in the production sector and the formation of the system of performance indicators of the enterprise in general. In this case, the definition of the overall efficiency of the management system in the production sphere at enterprises requires the study of many factors that directly affect the activities of the enterprise. The manner in which the production process of the enterprise is managed depends on its efficiency, profitability and competitiveness in a market economy. Therefore, the comprehensive research into ways of improving the efficiency of the management system in the production sector of enterprises in a market economy is quite complex, but at the same time it is highly relevant issue.

Analysis of recent studies and publications

The main features of the theoretical foundation for improving the efficiency of the management system were reflected in the works of national scientists, such as V.G. Voronkova [1], G.V. Osovska [2], R.A. Fathutdinova, N.Y. Podolchak, I.G. Shavkun [3], A.V. Shegda. The methodological guidelines for analysis of the indicators of increasing the economic efficiency of the enterprise have been studied by L.S. Zakharkina, R.A. Kushvaha, O.I. Yashchenko, I.A. Markina [4], V.V. Pryadko, I.M. Petrovich, G.V. Sovitskaya, A.A. Shershnev, A. G. Temchenko. Also, we note that the scientists of Zaporizhzhia School of Management have made a significant contribution to the study of this problem in the manufacturing sphere at enterprises, namely A.V. Cherep [5], N.K. Maksyshko, D.I. Babmidra, N.M. Proskurina, N.M. Shmygol, V.M. Gelman, Y.O. Kusakova, O.V. Shlyaga [6] and others. However, the unpredictability of the current economic environment of enterprises requires an in-depth study of ways to stabilize and maximize the efficiency of its operation.

Objectives of the article

The aims of the article are to improve the concepts of “efficiency” and to study the peculiarities of improving the efficiency of the management system in the manufacturing sector in enterprises in a market economy.

The main material of the research

Today’s reality shows that the conditions in which enterprises carry out their activities have changed in the specified manner. It has led to the introduction of the management system in the manufacturing sector in enterprises. On the one hand, enterprises are provided with economic independence; they decide themselves on procurement issues and marketing of products, determine the scale of production and the direction of using sources of funds. On the other hand, these enterprises are characterized by the high degree of deterioration of the active part of basic production assets, low-level of labour productivity, poor quality of products, and as a result unstable financial position [7]. Thus, the problem of increasing the efficiency of the enterprise management system is central to the conditions of the market economy, the solution of which depends on the place of the enterprise in industrial production, its financial status and competitiveness in the market.

Exploring the management system in the production sector, we note that the efficiency of production activity is the most important qualitative characteristic of management at all levels. By the economic efficiency of production, we understand the degree of use of the production potential, which is the ratio of the results to costs of social production. The higher the result at the same cost, the faster it grows per unit cost of socially necessary labour or the less the cost per unit of useful effect, the higher is the efficiency of production.

The production potential of the enterprise is a material prerequisite for the acceleration of scientific and technological progress. There is a relationship between them: the higher the techno-economic level of the elements of the potential and the degree of their use, the more powerful base (logistical) of scientific and

technological progress and the wider horizons of its implementation, more opportunities to improve and increase the size of elements of enterprises production potential. They mutually improve and develop each other [8].

To start examining the effectiveness of the management system, it is necessary to consider the categories of concepts such as “effect”, “efficiency” and “performance.” The term “effect” comes from the Latin word “result”. The category of “efficiency” can be interpreted as “performance”. The effect means the result, the effect of a change in the state of a particular object, caused by the action of external and internal factors. Thus, the effect is understood as the result of the implementation of measures in order to increase the efficiency of the enterprise through the economy of all production and labour resources [2].

With regard to the efficiency of production activity, this is an indicator of the activity of production on the distribution and processing of resources for the purpose of production of goods, which is defined as the ratio of output results to input resources or through volumes of output, its nomenclature.

Determining economic efficiency based on cost approach is the most widespread. However, some scientists prefer a resource-based approach. It takes into account all factors of production (fixed assets, working capital, number of employees), so it is theoretically suitable for assessing the level of overall efficiency.

In measuring the efficiency of resources, they may be represented either as their original (revalued) value (applicable resources) or as a part of their value in the form of production costs (production-consumed resources). If we take into account that the results of production are not only varied, but can also be represented in various forms — cost, natural, social — then it becomes obvious that the efficiency category must be identified in accordance with those aspects of the enterprises’ activity, which is important to analyse and evaluate (see Fig.1) [9].

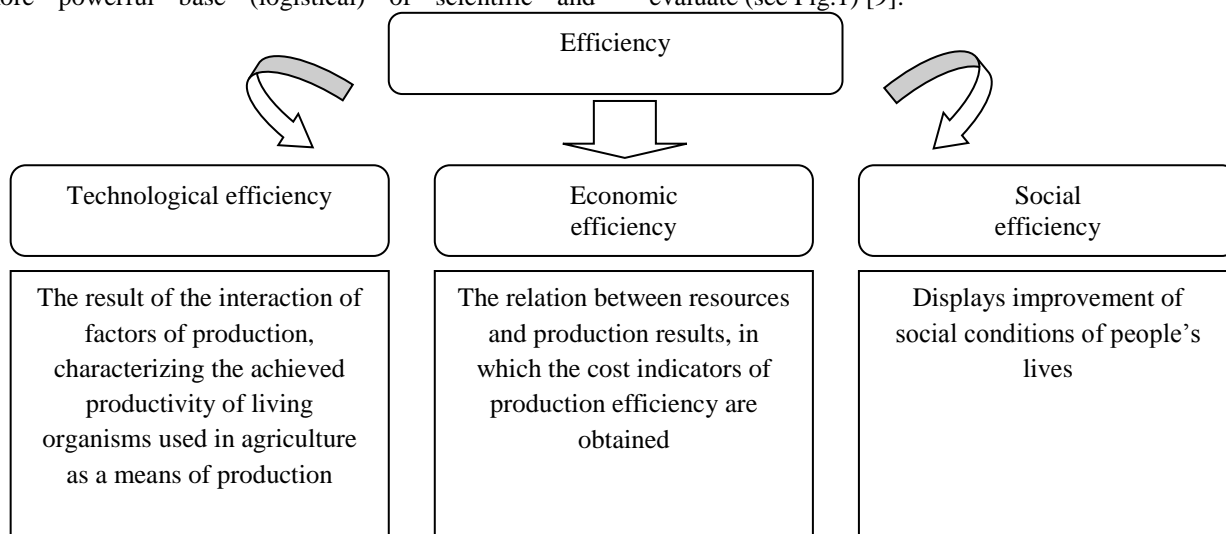


Fig. 1. The main types of production efficiency

Having examined the category of production efficiency, we can note that this category is complex and

multifaceted. There is no single definition of this concept. According to A. Grechko and B. Balagir, the efficiency is: “This category, which characterizes the

productivity of any costs, comprehensively reflects the final results of the use of means of production and labour resources.” The overall effectiveness can be presented as a composition of external and internal components. The distinction of the latter occurs on the basis of the functional differences of the integrated system of management of entrepreneurial activity. In this case, the external component is realized through marketing activity, and internal is realized in the system of production management. The concrete directions of realization of an external component of management efficiency become, under current conditions, such forms of marketing activity as the organization of advertising enterprises, the development of marketing policy, the formation of corporate style of entrepreneurship [10].

In foreign practice, the term “productivity of the production and service system” is commonly used to mean the efficient use of resources (labour, capital, land, materials, energy, information) for the production of various goods and services as a synonym for the term “economic performance” [11].

Also, we must note that the performance and efficiency of the management system of any sphere of activity depends on the systematic action of the employees of the functional services and departments, on the rational

distribution of powers and sharing of responsibilities between them, on the degree of perfection of administrative procedures, etc. [5]

With this in mind, the qualitative indicators that characterize the specifics of managerial work are used in order to assess the activity of employees of the administrative apparatus [12].

It should not be overlooked that the overall system performance is a concept much wider than productivity and profitability of production. The main feature of efficiency (productivity) may be the need to achieve the goal of production and economic activity of the company with the least cost of social labour or time [13].

The problem of improving the efficiency of production is to provide the maximum possible result for each unit spent labour, material, financial and other resources. Therefore, the criterion of the efficiency of production on a macroeconomic scale is the growth of productivity of social labour. The quantitative expression of this criterion is reflected through the system of indicators of economic efficiency of production. Table 1 represents the system of indicators of production efficiency [6].

Table 1 - Indicators of economic efficiency

№п/п	Name	Characteristic
1	General indicators of production efficiency	the level of satisfaction of the needs of the market, the production per unit cost of resources, costs per unit of commodity products, the profit per unit of total costs, profitability of production, the national economic effect of the use of a unit of production
2	Indicators of the efficiency of using live labor	the labour complexity of the product, the relative release of workers, the growth rate of labor productivity, the share of product growth at the expense of productivity growth, the coefficient of efficiency of use of working time, the savings of the wage fund, the output of 1 UAH wage fund
3	Performance indicators for the use of fixed assets	the return on capital assets, the return on assets of the active part of fixed assets
4	Indicators of the efficiency of the use of material resources	the material content of products, the material efficiency, the coefficient of use of the most important types of raw materials, the fuel and energy consumption by 1 UAH of pure production, material cost savings, the coefficient of extraction of useful components from raw materials
5	Indicators of efficiency of use of financial resources	the coefficient of turnover of working capital, the duration of one turnover of standardized working capital, the relative release of working capital, the specific investment, the investment per unit of installed capacities, the return on investment, the payback period of investments
6	Product Quality Indicators	the economic effect of improving the quality of products, the share of products that is consistent with the best world and domestic samples, etc.

Regarding production management, it is the most structured and clearly deterministic branch of operational management. In the production management, operations are subject to fairly rigid and more or less unambiguous planning of calculation and control. An essential organizing role in management is played by current control. Management of operations in the manufacturing sector begins with identifying the type of technology.

The depth of division of labour, the type of specialization and the cooperation of production determine the construction of the management structure of the operating system.

Operational management is formally represented as a field of management associated with the production of goods and services, which involves the use of specialized methods and techniques for solving production problems.

The scope of responsibilities of operational managers includes all activities of the organization, concerning the transformation of input resources into production output. In other words, it is the management in the process of creating goods (services), which is carried out at the level of operations from providing the organization with the necessary resources and during their transformation into finished goods (services).

The term "operations" is quite extensive and applies to industrial and agricultural production as well as the

provision of services by any type of organization (public, private, etc.).

The operational function applies to all actions resulting in goods, services offered by the organization on the market. Without this function, of course, no organization can exist. To implement the operating function, an appropriate operating system is created [14]. The main factors that positively affect the production activities of the company include five indicators [4], which are discussed in further detail in Table 2.

Table 2 - Five groups of factors that influence the production activity

№п/п	Name	Characteristic
1	Rational material management	The problem of saving and reducing the consumption of raw materials, materials, energy should be under constant control of the relevant specialists of enterprises with material-intensive and energy-intensive production. The task of saving resources at such enterprises can be positively solved by implementing waste and non-waste technology, increasing the output of useful products or energy per unit of used material, the use of cheap and low-grade raw materials, improving the quality of materials with the help of primary processing.
2	Technology	Technological innovations, especially modern forms of automation and information technology, have a great influence on the level and dynamics of production efficiency. On the principle of chain reaction, they cause significant changes in the technical level and productivity of technological equipment, methods and forms of organization of labour processes, training and qualifications of personnel, etc.
3	Use of equipment	This factor is one of the leading places in the program for improving production efficiency. The improved productivity of the existing equipment is facilitated by the proper organization of repair and maintenance, optimal terms of operation, ensuring the necessary proportionality in the throughput of technologically connected groups (units), accurate planning of loading in time, increasing the variability of work, etc.
4	Productivity	The main source and determining factor of increasing the efficiency of the enterprise's production activities are employees: managers, entrepreneurs, specialists, workers. The productivity of their work is largely determined by methods, techniques, personal skills, knowledge, attitude to work and the ability to perform one or another job.
5	Product compliance	For achieving high productivity of an enterprise, the usefulness of the product is not enough. Proposed by the company for sale, products must appear on the market in the right place, at the right time and at a reasonable cost. In this regard, the company must ensure that there are no organizational and economic barriers between production and individual marketing stages.

Conclusions

Summing up, we note that only a comprehensive study of the peculiarities of the management system in the production sphere can affect the growth rates of production efficiency. The study of the indicators of the efficiency of the management system in the industrial sector and the determination of factors of production efficiency are the most important tools for implementing the economic policy of the enterprise and key tools for substantiating management decisions, optimizing the cost of resources, improving price policy and increasing the competitiveness of the enterprise.

The problem of improving the efficiency of the management system in the production area and the

enterprise itself is to provide the maximum possible result for each unit spent labour, material and financial resources. The main factors of increasing the efficiency of an enterprise's management system in a market economy are to improve its technical level, management, organization of production and labour, change levels and patterns of production, improve the quality of natural resources and so on. Only the proficient use of the entire system of these factors can provide sufficient growth rates of production efficiency and improve the efficiency of the management system in the production sphere of the enterprise in a market economy.

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