

# **INFORMATION TECHNOLOGIES IN THE WORK OF THE MANAGER OF AN INDUSTRIAL ENTERPRISE**

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In modern conditions of globalization and digital transformation, information technologies play a key role in the functioning of industrial enterprises. Growing competition, dynamic market development and the need for effective resource management force companies to actively implement the latest technological solutions. Managers of industrial enterprises are faced with the need to quickly make strategic and operational decisions based on the analysis of a large amount of data. The use of information technologies in this area allows not only to increase the efficiency of management, but also to optimize production processes, improve communication between departments and minimize costs.

Information systems, automated platforms and data analysis software allow managers to receive the necessary information in a timely manner, predict possible risks and develop effective strategies for the development of the enterprise. In addition, the widespread use of cloud technologies, artificial intelligence and big data contributes to increasing the competitiveness of companies, allowing them to quickly adapt to changes in the external environment.

This report considers the main information technologies used in the work of managers of industrial enterprises, their impact on the efficiency of management and prospects for further development in this area.

The use of modern electronic computing and information technology in economic processes, and especially in management, significantly improves the forms and methods, reliability and efficiency of management in general. Computer complexes united by a network are especially useful in the functioning of information systems in organizations and institutions.

The effective activity of a manager is impossible without high-quality information support, which includes the collection, processing, analysis and use of data for managerial decision-making. Information is a key resource in today's business environment, and its proper organization helps to increase productivity, optimize business processes, and ensure the competitiveness of the enterprise. The use of modern information systems and technologies allows managers to quickly respond to changes, analyze the market and effectively manage resources.

Information technologies play a key role in the modern management of industrial enterprises. They provide effective planning, control, analysis and optimization of production processes, which increases the competitiveness of the enterprise.

The main areas of application of information technology in industrial production primarily include the automation of business processes, in particular, the use of ERP systems (SAP, Oracle, 1C), which allows you to centrally manage resources, finances, production and personnel. Production management systems (MES) are an important direction of informatization of production processes at any enterprise. MES systems assist in real-time monitoring of production operations, allowing for flexibility and quick

response to changes.

Recently, a lot of attention has been paid to analytics and big data (Big Data). The use of analytics tools (Power BI, Tableau) allows managers to make informed decisions based on the processing of large amounts of data. The use of cloud services (AWS, Google Cloud, Azure) provides access to data from anywhere in the world, increasing the mobility and productivity of managers [3, 5, 9]. Internet of Things technologies help in automating accounting, diagnosing equipment, and predicting malfunctions.

Information technology plays a key role in improving management efficiency at all levels – from small businesses to large corporations and the public sector. They provide automation of processes, improve communication, facilitate quick decision-making and increase the transparency of managerial actions. IT systems allow you to automate routine tasks such as accounting, personnel management, document management, and logistics. This reduces the number of errors and speeds up the execution of operations. Modern information systems (ERP, CRM, corporate messengers) provide a quick exchange of information between employees, departments and partners. This contributes to operational management and more efficient allocation of resources. Information technology allows executives to use analytical tools, artificial intelligence, and big data to make informed decisions. This reduces the impact of the human factor and increases the accuracy of forecasts. Modern information technologies provide effective monitoring of the activities of organizations, which increases the responsibility of employees and reduces the risks of fraud. Information technologies contribute to a quick response to market changes, economic challenges and consumer needs. Cloud technologies, mobile applications, and online platforms allow companies to work efficiently even remotely.

The use of information technology in the activities of the manager of an industrial enterprise is a necessity to achieve efficiency, competitiveness and stable development. The use of modern IT solutions allows you to optimize business processes, improve control and analytics, which has a positive effect on the overall productivity of the enterprise. Information support is the basis of successful management, as it contributes to making informed decisions, increasing work efficiency, and achieving the company's strategic goals. The use of digital technologies, automated management systems, and analytical tools allows managers to quickly adapt to changes and improve business processes.

Thus, in the conditions of market relations, in the functioning of the system of automated collection and processing of information, within the framework of which the system of objective information support of management operates, there is an opportunity to significantly improve the quality and efficiency of development and adoption of managerial decisions, as well as:

- to apply new methods of management (management by deviations), aimed at simplifying it and improving the quality of management;
- to simplify the organizational structures of management objects due to the elimination of intermediate links, for example, the shop structure at industrial enterprises;
- to provide, in the rhythm of production, managers and specialists of different levels through the screens of their personal computers (or on other media) with objectively necessary information (by the method of automatic or automated informing), in accordance with their powers, functional duties and official rights and the degree of responsibility;
- use relevant initial (result) information for analysis, development and

management decision-making. At the same time, in the initial forms of the result information, there is already an elementary analysis of data (absolute and relative values — deviations, averages, comparison, grouping, application of the balance method and index analysis, etc.), which are necessary for the development and adoption of specific management decisions;

- to free managers and specialists of various levels from the routine work of collecting, storing and processing data and their elementary analysis, and to allow them to focus on creative work and control over the implementation of managerial decisions.

In addition, there is an opportunity to improve primary accounting, compile consolidated reporting due to its automation, etc. This:

- reduction by 80-85% of manual labor in the automated collection of primary factual information at the places of its mass occurrence. At the same time, it is possible to enter a minimum of necessary information into the primary document, and get the maximum when processing it;

- simplification of forms of primary documents when they are automatically filled out by excluding derived indicators, intermediate totals, etc.;

- to compile consolidated reports automatically on the basis of primary information, as well as to significantly improve its forms, the information of which is transmitted through communication channels to higher subordinate institutions;

- to combine three types of accounting (operational-technical, statistical and accounting) into a single economic one, since all primary information is collected at a time in the rhythm of production, from single sources, and therefore is unified and is also used in management processes.

There are other benefits from the use of computer and information technology in the process of management at an object where this or that automated information system operates. These systems with networks are constantly evolving, improving, etc.

The development of information technologies has become a determining factor in the successful activity of industrial enterprises in the XXI century. The use of modern digital solutions allows you to significantly increase management efficiency, optimize production processes and improve coordination between structural units. Managers who actively implement information technology in their activities receive significant benefits, including increased speed of decision-making, reduced operating costs, and the ability to respond flexibly to market challenges.

Cloud computing, big data, artificial intelligence, and automated management systems are becoming indispensable tools for managers, helping them increase the productivity of enterprises. At the same time, the effective use of these technologies requires appropriate qualifications and continuous improvement of knowledge in the field of digital innovation. In general, information technologies not only change approaches to the management of industrial enterprises, but also contribute to their sustainability and competitiveness in the modern economic environment. Further development of this area opens up new opportunities for optimizing business processes and ensuring the sustainable development of companies in the market.

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