

# THE IMPORTANCE OF DIGITAL TECHNOLOGIES IN ENTERPRISE MANAGEMENT

**Kravchenko Vladimir Vladimirovich,**  
**Director of “Digital economy research centre”**  
**Uzbekistan**

**Аннотация.** Ушбу мақолада корхоналар бошқарувида рақамли технологияларнинг ахамияти тўғрисида фикр-мулоҳазалар юритилган. Корхоналар бошқарувида рақамли технологияларнинг ривожланиш истиқболлари ўрганилган ҳамда хулоса ва таклифлар ишлаб чиқилган.

**Калит сўзлар:** рақамли технологиялар, корхона, бошқарув, телекоммуникация, функция.

**Аннотация.** В данной статье рассматривается важность цифровых технологий в управлении бизнесом. Изучены перспективы развития цифровых технологий в управлении предприятием и разработаны выводы и предложения.

**Ключевые слова:** цифровые технологии, предприятие, управление, телекоммуникации, функция.

**Abstract.** This article discusses the importance of digital technologies in enterprise management. Development prospects of digital technologies in enterprise management were studied and conclusions and proposals were developed.

**Key words:** digital technologies, enterprise, management, telecommunications, function.

At the new stage of enterprise management, modern digital technologies are considered as the main production resource determining the growth of social welfare. First of all, the use of modern computer and information systems by enterprises of the real sector of the economy is the most important condition for their effective operation in the digital economy.

Issues of widespread use of digital technologies in management by Decree of the President of the Republic of Uzbekistan No. PF-6079 of October 5, 2020 “On approval of the “Digital Uzbekistan – 2030” strategy and measures for its effective implementation” established, including the creation of a unified state information

management system, the creation of all the resources necessary for the collection and digitization of information in public administration, the automatic formation of informed decision-making, the adoption of management information tasked with improving the support system, including by introducing a real-time business analysis system<sup>1</sup>. In addition, by the decision of the President of the Republic of Uzbekistan dated August 22, 2022 "On measures to bring the field of information and communication technologies to a new level in 2022-2023" PQ-357, the management system of enterprises ( Implementation of ERP) modules and filling with additional functions, management of employees and calculation of income, management of sales, organization of maintenance activities, monitoring and analysis of enterprise activity indicators are put forward<sup>2</sup>.

Korxonani raqamlashtirish zamonaviy ishlab chiqarish usullariga asoslangan holda texnologik jarayonlarni va boshqaruvning barcha darajalarida qaror qabul qilish jarayonlarini boshqarish sifatini keskin o'zgartiradi va korxonada faoliyati samaradorligi va barqarorligini oshirish uchun eng muhim omillardan biri hisoblanadi.

In general, the enterprise management process is a set of purposeful actions to coordinate the joint activities of employees to achieve the set goals of enterprise management and management apparatus. According to the procedure of implementation of management activities, it can be divided into the following stages: goal, situation, problem and decision-making. Before making any influence in enterprise management, its purpose should be determined, because management is carried out to achieve a certain goal.

The IT industry is actively developing. More and more aspects of human and social life are associated with it. Enterprise management is no exception. Businesses use a large number of solutions to achieve their goals. Information systems and technologies (IT) in the field of organization management are methods that allow

---

<sup>1</sup> From the Decree of the President of the Republic of Uzbekistan dated October 5, 2020 on the approval of the "Digital Uzbekistan – 2030" strategy and measures for its effective implementation.

<sup>2</sup> From the decision of the President of the Republic of Uzbekistan dated August 22, 2022 No. PQ-357 "On measures to bring the field of information and communication technologies to a new stage in 2022-2023".

you to effectively plan, share data, control deliveries, and perform other actions aimed at optimizing work processes and maximizing profits. They are performed on the basis of computers or other equipment.

There are various definitions of the concept of IT. We can say that this is a set of processes for creating, storing, and disseminating information. Traditionally, it is customary to identify this industry with the use of computers. This is due to the fact that with their introduction, this area began to develop much faster. However, it is not limited to electronic devices. Tools for fixing data and their further exchange have been known since antiquity. These are books familiar to every person and their early analogues: papyri and clay tablets.

The purpose of using information technology (IT) in the enterprise is to solve problems in the management of objects and processes. With the help of writing, it was possible to significantly expand the opportunities for construction, crafts and agriculture. Records helped our ancestors keep records and share experiences among themselves. In the 19th century there was a breakthrough in this area. In addition to the already indicated means, new ones began to appear - typewriters, gramophones and records for them. From the beginning of the 1940s, electronic instruments began to be produced - the first computers, electric players and voice recorders. The methods familiar to us began to be applied in the 90s. Now the task of IT in the global sense is the same, only now to do it faster, more conveniently and more efficiently.

In our time, it is difficult to overestimate the role of the use of information technology in enterprise management, as well as in other sectors of public life. There is a trend towards significant changes in all areas where human resources are present. Company managers try to optimize all processes as much as possible and increase profits.

This is one of the many areas in which the technologies described in the article are involved. To ensure the smooth operation of the department, the heads of small offices are consistently implementing data collection and processing systems. They have several basic functions. Among them:

accounting for the number of existing employees;  
fixing payroll operations;  
human resources management - search for candidates for positions, training,  
conducting internships.

If we are talking about a larger firm, then information technology in management activities covers management at all levels: tactical, strategic, and also operational.

There are a number of parameters that software must meet if its goal is to optimize the work of the personnel department. Some of them:

high degree of protection against access by unauthorized persons;  
user-friendly interface;  
fast data processing in real-time mode;  
the ability to function in a local network or the Internet;  
ranking rights depending on the position and authority of employees.

Today, there are a large number of products from different manufacturers on the market. But before purchasing, you need to make sure that the program meets the above requirements. Otherwise, it will not be able to perform the tasks assigned to it. After we figured out what information technology is in management, we need to understand the categories into which they are divided.

This group includes all IT that has been created by man and used for various purposes. Allocate:

Telecommunications - mobile communications, Internet, cable and satellite TV.

Text - for example, automatic speech recognizers that record it in printed form.

Graphic - work with images: photo editors, software for drawing and modeling.

Multimedia - simultaneous processing of picture and sound.

Databases are used to store and process information.

Internet - mail clients, instant messengers, websites.

Software - software development.

Server - connection of users.

Protective - prevent leaks and theft of traffic.

artificial intelligence - teaching a machine how to think.

A common characteristic of information management technologies is versatility. IT is applied in all areas of industry as well as in everyday life.

Nowadays, they are actively used to transfer, receive and accumulate knowledge. Various means are used for this. For example, the Internet. Now online courses and distance learning are actively gaining popularity. Large databases are used for storage.

In addition, with their help, you can fully manage the educational process. They allow teachers, principals and school managers to maintain two-way communication with parents, store grades, and create communities within the institution.

The financial sector is also affected by IT. There are many examples. Here are some of them:

Computer technologies in business process management. Their job is that they analyze the financial condition of the company, accounting for goods, costs and other parameters.

Data protection, leak prevention. For example, through coding.

Expert systems accumulate knowledge in a certain industry, and then suggest a solution to the problem based on it.

Reference and legal - provide consulting services on a variety of issues. The most famous are Consultant Plus, Guarantor and so on.

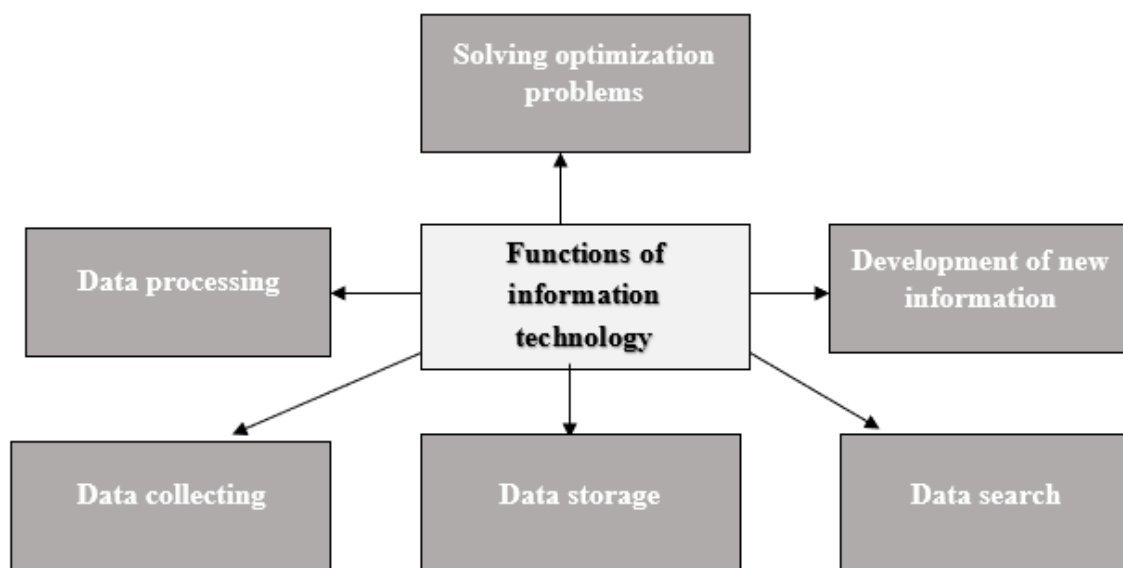
Corporate information technologies in production management. This group includes those intended for resource planning, supply management, implementation, and monitoring of all indicators.

Support - with their help, the search for a way out of certain situations is carried out.

This is another area where IT is actively involved. They are necessary due to the fact that enterprises in this area are divided into a large number of departments. Each of them uses their own communication structures. Companies of this profile use a large number of control systems and computer technologies. Among them:

- cellular;
- Internet;
- control and accounting of expenses;
- billing;
- and others.

First of all, it is the search, processing and storage of information. Separately, it is necessary to make a reservation that the list of IT appointments includes not only work with old data, but also the constant creation of new ones. It is necessary to make managerial decisions. The costs that go to their development and gradual implementation pay off through automation and optimization. As a result, the company's income increases. In the following picture, we shall see the functions of information technologies.



There are several basic concepts according to which they are used in production. Among them:

- Operational regulation - this means that it is carried out in real time.

End-to-end administration - support for the full cycle of management. If we take a specific object, then first data is collected about it, then its state is predicted after a certain time period, a plan is drawn up, and potential performers are informed. The last step is to check the execution of the task.

Adaptability is the principle that process control systems and information technology adapt to existing conditions.

Network regulation is a concept according to which the vertical and horizontal directions of the company's work are distinguished.

Based on the above pillars, IT is beginning to take on the role of an intelligent pipeline. It helps to automate part of the management. As a consequence, this leads to a significant reduction in costs that can arise due to poorly tuned control mechanisms. Proper implementation and use will help to significantly increase the profit from commercial activities.

Today, in the practice of managing large companies and corporations, there are a number of IT. Among them:

Resource planning (ERP) is a database that allows you to manage business processes. It works on the basis of a single application with the same interface. It covers a number of areas. These include: drawing up plans and forecasts, sales management, administration of the release of goods, purchases.

Customer Relationship Management (CRM) is a management information technology that allows you to build relationships with customers as well as with business partners. With its help, you can automate part of the work of the marketing department, call center, and so on. Such a decision has a positive effect on the income received at the end of the month and the profitability of the entire company.

Support for analytical activities (BI). The system is designed to store the data that was obtained as a result of the analysis. Another task that they have is their subsequent processing.

This category includes non-closed systems that are used in the management of the company. Allocate:

Supply chain management (SCM) - used in the process of creating complex goods. The peculiarity is that components have to be ordered from several different suppliers. In order to avoid interruptions in production, it is important that all items are delivered to warehouses promptly. The specified IT allows you to calculate and track the supply at all stages.

Material Resource Planning (MRP) - with their help, the corporation's management carries out the acquisition, manufacture, and sale of products.

Human Resources Management (HRM) - systems are engaged in the search for potential employees, as well as monitoring their activities.

The modern field of recruiting is no exception - it is also actively introducing new solutions that help automate their work and reduce costs. Such IT is divided into the following categories:

Electronic directories - they contain useful information about many industries. For example, a list of laws. Consulting bases are popular. They can also contain high-quality and interesting information on any other topic. They will come in handy in the process of completing the tasks.

Software that serves to automate some fronts of the company's activities;

Complex solutions and individual parts that they include;

Specialized information management technologies.

This category includes information technology designed to solve functional problems if the company employs a large number of personnel. In such cases, the manager needs to carry out more careful and thoughtful monitoring.

The programs described in this subsection are able to satisfy any customer's needs, even if they are complex from a technical point of view. Such requests include:

organization management;

control of existing employees, evaluation of their performance;

maintaining the circulation of all documents related to personnel;

calculation of accrued wages for each employee;

recruiting;



conducting analytics.

In conclusion, the development of organizational management information technologies makes it possible to make personnel records operational and process data in real time. In addition, the possibility of human error is now much lower due to the introduction of new approaches. If flaws have already been made, with the help of modern tools it is much easier to correct them. When using the described systems, it is possible to cover all areas of activity within the organization as much as possible. The main reason is a single space in which decisions are made.

## References

1. Decree of the President of the Republic of Uzbekistan dated October 5, 2020 on the approval of the “Digital Uzbekistan – 2030” strategy and measures for its effective implementation.
2. Decision PQ-357 of the President of the Republic of Uzbekistan dated August 22, 2022 “On measures to take the field of information and communication technologies to a new level in 2022-2023”.
3. Goncharenko L.P. Risk management: a manual / Ed. Dr. Sci., honored. Scientist of Russia EA Oleynikov, LP Goncharenko, SA Owl. - 2 - ed. sr. – Moscow KNORUS, 2007.
4. Jumanova S. Digital economy: the path to development. //New Uzbekistan, January 28, 2020, issue 2.
5. Gulyamov, S.S. and b. (2019). Blockchain technologies in the digital economy. - T.: Economy-Finance. 396 p.
6. Kurpayanidi, K., Ilyosov, A. (2020) Problems of the use of digital technologies in industry in the context of increasing the export potential of the country// ISJI Theoretical & Applied Science. p. 113-117.
7. Abdullayev, A. M., & Kurpayanidi, K. I. (2020) Analysis of industrial enterprise management systems: essence, methodology and problems. Journal of Critical Reviews, 7 (14), 1254-1260. <https://dx.doi.org/10.17605/OSF.IO/E6JFS>.
8. [https://en.wikipedia.org/wiki/Digital\\_economy](https://en.wikipedia.org/wiki/Digital_economy)
9. [www.mitc.uz](http://www.mitc.uz).
10. [www.google.ru](http://www.google.ru).