

**СТАЛИЙ ЕКОНОМІЧНИЙ РОЗВИТОК:
ІННОВАЦІЙНІ ПІДХОДИ ТА СТРАТЕГІЧНІ
ПЕРСПЕКТИВИ**

КОЛЕКТИВНА МОНОГРАФІЯ



МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ РАДІОЕЛЕКТРОНІКИ

Кафедра економічної кібернетики та управління економічною безпекою

СТАЛИЙ ЕКОНОМІЧНИЙ РОЗВИТОК: ІННОВАЦІЙНІ ПІДХОДИ ТА СТРАТЕГІЧНІ ПЕРСПЕКТИВИ

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Монографію присвячено дослідженню особливостей функціонування соціально-економічних систем в контексті цілей сталого розвитку. Висвітлено проблеми господарювання економічних агентів на всіх рівнях управління в умовах цифрової трансформації та протидії гібридним загрозам, питання забезпечення економічної безпеки окремих підприємств, галузей, регіонів та країни в цілому. Монографія є результатом теоретичних і практичних досліджень з удосконалення методологічного та науково-методичного забезпечення функціонування соціально-економічних систем на мікро-, мезо- та макроекономічному рівнях.

Монографія призначена для науковців, викладачів, здобувачів всіх рівнів вищої освіти, фахівців, професіоналів-практиків, які займаються дослідженням механізмів функціонування соціально-економічних систем, напрямів цифрової трансформації в умовах протидії гібридним загрозам, забезпечення економічної безпеки підприємств, галузей, регіонів та країни в контексті цілей сталого розвитку.

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INFORMATION TECHNOLOGIES AS A COMPONENT OF THE SOCIAL AND COMMUNICATION SUPPORT OF AN ORGANIZATION

Trends in the development of the modern information society lead to a reorientation of organizations to the use of information technologies in their activities. Organizations' modern computers and information systems are essential for effective functioning in the digital economy.

To improve the strategic management of business processes, more and more attention is paid to network tools that allow organizations to form profitable information spaces. Organizations that use the latest knowledge and information technologies can dramatically improve their socio-economic status. Therefore, the introduction of information innovations into the activities of organizations becomes simply necessary.

The systematization of accumulated knowledge and foreign experience in the theory and practice of applying modern information technologies in various fields of activity was carried out by such scientists as O. Tomashevsky, M. Viter, A. Shevchuk, P. Klimushyn, A. Serenok, O. Hrytsunov, M. Ozhevan, S. Hnatyuk, T. Isakova, D. Dubov and others.

However, their scientific works need to pay more attention to the use of information technologies to form the social and communication support of the organization. With the help of information technologies, it is possible to more effectively overcome the uncertainties of the market environment, manage business processes, and achieve high efficiency of the organization's activities.

The purpose of this study is to analyze the features of the use of information technologies to form an organization's social and communication support.

The definition of information and communication technology is often associated as a synonym for information technology. However, information and communication technology is a more general term that emphasizes the role of unified technologies and the integration of telecommunications (telephone lines and wireless connections), computers, firmware, software, storage, and audiovisual systems that allow users to create, access, store, transmit and modify information.

Information and communication technology comprises telecommunications, media broadcasting, audio and video processing, transmission, network management, and monitoring functions.

Today, information technologies have begun to influence the daily activities of any organization actively and have become an integral part of the information infrastructure of this organization. Information technologies allow you to explore and interconnect the components of the organization's activities with each other. They are developing at an extremely rapid pace and capturing ever more expansive areas of activity so that any competitive activity in the future can only be formed with a detailed analysis of the possibilities of using information technologies.

When implementing information technologies in the management of modern organizations, the following obstacles can be identified [1]:

- the difficulty of studying rapidly changing information flows due to the increased export orientation of a significant number of organizations;
- the difficulty of developing and implementing information and software systems for business management automation due to the migration of IT personnel and lack of financial resources;

- there is a small number of managers who understand the practicality of using information technology to improve administrative tasks;

- the possibility of constant use of information technologies in the organization and provision of mobile assistance.

The implementation of information technologies in an organization will provide the following positive aspects [2]:

- 1) saving resources (primarily labor and time) and increasing efficiency;

- 2) adding time to resolve urgent issues that are directly related to achieving the organization's goals;

- 3) facilitating the exchange of information and project work and accelerating the organization's document flow;

- 4) more effective planning and implementation of both the organization's general strategy and its marketing, financial, and human strategies;

- 5) facilitating brand promotion and simplifying the process of interaction with the target audience will help control financial costs;

- 6) forming a comprehensive analysis tool that does not require effort to write reports;

- 7) providing the ability to integrate many software, etc.

Information technologies in business have the following properties that are useful for the management of an organization [3]:

- helping to bridge the gap between economics and mathematics;

- are the most effective mediator of modern methods for solving economic problems;

- contributing to the harmonization of economic procedures and international requirements;

- enable new means of collecting, transmitting, and processing information, ensuring increased optimization and streamlining of administrative functions.

The material basis of modern information technologies is three main technical achievements:

- the emergence of a new environment for storing information on physical media (magnetic tapes, microfilms, magnetic and optical disks, semiconductor devices, etc.);

- the development of communication means that ensures the delivery of information to almost any point on the globe without restrictions in time and space and mass coverage of the population using communication (radio, television, data transmission networks, satellite communication, telephone network);

- the possibility of automated data processing using a computer according to a given algorithm.

Information technology is distinguished by its functional properties. Administrative functions, including sales and marketing, service delivery, financial management, accounting, and human resources, are performed through their information systems. In large companies, each function's subfunctions also have their information systems. For example, a service function may have systems for inventory management, service process management, and materials cost planning.

An organization's information and organizational design may consist of computer reservation systems, videoconferencing systems, video systems, computers, information management systems, electronic information systems, electronic money transfers, telephone networks, mobile communications, etc.

Information reorganization and organizational design can significantly increase employee productivity and often require the release of personnel from routine tasks.

At the level of operational activities, the following tasks are solved: preparation of regular control reports on the status of data processing, data storage, obtaining answers

to requests on various open topics, and processing them in the form of paper documents or reports [4].

A robust infrastructure and methodology for building an information system helps achieve high efficiency in modern organizations. At the same time, the development of information systems reflects the need for business improvement.

This provides access to innovative service tools, increasing work efficiency, developing new business niches, analyzing internal business processes, optimizing, formalizing, and describing business processes, preparing project documentation, automating business processes, and implementing and supporting software products.

An information system is a set of technologies, software, organizational support, and personnel designed to provide timely information [3].

An information system is a set of software, organizational, information, and technical means combined into a single system for collecting, storing, processing, and publishing information related to a specific function.

An information system should cover all phases of the management process: planning, operations, accounting, and analysis. This provides a comprehensive approach to managing the organization's resources and sources [5].

Before deciding whether to use information technology in an organization, one should analyze the current business processes of that organization, understand the challenges faced by the relevant stakeholders, and then embark on digital transformation.

The digital transformation process of a business is very complex. It requires knowledge from various fields, such as computer science, engineering, cognitive science, information systems, management, business process management, etc. [6].

With the help of information technology, it is possible to successfully manage projects, establish reliable communication between participants, detect and respond to deviations promptly, document all project stages, and achieve rapid control.

In addition, the tasks of these systems include, among others, the organization of discussion groups and chat channels, remote file storage, and storage of decisions and information of stakeholders.

Current trends indicate that information technology is becoming increasingly widespread for simplified access to project information and effective communication between project team members [7].

To remain competitive in the evolving and rapidly changing market conditions and to apply new technologies and solutions, enterprises need to use all the advantages of the latest information technologies. To successfully solve problems related to information technologies, enterprises must invest in constantly updating their systems and making regular improvements.

This approach allows us to maintain a high level of qualification and reliably avoid any losses of work efficiency. The active implementation of information systems in business management will enable the organization to keep the necessary level of competitiveness despite difficult circumstances.

At the same time, using information technologies in business management increases the competitiveness of any organization by improving management efficiency and adaptability to changes in the market environment [3].

The effectiveness of information technologies depends on their skillful application, their impact on increasing the productivity and quality of managers' work, and on reducing the cost of informatization through optimal design.

New information technologies and information analysis systems that will be implemented in organizations will directly increase labor productivity, especially in the

field of intellectual work and management, and their implementation will have a significant impact on the economic development of organizations [3].

The basis of the new modern information technology, which is based on the widespread use of personal computer technology, are three main principles [1]:

1) integration, which provides a comprehensive approach to solving tasks by combining the capabilities of both technical and software tools;

2) flexibility, which allows you to dynamically and with little effort perform the tasks;

3) interactivity, in turn, allows you to reconfigure tasks that consider specific requirements dynamically.

Implementing information technologies in organizations is a system of measuring organizational and economic nature.

An integrated approach to implementing information technologies in organizations makes it possible to unite all structural divisions into a single information space, organize more accurate cost accounting, improve cost and deviation analysis methods, and ensure proper management [8].

Modern information technologies aim to increase the automation of all information processes, which is the basis for accelerating scientific and technological progress.

Information technologies allow you to effectively combine the technical capabilities of computing, telecommunications, and computer science. They aim to collect, accumulate, analyze, and deliver information to consumers (scientists, engineers, managers, doctors, economists) regardless of the distance to the sources and volumes, automate monotonous operations of the management process, and prepare analytical information for decision-making.

The widespread use of modern information technologies in the organization provides operational access to the most remote sources of information, including sources of the external environment; high-quality electronic communication, which best and fastest approaches the ideal; creation of opportunities for vertical and horizontal interconnection of the management activities of all levels of enterprise managers; functioning of a single information environment of the organization, which will allow to cover multifunctional activities in a single complex.

Thus, information technologies penetrate both professional activities and private life. They affect the international trade balance, employment levels, and politics. As the information society develops, a robust information technology industry emerges, designed to meet the needs of this society. The information technology industry generates new types of information products and means of delivering them to consumers. It is determined that one of the most effective tools for combating competition is the implementation of modern information systems in organizations. The positive aspects that implementing information technologies in the organization will allow to obtain are highlighted.

It is revealed that the active implementation of information systems in business management will enable the organization to maintain the necessary level of competitiveness despite difficult circumstances.

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