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## **INTRODUCTION OF DIGITAL TECHNOLOGIES INTO THE ECONOMY**

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Annotation: The article discusses the trends and features of the development of digital technologies. The main directions of digitalization development in the world are described. Globalization, changing consumer behavior, transition to a networked digital economy: speed and mobility, digitalization are the trends of our time, encouraging companies to search for new competitive business management models. Information technologies are rapidly transforming corporate principles of human resource management (HRM).

Keywords: digital technologies, globalization, commerce, security.

Digital economy is a system of economic, social and cultural relations based on the use of digital information - communication technologies. The development of digital technologies is one of the most important factors of economic growth, which becomes possible thanks to the automation of existing processes, the introduction of fundamentally new, breakthrough business models and technologies, such as digital platforms, digital ecosystems, in-depth analytics of large amounts of data, robotics, they also serve as a mechanism for social elevators, contributing to increased accessibility, quality and convenience receiving services in such areas as medicine, education, state and municipal services, culture. Digital transformations make it possible to create comfortable and safe conditions for city life based on "smart" technologies, and digital platforms create new opportunities for human employment, help develop additional skills and improve qualifications, especially for people who previously did not have such opportunities due to social or geographical restrictions,

contribute to the emergence of new ones related to digitalization, professions and high-paying jobs. The whole world is covered by the idea of digital change.

Services are easier to digitalize, and its impact in trade, in the financial industry, public administration, and education is also visible. However, this is also promising for business. The digital economy has a lot of positive aspects. It reduces the cost of payments and opens a new income list. In online mode, the prices of services are lower than in a conventional economy (primarily due to a reduction in funds for promotion). In addition, goods and services in the digital society have high the chances of entering the global and global market, becoming accessible to people in every part of the world. In the multidimensional world of digital technologies, one often hears about the digital economy or, as it is also called in Western literature, the economy of "digitization". And the digital transformation taking place in it is a process of global expansion of information and communication technologies that lead to the integration of all spheres of the economy. The foundations of the modern binary number system were laid by mathematician Karl Leibniz in the XVII century. In the twentieth century, it began to be used for software computing: in 1941, the first computer appeared, and in 1948, the first computer program. Then, in the middle of the XX century, digital technologies were understood as those where information is converted into an intermittent (discrete) data set consisting of 0 (no signal) and 1 (there is a signal). They were contrasted with analog ones, where data is a continuous stream of electrical rhythms of different amplitudes with an unlimited number of values. But later this was replaced by another definition: digital technologies are those where information is "digitized", that is, it is presented in a universal digital form. Another option is all the technologies that allow you to create, store and distribute data.

Modern society is rapidly changing under the influence of various innovative digital transformative technologies. "Digitalization as a modern approach to development implies not only the installation of high-tech equipment and the

introduction of software systems, but also fundamental changes in economic processes, business models and management tools.

The latest "digital technologies play an important role in stimulating the economic growth of countries and integrated macro-regions, while the digital economy is growing many times faster than the traditional economy. Most of this growth is based on and supported by modern technologies, including rapidly developing information and telecommunication technologies (ICT). Digitalization "creates certain conditions that require a number of skills from a person for high-quality coordination of interaction, for example, the ability to work with information and communication technologies, to use new opportunities of the digital space for professional and personal needs. Digitalization as a key aspect of the digital economy based on the use of data consists in the use of digital technologies (information and communication (ICT), computer) to significantly improve business performance: increase labor productivity, customer service quality, optimize operations or formation. Electronic commerce, Internet banking and other modern trends are developing day by day. Today, the task of ensuring the security of people, companies, and the state becomes possible due to the high level of development of digital technologies and the availability of highly qualified specialists in the use of artificial intelligence, machine learning, and cryptography.

The digital economy consists of three main elements:

1. Infrastructure elements (equipment and programs, telecommunication devices, etc.).
2. The direction of electronic business.
3. The direction of e-commerce (trade in goods online).

The main types of digital technologies, which are represented by a list of the leading directions of development and use of data, include:

1. *Internet of Things (IoT – Internet of Things);*

Let's make it a little clearer, according to the concept of space (IoT), presented by Rob Van Kronenburg, a thing is any virtual or real object that exists, moves and can be uniquely determined. Therefore, the Internet of

Things is a paradigm that combines many technologies and involves equipping with sensors and connecting to the Internet all devices and things used (smart home, smart household appliances and machines), which allows you to implement remote monitoring, control and management of processes in real time. It is planned that in the near future things will be able to exchange information, which will allow us to talk about the automation of interchange processes on the lines of various conveyors, in repair systems, when delivering goods to consumers and in other areas of the economy.

2. *Digital technologies.*

The field of digital technologies in human resource management is currently at the stage of origin, formation, formation, which does not allow for an objective and in-depth analysis of the scientific definition of HR - Digital.

3. *HR processes.*

HR processes include the interaction of employees among themselves, the exchange of experience, the transfer of knowledge. This is a complex process, which is one of the main tasks of a human resource management manager. The modern program "human research manager" – HR manager, helps to solve the tasks facing the specialist: organization of a clear and well-coordinated work of the company's workforce; training and trainings of the company's personnel; identification of the motivation of the organization's employees with an individual approach to each employee. The use of high-tech HR practices has a positive economic and social effect. A smart enterprise can identify and identify the scope of activity, configuration parameters and production conditions, as well as independently and remotely communicate with other equipment and special adjustments are made to the workflow of people so that the machine adapts to human work. For a modern HR professional, it is important to be able to manage the constant process of change, relying on technology.

4. *Machine learning and Artificial intelligence.*

ML and Artificial intelligence is a set of methodological approaches and tools thanks to which powerful computer systems can find data in their memory arrays that might not have been initially assumed, since their new relationships and patterns were not known. This means that machine learning can occur in the process of solving a significant number of similar and figuratively similar tasks. Artificial intelligence allows us to effortlessly translate information from one language to another, allows us to recognize speech and immediately make it into typewritten text, develop algorithms for correct decisions, etc. The modified version of this Cognos Analytics service includes managed data discovery, automated predictive analysis and cognitive capabilities, which allows you to extract value from big data using predictive, behavioral and other advanced analytics. Artificial intelligence is a trainable computing structure that differs from human, the ability to think, only in a narrow specialization and the absence (so far) of the ability to spontaneously switch between mental activity profiles. Considerable attention is paid to the improvement of IT infrastructures both in the development of machine learning and in the development of artificial intelligence. Today, a number of companies are already using "clouds" for computing and data storage, which are actively being taken into the service of artificial intelligence and machine learning technologies.

Digital technologies contribute to the rapid transfer of knowledge and the selection of the best solutions, which is manifested in the competencies of the staff. Digital platforms carry out communication relationships, develop competencies. The era of digital technologies turns the minds of managers and dictates the need to search for new and adapt existing management models that are the basis of future competitiveness. Robotization leads to the fact that some functions are most effectively capable of being performed by a machine: service in a retail store without a cashier, automated legal claims, psychometric characteristics of a candidate when recruiting according to his profiles and preferences in social networks,

GPS beacons to optimize labor costs and communications in teams, analytics of sometimes incompatible areas and numbers - all this indicates the need for rapid changes in human resource management. New business and HR strategies based on Digital technologies increase the effectiveness of management decisions: automated recruiting, transition to virtual workplaces, individualization - creating an environment for self-realization and development for each employee, HR analytics and performance management. So, in summary, I would like to note that the emergence and dominance of digital technologies will, in turn, lead to the emergence of even newer, breakthrough technologies that will make modern society better, simplify the lives of many people in finding information, processing and using it. Not only things will become "smart", but also cities. Data will become a vital asset, and security will become a necessary foundation in life. The "digitalization of the world" will lead to changes in all sectors and spheres of the economy, will contribute to the creation of new professions, new companies that will have to not only use digital technologies, adequately survive in this digital transformation, but also become leaders. Due to the fact that digital forms of work are being introduced into the economy, benefits are achieved for all participants in the process - for each person, a large company, and a country. All industrial trends today are closely intertwined with digital technologies, and this process has only been increasing its intensity and popularity over the past two centuries.

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