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Research Article

MODELS OF DIGITAL ECONOMY

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ABSTRACT

Recently, the concept of "digital economy" has been used a lot. Indeed, in many developed countries, the digital economy has significantly influenced their development factors. The digital economy plays an important role in the life of society. So, this article is about the digital economy, which analyzes important issues such as the nature of the digital economy, the tasks and goals of the digital economy, the experience of foreign countries in the formation of the digital economy, and the obstacles to the development of the digital economy in Uzbekistan.

KEYWORDS

Digital economy models, transformation, e-government, national innovation systems, American model, technological innovation, financial crisis, internet communication, wireless communication, free and open internet, blockchain technologies, digital transformation, modernization, digitization policy.

INTRODUCTION

Today, the trend of digitalization of various spheres of society is rapidly increasing worldwide. This process serves as a basis for introducing innovations and improving the internal socio-economic situation. In this regard, many countries encourage it in order to prevent the positive effects of digital technologies and the negative consequences of changes

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(transformations) began to organize its development. RI's development programs have been approved in a number of countries, including: China, Germany, Japan, Brazil, USA, Great Britain, Estonia, Netherlands, Ireland, Sweden, Singapore, European Union and other countries. The number of such countries is increasing year by year. Each of the adopted programs (or strategies) has its own characteristics. But all of them are aimed at solving national problems and primarily rely on national innovation systems.

According to the results of recent scientific research (2015-2019), the 10 countries with the most developed digital economy include the USA, Singapore, Sweden, Denmark, Switzerland, the Netherlands, Finland, Hong Kong, Norway and South Korea. In this list, Russia is 38th, and Kazakhstan is 35th. By experts of the Shanghai Academy of Social Sciences According to the annual published report of scientific research conducted in this regard, the USA, Singapore, China, Great Britain, Finland, South Korea, Japan, Netherlands, Australia and Germany are listed in the list of 10 competitive numerically developed countries of the world. They analyzed the main indicators of progress from the point of view of transformation and economic information. This made it possible to identify a number of models of the digital economy. The American model is one of the first to develop ICT. Founded in 1924, IBM is one of the recognized leaders in this field. The main development and concentration of high-tech companies in America

The region (in the ICT sector) is considered Silicon Valley, and it began to develop in the 1960s. Private business has been active in this field since the second half of the 1960s with the support of state structures and state bodies. ICT industry at that time. Modern big companies such as Intel (1968), Microsoft (1975), Apple (1976), Oracle (1977) appeared. In 1980, Stevenson-Widler's "Technological Innovation" concept was accepted. He demanded that every federal laboratory establish an office to identify innovative technologies for commercialization and then transfer them to the private sector. Also, the "Bey-Dole" cone, which is considered one of the most effective measures for the development of innovations, was adopted. This law allowed universities to receive funding based on the results of their research. In addition, innovation various programs have appeared to encourage, these are: Small Business Innovation Research, Small Business Investment Company - reformed, Small Business Technology Transfer, Manufacturing Extension Partnership. Tax incentives were introduced for scientific-research and engineering developments. Thanks to grants, many new joint research enterprises and high-tech centers was established. After the 1990s, the US economy became the world leader laughed. Active support and development of the country's IT industry continued to push. The result is new successful companies

appeared: Amazon.com (1994), Google (1996), Facebook (2004), Uber (2009). At the same time, there was a tendency to slow down the development of traditional networks. If in 1997

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17% of GDP was formed by the manufacturing industry, in 2013 it was 12%. As a result of the financial crisis, the instability of the IT industry, as well as the decrease in the competitiveness of US products in the world markets, the initiative to introduce achievements in the field of ICT to other areas of activity was launched in America at that time supported by the presidents, these include: simplifying the regulation of Internet communication, the allocation of radio frequencies for wireless broadband communication, and the transfer of public services to the "e-government" format. The President's Advisory Council on Science and Technology (PCASTI), which produces reports and policy recommendations on science, technology, and innovation for the administration, became more active. In addition, the "Revitalize American manufacturing and innovation act of 2013" will restore the American manufacturing industry and innovation recovery, as well as the national program "Manufacturing USA". First of all, it was related to the introduction of ICT "National network for manufacturing innovation" (NNMI - national network of innovations in the field of manufacturing technologies) is included in the program. Its main goal is to develop and commercialize industrial technologies through cooperation between industrial companies, universities and federal government agencies is to create a network of research institutes. It is planned to allocate about 1 billion dollars from the federal budget to finance the program until 2022.

In 2014, the national program for reforming the system of training specialists in the fields of science, engineering, technology and mathematics (STEM) was launched. The program is planned to be implemented by the National Science Foundation (higher and graduate education), the US Department of Education (school education), and the Smithsonian Institution (other forms of education). The level of penetration of the Internet in the USA is very high, almost 88% of the population are considered its users. But according to international calculations, the United States is no longer considered a leader in this field.

According to the 2017 Internet Development Index of the International Telecommunication Union (ITU), the country ranked 16th (China is 80th). Accepted in the country state programs are not actively implemented. In 2012, the National Institute for Innovative Additive Manufacturing (Youngstown, Ohio) opened as the first project. In 2014, with the help of the US Department of Energy and the US Department of Defense, digital design and processing, integrated photonics, and the development of smart devices. Decisions were made to create several more institutes specializing in the innovation of ash. In 2016, the network consisted of nine institutes and more it was planned to open six. There is also digital inequality, with 39% of the population in rural areas not having access to the Internet.

In 2016, 10% of the country's population or 34 million people did not have access to the Internet at high quality level. Outside of that, US internet is the slowest and most expensive. The main

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obstacles to the digitization of the United States are problems related to structural imbalances, namely the federal budget acidity and the desire not to increase the tax burden are considered. Therefore, the state's ability to finance innovative programs is somewhat limited. Also, its competition with China in the field of ICT is intensifying. The USA is the second largest exporter of computers, telephones, radios, and communication equipment after China. In addition, China is trying to overtake US exports of airplanes and automobiles as the third-largest semiconductor manufacturer. In 2016, the "Digital Economy Agenda" in the United States was announced. According to the document, the growth of the American economy and competitiveness depends entirely on the development of the digital economy. Therefore, it is proposed to encourage the spread of the Internet and to reveal its role as a global platform for communication, trade and innovation. Four directions are priority: free and open internet; trust and security on the internet; access and opportunities; innovation and new technologies are defined as directions.

The goal of the program is to help and support US business, business-to-business digital policy issues and successful solutions to challenges in foreign digital markets, as well as to increase product exports through global e-commerce channels. The foreign and domestic policy of the current president of the United States significantly changed. His strict protectionist policy to complications in relations with trading partners, especially China. The anti-dumping investigation conducted in this regard is large can be effective. In such conditions, within the country. The development of the digital economy is taking its next step, and at the same time, the economic wars in the global digital space are intensifying. These and other changes indicate that it will be difficult for the United States to maintain its leadership position in the ICT sector.

European model of digital economy development formation began in 2010, and the "Digital Agenda for Europe" was adopted in the European Union. Its objectives are to promote economic growth in Europe, to help people and citizens, and to maximize the benefits of digital technologies, sustainable economic and social benefits (by creating a common digital market based on high-speed and ultra-fast internet and interoperable applications). "Digital Agenda", "Europe 2020" strategy is seven leaders in this was the first of his initiatives. Future plans are adjusted.

In 2015, the "Digital Single Market Strategy for Europe" was adopted. Its target is the US, Japan in the Internet economy and progressed from South Korea. To achieve this, it was necessary to expand access to digital goods and services, to create the best conditions for the availability of digital networks and services, and to offer a high level of digitization of the economy.

In 2016, the European Commission adopted an investment plan aimed at removing digital barriers across the EU. Digital Single Market (funding amount 50 billion euros), including five main directions:

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- digital public-private partnerships (PPP) - is the most expensive, and for its implementation 22 billion euros will be allocated. The main task is to encourage the research of social, economic and technological networks;

- to help all 28 EU member countries to provide public services via the Internet. In this direction, 20 e-government initiatives were launched. E-procurement is expected to be completely successful in 2020;

- to provide an opportunity to exchange information regardless of the manufacturer, operating system or technology of the connected devices. For this, it is necessary to accelerate the development of standards, which are a strategic element of the European industrial policy covering various fields (health care, transport and smart cities, 5G, IoT, cloud computing, cyber security and information technologies);

- creation of the European cloud infrastructure for data storage (European Open Science Cloud - EOSC), which cost 6.7 billion euros. 1.7 million from the platform. 70 million in the field of European researchers, science and technology experts use;

- 5.5 billion euros are allocated for the development of existing national and regional digital innovation hubs and the creation of new ones. The purpose of their creation is to enable every field to use knowledge and testing equipment with the help of the latest digital technologies.

The EU is working to create a Digital and Innovation Policy, a Digital Single Market and an Innovation Union. Strategies and programs within existing European structures and organizations in progress. The main tool for creating the Innovation Union (another initiative of the "Europe 2020" program) is the Horizon 2020 program, which was launched in 2014, and in this program planned to spend 500 million euros on the construction of innovation hubs. Digital innovation and new business models are considered engines of change (taking into account jobs and trade in the European Union). According to the digital single market strategy, 38 different economic initiatives were put forward, 23 of which took the form of draft laws. This includes: phasing out roaming for mobile communications within the EU, harmonizing frequencies for the development of 5G networks and new online services, and creating free Wi-Fi zones in different EU regions. The EU is one of the largest and most important regions in the global digital space. Experts say that the use of ICT in Europe is unevenly distributed among different countries, companies and individuals. New ICT adoption is limited due to increased concerns about digital security and privacy. Technology expertise (including the use of blockchain) depends on the results of the fight against technical difficulties and the elimination of technical problems. The implementation of approved digitization plans is affected by EU system problems. Conflicts between individual countries and the European Union are also having an impact. Estonia became the first country to announce the launch of a national cryptocurrency on the agenda. However,

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this initiative caused sharp criticism from the European Central Bank. In Europe, the traditional fight against monopoly is not going well. Because of the proposal to introduce a digital tax to cyber corporations not all countries are cheering. Creating a single digital market in Europe in the coming years not planned. Eliminating national markets and creating a common European market is expected to create new jobs and additional economic growth. Digital transformation is considered to have a beneficial effect on the economy. Brussels estimates that investments in the digital single market could boost the economy by 110 billion euros.

Great Britain, as a country with a high share of the trade and financial sector in the economy, was significantly affected by the global crisis of 2008. Thanks to it, the attention in Europe to the development of the ICT industry has increased dramatically. Great Britain, according to experts, is considered one of the most innovative and entrepreneurial societies in the world (the presence of world-class higher education institutions, the development of venture capital markets, a modern regulatory and legal framework, etc.) considered the spread of new technologies as the most important direction of development.

In 2010, Great Britain adopted the Digital Economy Act 2010 (DEA) amending the Communications Act and a number of other legal and regulatory documents. The innovation system was modernized and, most importantly, rational relations were established between all participants of the innovation process and the state. Government bodies have become independent customers of research. Since 2011, a Catapult system (InnovateUK - state innovation agency) for the implementation of projects selected in competitions by organizations, they are commercial financing with grants from state funds based on the combination and supports research and development) was established. In 2013, 10 such centers were created in the country, including Digital and Future Cities, Transport Systems and Energy Systems. The state supports them through TechUK (an association of more than 850 AI, telecommunications and electronics companies, covering half of the sector's employees) and other competent organizations. In 2017, a new law on digital economy was adopted. It addresses issues related to electronic communications infrastructure and services, as well as updated terms and forms of copyright infringement.

Digitization of the service sector has become the main direction of the country's development. E-commerce in the UK is better than any other country in the world

developed. The degree of digitization of the financial sector is also considered a top UK financial technology center. The use of social networks is also widespread in the country. The British were the first to start using smartphones and mobile internet, and they are far ahead of others spend online, use phones to listen to music, and spend more time on social networks than Europeans. Digitization is also developing in other fields, including education (RefMe, eSchools) and health care (Network Locum).

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Successful British IT companies are relatively unknown. For example, ARM Holdings, which produces microchips for 95% of all smartphones in the world market. Tomb Raider a Grand Theft Auto competes with world leaders in real estate, Zoopla Property Group and Rightmove. In 2015, the results of the first large-scale digital transformation program in the construction sector were summarized. National experts believe that building information modeling technologies (BIM - Building Information Modeling) are currently changing the construction industry. They are confident that full computerization of construction in Great Britain will become the norm, and hope that this sector of the country will become a world leader, and that British designers, contractors and product manufacturers will be recognized at the global level. This is expected to increase the volume of work and lead to the creation of new job opportunities and the opening of new opportunities.

Another priority area for digitization in Great Britain is the development of rail transport. Since 2012, the largest infrastructure project in Europe - Crossrail - has been implemented in the country. It is a world-class railway connecting west and east London, passing between existing underground lines, sewerage and electricity systems and buildings up to 40m deep. Crossrail's future passenger traffic is estimated at 200 million people per year, which is 1.5 million per hour. person uses. Crossrail will bring 42 billion to the UK economy over 60 years. brings pounds sterling. Economists estimate that every pound spent on road construction generates a profit of 2.6 pounds. Crossrail is currently nearing completion. In November 2017, in connection with the end of five-year funding periods for the first centers of the Catapult system, their work was analyzed. It found that around £1.25 billion has been channeled to the centers, of which around £745 million has come from the private sector, but most of that is dependent on government funding. Management and organizational strategies of most centers were analyzed and 38 types of improvement recommendations were made. Three centers - digital, future cities and transport systems plans - were found to be in need of improvement.

In 2017, a digital strategy was launched in the UK. The document aims to develop the country's "leading digital economy" in the seven includes direction, including: building dune-level digital infrastructure; providing access to necessary digital skills for all; creating the best conditions in the world for starting and developing a digital business; helping businesses go digital in the UK; creating the world's safest place to live and work online; maintain a global leadership role in serving its citizens on the Internet; expanding the use of information in the economy and increasing public confidence in its use. The strategy includes, in particular, the creation of five international technology centers designed to maintain the global dominance of British companies. The British government plans to provide free education for people who do not have digital skills. Beyond that, Google, Lloyds

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Private sector organizations such as Banking Group, Barclays participate in the training of adults and children. The British government plans to invest 17.3 million pounds in university-based scientific research in the fields of robotics and artificial intelligence. The use of artificial intelligence will add 654 billion pounds to the British economy in 2035. it is expected that it can bring.

Internet appeared in Germany in 1983. But, as in other European countries, it began to pay more attention to ICT development in the early 2000s. Decisions in this field are based on the specific features of the internal structure of the economy and are based on the national innovation system. In Germany, the share of industry in GDP is high compared to many other developed countries, 23%, and the deindustrialization of the economy is low. Country general engineering (especially mechanical engineering and automotive engineering), it is also considered a leader in the field of transport and logistics. Although these are "hidden champions" in cup scores, there are also well-known large companies.

Historically, Germany has formed the most developed and influential scientific and innovation "ecosystems" in the world. There are nearly 1,000 scientific research organizations of various forms and statuses in the country. Eight large science academies financed from state budgets are united in the "umbrella" structure - the Union of German Academies. Apart from this, there are a number of organizations that have the influence of the National Academy of Sciences. This status was given to the oldest German Academy of Natural Sciences in Europe "Leopoldina" (founded in 1652), as well as the National Academy of Science and Technology. of research organizations in Germany. Most of them are united in four umbrella structures named after famous German scientists: M. Planck Society for Scientific Research, Fraunhofer Society, Helmholtz Association and Leibniz Association for Research Institutes (WGL). Incorporating dozens of research institutes, the societies have extensive research programs and extensive budgets drawn from a variety of sources, including federal and state funds. The national feature of the German model of development of science and innovation (including training and other fields) is the consistent implementation of the idea and principles of cooperative federalism: the absence of a strict hierarchy among participants, as well as the absence of responsibility, authority and financial division between the level of the Federation and the level of the state. The Federal Ministry of Science and Technology plays a key role in the formation and implementation of the state scientific policy. Other federal ministries also participate in the implementation of some directions of the state scientific policy. At the land level, the scientific policy of the state is the land governments and their respective ministries is formed and implemented by The Standing Joint Scientific Conference (GWK) serves as a scientific policy coordinator between the federal and state levels. In addition, the German Science Council (WP) advises federal and state governments on the management of science and higher education.

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State decisions in the field are supported by special advisory structures operating under the auspices of the federal parliament and the government, as well as their counterparts at the local level. The most important of these is the Permanent Expert Commission on Research and Innovation (EBI), which was established by the federal government in 2006.

Specialists of the authorities, they emphasize the ability to develop effective structural models of large-scale projects, the ability to "translate" new ideas, images of the desired future and conceptual approaches into the language of specific tasks for science, education and industry. The country has chosen the goal of avoiding the risks associated with its previous development. One way to solve this complex problem is to systematically integrate evaluation procedures into strategic planning and project management mechanisms. German science policy seeks to make effective use of the expertise of social sciences and humanities to find answers to the main problems of our time, including post-crisis economic development and digital evolution.

The legal and instrumental basis of the German development policy is formed by a set of complex documents, including federal government strategies, various action plans (initiatives) of federal ministries, as well as agreements (pacts) and joint initiatives of the federal government and state governments. At the same time, Germany denies the need to harmonize the relevant legislative initiatives of the EU member states. All these tools and institutions were used in the formation and implementation of state policy in the field of modern ICT development of the country. The main document was the high-tech strategy for Germany (Hightech Strategie Innovationen fur Deutschland - HTS), adopted by the federal government in 2006 and revised in 2010. 2013 in the coalition agreement agreed by XDS/XSS and SDPG principles of mutual cooperation between state agencies, entrepreneurs, trade unions, science and society were clarified. The "Digital Order 2014-2017" fields were covered in detail, and a part of it was the "Industry 4.0" initiative.

The concept of Industry 4.0 was put forward in 2011 by representatives of the country's scientific community (Acatech and artificial intelligence research center) and BMBF. It is supported by the leading German business associations (BITCOM - ICT, VDMA - mechanical engineering and ZVEI - electronics) and the Fraunhofer Society. The main goal of this idea is to create "intelligent manufacturing" by connecting cyber physical systems (CPS - cyber physical systems) with factory processes, machines and warehouses to the global industrial network - the Internet of things and services. Industry 4.0 includes areas such as: standardization and creation of a suitable (reference) architecture of records; management of complex solutions; global broadband infrastructure for industry; security; organization of menat; education and new competencies; normative-legal base; efficient use of resources. It aims to ensure the country's leadership in the world manufacturing market in the areas of

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processing industry, industrial research and development.

In 2014, the federal government was renewed for Germany. adopted a technology strategy (HTSII). This document is of great importance to increase the transparency of all procedures related to the development and implementation of the strategy, to increase the public participation in the evaluation of the obtained results and intellectual crowdfunding (including through modern Internet technologies). Today, almost 86% of the country's population is on the Internet has access. Germany was the first in the world to digitize its libraries within the framework of the national project "Global info" (from 1998 to 2004), which is a part of the "Information as raw material for innovation" program. Germany is one of the leaders in the market of embedded systems and has a decent position in the ranking of security and business software, issues of system solutions and know-how in embedded systems and semantic technologies. Germany's embedded systems market ranks third in the world after the USA and Japan and generates 20 billion euros per year. According to forecasts, it will reach 40 billion by 2020. from euro to copper. But the annual turnover of the software sector is 4 billion - 15 billion. produces euros. Many strategies, programs and projects are being implemented in the country. By 2015, with the help of CPS, a number of model factories were established and strong research associations, such as the innovation cluster "Smart Technical Systems East Westphalia-Lippe" (OWL) appeared. 40% German company already use Industry 4.0 technologies and 23% plan to implement them in the next few years. The share of digital technologies is currently 22% in industry, including 19% in mechanical and automotive engineering, 26% in electronics and electrical engineering, and 27% in the IT industry.

In 2015, the federal ministries created one of Germany's largest network platforms, the platform Industry 4.0, whose task is to develop existing new projects and their subsequent is to dissolve the dispersion. Along with the traditional blocks (architecture, norms and standards, ITTKI), special attention is paid to the security of network systems, legal issues, education and training, as well as cooperation between representatives of government, business, science and society.

The German government's efforts to promote the spread of digital technologies have received international recognition: the United States and Great Britain are trying to use Germany's experience in this field. Germany is developing cooperation with other countries to promote new ICT. For example, the Industry 4.0 (Industrie 4.0) platform is the Industrial Internet Consortium of the United States (founded in 2014), the French Alliance of Future Industry (Alliance Industrie du Futur, 2015) and the Japanese Robot Revolution Initiative (The Robot Revolution Initiative, 2015) is under investigation. In addition, Germany has signed a Memorandum of Understanding and a joint action plan with China, and will hold regular meetings with the EU and G20 countries. According to the international evaluation of the level of digitization, Germany ranks 12th in the

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Internet Development Index (ITU), lagging behind the leaders. Whereas, for example, Great Britain is the fifth leading country. Experts cite factors that discourage the introduction of Industry 4.0 technologies in Germany: sufficient level of suspicion regarding the security of digital data; implementation and use of uniform standards; the need for large investments; lack of skilled personnel who understand strategic development; lack of customer knowledge; lack of qualified personnel in coronas; Failure to understand the socio-economic benefits of not developing a business model.

The problems are in the level of digitization between the Eastern and Western regions, the digital inequality between different generations of the population, as well as the difference between the local (native) population and the immigrants (migrants), and small and large businesses are not sufficiently involved in the process of digital transformation. The implementation of the "Industry 4.0" project is recognized as an important measure of consolidation in the German technological manufacturing industry, especially in the field of production tools. The implementation of this concept, six sectors of the German economy (engineering; automotive and components; electrical engineering; chemistry; IT; agriculture and forestry) will be able to receive an additional 78 billion euros by 2025.

The implementation of these measures will make Germany the world's leading supplier of cyber-physical production systems. By 2020, the share of digital technologies in production processes in Germany is expected to increase by an average of 3.8 times, to 83%. It is doubtful that any country in the world will not be able to achieve prosperity. Modern digitization processes are directly related to globalization. But with the spread of the digital economy, the level of globalization is increasing. There are common digitization challenges for all countries: data transparency, uniform standards, network security, and personal data protection. In order to solve them, it is necessary not only to consider competition as a mechanism of development, but also to mention the need for cooperation.

The formation of the digital economy opens up new opportunities and directions for integration. The attempts of the EU and EOIX to use the synergistic effect of the associations to achieve great success in the digital transformation are particularly interesting. China was a significant laggard in ICT development relatively recently. The change in this situation began with the launch of two main state projects - Plan 863 (approved on March 3, 1986) and “Fakel” (in 1998). The first project reaches high technologies in seven key areas, including ICT, in the long term directed to receive. Special attention was paid to the training of qualified personnel, including the training of the best students abroad and the attraction of foreign specialists. The second project was a set of legislative documents and initiatives aimed at the rapid development of the new high-tech industry. In China, the world's best achievements in ICT have actively cloned; Almost every means was used to bring as much foreign advanced technology as possible.

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China's practice of technology transfer has been called "innovative mercantilism". This represents the pattern of "import-assimilation-innovation" rather than the traditional "import-production". China's uncompromising adherence to the formula "foreign investment - Chinese exploitation - Chinese ownership" ensured the openness of the market for foreign companies. Implementation of a step-by-step approach to state support programs (with constant adjustments taking into account external and internal impact factors) and strict monitoring of the fulfillment of established obligations was carried out. High business spending on ITIs encouraged.

In 2010, the country was ready to take the next step, that is, to provide its own independent high-tech national industry. The relevant directorate of the State Council of the People's Republic of China on scientific and technological development of the country for 2006-2020 and the 11th five-year plan were adopted. In the following years, attention was paid to the development of the ICT sector. In the 12th five-year plan (2011-2015), the "new generation of telecommunications equipment" sector, aimed at fundamentally changing the composition of the national economy, was included in the list of priorities. In China, the Internet has been recognized as a key infrastructure for the development of the "new economy" with great socio-economic benefits.

It is impossible not to recognize the huge achievements in ICT development in China, which started from scratch and were achieved in a very short time. Currently, the share of the main networks of the digital economy in China is 6-7% of the GDP. In 2016, fixed broadband services covered all cities and 95% of administrative villages in the country. 85% of primary and secondary schools in China are connected to the Internet. Over the past 18 years, China's ICT export volume has increased more than 16 times. China is the only country that can create a national internet today. Large companies in the country are analogues of American giants: Tencent - a large telecommunications company; Baidu is a search engine; Xiaomi Tech - manufacturer of mobile devices; Google with its Android operating system is a completely independent company; Weibo (similar to Twitter); QQ and WeChat messengers; Aliplay is huge with its payment system Internet giant Alibaba, as well as Huawei Technology, ZTE, NetEase, TP-Link and others. The world-famous and leading companies are gradually leaving the country. China owns Uzi's EIX, Shenzhen Silicon Factory. Apart from this, the form of ownership of the giants of the Chinese information industry is different: Huawei is a private company and ZTE is a state-owned company. China, in particular, stands out for its success in creating electronic computing equipment for IT solutions for the aerospace industry and medicine. But in the country the level of digitization of different sectors is not the same. In 2016, the share of the digital sector in services was about 30%, in industry - 17%, and in agriculture - 6%, insurance (46%), production of audio and video products (45%), financial services (40%), as well as production of organizational and cultural equipment (59%), equipment manufacturing

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(47%), which are currently leading. Agriculture and animal husbandry account for 6 and 4%, respectively.

National experts note that there are still legal documents that are not being changed in accordance with the development of the digital economy. The innovative system has its own characteristics. In particular, there are many controversial issues related to data ownership and intellectual property protection. No law has been developed to protect Fucaro's personal data. There is a numerical disparity between the Eastern, Central and Western regions of the country. The national data collection took place in January 2017 in Beijing and Shanghai (typical of China cities) internet usage is 70%, in the central regions - 50%, in the Southwest - 40%. In December 2016, Internet penetration in urban areas was 69%, while in rural areas it was 33%. The level of digital literacy of different groups of the population varies significantly. 642 million in December 2016. A person has digital skills those who could not use the Internet due to lack of information (54.5%), low literacy level (24.2%).

Experts point to the low quality of the labor force in terms of ICT skills and literacy, and the lack of qualified specialists. China has made great achievements in the formation of a national education system, and one of these achievements is Shanghai Higher Education Institutions. At the same time, it is necessary to increase the financing of this sector in order to spread the high quality of the basic structure throughout the country. Today, China spends 4% of its GDP on it, while the world's leading countries spend 5-7% of their GDP. The country is striving for independence in terms of ICT, because information security is considered as serious as a nuclear threat. China is working to create a secure industry that is 100% secure against unauthorized access. At the moment, a number of foreign websites in China are restricted under the "Golden shield" project. In 2015, the "Internet" program was adopted, which aims to build an information society by 2049 (in connection with the 100th anniversary of the People's Republic of China). The program contains a conceptual document in which network plans are developed and relevant targets are set. In addition, according to the "Made in China-2025" strategy (2015), it is planned to turn China from a global factory into a global laboratory.

For this, it is planned to introduce the concept of active digitalization of industry, finance and trade and intelligent production. Activities: energy, agriculture, education, healthcare, transportation, financial services, social and public services, logistics, e-commerce, development of the "impression economy", intellectual property management, software, including source development. In the period of 2015-2025, the Chinese economy plans to increase the digitization of networks and sectors to a level exceeding 22% (population). By 2020, the share of the digital economy should be 35% of GDP, and by 2030, it should be more than 50%. Improvement of the tax system in China, encouraging banks to lend to small and medium-sized enterprises, and encouraging innovative companies will continue.

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It is expected that private companies will increase their spending on IT, and strengthen relations in science and production within the framework of public-private partnerships.

The comparative analysis of the created digital economic models allows us to distinguish its general features that are common to all national digital economic models:

- the formation of a new fifth technological order based on the use of information and knowledge;

- creation of a global digital information environment;

- structural restructuring of remote employment;

- the quality of life is directly related to the level of consumption of information resources;

- increase in information security issues.

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