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## DIGITALIZATION AS THE BASIS OF THE EU ECONOMIC POLICY IN CREATING A SINGLE INTERNATIONAL DIGITAL MARKET

*Abstract.* The article deals with topical issues related to the creation of a single international digital market. The conditions in which Ukraine's industrial complex will have to operate in the near future are influenced by globalization. The European Union (EU) actively supports and develops the digital economy as a basis for the development of all sectors of the regional economy. The EU's economic policy promotes the digitalization of societies in the EU member states and aims to facilitate the development of a single digital market and the eventual creation of the EU Digital Union. The creation of a single digital market is one of the main prospects and challenges for the European Union. Digitalization has created a world without borders, and its implementation requires a new form of governance based on its specific characteristics. This process requires addressing a number of practical and political issues in the economic and trade relations of the international community. The most influential factors in these processes are digital transformation, the pandemic, and military conflicts. The article provides brief information on the essence of these processes. The European Commission, the British Computer Society, the European Parliament, the US Intelligence Community, the US Department of Broadband and Digital Economy (DBCDE), McKinsey and Deloitte, and others have their own interpretations of the digital economy. Domestic scholars have paid some attention to this term and offered their own interpretations. A growing amount of data is constantly being generated, which has led to the need to create completely new means and levels of value. This fundamental transformation is caused by the industrial revolution. In its policy recommendations, the EU has emphasized the need for Europe to lead the transition to a healthy planet and a new digital world. This requires that every citizen, every worker, every businessperson has a fair chance, wherever they live, to reap the benefits of our increasingly digitized society. Digital solutions, such as communication systems, artificial intelligence, or quantum technologies, can enrich our lives in many ways, although the benefits of digital technologies do not come without risks and costs. It is noted that digitalization is carried out within the framework of economic policy, which, in the EU, is aimed at creating a single international digital market. The characteristic features of this process are presented.

**Keywords:** economic policy, globalization, digitalization, digital transformation, international, single digital market.

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## ЦИФРОВІЗАЦІЯ ЯК ОСНОВА ЕКОНОМІЧНОЇ ПОЛІТИКИ ЄС У СТВОРЕННІ ЄДИНОГО МІЖНАРОДНОГО ЦИФРОВОГО РИНКУ

***Анотація.*** У статті розглядаються актуальні питання щодо створення єдиного міжнародного цифрового ринку. На умови, в яких найближчим часом доведеться працювати промислового комплексу України, впливає глобалізація. Європейський Союз (ЄС) активно підтримує та розвиває цифрову економіку як основу для розвитку всіх секторів регіональної економіки. Економічна політика ЄС сприяє цифровізації суспільств у державах-членах ЄС і спрямована на сприяння розвитку єдиного цифрового ринку та остаточному створенні Цифрового союзу ЄС. Створення єдиного цифрового ринку є однією з головних перспектив і викликів для Європейського Союзу. Цифровізація створила світ без кордонів, і її реалізація вимагає нової форми управління, заснованої на його специфічних характеристиках. Цей процес вимагає вирішення низки практичних і політичних питань в економічних і торговельних відносинах міжнародної спільноти. Найвпливовішими чинниками цих процесів є цифрова трансформація, пандемія та військові конфлікти. У статті подано короткі відомості про сутність цих процесів. Європейська комісія, Британське комп'ютерне товариство, Європейський парламент, розвідувальне співтовариство США, Департамент широкосмугового зв'язку та цифрової економіки США (DBCDE), McKinsey та Deloitte та інші мають власні інтерпретації цифрової економіки. Вітчизняні науковці приділили певну увагу цьому терміну та запропонували власні трактування. Постійно генерується все більший обсяг даних, що призвело до необхідності створення абсолютно нових засобів і рівнів цінності. Ця фундаментальна трансформація викликана промисловою революцією. У своїх політичних рекомендаціях ЄС підкреслив необхідність того, щоб Європа очолила перехід до здорової планети та нового цифрового світу. Це вимагає, щоб кожен громадянин, кожен робітник, кожен бізнесмен мав справедливий шанс, де б він не жив, пожинати переваги нашого все більш оцифрованого суспільства. Цифрові рішення, такі як системи зв'язку, штучний інтелект або квантові технології, можуть багатьма способами збагатити наше життя, хоча переваги цифрових технологій не без ризиків і витрат. Слід зазначити, що цифровізація здійснюється в рамках економічного політики, яка в ЄС спрямована на створення єдиного міжнародного цифрового ринку. Наведено характерні особливості цього процесу.

***Ключові слова:*** економічна політика, глобалізація, цифровізація, цифрова трансформація, міжнародний, єдиний цифровий ринок.

**Introduction.** The processes of globalization, the Fourth Industrial Revolution and digitalization, the coronavirus pandemic and military conflicts of the 21st century have fundamentally changed the way we look at economic processes and necessitated the development of new economic and social policies.

The process of digital transformation is accompanied by external effects in the development of countries, regions, manufacturing enterprises and businesses. They are associated with the intensification of innovation processes aimed at integrating technologies, business processes, industries, and the entire economic base, which

significantly affects regional markets for the allocation of productive forces and infrastructure.

The European Union (EU) actively supports and develops the digital economy as a basis for the development of all sectors of the regional economy. The EU's economic policy promotes the digitalization of societies in the EU member states and aims to facilitate the development of a single digital market and the eventual creation of the EU Digital Union. The creation of a single digital market is one of the main prospects and challenges for the European Union. Digitalization has created a world without borders, and its implementation requires a new form of governance based on its specific characteristics. This process requires addressing a number of practical and political issues in the economic and trade relations of the international community.

**The purpose of the study** is to analyze the essence of modern processes of digital market transformation and their impact on the formation of the economic policy strategy of manufacturing enterprises in international relations.

**Analysis of recent research and publications.** The theoretical essence of the digital economy has been and continues to be considered by many foreign and domestic scholars. The concept of "digital economy" was first defined in the mid-1990s in the works of American scientists D. Trapscott and N. Negroponte. They viewed the digital economy as the growing interconnectedness of people and organizations that is shaped by the Internet. The authors identified four main areas of influence of digital technologies: the future of the labor market, customer interaction, digital supply chain, and the Internet of Things [1]. Former US President Bill Clinton's Assistant to the President for Science and Technology Neil Lane developed this concept. He argued that the digital economy is determined by the changing characteristics of information, computing, and communications [2]. Most researchers tend to believe that these scientists laid the foundations of the digital economy. Thomas L. Mesenburg, E. Brynjolfson, B. Kahin, Rob Kling, Robert Lamb, and others continued their research in this area. These authors have divided the digital economy into four components: digital products and services, variable digital products and services, services and production of

IT-dependent goods, and the IT industry itself [3]. Subsequently, the classification of the digital economy included the use of information and communication technologies for business activities. This statement was the beginning of the emergence of new, broader definitions of the digital economy, according to which any activities based on digital technologies are related to the digital economy.

The European Commission, the British Computer Society, the European Parliament, the US Intelligence Community, the US Department of Broadband and Digital Economy (DBCDE), McKinsey and Deloitte, and others have their own interpretations of the digital economy [4-7]. Domestic scholars have paid some attention to this term and offered their own interpretations [8-11]. An interesting analysis of theoretical approaches to the definition of this concept was presented by I. Lytvynenko, a specialist at the International University of Finance [12]. The issue of state regulation of the development of the digital economy sector in Ukraine is considered in the doctoral dissertation of T. Shtets (2021). The digital transformation as an imperative for the innovative development of business structures is studied in the doctoral dissertation of I.V. Strutynska's doctoral dissertation (2020). These issues are also actively considered in many dissertations, including bachelor's and master's theses. The Digital Strategy for 2022-2025 is envisaged in the United Nations Development Program.

The problems of the development of the European Union's digital market have been studied in their scientific works by such international economists as S. Pirsog, A. Grigorescu, K. Linkaru, F. Popa, E. Lazarchuk, H. Sigurdarson [14], K. Niemann-Metcalf and I. Papageorgiou [15], D. Troitino [16] and other scholars. Despite the great attention to the problems of digitalization by scholars and practitioners, the issues of creating a single international digital market in the current environment require additional research. This paper is devoted to these issues.

**Summary of the main material.** The Fourth Industrial Revolution has brought digital communications, social media interaction, and e-commerce into our everyday life, and digital enterprises have changed and continue to change all economic and social relations [14]. A growing amount of data is constantly being generated, which

has led to the need to create completely new means and levels of value. This fundamental transformation is caused by the industrial revolution. In its policy recommendations, the EU has emphasized the need for Europe to lead the transition to a healthy planet and a new digital world. This requires that every citizen, every worker, every businessperson has a fair chance, wherever they live, to reap the benefits of our increasingly digitized society. Digital solutions, such as communication systems, artificial intelligence, or quantum technologies, can enrich our lives in many ways, although the benefits of digital technologies do not come without risks and costs. Citizens no longer feel in control of what happens to their personal data and are increasingly overwhelmed by the attention grabbing nature of their information. And malicious cyber activity can threaten our personal well-being or disrupt our critical infrastructure and create broader security concerns. The unforeseen and unpredictable consequences of artificial intelligence's interference in humanity have already worried the world's inhabitants and governments of almost all countries. This significant societal transformation calls for deep reflection at all levels of society on how Europe can best address these risks and challenges.

The EU wants European society to be based on digital solutions that are firmly rooted in our shared values and enrich the lives of all of us. People should have the opportunity to develop personally, to choose freely and securely, and to participate in society regardless of age, gender or professional status. Businesses need a structure that allows them to start and expand their business, combine and use data, innovate, and compete or cooperate on fair principles. That is, Europe should have a choice and pursue digital transformation in its own way.

European technological sovereignty begins with ensuring the integrity and resilience of its own data, network and communications infrastructure. This requires creating the right conditions for the development and deployment of its own key capacities, thereby reducing dependence on other parts of the globe for critical technologies. Europe's ability to define its own rules and values in the digital age will be strengthened by such opportunities. European technological sovereignty is not defined

against anyone else, but by focusing on the needs of Europeans and the European social model. In our view, the EU should remain open to everybody, provided that market actors play by European rules and meet European standards, no matter where they are located. Citizens should be able to make better decisions based on information derived from non-personal data. And this data should be available to everyone - public or private enterprises, large or small, startups or giants. This will help society maximize the benefits of innovation and competition and ensure that everyone benefits from the digital dividend.

According to the EU's policy, over the next five years, it is planned to focus on three key objectives to ensure that digital solutions help Europe to follow its own path towards a digital transformation that works for people through respect for our values.

- Technology that works for people: developing, deploying and using technology that makes a real difference to people's everyday lives. A strong and competitive economy that harnesses and shapes technology in a way that respects European values.
- A fair and competitive economy: a single market without barriers, where companies of all sizes and in all sectors can compete on a level playing field and can develop, sell and use digital technologies, products and services at a scale that increases their productivity and global competitiveness. At the same time, consumers can be confident that their rights are respected.
- An open, democratic and sustainable society: an environment that is trustworthy, in which citizens are empowered by the way they act and interact and the data they provide both online and offline.

Addressing these challenges is expected to allow Europe to become a trendsetter in the future. A European path to digital transformation that reinforces democratic values must respect fundamental rights and contribute to a sustainable, climate-neutral and resource-efficient economy. For Europe to truly influence how digital solutions are developed and used globally, it needs to be a strong, independent and focused digital player in its own right. To achieve this, a clear framework is needed to facilitate reliable, digital interactions in society, for both people and companies. Without this focus on

trustworthiness, the vital process of digital transformation cannot succeed. Creating Europe fit for the digital and artificial intelligence era is a complex task with many interconnected parts: economy, trust, society and international [17].

Summarizing these signs of digitalization, the European Commission annually creates its own regulatory index of digital development of the economy and society (Digital Economy and Society Index (DESI)). Its components are human capital, communication technology coverage, integration of digital technology, and the scope and availability of digital public services (Fig. 1). The Digital Economy and Society Index (DESI) is a composite index that measures and compares the progress of EU countries in the field of digital economy and society. Since 2014, the EC has been monitoring the progress of EU member states in digital competitiveness and monitoring the digital indicators of Europe as a whole using the DESI index. The construction of the DESI ecosystem in Ukraine is accompanied by the digitalization of public services, business and access to technology, which opens up many opportunities.

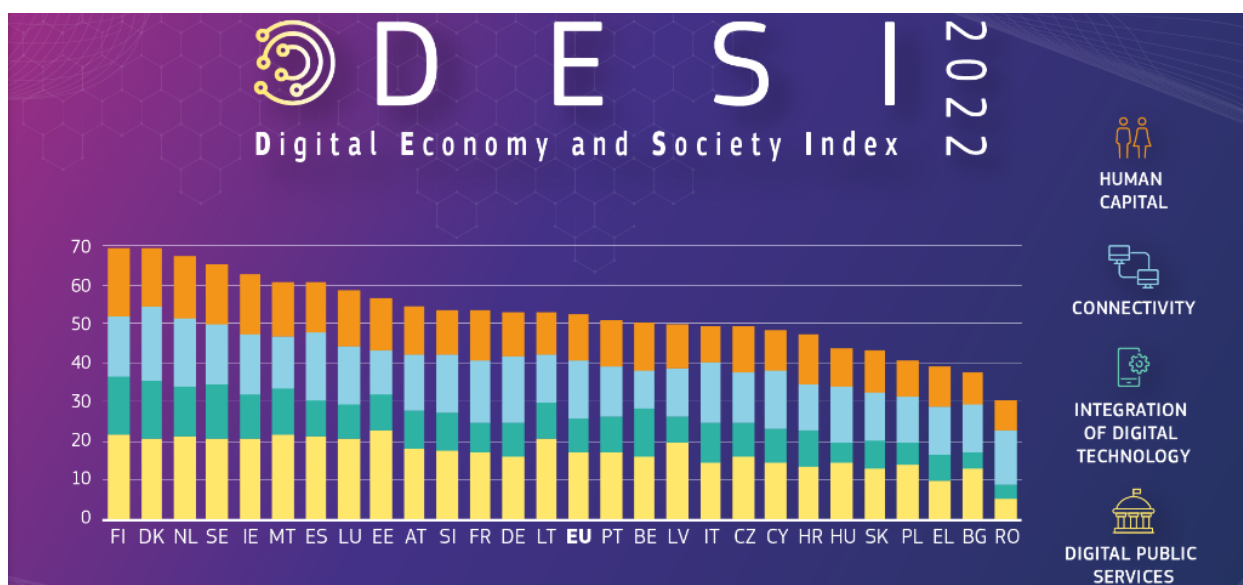


Fig. 1.- Digital Economy and Society Index (DESI) of the EU countries according to the European Commission in 2021 [18].

It is important to understand the state's progress in this area and improve the digital experience of citizens. In EU countries, DESI (Digital Economy and Society Index), which was also introduced by Ukraine, helps in this. In accordance with the Association

Agreement between Ukraine and the EU, signed in 2014, the Ukrainian government undertook to bring its legislation into line with EU standards. Ukraine has serious prerequisites for joining DESI. The Concept and Action Plan for the development of the digital economy and society of Ukraine have been legally adopted. However, a more modern digital strategy is needed, aligned with the latest EU strategies. By establishing a coherent legal, political, institutional, coordination and methodological framework for DESI, the Ukrainian government will be able not only to measure and monitor, but also to shape digital transformation policies based on data. DESI is published annually by the European Commission and measures the progress of EU Member States in achieving the goals of the EU Digital Decade Program until 2030. The key elements of DESI correspond to the digital goals of the EU: safe and sustainable digital infrastructure, digital skills, digitalization of business and digitalization of public services. On September 6, 2023, the Cabinet of Ministers of Ukraine adopted an order approving the list of indicators of the Digital Economy and Society Index (Digital Economy and Society Index — DESI) in the country, as well as the procedure for collecting and exchanging data on indicators based on the EU Methodology. The order will provide the prerequisites for tracking progress in the direction of the digital economy, as well as comparing its own path with the digital economies of the EU. This decision of the CM corresponds to the digital goals that the EU plans to implement by 2030. Ukraine is known as one of the leaders of digital transformation. DESI is published annually by the European Commission and measures the progress of EU member states in achieving the objectives of the EU Digital Decade Program until 2030. The key elements of DESI are in line with the EU's digital goals: secure and sustainable digital infrastructure, digital skills, digitalization of business and digitalization of public services. The process of Ukraine's inclusion in DESI depends on the ability to regularly provide the European Commission with the necessary statistical data collected in accordance with EU requirements. Ukraine's inclusion in DESI will help realize the state's digital competitiveness potential, as well as promote integration into the EU's Single Digital Market. The implementation of DESI in Ukraine will make it possible to



determine the dynamics and progress of digital development, comparing with the digital economies of the EU, and thus contribute to the integration into the Single Digital Market of the EU.

The list of indicators of the Digital Economy and Society Index (DESI) has been approved. Human capital, Internet connection, integration of digital technologies and digital public services are defined as its main components. Sub-components with corresponding indicators are also defined.

#### 1. Human capital:

- availability of Internet user skills with indicators: number of people who have at least basic digital skills, percentage, number of people who have higher basic digital skills, percentage; number of people with at least basic digital content creation skills, percent
- the availability of advanced skills and development with indicators: the number of specialists employed in the field of information and communication technologies (hereinafter - ICT), aged from 15 to 74 years, percent; number of female ICT specialists, percentage; the share of enterprises that conducted training for the purpose of developing their employees' skills in the field of ICT, in the total number of enterprises, percentages; the number of graduates of higher education institutions with specialties in the field of knowledge "Information technologies" in the field of ICT, percentages.

#### 2. Internet connection:

- fixed broadband access to the Internet with indicators: the share of households that use a fixed broadband connection to access the Internet, percentages; the share of households that have fixed broadband Internet access with a speed of at least 100 Mbps, percent; the percentage of households that have fixed broadband Internet access with a speed of at least 1 Gbps;
- coverage of fixed broadband Internet access with indicators: share of households covered by high-speed broadband Internet access networks, percentages; ;  
the share of households covered by ultra-high-bandwidth networks, percentages;

- mobile broadband access to the Internet with indicators: radio frequency bands, harmonized and assigned for the use of 5G radio technology, percentages; radio frequency bands of the harmonized radio frequency spectrum for the use of 5G radio technology; the number of settlements covered by 5G radio technology, percentage; percentage of the population using mobile devices to access the Internet.

### 3. Integration of digital technologies:

- digital intensity with indicators: the share of enterprises with at least a basic level of digital intensity in the total number of enterprises (grouping by the number of employed employees 10-249 people), percentages;

- digital technologies for business with indicators: the share of enterprises using software (ERP) in the total number of enterprises, percentages; the share of enterprises using social media in the total number of enterprises (by the number of social media used, two or more), percent; the share of enterprises conducting "big data" analysis in the total number of enterprises, percent; the share of enterprises purchasing cloud computing services in the total number of enterprises, percent; the share of enterprises using artificial intelligence technologies in the total number of enterprises, percentages; the share of enterprises that send invoices in electronic form, in the total number of enterprises, percentages;

- e-commerce with indicators: the share of enterprises engaged in e-commerce in the total number of enterprises (grouping by the number of employees 10-249 people), percentages; the volume of sold products (goods, services) of enterprises obtained from e-commerce (grouping by the number employed workers 10-249 persons), percent; the share of enterprises that carried out electronic trade in the total number of enterprises (grouping by the number of employed employees of 10-249 people and by the location of clients of EU member states and other foreign countries), percentages.

### 4. Digital government services:

- electronic government with indicators: the number of users of electronic government services, percentages: pre-filled forms, points (0-100);

-state digital services for citizens, points (0-100); government digital services for business, points (0-100);

-open data, percent of the maximum score.

The periodicity of data and metadata submission is carried out every year after the start of operation of the data collection service - the NKEK regulatory reporting system as part of the Electronic Regulatory Platform and the establishment by the central executive authority in the fields of electronic communications and radio frequency spectrum of criteria for classifying electronic communication networks as broadband access networks, high-speed networks, networks of high and ultra-high bandwidth.

Since 2017 the EU Council has been focusing on a variety of related digital issues, such as the Declaration and Roadmap on the development of 5G infrastructure for mobile communications, which is essential for connected devices, the so-called Internet of Things, the e-Government Declaration and cybersecurity packages. It has been argued that the free movement of data should be considered the fifth freedom for the EU, in addition to the freedom of movement of goods, services, persons and capital, although this idea has not led to specific legislative initiatives at the time [19]. The EU is actively developing the digital economy, which in modern conditions is becoming the basis for the development of other sectors of the regional economy. The EU's economic policy promotes the digitalization of societies in the EU member states and aims to facilitate the development of a single digital market and the prospective creation of the EU Digital Union. However, the country's innovation policy is often only declarative, and real steps lag behind the needs of the business environment. It is possible to assess the effectiveness of innovation policy, in particular, of the EU countries, by assessing the level of their readiness to implement the advanced digital technology - 5G Internet (Fig. 2) [20].

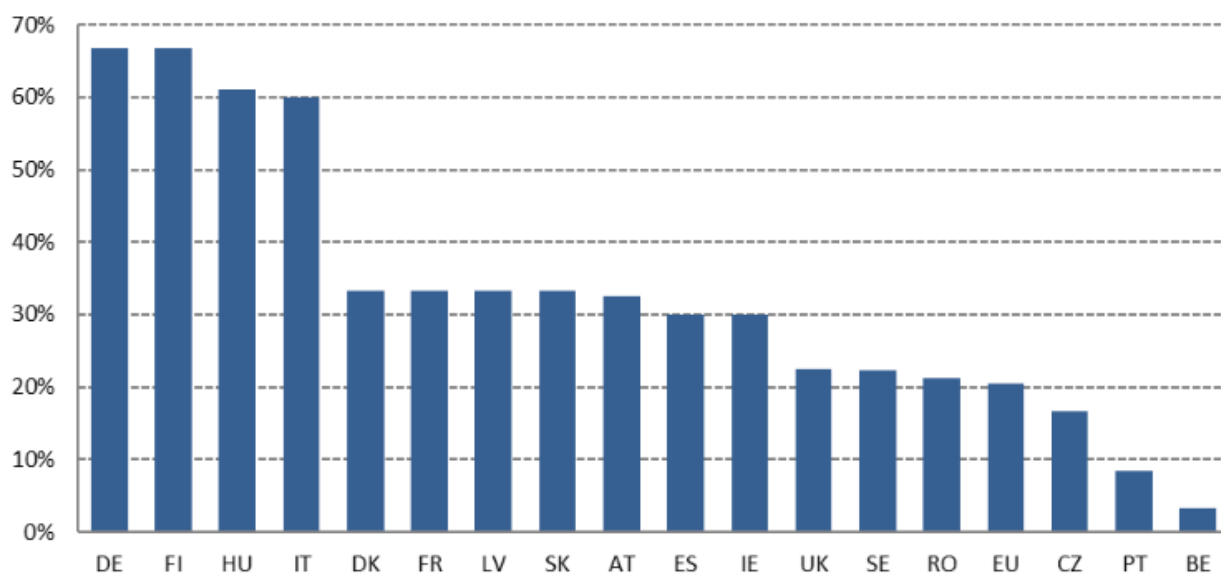


Fig. 2.- Readiness of EU countries to implement 5G Internet, in % of the potential coverage area. [20]

As can be seen from Fig.2, not all EU countries are ready for a new round of development and spread of digital technologies, but only the most advanced ones in terms of digitalization. Thus, the peculiarities of the formation of the EU digitalization mechanism are determined by the development and implementation of digital technologies, which include, first of all, cloud technologies, the Internet of Things, artificial intelligence, neural networks, etc. These are the factors that cause changes in the international distribution of the structure of supply and demand in the labor market. Technology has led to the emergence of a new phenomenon in the labor market - the gig economy, in which the labor market is undergoing dramatic changes. The demand for permanent jobs has significantly decreased and the demand for temporary projects has increased, and employment is moving into the digital space. Technology has provided various social groups with the opportunity for remote employment, which is of great importance in the face of the threats and challenges of our time. The main components of modern economic relations have become digital technologies and the availability of digital public services, communication technologies, and human capital.

In our opinion, the existing institutional component of digitalization in the EU countries is more concerned with the digitalization of public services and does not

provide for the creation of special information and communication tools for professional support of these processes. For example, in Ukraine, free access to knowledge in the field of digitalization for young people is becoming increasingly difficult, and there is no strategy for creating a professional and qualification structure for the national economy. The effectiveness of digitalization processes crucially depends on the availability of relevant specialists, but no decisive changes in this direction have been observed so far (Fig. 3)[20]. As can be seen from Fig. 3, the dynamics of the number of IT specialists in the EU in 2020 amounted to 4.2% of the total population and increased by 6% over the five years from 2015-2020. The number of female IT professionals grew at a higher rate, but the question remains how many such professionals are actually needed, and it is not known what the forecast for their distribution in the labor market is.



Fig. 3.- Dynamics of the number of IT specialists in the EU, 2015-2020. Source: compiled by the author based on [20].

At the same time, the private sector is experiencing active digitalization processes, especially in industrial production, electricity, pharmacy, medicine, retail, education, transportation and logistics, etc. Digitalization has created a world without borders and it has different characteristics from other aspects of the single market [21]. In terms of business management, cloud technologies play a dominant role today. About 40% of large enterprises and 20% of small and medium-sized businesses use cloud computing functionality in their operations. As for the territorial distribution, there is a significant technological disparity between European countries. Thus, Finland (62% of enterprises)

and Sweden (59% of enterprises) are the leaders in the use of cloud technologies, while Romania (13% of enterprises) and Bulgaria (7% of enterprises) are outsiders[21].

According to Gartner, in 2026, the global cloud services market will reach about USD 521.8 billion, which is almost twice as much as in 2021. [5]. One of the main reasons for this growth is that in order to achieve greater flexibility, mobility, and efficiency, businesses are reorienting their operations to cloud services. [30].

The analysis shows that the EU has been consistent in creating a single digital market. For example, in order to remove obstacles to cross-border transactions and provide legal certainty for businesses and consumers, an internal market framework for online services was established (the Electronic Commerce Directive (2000/31/EC). This Directive established an understanding of the different roles of Internet service providers. The next step in the development of the digital market in the EU was the E-Government Action Plan 2010 of 2005, which defined five main goals [23]:

- 1) to provide reliable and innovative e-government services to all citizens and thus bridge the "digital divide" in an effort to make digital Europe more inclusive;
- 2) to make these services efficient;
- 3) to ensure that all public procurement is conducted online;
- 4) to ensure convenient, secure and authorized online access, emphasizing the need for secure identification;
- 5) to strengthen democratic decision-making through new technologies.

The adoption of the EU Strategy for Social and Economic Development "Europe 2020" (2010) can be considered the starting point for the formation of a full-fledged Single Regional Digital Market. The Strategy envisaged 7 flagship initiatives, including the Digital Agenda for Europe. The seven pillars defined for the Digital Agenda form the structure of the EU digital market [24].

Based on the "Malmo Declaration" adopted by the ministers responsible for e-government policy in the EU member states (2009) and the "Digital Agenda" (2010), there is:

- creation of a plan for the development of a single digital market;

- improving interoperability and standardization;
- focusing on building trust and security;
- promoting high-speed Internet access;
- support for digital research;
- introducing a provision on digital literacy in society.

One of the main aspects of these initiatives was the creation of a cross-border and interoperable environment in the EU.

In 2014, EU Regulation (EU) No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market was adopted. It replaced the Electronic Signature Directive (1999) by including citizen identification, electronic seals, and providing a European framework for the acceptance and use of foreign digital identities for citizens and businesses in cross-border e-government services.

The European Commission launched the Digital Single Market initiative (2014), and 28 separate legal acts were approved over the next five years [25].

The European Commission defines the single digital market as an electronic market where goods, citizens, electronic services and capital move freely, and where individuals and companies can conduct online activities without hindrance, subject to fair competition, high levels of consumer and personal data protection, regardless of their nationality or location. The regulatory challenge is to ensure that the single market can operate in the digital world as well as in the analog world. This means ensuring better access for consumers and businesses to electronic goods and services throughout the EU, as well as creating conditions for the development of digital networks and services and maximizing the growth potential of the EU's digital economy [26].

Important steps in the implementation of the strategy were the adoption of the Directive on the Security of Network and Information Systems (EU Directive 2016/1148), as well as the adoption of the General Data Protection Regulation (GDPR), which is a comprehensive data management regulation and is characterized as "the toughest privacy and security law in the world" (2014). In accordance with the General Data Protection Regulation in the European Orientation, which entered into force in

May 2018, the transfer of personal data of European citizens to third countries is limited [27]. The EU has developed a strategy for artificial intelligence, which, among other things, contains a charter on the ethics of artificial intelligence [27].

In general, the strategy of the Digital Single Market is to maintain Europe's position as a world leader in the digital economy and to help European companies develop globally. Already at the stage of forming the Strategy, it was predicted that such a market would create opportunities for new startups and existing companies in a market of more than 500 million people, potentially bringing hundreds of billions of euros a year to the EU economy, creating new jobs and transforming public services.

The purpose of the Digital Single Market is to reform regulatory provisions and ensure their greater unification in the context of consumer protection, copyright, and online sales. The European Commission sets five priority goals for the DSM [28]:

- 1) increase of the volume of e-commerce in the EU by counteracting geo-blocking and facilitating international parcel delivery;
- 2) adaptation of copyright rules in the EU to the digital era;
- 3) updating audiovisual content regulation in the EU and working with platforms to create fairer conditions;
- 4) promoting European films, protecting children and combating hate speech, strengthening European capabilities to respond to cyber attacks by strengthening the European Union Agency for Cybersecurity (ENISA), to ensure better protection for businesses, public institutions and EU citizens;
- 5) helping businesses of all sizes, researchers, citizens and public authorities to make the most of new technologies by ensuring the availability of the necessary digital skills and funding European research in the fields of healthcare and high-performance computerization of processes.

The European Commission has also released a Communication "Artificial Intelligence for Europe" (2018), which sets out a European initiative on artificial intelligence, which aims to [29]:



- increase the EU's technological and industrial potential and the implementation of artificial intelligence in the Union's economy;
- prepare for socio-economic changes by encouraging the modernization of education and training systems, developing talents and supporting labor market changes in line with the projected changes that the integration of AI technology will bring to the EU labor market;
- ensure an appropriate ethical and legal framework for the functioning of artificial intelligence in the EU.

Following the introduction of the framework approach to govern EU policy on artificial intelligence (AI), the European Commission initiated the establishment of a Member State Group to assist in the development and harmonization of the EU Coordinated Plan on AI (2018) [30]. The plan was published together with a related AI factsheet. The Member States Group is responsible for the progress, implementation and review of the coordinated plan, as well as for preparing Member States' reports on the progress of digitalization of European industry.

**Conclusions.** Digitization and the creation of a single EU electronic market have a great impact on the competitiveness of enterprises and economies of the participating countries. They contribute to increased efficiency, stimulate innovation and open new markets. At the same time, these processes carry certain challenges, such as cyber security and the need for continuous training. It is important that governments and businesses actively work to overcome these challenges and make the most of the potential of digitalization for economic growth and improving the quality of life of citizens. The creation of a single electronic market in the EU is an important step on the way to the integration and harmonization of the digital economies of the participating countries. This helps to create a favorable environment for business development and increase the competitiveness of European enterprises at the global level.

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