FUNDAMENTALS OF HIGHER EDUCATION IN THE DIGITAL ECONOMY

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ABSTRACT

The article highlights the key aspects of modeling to improve the quality of forecasts of staffing needs of the regional economy in the context of digital transformation of the regional economy and business. The distribution of the number of specialists in the field of ICT in Ukraine, employed in the economy, was assessed and a negative tendency towards a decrease among specialists of the highest level of qualifications of software and application developers and analysts was revealed. The analysis of the distribution of ICT specialists by type of economic activity in 2018 and 2020 (forecast) in the Dnipropetrovsk region is carried out. The distribution of the graduation of bachelors and masters in the main areas of training and specialties in the field of ICT in the Dnipropetrovsk region for 2018-2019 was analyzed and areas and specialties in which growth trends are observed. The data on the distribution of the population of the Dnipropetrovsk region in 2019 of the possession of digital skills are considered and presented. It was revealed that, in accordance with official data, the share of the population of the Dnipropetrovsk region with digital skills (elements of digital literacy) in one or another subject area is less than 50%.

Key words: *digital economy, digitalization of education, information technology*

INTRODUCTION

The world economy at the beginning of the XXI century demonstrates new phenomena and trends that were not previously known. The depth of the ongoing changes allowed some economists to draw a conclusion about the onset of a special temporary phenomenon or an era of transformations that presuppose a qualitative renewal of the economy to its new model. In this aspect, Ukraine and its regions are no exception, it is on the eve of a new stage of transformation.

Today, the Ukrainian community needs clearly defined guidelines for socio-economic development, in connection with which, the study of the essence of the transformation process in the context of the transition to a digital economy is of particular relevance. The digital economy sets fundamentally different trends focused on training specialists of a qualitatively different level, including solving the problems of modeling the personnel needs of the regional economy.

And the point here is not even that a number of specialties from the former economy will not only lose their relevance, or even disappear from the labor market. Much will depend on how much the specific knowledge, skills and abilities acquired in the learning process will be consistent with the format of the digital economy, which itself will undergo constant and fairly rapid changes.

1. DIGITALIZATION IN HIGHER EDUCATION IN UKRAINE AND ITS REGIONS

It should be noted that in the conditions of the economy of the regions of Ukraine, modern approaches to modeling the personnel needs of the regional economy have a number of limitations. Among them, the three most significant should be noted:

– focus on large and medium-sized businesses, while regional development is accompanied by fairly high growth rates of small businesses, while in the framework of the coronavirus pandemic it is most exposed to economic risks;

– the lack of consideration of the influence of a number of factors causing structural changes in the main subsystems of the regional economic system: in the economy (by type of economic activity and number of employees), in the labor market (by professions, qualifications, by competencies), in the system of vocational and higher education (by training levels, including digital literacy and specialties). Among such factors are the implementation of innovative digital and investment projects, the development of regional technological platforms (RTP), the formation of promising labor markets;

– orientation of forecasting methods for the retrospective period and development trends, which does not allow timely identification and consideration of changes in the qualitative and quantitative composition of the personnel needs of the regional economy. As a result, forecasts of the staffing needs of the regional economy are characterized by a low level of accuracy and reliability, especially when making forecasts for levels of education, professions and qualifications.

In the context of the digital transformation of the regional economy and business, in order to improve the quality of forecasts of the staffing needs of the regional economy, the key aspects of modeling should be clarified:

– regional subsystems taken into account when modeling the personnel needs of the economy and business;

– factors affecting the size and structure of staffing requirements;

– the stages of the process of forecasting the staffing needs of the regional economy by types of economic activity, levels of education, professions.

Among the regional subsystems in modeling the personnel needs of the economy and business, as a rule, the following three are distinguished: the economy, the labor market, and professional and higher education.

For the effective implementation of the task, first of all, it is necessary to define and understand what digitalization implies in higher education and whether this process entails a change in the educational paradigm, the transformation of relations between co-sponsors of education.

An analysis of the few scientific publications devoted to this issue [1, 2, 3, 4] showed that it is widely believed that digitalization of higher education involves the wide and active use of information and communication technologies (ICT). It is assumed that the introduction of ICT through digital repositories, cloud services and social networks will allow teachers of educational organizations to introduce active forms of student learning in a mixed environment based on the theory of social constructivism of project learning and situational learning.

Digitalization in higher education in Ukraine and its regions also involves the creation of a fundamentally new information structure for conducting the educational process at the regional level. This structure will provide unlimited access to educational resources for anyone with access to the Internet. However, unlimited access to electronic resources does not mean expanding access to education, improving its quality.

Getting information is not learning or education. It should be noted that the research literature of domestic and foreign scientists dedicated to the strategy of e-education, in addition to the dignity of this type of education – unlimited access to educational resources, also revealed the problem – the digital competence of both students and faculty. Undoubtedly, the majority of current students and part of school graduates, before entering a higher educational institution, have quite a lot of experience in using some digital technologies after compulsory (secondary) education. But basically, these technologies are associated with good skills in finding the necessary information in Internet resources and creating (if necessary) electronic presentations.

Having experience of initial acquaintance with digital technologies, there is a high probability that students (or an applicant) have an overestimated self-esteem about the level of digital technology proficiency, which can negatively affect their activities in the learning process. Undoubtedly, the search for information through the Internet resources significantly reduces the time, but it leads to the fact that students, using someone else's ready-made texts, lose the ability to critically comprehend, «fragmentary thinking» develops.

The training of specialists adapted to the digital transformation of the regional economy and business requires appropriate skills in the use of ICT and from the teaching staff. In today's realities of the economy, under the influence of the consequences of the coronavirus pandemic and financial crisis risks, the format of electronic-distance education is undoubtedly a positive point.

Any training is carried out with the help of a «mediator», and this mediator is traditionally a textbook, study guide, workshop, scientific methodological guide, etc. At the same time, the textbook is filled with «energy», the act of learning occurs spontaneously, in flashes [5, p. 107]. In e-learning, the «mediator» is not a paper medium – a textbook and

educational-methodical literature, in which educational information is presented in accordance with the logic of studying the field of knowledge, that is, not the entire «holistic picture» of educational information is visible, but only part of it, «a fragment images».

At the same time, the information is perceived as absolutely truthful, correct, without comprehension and reflection. However, a number of empirical studies, for example [5, 6, 7, 8], show that familiarity with technology does not mean that a student understands the patterns of its use. Currently, with wide access to gadgets, students are experiencing difficulties in using digital technologies in an educational context [6].

It is important to note that constant immersion in a redundant information environment and in the absence of a certain systematic approach, leads to the fact that the student applies individual tactics of avoiding information (the phenomenon of information output), the essence of which is that a person ignores relevant useful information, because it too much to understand and accept [8]. A paradox of choice appears, that is, «there is a refusal to comprehend (analyze) information and fixation on a quick decision» [7].

This means that the student has difficulty in front of the volume of educational information, before solving the tasks assigned to him, therefore, he chooses the easiest or the first solution that comes to mind. There is a paradox: despite a certain level of information literacy, a student cannot select the necessary and sufficient number of information sources.

The choice leads to a random, not always correct source of educational information. In such conditions, one of the main tasks of a teacher is to teach students how to learn: how to extract the necessary, cutting off unnecessary (unnecessary) information, where to get it, given that there is so much of it. At the same time, be able to show how to classify and package information, how to cope with multitasking that goes in parallel. Modern university students, those who were born in the 21st century, according to M. Prensky's concept of Digital Natives, have an innate knowledge of digital technologies, perceive the digital world as everyday life, feel themselves in the flow of multitasking, are accustomed to the interactivity of gadgets, to their own activity on social networks, to the speed in the world of video games [9]. Based on this concept, many followers stated that modern university students have different abilities, therefore, the educational process in universities should be organized differently.

To confirm or refute this provision, a study was conducted in a number of universities in Dnipro in September 2020 (based on surveys of 2nd and 3rd year undergraduate and first-year students of economic and non-economic specialties of full-time education). Students were asked to choose teaching methods that best meet the needs and interests of the students themselves, as well as to identify outdated methods and methods that do not form the necessary skills, knowledge, and competencies.

The study (in the form of oral surveys) involved 186 students from 4 universities.

Analysis of the results of this express survey showed the following picture:

1. The most «outdated» teaching methods are – conducting a lecture with the help of chalk and blackboard (on the part of teachers) and manual «writing lectures» (on the part of students). This is noted 64 % respondents.

2. The methods that do not form the necessary skills, skills and competencies are writing essays, control tests; writing and public reading of reports and performance of tests. So answered 70 % students.

3. The most optimal teaching methods, according to students, were:

– solving situational problems in small groups (no more than 4-8 people) – 63 %;

– Creation of illustrative and informational graphic presentations for each academic discipline – 71 %;

– creation of projects (including multimedia) – 61 %;

– conducting trainings using role functions (including in the form of a colloquium) to consider a specific scientific and practical problem using the examples of operating enterprises, firms, companies – 78 %;

– the use of social networks in the educational process – 81 %;

– search and discussion of several options for solving the assigned tasks (and not only the option offered by the teacher) – 63 %;

– solving only those tasks, situations that are associated with the development and preparation of management decisions – 84 %

– use of gadgets in the learning process – 94 %;

– practical solutions to problems of information security, business analytics – 74 %.

Thus, based on the process of digital transformation of education in universities, a preliminary conclusion can be drawn: on the one hand, students believe that receiving and processing information from different systems, the introduction of digital technologies, practical training in the field of innovative digital development of an enterprise, company, firm (including in the field of small and medium-sized businesses), the active use of new teaching methods (in particular, on the basis of graphic illustrative display of educational material) allows you to get and form important skills and abilities; on the other hand, it should be noted that the teacher's use of digital technology leads to an increase in multitasking. This does not mean that students will do better.

Also, during the first half of 2020, an attempt was made to analyze the current situation with the availability and level of preparedness of specialists in the field of information and communication technologies in one of the regions of Ukraine – Dnipropetrovsk region.

In Ukraine and its regions, the share of specialists in this area amounted to 2.35 % of the total number of people employed in the economy. In the economy of the European Union, the leading position in this indicator is occupied by Finland (6.8 %), followed by Sweden (6.6 %), Estonia (5.6 %).

In the structure of the number of specialists in the field of ICT, the largest share falls on specialists of the highest qualification level – 64.1 %, the smallest – on managers (2.8 %). In Ukraine, the distribution of the number of ICT specialists employed in the economy is shown in Fig. 1.

Fig. 1. Distribution of the number in the field of ICT employed in the economy, % (2018-2020)

Source: prepared by the authors

Developers and analysts of software and applications (for databases and systems) prevail among specialists of the highest qualification level. From the data in Fig. 1, it can be seen that in the country there is a negative trend towards a decrease in such specialists due to leaving for other countries (in the period from 2018-2020), this indicator was 4.7 %. The largest share of mid-level specialists falls on specialists in ICT operation and ICT user support. It should be noted a positive (albeit insignificant) trend + 5 %. Unfortunately, the number of skilled workers is rather unstable (this is also associated with their departure to other countries).

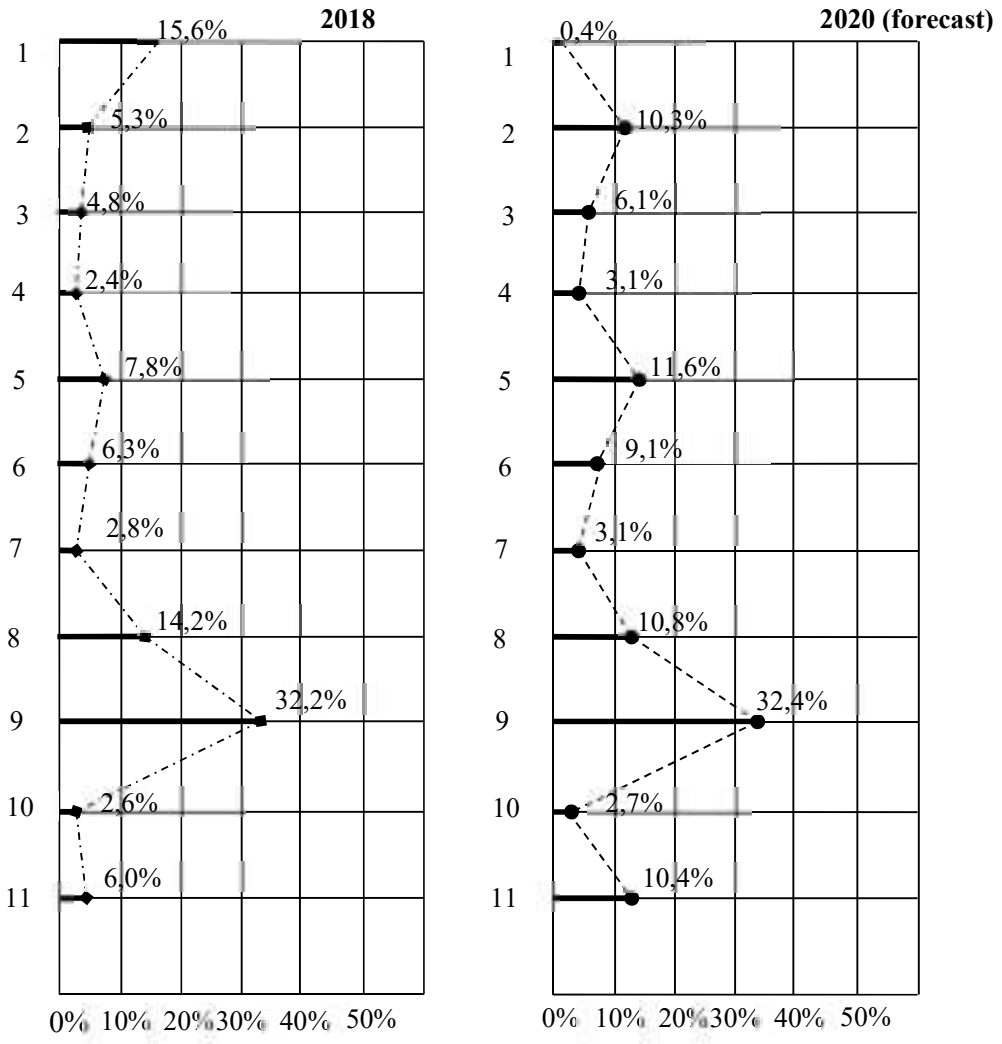
The insufficient number of trained ICT leaders should be highlighted. For example, in the United States, the share in the structure of the number of managers is up to 18.6 %, against 3.3 % in the field of ICT management.

The most popular types of activity in which ICT specialists are concentrated (and required) in a large region – the Dnipropetrovsk region are (Fig. 2) the leading sphere is «information and communication».

It should be noted that the analysis data indicates that the need for specialists in the field of ICT has the following types of activities (have a positive trend): wholesale and retail trade (+3.8 %), the financial sector (+ 5 %), scientific and technical activities (+ 2.8 %), service sector (+ 4.4 %). At the same time, a low level of activity of ICT specialists was noted: in the manufacturing industry (3.4 %), as well as in social spheres: education and healthcare, construction. A low inflow of ICT specialists can be noted in other spheres of activity (outside those noted in Fig. 2).

According to the results of the analysis, what specialties in the field of ICT are currently in demand in higher educational institutions of the Dnipropetrovsk region and to what extent the universities of the region are ready to provide the labor market with these specialists. According to data for 2018-2019, the release of bachelors and masters in the main areas of training and specialties in the field of ICT amounted to 8,6 % of the total graduation in 2018, and in 2019 – 10,6 %. Of these: 3,8 % – in the field of informatics and computer technology; 4,4 % in the field of applied informatics; 2,4 % – in the field of information systems and technologies. Figure 3 shows the distribution of the graduation of bachelors, masters of full-time and part-time education in the main areas and specialties in the field of ICT.

The analysis of the data presented in Table 3 showed that there is a growth trend in the following areas and specialties in the field of ICT: informatics and computer technology (+1.5 %), applied informatics (+1.3 %), information systems and technologies (+ 4.4 %), business informatics (business intelligence) (+1.8 %) and ICT and communication systems (+ 0.9 %). At the same time, in 2019, a smaller number of graduates came to a number of the most important sectors of the region's economic complex, namely: information security, minus 2.8 %; radio engineering, minus 1.7 %; fundamental informatics and information technology, minus 1.2 %, mathematics and computer science, minus 0.8 %.



1	Others	2	Financial and insurance activities	3	Transportation and storage	4	Construction
5	Wholesale and retail trade	6	Scientific and technical activities	7	Education	8	Manufacturing industry
9	Information and communication			10	Health care and social services	11	Services

Fig. 2. Distribution of ICT specialists by types of economic activity in 2018 and 2020 (forecast) – in Dnipropetrovsk region

Source: prepared by the authors

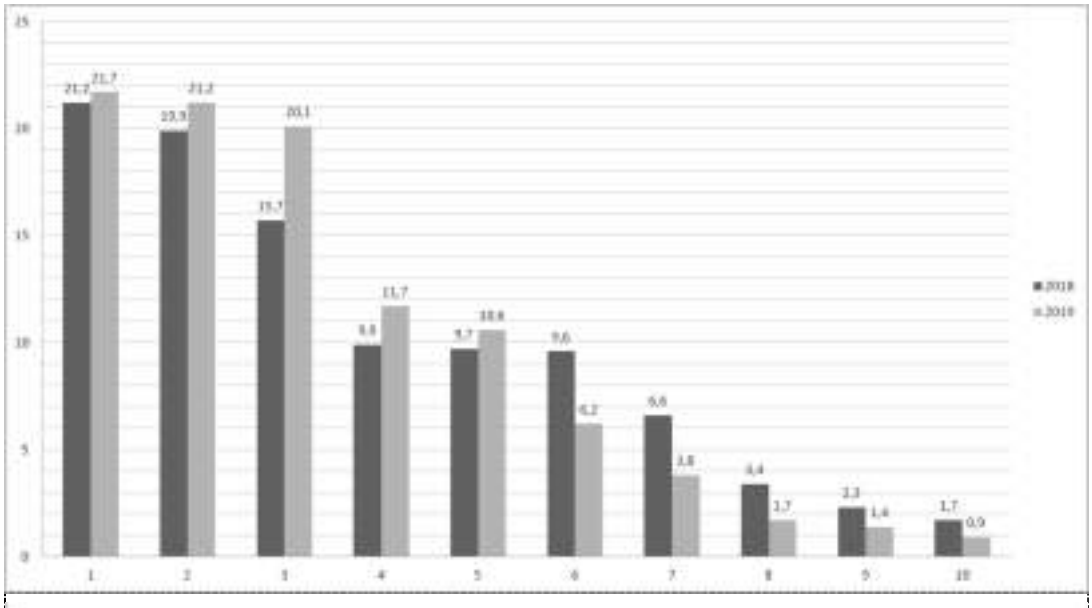


Fig. 3. Distribution of the graduation of bachelors and masters in the main areas of training and specialties in the field of ICT – Dnipropetrovsk region (2018-2019)

Source: prepared by the authors

At the same time, according to the opinion of a number of heads of IT companies and large industrial enterprises in the region, there is a lack of specialists – developers of software and applications of an applied nature.

It should also be noted that a difficult situation in the field of digital literacy has developed in the Dnipropetrovsk region. Figure 4 shows the data on the distribution of the population of the Dnipropetrovsk region in 2019 of the possession of digital skills. According to official data, the share of the population of the Dnipropetrovsk region with digital skills (elements of digital literacy) in one or another subject area is less than 50 %. At the same time, the region is included in the group of leaders in the whole of Ukraine in terms of digital literacy (4th place in 2018). Moreover, most of the region's population is concentrated between the ages of 16 and 26. Among the older generation (more than 50 years old), up to 71 % of the region's population does not need to use the Internet, and 62.3 % refers to the lack of skills for working on the Internet.

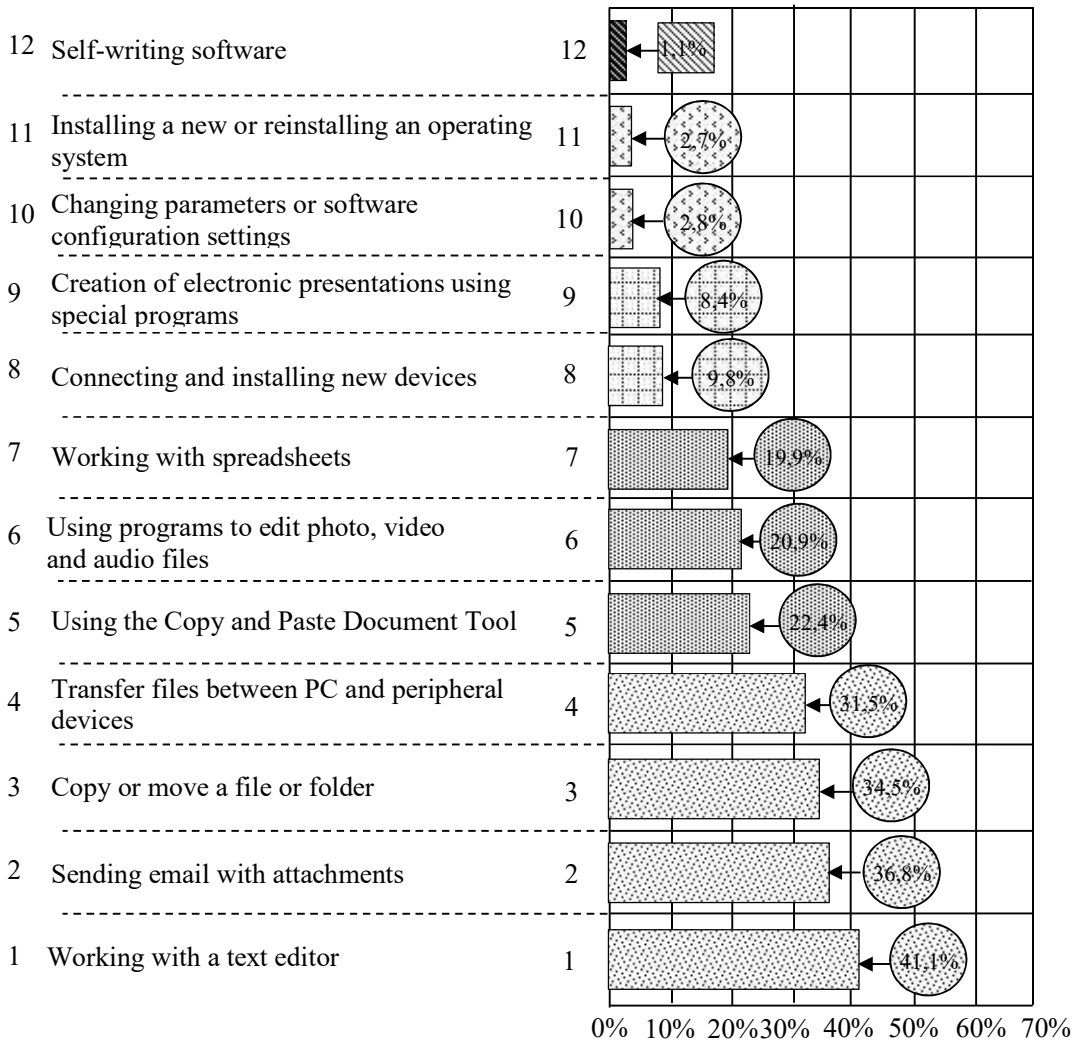


Fig. 4. Distribution of the population according to the degree of possession of digital skills (elements of digital literacy – Dnipropetrovsk region, 2019)

Source: prepared by the authors

2. THE POTENTIAL OF USING DIGITAL TECHNOLOGIES IN THE EDUCATIONAL PROCESS

The emergence of online courses with the use of IT technologies allows you to acquire knowledge at a convenient time and place without the direct participation of a teacher. In relation to the educational programs (EP) themselves, constant monitoring is also required in order to adapt them to the needs of the digital economy, including based on the specifics of a specific regional economy. Today, most students of universities and professional educational structures openly declare the need to obtain more in-depth knowledge in disciplines in the field of processing and analysis of big data, applied informatics, innovative digital development of enterprises and companies and the field of entrepreneurship, electronic and digital marketing, digital modeling of business risk assessment, including risks of economic interests of business structures of the regional economy.

To assess the potential of using digital technologies in the educational process, two most important criteria can be considered – «effectiveness» and «economic efficiency». From the point of view of effectiveness, this means that the introduction of digital technologies should contribute to meeting the needs of improving the quality of the educational process at the university (for example, independent study of certain topics, subject to effective applied training in the form of computer laboratory classes; reducing the duration of training (passing educational topics); individualization training, etc.

On the other hand, the use of one or another digital technology should reduce the costs of budgetary (extra-budgetary) expenses of the university itself, although there is a limitation due to the fact that the computer material part is in a deplorable state in most Ukrainian universities, and government structures have clearly lost time for digital transformation of the educational process.

It should also be noted that paying more attention to the analysis of new phenomena and trends in the economy, relying mainly on the work of American researchers (N. Negroponte, Ch. Meyer, M. Sawhney, D. Spulber, Don Tapscott, S. Durvetson, P. Seybolt and others), one can find the desire of the authors [10, 11] to characterize the new features of the modern economy, using terms such as «New Economy», «Internet Economy», «Digital Economy» (Digital Economy), «e-commerce» (E-economy, E-business), etc. These terms are often used synonymously when considering new phenomena in the economy caused by the formation of the global electronic network (Network), the global spread of personal computers (PC), the creation and continuous improvement of software (Software), the production of non-material products and services of IT companies.

Thus, considering the problems of higher education in Ukraine and its regions, the new economy is a natural form of post-industrial economy, then the digital economy is one of the evolutionary forms of manifestation of the new economy. The techno-digital nature of economic relations is the key distinguishing feature of the digital economy. It also follows that as a «form of form» the digital economy contains not only a set of features of a new economy, but also contains a number of distinctive aspects that characterize the qualitative certainty of the digital economy, which must be taken into account when developing EP and the educational process in general in Ukrainian universities.

According to the results of studies by a number of foreign and domestic scientists, it was revealed that the new and digital economy is characterized by also a rapid change in the material factors of social production, both in form and in content, that is, in the direction of decreasing their value and physical content. For example, the material consumption of products and production has dropped significantly in the economies of different countries only in recent decades. That is why one of the leading trends in the digital economy is considered to be the «disappearance» of the material, the replacement of the material by non-material components of production and products. Here we mean, first of all, the

tendency of an increase in the role and significance of the information-digital component in production costs and intellectual property, including: information itself, digital technologies, Internet services and services, software products, etc. compared to the material component. These trends should be taken into account in the process of digital transformation of education, especially in the context of the regional economy.

The value of companies, enterprises and firms as subjects of the economic complex of the regional economic system, their competitiveness is increasingly determined not only by tangible property, but rather intangible: human knowledge, human capital, artificial intelligence and strategic key intellectual property (possession of ideas, the ability to form the idea of an innovative product, the potential for the introduction of innovative digital technologies), providing strategic competitive factors of success for the subjects of the economic complex of the region.

Considering the problems of transforming education in the context of digitalization and modeling the staffing needs of the regional economy, it should be noted that the generation and interconnection of everything new (innovative) in the economy is still provided by humans. The mental potential of people and the power of intelligence can never be completely high (including artificial intelligence technologies), have no limit, and determine progress in any field. That is why human capital, the intelligence of employees, as well as university graduates, is becoming a leading factor in the new, digital economy. It is also important that if modern traditional technologies in market conditions are available to almost all firms, companies, corporations, then new digital business technologies and attracting consumers for some time entirely belong to the «know-how» of the personnel of the firm, companies and corporations. People who are able to work creatively, innovatively and digitally are practically invaluable. This, in turn, leads to a change, the development of personnel management methods, primarily due to the formation of a mechanism for motivating it to innovations, at enterprises, firms, companies aimed at maximizing the use of human potential.

In the context of modeling the staffing needs of the regional economy, another feature of the digital economy should be highlighted – the implementation of the principle of accelerating economic growth and innovative development. Thanks to the electronic network (Network), it significantly accelerates the distribution and adaptation of products in the field of circulation and consumption. The electronic network and digital technologies make network marketing (based on its digitalization) more effective: information about products, market situations is distributed according to the principle of a chain reaction. According to this provision, the first decision and the right action often provide great benefits and additional benefits. Good, quality products are distributed and sold online at a rate comparable to the spread of a virus in nature.

«Viral» marketing ensures the acceleration of economic growth for any enterprise, firm, company. An example would be many internet companies (Amazon, Alubaba) doing e-commerce and internet commerce. At the same time, the dependence of the value of the product on the market share is determined by the large-scale development of the electronic network. If earlier the value of a product was largely determined by its scarcity, now, thanks to the Network, the exception is quickly turning into a rule, the price is falling. The effectiveness of companies operating online is ensured, first of all, by persistence, mobility, communication skills, professional competence of personnel, collegiality of decisions and an individual approach to network users (potential buyers) based on Big Data technologies [12].

The digital economy, including in the context of the formation of criteria for digital literacy of university graduates, is also characterized by a change in the institution of mediation. The activities of intermediaries are now changing, as awareness and awareness of buyers is replaced by direct interconnectedness of market participants. On the one hand, traditional distributors and agents in developed countries are currently facing serious difficulties (including under the influence of the coronavirus pandemic) in their work with the development of an Internet network in which buyers and sellers are directly connected and do without intermediaries in their transactions. On the other hand, the amount of information is growing rapidly and users (buyers) are in dire need of a kind of «filters» that filter out unnecessary information.

These conditions create the preconditions for the emergence of a new type of mediation – information mediation. More and more info-Internet companies appear, offering aggregated services or intelligent customer service, aimed at strong qualified and technologically secure assistance in the implementation of transactions in all aspects. Such companies form the so-called communicative and organizational environment for the convenience of consumers and for the benefit, of course, of their own business. It is interesting in detail when any companies that have frequent contacts with all market participants and possess the appropriate digital technologies, as well as potentially useful information about these participants from the generated databases, can become information intermediaries. Software systems (Software) and services of Internet companies help buyers find the best options.

An important aspect of the Internet economy and the digital economy, in particular, is the special technology of doing business, which must be taken into account in the educational process. The peculiarity lies in the fact that the transaction is carried out on a one-to-one basis and generally without the participation of intermediaries traditional in the market, or with the participation of information intermediaries. Therefore, the information component of the value of goods and services is becoming more and more. At the same time, as real practice shows, sellers find this process more profitable, since the cost of digitalization is more efficient than spending on the traditional components of the cost of

goods. In turn, consumers tend to individualize their product requirements in accordance with their desires. In fact, there are unprecedented conditions for information exchange between suppliers and consumers, between sellers and buyers. For both, information is a key moment in their economic life in the context of the digital transformation of the economy.

It is also important to take into account the fact that the digital technological platform (the techno-digital basis of the new economy) provides unique opportunities for the implementation of the methodology of selectively targeted interaction of socio-economic subjects of the region. The formation of databases, large tables or large data arrays (Big Data) coupled with the emergence of new digital technologies for working with information on supercomputers allows you to determine the preferences of the subjects of relations and generate targeted influences and proposals for each individual. An individual approach to each consumer or participant in relations (including socio-political) in the context of globalization of relations, thanks to the «digital», becomes a reality and an effective management tool [13].

Thus, the goal of higher education in Ukraine and its regions in modern conditions should be to train specialists with modern knowledge and practical skills in analytical, statistical and economic research methods, analysis of socio-economic phenomena and processes using digital technologies.

It should be noted that digital transformation does not mean exclusively the introduction and use of ICT. The digital transformation of the economy and business at the macro, meso and micro levels presupposes qualitative changes in the content of the educational process at the university, which ultimately lead to the satisfaction of the needs of all its participants (students, teachers, employers) and will provide a worthy place for a particular higher education institutions in regional, national, world rankings.

At the same time, it is important to note that it is obvious that digital technologies can significantly transform educational processes in the face of reduced teaching load. At the same time, we must not forget about the quality of the education received. EP are constantly updated in the part of academic disciplines where changes are taking place. The transformation in the higher education system in Ukraine and its regions can contribute to a radical (even radical) rethinking of the discipline, its place in training specialists for the realities of the modern market, which has modern knowledge in demand on the labor market in an information-innovative society.

To implement this, will need access, during studies at the university, to modern professional information bases, software products, modern equipment. Of course, from the standpoint of economic efficiency, this carries additional costs, but the quality of knowledge and the possibility of obtaining it for adaptation in the conditions of modern market relations is much higher.

CONCLUSIONS

Thus, the basic goal of education, including higher education, for the needs of the economic complex of Ukraine and its regions, in the context of the digital transformation of the national and regional economies and business, should be the training of specialists with modern knowledge and practical skills (professional competencies) in the field of analytical, statistical and econometric methods, analysis of socio-economic phenomena and processes using digital technologies.

Transformation in the higher education system can contribute to a radical (sometimes radical) rethinking of academic disciplines, their place in the training of a specialist who has up-to-date knowledge in demand in the labor market of a particular region of Ukraine, based on the specifics of the structure of the regional economy, in an information-digital society.

A situation should be created where the interests of regional universities and the interest of employers (regional business) in obtaining highly qualified specialists with real practical skills coincide. At the same time, the need in every region of Ukraine to increase and develop digital literacy of the population should be realized.

Digital transformation at the regional level implies a qualitative change in the content of the educational process, both at the school level and at the level of a higher educational institution, which, ultimately, will lead to the satisfaction of all its participants (schoolchildren, students, teachers, employers).

In general, it should be noted that modeling the staffing needs of the regional economy, taking into account the specifics of its development, in the structural aspect, involves the creation of an effective system of strategic forecasting and operational monitoring of staffing needs by levels of education and professions, based on the «hard» impact on the economy of the regions of Ukraine of digitalization. The development of modeling methods will also improve the quality of forecasts of the staffing needs of the regional economy and create the basis for the formation of scientifically based forecasts of the target figures for admission to the regional system of higher education and vocational education. And this, in turn, will contribute to achieving the maximum correspondence between the needs of the economy, business and the capabilities of the education system in the digital economy. The upbringing of young people with the features of a new digital and economic intelligence should become one of the main tasks of the national and regional education systems, and above all higher professional education. The currently dominant focus on acquiring competencies as the main goal of higher education in Ukraine should be supplemented (or, more precisely, softened) by an orientation toward acquiring the traits of a new intelligence – a necessary quality of participants in socio-economic activity in the era of both intellectual economy and information and innovation digital economy.

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