Digital culture and society: problems of their relationship in the conditions of globalization

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ABSTRACT

This article considers problems of relationship of digital culture and society in the conditions of globalization. The author fully reveals the problems that are indicated in the Concept of the national strategy “Digital Uzbekistan 2030”. The negative consequences that can be caused by digital transformation in the period of globalization are also indicated.

The problem of the disappearance of traditional labor markets is touched upon, which causes major socio-economic shifts, including in the sphere of labor relations, while the type of professional activity and the nature of labor itself are changing. In the digital economy, the very process of recruiting is changing, i.e. there is a replacement of professions with machines. Digital culture is a world based on computers operating on the principle of digital binary coding. Its origins are the result of a long history of automation. The Republic of Uzbekistan is represented in many foreign and international indices and studies that indirectly assess the level of the country's readiness for digital transformation. And here the author raises the issue of cybercrime, where the problems of vulnerability of human rights and the protection of his personal data are highlighted.

Thus, the study of the impact of digital communications on culture and society is associated with the presence and need to solve a number of emerging problems, where our state pays special attention to determining the goals, objectives and measures for the implementation of the domestic and foreign policy of the Republic of Uzbekistan in the field of application of information and communication technologies.

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Raqamli madaniyat va jamiyat: globallashuv sharoitida ularning o'zaro munosabatlari muammolari

Kalit so'zlar:

raqamli O'zbekiston,
raqamlashtirish,
raqamli ko'nikmalar,
sun'iy intellekt,
avtomatlashtirish,
kiber jinoyat.

ANNOTATSIYA

Ushbu maqola globallashuv sharoitida raqamli madaniyat va jamiyat o'rtasidagi munosabatlar muammolarini o'rganadi. Muallif "Raqamli O'zbekiston 2030" milliy strategiyasi kontseptsiyasida ko'rsatilgan muammolarni to'liq ochib beradi. Globallashuv davrida raqamli transformatsiya natijasida yuzaga kelishi mumkin bo'lgan salbiy oqibatlar ham ko'rsatilgan.

An'anaviy mehnat bozorlarini yo'q bo'lishi muammosi muhokama qilinmoqda, bu esa katta ijtimoiy-iqtisodiy o'zgarishlarni, shu jumladan, mehnat munosabatlari sohasidagi o'zgarishlarni keltirib chiqaradi, shuningdek kasbiy faoliyat turini va ishning o'ziga xos xususiyatini o'zgartiradi. Raqamli iqtisodiyot sharoitida xodimlarni tanlash jarayoni o'zgarib bormoqda, ya'ni kasblarni avtomat bilan almashtirish amalga oshirilmoqda. Raqamli madaniyat – raqamli ikkilik kodlash printsipli asosida ishlaydigan hisoblash mashinalariga asoslangan dunyo. Uning kelib chiqishi – uzoq avtomatlashtirish tarixining natijasidir. O'zbekiston Respublikasi raqamli transformatsiyaga tayyorligini bilvosita baholaydigan ko'plab xorijiy va xalqaro indekslarda va tadqiqotlarda namoyish etilgan. Va bu erda muallif kiberjinoyatlar muammosini ko'targan, bu erda inson huquqlarining zaifligi va uning shaxsiy ma'lumotlarini himoya qilish muammolari yoritilgan.

Shunday qilib, raqamli kommunikatsiyalarning madaniyat va jamiyatga ta'sirini o'rganish, davlatimiz maqsadlarni belgilashga alohida e'tibor qaratayotgan, paydo bo'layotgan bir qator muammolarning mavjudligi va zarurligi bilan bog'liq bo'lib, bizning mamlakatimiz axborot-kommunikatsiya texnologiyalarini qo'llash sohasida O'zbekiston Respublikasining ichki va tashqi siyosatini amalga oshirish maqsadlari, vazifalari va chora-tadbirlarini belgilashga alohida e'tibor qaratmoqda.

Цифровая культура и общество: проблемы их взаимоотношений в условиях глобализации

Ключевые слова:

цифровой Узбекистан,
цифровизация,
цифровые навыки,
искусственный интеллект,
автоматизация,
киберпреступность.

АННОТАЦИЯ

Данная статья рассматривает проблемы взаимоотношений цифровой культуры и общества в условиях глобализации. Автор полностью раскрывает проблемы, которые указаны в Концепции национальной стратегии «Цифровой Узбекистан 2030». Также указываются негативные последствия, которые могут быть вызваны цифровой трансформацией в период глобализации.

Затрагивается проблема исчезновения традиционных рынков труда, что вызывает крупные социально-экономические сдвиги, в том числе и в сфере трудовых отношений, при этом меняется тип профессиональной

деятельности и характер самого труда. В условиях цифровой экономики меняется сам процесс подбора кадров, т.е. происходит замена профессий автоматами. Цифровая культура – это мир, основанный на вычислительных автоматах, работающих по принципу цифрового бинарного кодирования. Его происхождение – результат долгой истории автоматизации. Республика Узбекистан представлена во многих зарубежных и международных индексах и исследованиях, которые косвенно оценивают уровень готовности страны к цифровой трансформации. И здесь автор поднимает вопрос о проблеме киберпреступности, где выделяются проблемы уязвимости прав человека и защиты его персональных данных.

Таким образом, исследование влияния цифровых средств коммуникации на культуру и общество связано с наличием и необходимостью решения целого ряда проявляющихся проблем, где наше государство уделяет особое внимание определению целей, задач и мер по реализации внутренней и внешней политики Республики Узбекистан в сфере применения информационных и коммуникационных технологий.

INTRODUCTION

Nowadays, the level of digitalization of a country determines its economic and social development, as well as competitiveness in the world arena. In recent years, the reforms carried out in Uzbekistan have been accompanied by the active introduction of modern information and communication technologies into the process, the population's access to telecommunications services is expanding, public services are gradually being converted into electronic form and provided on a "one-stop" basis. The position of the Republic of Uzbekistan in the UN rating on the development of electronic government is gradually strengthening [1]. Moreover, the President of the Republic of Uzbekistan signed the Decree "On the approval of the Strategy "Digital Uzbekistan 2030" and measures for its effective implementation".

In order to accelerate the progress of digital technologies and create a favorable environment for their development, the main tasks of digital development of the Republic of Uzbekistan are identified in the Resolution of the President of the Republic of Uzbekistan "On approval of the Concept of the national strategy "Digital Uzbekistan 2030". The introduction of certain tasks and appropriate digital solutions entails not only improving the qualitative development of most sectors of the economy, social sphere and public administration. Furthermore, confronts society with more diverse and complex tasks, resulting in the main problem, where culture is experiencing a moment of "technological singularity", that is, an explosive acceleration of scientific and technological progress, which can completely transform culture and human consciousness.

In this regard, the Concept of the National Strategy "Digital Uzbekistan 2030" identifies problems as negative results of the digital transformation of the state: [2]

- *the disappearance of traditional labor markets;*
- *replacement of some professions with automated systems;*
- *an increase in the scale of cybercrime;*

– *the vulnerability of human rights in the digital space and the protection of his personal data;*

– *problems of data reliability and others.*

Namely, here we trace the problems of understanding and mastering by a person the set of competencies that characterize the ability to use information and communication technologies for a comfortable life in a digital environment, for interacting with society and solving digital problems in professional activities. This is the main characteristic for understanding digital culture.

MATERIALS AND METHODS

Affecting *the problem of the disappearance of traditional labor markets*, here it is necessary to emphasize that their complete disappearance is not yet foreseen. The development of the digital economy of our country, based on the production, distribution and consumption of information, causes major socio-economic shifts, including in the field of labor relations, while the type of professional activity and the nature of work itself are changing.

In the digital economy, the accumulation of material goods ceases to be the main goal of society, intangible values and interests come to the first stage. The new nature of work is associated with the improvement of the qualifications of workers, their constant training and creative communication. The development of the labor market based on digital technologies leads to the modernization of labor relations: in communication between employers and performers, there is an active use of information and communication technologies and the formation of new norms of behavior, where problems of employment of the population in the digital economy take on new meaning. Here we trace the digital culture at the material and functional levels, where the transition to a digital economy in the labor market requires completely new skills and competencies. For the effective usage of digital technology and scaling up businesses nationally and internationally, organizations need to find people with the right mix of technical, business, interpersonal and creative skills. In the current conditions, basic skills (the ability to write and count correctly) are clearly not enough – it is also necessary to have business and interpersonal qualities. State-of-the-art technical skills are critical to any manufacturing process or service delivery, complemented by leadership-level (C-suite, entrepreneurial) skills specifically tailored for digital management. For employers, the so-called “soft skills” of potential candidates have recently become a priority: personal qualities and social skills, for example, the ability to work in a team, curiosity, initiative, critical thinking, self-management, the ability to solve complex problems, interact with different people to prioritize correctly.

New working conditions require new skills – digital. According to the Canadian classification, digital skills cover several categories: [3].

1. Foundational skills, including basic literacy, writing, paperwork and billing, without which only low-skilled jobs can be successfully completed. Before employee can start working with digital technologies, he needs to have a set of these skills.

2. Transversal skills, which include mostly transferable and flexible skills such as teamwork, lifelong learning, problem solving, and relationship development. Without these “flexible” skills, an employee’s technical potential cannot be fully realized.

3. Digital technical skills relate to the use of a computer and software, the application of network security measures, and others. These skills are critical to the effective functioning of today's digital workplaces.

4. Digital information processing skills – high-level of cognitive skills in relation to information processing, for example, finding, synthesizing, evaluating, applying, creating and transmitting information. This includes, among other things, the skills required to obtain specialized qualifications and professions in the ICT field.

The new competitive environment is forcing companies to treat their personnel differently. Competition in the search for and attraction of the most talented and qualified specialists has noticeably increased, as well as the focus of employers on retaining the best employees. Human capital, especially those with digital skills, is becoming a key resource in a firm's competitive strategy.

It is also worth noting here that the importance in government policy is attached to the development of e-commerce. In accordance with the Decree of the President of May 14, 2018 "On measures for the accelerated development of e-commerce", in order to stimulate business entities in the field of e-commerce, the National Register of e-commerce subjects e-tijorat.uz was created, on which 32 entities are currently registered. The main universal electronic trading platform in Uzbekistan is the Trade Uzbekistan trading platform (website tradeuzbekistan.com), created by the Ministry of Investment and Foreign Trade. Other electronic trading platforms have also been launched, for example uzbtextile.com for textile manufacturers in B2B format, universal.uz for small and medium-sized businesses, etc. At the same time, the level of development of legal e-commerce in Uzbekistan is still low.

According to the ICT Development Index (IDI), Uzbekistan in 2017 ranked 95th (index – 4.9) among 176 countries of the world (for comparison: Belarus – 32nd (7.55), Russia – 45th (7.07), Kazakhstan – 52nd (6.79). Iceland took the first place (8.98), the second – South Korea (8.85) [4].

According to a study by Ecorys UK Ltd, commissioned by the British government, already in 2022, approximately 22% of new jobs in the global economy will be created thanks to "digital professions" [5]. In the near future, the main focus will be on recruiting staff with the necessary digital skills. Moreover, 73% of recently surveyed companies are already experiencing serious problems in finding such specialists [6].

All innovations and implemented measures for the application of information and communication technologies require an increase in digital literacy of the population, the training of highly qualified personnel in the field of digital technologies, the creation of favorable conditions for retraining of staff, the popularization of remote work methods, i.e. all those competencies that we can attribute to digital culture.

Further, in the digital economy, the process of recruiting is changing, i.e. there is a *replacement of professions with automatic machines*. Digital culture is a world based on computers operating on the principle of digital binary coding. Its origins are the result of a long history of automation, with mechanical watches as their starting point in the European modern era. The 20th century automaton culture developed its value basis in the form of what could be called a technological imperative. Its formulation can sound like this: everything that can be technologized must be technologized.

Marshall McLuhan – the discoverer and prophet of the imperativeness of technology – in his famous book "Knowing the Media" characterized this power of automata (he

considered the latter as the crown of the evolution of media) through their anthropological reversion and subordination of man. In the civilization of automatic machines, a person turns into a “sexual organ of the machine world” – an element, a node of the self-determined development of technology [7]. A person finds himself in a completely new existential situation, because he gradually realizes the superior power of what he himself created.

There are two vectors of development of the labor market in the context of the digitalization of the economy. The first scenario, an optimistic one, is based on the fact that the labor market in the digital economy is in need of creative people who are able to think creatively. Manufacturing will generally not need people, but they will be needed for the sphere of “human-centered” services, since robots in the near future will not be able to replace creativity, invention, design, programming and maintenance of themselves, organization and adjustment of production. Technologies for online control of robotic equipment will develop, which will require a large number of online operators. Thus, the introduction of AI and robots in the manufacturing sector should be seen as an expansion of technical capabilities. In addition, digital technology will enable older workers and workers with disabilities to better integrate into the marketplace while machines perform hazardous and routine jobs. People will be able to more actively use their free time for other work or leisure, for creativity and the provision of innovative services. With the timely development of educational programs and their implementation with the help of the state, the transition from old professions to new ones will become less painful. Personnel of the “digital era” will provide production, storage, processing and sale of information, create unique knowledge, and also manage it.

New digital technologies have a number of advantages that positively affect the labor market: [8].

- The use of modern digital portals for job search allows candidates to improve their career opportunities through access to an extensive database of relevant vacancies. Thanks to the Internet and special web services, the transparency of information about both employing companies and potential candidates has increased significantly. In turn, various social networks play a significant role, from which you can get a lot of useful information about employers and employees;

- Digital platforms help to increase labor productivity, as they better match the profile of the applicant to the proposed vacancy. In addition, they can reduce unemployment, as well as reduce shadow employment and job search time. Examples include digital platforms such as Uber and YouDo, whose business models are based on the effective correlation of supply and demand levels in the labor market.

- The introduction of modern digital tools in all spheres of life contributes to the emergence of new professions and jobs.

- Thanks to modern technologies, it becomes possible to work remotely, which makes it possible to increase the efficiency of employment of specialists from regions with low local demand.

This also leads to the problems of digitalization of production, where things will come into closer contact with each other (the industrial Internet of things), and between people, on the contrary, alienation will grow. As a result, digitalization can lead to negative impacts on those employed in the production of products and the provision of services, when the product creation chain is minimized, design, 3D printing and delivery will be

sufficient. According to some experts, by 2030 the labor force will be quantitatively smaller, it will be older, formally better educated, and there will be a tendency for 50% of professions to die out.

Robots are far superior to humans in terms of endurance, accuracy and speed. In other words, they are more productive and practically do not allow scrap (if configured correctly). This means that robotization, which increases productivity and reduces the cost of production, as a whole, will be an unconditional benefit and a driver of economic development. However, a study of recent research suggests that most experts do not share the bright expectations for industrial automation. The pace of world robotization indicates that we are gradually moving towards a deserted industry. Some surveys claim that more than half of all existing jobs will either change or disappear altogether [9].

The likely consequences of the automation of work will be the stratification of the population by income level, an increase in unemployment, as well as a decrease in the level of income and life of people in settlements with limited employment opportunities (the so-called monotowns). Researchers predict that robotization will lead to a split in society: on one side there will be qualified professionals – engineers and developers, and on the other – low-skilled personnel. It was about such a society and its problems that Kurt Vonnegut wrote in his novel *The Mechanical Piano* back in 1952 [10].

Researchers predict that AI will soon significantly change the labor market. A major 2017 poll by researchers from AI Impacts, the Future of Humanity Institute (Oxford University) and the Department of Political Science (Yale University) suggests that AI will surpass humans in many activities over the next ten years. Such as translation from foreign languages (by 2024), writing essays for schoolchildren (by 2026), truck driving (by 2027). In 2031, AI will finally replace sellers in retail, in 2049 it will write the first bestseller, and by 2053 it will master the profession of a surgeon. Researchers believe with a fifty percent probability that AI will outstrip humans in all tasks within the next 45 years and automate all human jobs in 120 years, and respondents from Asia expect these events to occur much earlier than North Americans [11].

As a result of the above, the replacement of professions with automatic machines entails several problems: a well-paid employee either completely loses his job, or switches to a less paid one; the payment of all kinds of taxes, including municipal taxes, due to which the local budget exists, is reduced or completely stopped, and this is already a problem not only for the employee, but for the entire settlement where the robotic production is located – after all, the robot does not pay either income tax or deductions to the pension fund; the complete or partial release of the employee also raises the following ethical question: what should he do with himself in the freed time? According to J. Stiglitz, winner of the Swedish National Bank's prize for economic sciences in memory of A. Nobel, the use of artificial intelligence technologies for the benefit of society will reduce the working week from 45 hours to 25-30 hours against the background of an increase in general welfare and quality of life [12]. At the same time, will a person not feel his uselessness, detachment from society? Will he feel superfluous, unclaimed, which can lead to psychological stress, apathy, depression?

Today, the Republic of Uzbekistan is represented in many foreign and international indices and studies that indirectly assess the level of the country's readiness for digital transformation. Touching upon the issue of cybercrime, here we can also note the problems of vulnerability of human rights and the protection of his personal data.

In the “Global Cybersecurity Index” of the International Telecommunication Union, the republic has risen to 41st position and took 52nd place, thus standing on a par with the leaders of the CIS countries in strengthening cybersecurity [13].

Touching upon the problems of cyberspace, according to J. Stern, they should focus not on the study of Internet culture, but on the cultural studies of the Internet; the study of the Internet should thus become one of many other areas of research in everyday life [14].

Many people today spend a significant portion of their lives on the Internet. And it is quite natural that criminals began to use the Internet space for their illegal activities. Cybercrimes pose a real threat to the economic and legal security of modern society.

Currently, the Republic of Uzbekistan pays special attention to the tasks and problems of ensuring cybersecurity at the state level, as evidenced by the ongoing work to identify threats, vulnerabilities and incidents in cyberspace. In 2019, 268 incidents, 816 vulnerabilities and about 132,000 cybersecurity threats were identified in information systems and websites of the national segment of the Internet [15].

For scammers, the attraction of cybercrime is that it is much more efficient and safer to steal from electronic wallets than to get into a victim’s pocket. In addition, there are no psychological barriers, as the perpetrators do not even see their victim. Most often, cybercrimes are committed with the aim of causing material damage to individuals and legal entities. The goal can also be political – causing damage to basic state institutions (theft of data constituting state or commercial secrets, organizing cyber sabotage) and ideological (for example, recruiting Internet users into the ranks of terrorist groups).

The most common types of cyber fraud are: [16]: phishing, as a result of which cybercriminals lure gullible users to their sites disguised as sites of well-known organizations, and extract their personal data, account and credit card numbers in order to subsequently withdraw money from these accounts; spoofing (disguising as another user or network resource), cyber ransomware (encrypting a file using a specially launched virus and then demanding money for decryption), spam (mass mailing of advertising information to addressees without their consent), copyright infringement (putting music on the public domain), photographs, films, books, etc. Without the consent of the authors), etc.

The law of being in the digital space states: “once it is on the Internet, it will remain on the Internet forever” [17]. Everyone on the Internet leaves a «digital footprint» of their presence. “Digital footprints” ever left by a user of the World Wide Web are phone numbers, e-mail addresses, associated logins and passwords, as well as bank details; geolocation data; photo, video and audio files; browser history and searches in individual applications, and so on. “Digital footprints” in one way or another characterize the personality of the person who left them. Moreover, “digital footprints” and “digital memory” can change the opinion about a person and radically change his fate. “Digital memory”, unlike “digital footprint”, does not characterize the “prints” left by a person, but what happens to them a week, a year or several more years later, or even after the death of their owner.

“Digital memory” also has negative properties. Yes, there is a law on the right to be forgotten. However, not everything can be “erased” – only that which is unreliable and tarnishes the reputation.

Many see the danger of the predominance of artificial intelligence over the human, “digital slavery” is seen everywhere: this is attachment to a bank card, on which all your savings are, and which can be blocked at any time; this is when you forgot your pin – code and cannot withdraw money from the card; this is when fraudsters have withdrawn money

from your card and you have to prove in court that this happened through no fault of yours; attachment to the phone number that needs to be provided. It is possible to change the number, but it is very problematic.

Currently, Uzbekistan is implementing a number of measures aimed at combating cybercrime. In particular, legal regulation in this area is being improved, foreign experience is being studied, work with the population is being carried out, which consists mainly in calls for vigilance and clarifying the need to protect personal data. Cybercrime is a real threat to the security of modern society and undermines the credibility of public authorities. To combat cybercrime, new approaches are needed based on the widespread use of the achievements of science and technology, as well as the training of employees of a new formation who are fluent in the secrets of computer programming. And of course, the study of digital culture in general.

CONCLUSION

Thus, the study of the impact of digital communications on culture and society is associated with the presence and need to solve a number of emerging problems, where our state pays special attention to determining the goals, objectives and measures for the implementation of the domestic and foreign policy of the Republic of Uzbekistan in the field of application of information and communication technologies, as well as – the formation of a national digital economy, ensuring national interests and implementing strategic national priorities.

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