

Social threats in the digitalization of economy and society

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Abstract. As Ukraine slowly moves towards the digitalization of the economy and society, new trends in the social and labour sphere are revealed that have become challenges to the traditional system of social protection and regulation of labour relations. The impact of digitalization on the social sphere is ambiguous and creates both new opportunities and social threats that have become the purpose of the study. The social threats of digitalization for the nation include moral and spiritual degradation of society, reforming the economy without taking into account social priorities, the growth of structural unemployment, and cyberthreats in the national security system. It is substantiated that the main social threats posing a danger to every person in the process of digitalization are the Internet dependency, personality degradation, decline in mental health, further income differentiation, unemployment increase, increased state control over income and expenses of each person, decrease of personal life security, increased risk of loss of personal information, financial resources as a result of cybercrime and human negligence, computer illiteracy, transfer of decision-making powers to machines. Recommendations for improvement of institutional support of digitalization are proposed in order to minimize social threats in society.

1 Introduction

The digitalization processes taking place in the world are irreversible and provide a stable growth of economies at this stage of implementation. However, the scientific community is increasingly concerned about future changes in socioeconomic reality for the new generations of humankind growing in the era of high digital technology. Children of generation “Y” have become a new generation of the “digital person” – the generation “Z” which appeared in the conditions of globalization and digitalization, with its valuable ideas about the opportunities and challenges of the information era. The following basic components of social and labour relations are transformed: labour organization, payment and protection, guarantees of stable full-time employment, social protection of the unemployed and low-income groups of society. Generation “Z” does not idealize the approaches and traditions of the industrial age, freely possesses digital skills and values freedom in labour relations, looks for and follows its work and life balance. The conflict of

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priorities and values of managers and subordinates from different generations leads to the emergence of new methods of personnel management.

The works of supporters and active participants in the digitalization of the economy and society focus on the opportunities that will be facilitated by the intensification of this process. Digitalization is “the saturation of the physical world with electronic digital devices, systems and the establishment of electronic communication exchange between them, which actually enables the integral interaction between the virtual and physical, that is, creates a cyber-physical space” [1]. Among the main advantages of digitalization are the growth of the efficiency of the economy, the development of digital entrepreneurship, the improvement of the quality of services in education, medicine, transport, agriculture, increase in the environmental protection efficiency, reduction of the number and increase of the effectiveness of preventing disasters, public safety increase, reduction of corruption level in the system of public administration, increased participation of the population in social and political processes, creation of new jobs, at the micro-level – saving on the costs of organizing stationary working places. On the other hand, any changes in social and labour relations as a result of the digitalization of the economy, and, accordingly, new opportunities and threats in the social sphere, require the development and implementation of preventive measures that counteract the emergence and development of social threats and allow one to fully realize the potential for improving the quality of life of the population and the efficiency of the business entities.

The purpose of the work is to study the social threats that arise under the influence of the digitalization of the economy and society, in the social and labour areas.

2 Research results

Factors, conditions, phenomena, both existing and potential, which create or may create social danger are considered to be a social threat. Among the social threats posing a danger to every person when digitizing all spheres of his/her life should be singled out:

1. Internet addiction which is recognized by physicians more powerful and complex compared to other types of dependencies. The loss of the real world, the emergence of dependence on the virtual world, social networks negatively affects the mental and physical health of a person and allows manipulating the consciousness and actions of adults and children. Replacing real relationships with social life in social media creates an illusion of an intense active life, changes personality, spoils relationships with relatives and friends. The development of Internet addiction occurs in the form of participation in online financial transactions, game addiction, sexual communication, comments on materials in social media; permanent staying on dating websites, correspondence with strangers, browsing various websites without a specific purpose for hours. Internet addiction affects 2 to 10% of all network users [2].

2. Degradation of the population due to the preservation of necessary information on gadgets and the reduction of brain activity as a result of the use of online search systems to solve any problems, including in the learning process. The ability to get an answer to any question in a few minutes reduces the creativity of young people and children; ready-made solutions, examples and patterns form a one-track mind.

3. Decline in mental health of the population with easier access to violence, immoral videos depreciating the lives and health of other people and animals. The introduction of new technologies and the provision of new opportunities in the virtual world to all citizens must be accompanied by the establishment of new “rules of the game”, norms of behaviour in the “new world”, the definition of the rights, duties and responsibilities of each participant in the virtual world by all world society, since the virtual world does not have borders and does not recognize the boundaries of individual states, which complicates the

control of the content of Internet pages by government agencies. Therefore, there is an increasing need for strengthening and developing cultural values, moral guidelines, forming and maintaining an “acceptable” behaviour in society and condemning an “unacceptable” behaviour by public, popularizing socially meaningful content in the Internet.

4. Further differentiation of incomes and growth of the population, which belongs to the poor category, unemployment increase. According to various forecasts, the excess of the number of disappearing jobs over the number of created employment places in the near future may amount from 5.1 million to 85 million jobs. Carl Benedict Frey and Michael Osborne’s study shows that 47% of jobs (in the United States) are at risk of automation [3]. Digital technology, machine learning, automation, previously used by large enterprises, are now being applied by medium and small businesses. Business executives have appreciated the benefits of digitalization of business processes that are associated with increased production efficiency and service delivery, increased productivity, and now jobs requiring both skilled and unskilled labour are being digitalized and automated.

Negative projections for job cuts do not concern IT professionals whose demand grows annually around the world. Creative, mobile employees with high digital skills are getting more valuable. “Social strata of “new rich” employees (“golden couples”, “creative stars”, etc.) and at the same time “new poor” employed in social production are appearing and growing... At one extreme of the employed in social production (top management, financial sector of international corporations, intermediary structures, investment funds, etc.) there is a concentration of income due to hypertrophied distribution both for property and for labor at the same time, which shows the asymmetry between the performance of these categories of the employed and received revenues. And at the other extreme, there is an expansion of the ghetto of non-standard employment and job market, requiring secondary and lower than the average qualification of the labour force” [4].

5. Increased state control over income and expenses of each person, decrease in protection of privacy, including freedom of speech, movement, rest. Increasing public safety by installing observation cameras in all public places, in the workplace, using face recognition technologies, on the one hand, provide protection against fraudsters and criminals, and on the other hand, allows controlling all the movements and conversations of employees and clients in the organization, the entire population on the whole territory where surveillance devices are installed.

There are different options for controlling income from fiscal services and the public, one of which is electronic declarations. The income declaration is either a voluntary declaration of the citizens, or a requirement of the legislation of the country, which enables income control. Since 2015, banking secrecy has ceased to operate in Ukraine due to amendments to the Law of Ukraine “On Banks and Banking” [5], according to which state bodies can make inquiries regarding the person’s finances at the bank when making social payments, benefits and salaries at the expense of state funds. In compliance with the resolution № 148 of the National Bank of Ukraine [6], Ukrainians are obliged to make all purchases exceeding UAH 50,000 in a cashless form in order to allow fiscal services to control the movement of citizens’ money. These legal documents and instruments allow controlling the income and expenses of each person, interfering with the people’s personal life on the one hand, and on the other hand, preventing and counteracting the legalization of income and financing of terrorism.

6. Increased risk of loss of personal information, financial resources as a result of the growth of cybercrime and human negligence, computer illiteracy. The most vulnerable category of users is the elderly and children. “The entry point for the largest number of cyberattacks is personal, portable devices connected to the Web (smartphones, tablets, etc.) ... According to Cisco’s data, today, up to 70% of cyber incidents start on personal mobile devices ... Cloud services, local corporate networks, Wi-Fi hotspots, industrial and home

appliances ... greatly increase the possibilities of cyberattacks for criminals” [7]. 65% of cyber incidents are due to deficiencies in modern security systems, up to 48% of incidents – to a low level of computer literacy among users, 55% of organizations fail to identify the cause of the incident [7].

7. Transfer of the right to make decisions to machinery (robots) following the prescribed rules and procedures, instructions may endanger the life and health of a person, unless a particular case is subject to general rules, but requires an individual approach and actions according to a particular situation. For example, the robot driving a car will follow the instructions given in accordance with the traffic regulations and may not stop in an unauthorized place if the passenger suddenly feels bad and needs to get out or get help. In turn, an automated recruitment system by certain criteria can leave talented and unique candidates for vacancies neglected if they do not, according to a certain criterion, score “the required number of points”.

The main social threats of digitalization for a nation are moral and spiritual degradation of society, reforming the economy without taking into account social priorities, structural unemployment growth, and increased cyberthreats in the national security system.

The moral and spiritual degradation of society facilitates the manipulation of public opinion, formation of necessary moods in society, dissemination of false and half-truth information with a certain subtext, pushing for protest behavior, programming of the population for certain reactions and actions, including illegal. The author of articles [8-10] warns about the catastrophic impact of the digitization of the economy on the development of society while ignoring the cultural and moral values, norms and rules.

Reforming the economy without taking into account social priorities will exacerbate the social inequality and injustice existing in Ukrainian society; will lead to structural changes in industries, disappearance of uncompetitive enterprises, investment in which is ineffective, regardless of their social significance; the number of people at the poverty line will dramatically increase, and the need for social assistance from the state will increase from the part of the able-bodied population each year.

Changes in the sectoral structure under the influence of digitalization will lead to an increase in structural unemployment, which requires a rapid response from the education system and state support for training specialists in new professions and the creation of new jobs. Training specialists in new professions takes longer than the disappearance of outdated professions and the increase in the number of unemployed, therefore, without state regulation of the labor market, aimed at implementing social policy, it is impossible to overcome the negative phenomena in the social sphere that arise in the digitalization of the economy and society.

The growth of cyberthreats in the national security system requires active and preventive measures at all stages and levels of implementation of the Concept for the Development of the Digital Economy and Society of Ukraine. The number of cybersecurity specialists, both in Ukraine and around the world, is too small and their qualifications are insufficient. “The global need for cybersecurity specialists is now 12 times higher than other IT specialists need, ... 37% of the world's employers are not satisfied with the low level of training in this area” [7]. Traditional security technologies do not provide complete security, and the diversity of cyberthreats and the scale of their harm is constantly increasing, requiring new security technologies, advanced training for cybersecurity specialists and computer literacy users.

3 Conclusion

Thus, the digitalization of the economy and society requires simultaneous changes in the social policy of the state, including the labor legislation of Ukraine, in legislative acts

concerning social protection of the population, national security of Ukraine, and the state budget of Ukraine. The absence of legally established rules, procedures and mechanisms for the consideration of social issues in the process of digitalization leads to discriminatory phenomena in the system of social and labour relations and the escalation of social threats in society.

Institutional support for digitalization should be accompanied by public support, which consists in the formation of “The Code of Ethics of the Internet User” and “The Code of Ethics of the Content Owner”. “The proper use of the Internet possibilities and social networks” should be a separate issue of teaching digital disciplines from junior classes, which will teach “acceptable” and define “unacceptable” behaviour in the virtual world to preserve physical and mental health.

The level of freedom and non-interference in the life of every citizen must be balanced with the level of social security and ensured without violating the privacy of every person.

The digitalization of the economy should take place considering social priorities, adherence to the principles of social justice and development of the social and labor potential of the country, and the achievement of the economic effect should not lead to an increase in social threats and negative social effects.

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