Possibilities and Threats of Digitalization for Society

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Abstract

The important task is to provide access to all participants to electronic platforms and services and also expand the bandwidth of communication and telecommunications systems. Digital model of economic development implemented by modern economic systems is contradictory. Like all models that were previously implemented throughout the history of the world economy, the modern model not only opens up new prospects for socio-economic development, but is also associated with certain risks that need to be managed. Contribution to the literature lies in the fact that the article has formed an innovative systemic vision of cause-and-effect relationships.

Keywords

Digitization · Digital services · Digital dividends · New business models · Cybersecurity

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1 Introduction

The digital economy allows an ordinary consumer to get the necessary services, buying products or purchasing services in online stores at a better price and lower costs. Digitization can raise the level of life of a citizen and create comfortable conditions for their survival and the opportunities for self-realization of each person. According Barmuta et al. digitalization will become the basis for sustainable production growth, improving the population's competitiveness and living standards (Barmuta et al., 2020).

Ignoring the existing benefits provided by technological progress and financial and technical innovations, the digitalization of the economy carries risks and threats. Beknazarov et al. notes, that the identification of potential threats, and their accounting in the development of economic development strategies will allow ensuring a stable functioning of the economy (Beknazarov et al., 2020). Questions of society were discussed by such scientists as Barmuta et al. (2020), Beknazarov et al. (2020), Gueyffier et al. (1999), Moskvitina (2020), Idrysheva et al. (2019), and Korostelkina et al. (2020). However, some issues remained unexplored.

1.1 Methodology

The important task is to provide access to all participants to electronic platforms and services and also expand the bandwidth of communication and telecommunications systems. As noted by Idrysheva et al. in the article "Marketing communications in the digital age," digitization frees a person from routine operations, allows them to engage in strategies (Gueyffier et al., 1999; Idrysheva et al., 2019; Moskvitina, 2020). Small businesses worldwide turn into "micro-multinational companies." Currently, 86% of startups have some form of business connections outside the country of residence, thus opening up new markets for themselves.

2 Results

The economic and social benefits from digitization are presented in Fig. 1.

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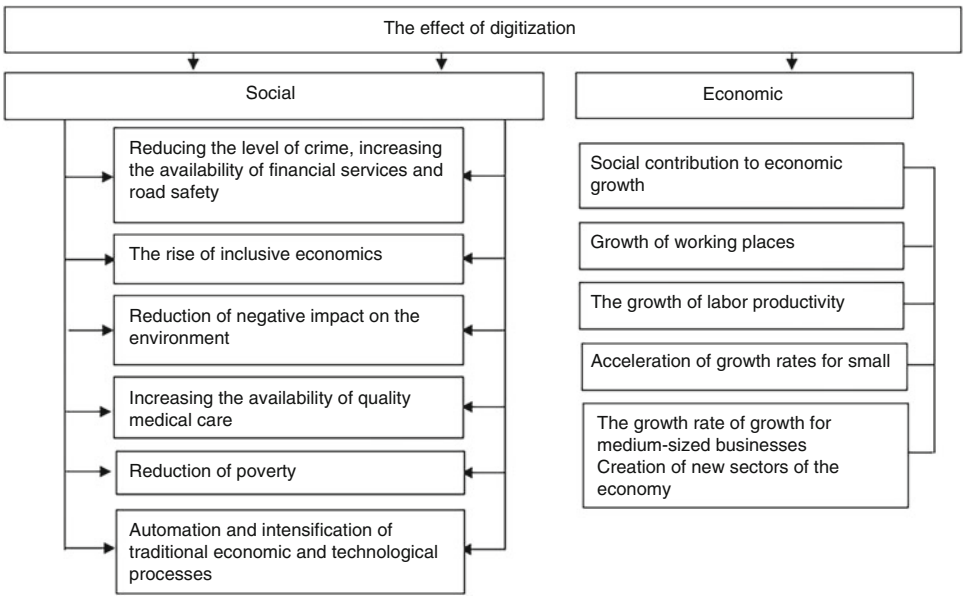

Fig. 1 Economic and social benefits from digitization. Source: Developed by the authors

The development of infrastructure and the reduction of the cost of processing, storage, and transfer of data will bring humanity to the threshold of a new, large-scale stage of the digital revolution, a characteristic feature of which is the merger of online and offline (Korostelkina et al., 2020; Sharapiyeva et al., 2019; Tovma et al., 2020). The small growth of subscribers is explained by the lack of coverage in exceptionally remote areas.

Among the factors that determine the need for digitalization of the economy, the following should be mentioned in the first place. A person needs to satisfy their vital needs. With this purpose, they have created and constantly developed the system of economic activity, which must meet the existing and emerging needs and resource opportunities.

The three main factors are: the previous system of education, cultural features, and the vision of the government in relation to ICT (Fig. 2).

Together with that, the digital economy raises serious problems. Moreover, there might occur a loss of information sovereignty: data about citizens is collected through global social networks and not by national companies.

Key technologies will be concentrated in the hands of several influential corporations, allowing them to dictate their market conditions. Inequality can grow to such an extent that the benefits from the previous changes will be concentrated among a relatively small elite. Moreover, the life expectancy of enterprises may reduce even further: for the last 50 years, the average term of existence of the company was reduced from 60 to 18 years. Risks and threats of digitization are shown in Table 1.

So, the following risks and threats of digitization were found. State: Imposed borrowing of western technologies, rapid degradation of own capabilities; destruction of traditional mechanisms of state management and regulation. Political risks: new vulnerabilities related to tracking, leakage of personal data, and loss of secrets of personal life; the takeover of the domestic market by powerful multinational companies.

Production risk: further reduction of life expectancy of enterprises. Personnel risk: search for qualified specialists. The risk of corruption: when corrupt persons "go" into virtual reality, they can use material benefits anonymously, without disclosing their identity. The risk of digital degradation: digital degradation can lead to brain degradation and weakness.

In our opinion, the risks that do not include digital technologies in themselves can be classified into state, political, technological, and cybersecurity risks, risks of digital totalitarianism, production risks, and corruption risks.

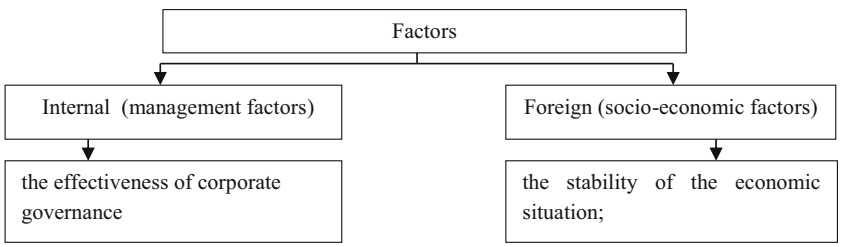

Fig. 2 Factors vision. Source: Authors

Table 1 Risks and threats of digitization

No.	A sign	Types of risk
1	State	– Imposed borrowing of western technologies, rapid degradation of own capabilities; – Destruction of traditional mechanisms of state management and regulation;
2	Political risks	– New vulnerabilities related to tracking, leakage of personal data, and loss of secrets of personal life; the takeover of the domestic market by powerful multinational companies;
3	Production risk	– Further reduction of life expectancy of enterprises;
4	Personnel risk	– Search for qualified specialists;
5	The risk of corruption	– When corrupt persons "go" into virtual reality, they can use material benefits anonymously, without disclosing their identity;
6	The risk of digital degradation	– Digital degradation can lead to brain degradation and weakness.

Source: Developed by the authors

3 Conclusions

So, digital model of economic development implemented by modern economic systems is contradictory. The following risks and threats of digitization were found: state, political risks, production risk, personnel risk, the risk of corruption and the risk of digital degradation. Like all models that were previously implemented throughout the history of the world economy, the modern model not only opens up new prospects for socio-economic development, but is also associated with certain risks that need to be managed. Its contribution to the literature lies in the fact that the article has formed an innovative systemic vision of cause-and-effect relationships.

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