

# Vector of Digital Transformation of Economic Processes



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**Abstract** The economy of the twenty-first century is changing in a digital direction. More and more we see the penetration of Internet technologies into the processes of life (companies, people). The more our lives are digitalized, the faster changes occur, new developments appear, and products are introduced. The speed of development of a digitalized modern economy is also influenced by many factors, one of which is the manifestation of favorable and unfavorable events that can lead to the onset of an economic crisis. In a crisis, it is important to quickly adapt and understand what needs to be done to move forward, what technologies to implement in order to be modern and necessary. The consequences for each country will be different, but the restrictions that have been imposed on small, medium and large businesses, as well as on the citizens of each country, can lead the world economy into a state of recession. The crisis of 2020 can increase the spread of digital technologies throughout the world. Based on the analysis of the adverse factors that have occurred and the study of expert opinions to determine the future of the economy, the vector of transformation and development is determined.

**Keywords** COVID-19 · Digitalization · Economy · Instability · Transformation

## 1 Introduction

The pace of development of the world economy in the modern world is influenced by various factors, including uncertainty and intermittent instability, including due to the cyclicity of the economy. In the first quarter of 2020, the world is facing a new threat

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– the coronavirus pandemic. COVID-19, entering all countries, contributed to the suspension of ongoing production and distribution processes, as well as contributed to the shutdown of international communications. Restrictions in connection with the spread of coronavirus can cause significant damage to the economies of developed and developing countries and lead to a global economic crisis. At the same time, the spread of COVID-19 should not be recognized as the root cause of the economic crisis, the pandemic becomes only a trigger in such situation.

Things that we see throughout 2020 on the global commodity and financial markets prove the cyclicity of economic development. Crises occur with a certain frequency every seven to ten years, the coronavirus acted as a “trigger”, being surprising and massive. During COVID-19, the global economy faced serious adverse events. If we highlight some of the negative aspects that have currently affected the economic performance of countries and individual regions and will continue to be adversely affected for some time in the future until the economy recovers, then among them are:

- decrease in production activity;
- lower oil prices (as a result of lower oil demand and lower production activity);
- decrease in the solvency of the population and companies;
- reduction of consumption;
- increase in the number of unemployed, social tension;
- falling of quoted shares on major markets;
- reduction of the service sector and restriction of tourism.

If economic activity declines, GDP will fall.

Russian economists believe that the fall in Russia’s GDP in scale can be comparable to what it was in the 90 s of the twentieth century (in 1992, GDP fell by 14.5%, a year later – by 8.7%, a year later – by 12.6%), the decline now can be from 10 to 20% [8]. This means that Russia have to look for ways to develop its economy in the new conditions. With these adverse consequences, it is necessary to notice the opposite conditionally positive trend (conditional because there are adverse consequences) – the digital development of countries, including Russia. The digitalization of processes and things can be recognized as a trend in the future development of the economy. The spread of the coronavirus leads to an increase in the role of remote activity: the sale of products, the provision of various services, the management of the company and personnel, and so on. The mass transition to digital technologies increases their importance and accelerates the spread of digitalization.

## 2 Methodology

The fifth issue of the National Intelligence Council report presented global trends in the 2030 outlook [6]. Among the factors, groups were identified: the most likely, unexpected, and critical, which are the most difficult to predict and analyze. Among the unfavorable destructive factors, severe pandemics, abrupt climate changes, crises

of the strongest countries, and wars were highlighted [6]. Already in 2020, we faced a pandemic declared as a result of the spread of the coronavirus, and we see what impact it has on the economy. We can not say that this pandemic was severe, but it is worth noting the high rate of spread of the virus. One of the reasons for the rapid spread of the virus and information about it in the current time in the countries of the world is the strengthening of globalization, the development of technologies, free movement (unhindered international tourism). Thus, globalization and its accompanying processes, the high speed of information dissemination, and the increased availability of movement have become one of the reasons for increasing attention to the current situation, as well as the reason for realizing the need for technology development. It is noted that now the high-tech market has entered a recession caused by the coronavirus pandemic. According to an optimistic scenario, it is possible to recover in 2020, according to a negative scenario, the high-tech market will recover only after 2022 [2]. At the same time, the ability to develop digital innovations by 2023 can be included in the list of competitive advantages of companies [5]. The opinions of experts presented in news feeds, statements about the new world contain the development of remote processes, the decline in consumption (transition to conscious consumption), remote employment [1], globalization, the growing speed of changes, digitalization.

### 3 Results

The economic crisis that occurred in 2020 is associated with the spread of COVID-19 and the adoption of restrictive measures by countries to reduce cases of the disease. But it is impossible to call the coronavirus the determining cause of the crisis, since already in 2019, news feeds predicted the global economic crisis in 2020 for a number of reasons: the trade war between the United States and China, “bubbles” on the largest stock markets, a slowdown in production growth in the global economy [7]. The coronavirus pandemic actually joined the above-mentioned adverse factors of the deterioration of the global economy in 2020. As a result of the spread of COVID-19 in different countries and the establishment of restrictions, a high level of damage to the economy in the future two years is predicted. Special manifestations of the crisis phenomena of 2020 fall on the economies of developing countries. We see how exchange rates change, for example, in Russia, with the onset of the coronavirus, the ruble exchange rate against the dollar showed a weakening of up to 15%, as there was a drop in Russian stock prices (although it is important to note that in general, the shares of companies in other countries also showed a drop).

The coronavirus has also hit the economies of developed countries. The United States – the largest power in the world – is increasing its public debt, in 2020 it increased from 3 trillion dollars and for the first time exceeded the mark of 26 trillion dollars [9]. The reasons for the significant increase in the debt burden are the high costs of the state to eliminate the consequences of the coronavirus. Production stoppages and the economic downturn caused the increase in the number of

unemployed. The deterioration of the US economic situation may worsen the global economic crisis.

Despite the predicted adverse consequences (of a destructive nature), it is necessary to note the positive side of the crisis (creative). The crisis is a factor of development, we should look for ways to adapt, survive in the current conditions and ways to increase competitiveness, that is, we need to determine what is expected in the future and what will be necessary. The predominance of the commodity economy makes countries vulnerable, and it is necessary to focus on the IT development of most areas and industries. New conditions set the requirements, there is a digital transformation caused by the development of Internet technologies, as well as the creation of more advanced technological products.

The suspension of production processes, disruption of sales, restrictions on the work of offices, offline stores brought losses to both the largest corporations and smaller business representatives. Significant losses were incurred by representatives of the restaurant business and public catering, entertainment, tourism, and air transportation. Companies are faced with the need to transfer communications with staff, consumers, and suppliers online.

The products of technological development are becoming an integral part of the economic life of all countries, and Russia is no exception. We need to increase the share of the digital economy in the country's GDP. Digitalization of the economy can increase GDP. Banks are examples of successful technology development in Russia. Recently, the banking sector has been undergoing a digital transformation. More and more services are available online, and the format of the services is changing.

Now it is worth thinking about how to digitalize the education sector, training services can also be provided online, this can increase the flow of customers, which will bring additional income. There is a potential for digitalization, as well as robotization and other areas of life.

With the development of new technologies, the digitalization of the economy and business, we should not forget about the possible risks, so we should be engaged in:

- search for new niches, sales markets;
- cost reduction;
- increase customer loyalty.

Online development requires the introduction of new technologies in the company and the involvement of specialists in this field. Perhaps in the future 5 years, each company, whether trading or manufacturing, will be “digitalized” by the main processes, for example, it is possible to implement automated ready-made solutions for financial management, procurement, providing the main processes, as well as a financial management system. In addition, companies can develop their own software products to meet their own needs and the needs of customers.

## 4 Discussion

Issues of digital transformation of the economy in Russia and the world are published in various analytical and research materials. On a quarterly basis, the Digital Economy organization presents a digest of research and publications [3]. In the process of implementing digital transformation, every element of the corporate structure is important. With the development of digital technologies in companies, there is a need for specialized knowledge, which requires the development of digital competencies of company personnel or the involvement of new employees (or partners) [10]. There is an opinion that by 2030, every successful company will independently develop software for digital transformation [4].

The online sales channel will be developed more and more. In the pandemic, we saw that everything is translated into an online format, we can spend money without leaving home and order everything from appliances to food, from clothing to other goods with home delivery. Sales are the most important condition for maintaining the country's economy, because inpayments provide the revenue part of the budgets, which is redistributed to mandatory payments and needs. Thus, the development of the online space will have an important impact on the economy of countries, in particular, Russia.

## 5 Conclusion

As a result of the coronavirus pandemic, we are facing a new economic crisis, increasing inequality between rich and poor, and rising unemployment. Despite the significant losses of the global economy and the economies of individual countries, we should understand in what we can be successful in the future, what industries we need to rely on and where to invest the available resources. The trend towards technology development will undoubtedly increasingly penetrate developing countries. Thus, the coronavirus is becoming a driver for the development of online services, as well as increasing the digitalization of companies' processes. In the era of digital transformation, it is necessary to move away from the interpretation of the main goal of activity from maximizing profit to maximizing utility, that is, maximizing the satisfaction of needs from the goods sold and purchased.

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