Implementation of the National Project “Digital Economy” in Regional Strategies

Leontyev A.I.¹ Novikova N.V.²,*

¹Administration of Ekaterinburg city, Ekaterinburg, Russian Federation
²Ural State University of Economics, Ekaterinburg, Russian Federation
Corresponding author. Email: novikova.nv2@yandex.ru

ABSTRACT
In modern conditions, digitalization is one of the growth drivers for the development of regions. This article offers to consider a different interpretation of the concept of “digitalization”, the essence and elements of digital transformation in modern realities, including digital technologies. The aim of the study is to analyze the strategies of socio-economic development of the regions with a view to introducing elements of the “digital economy”. Moreover, the author will apply theoretical, empirical, and expert methods in this study. According to the results of the study, features and problem points in strategic regional documents in the context of digital transformation will be identified. Also challenges and possible consequences will be formulated in the absence of digitalization elements in strategic regional documents. This article will be interesting for executive authorities, the scientific community, teachers and students of higher educational institutions.

Keywords: strategy, national project, digitalization, digital technologies, federation subject, digital economy

1. INTRODUCTION

Currently, significant changes are taking place in society in connection with the digital revolution (IV industrial revolution). According to the German economist, founder and president of the World Economic Forum in Davos since 1961, Klaus Schwab, “digital technologies based on hardware and software and networks are not new, but every year they become more advanced and integrated, causing the transformation of society and the global economy”. [9]

For the purposes of this study, the authors propose to consider the term “digitalization” (table 1), as when analyzing research in the field of digital economy, the author did not establish a clear content of this concept.

Table 1 Definitions of “digitalization”

<table>
<thead>
<tr>
<th>Author / Source</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negroponte N.</td>
<td>The conversion of information into digital form, which in most cases leads to lower costs, the emergence of new opportunities, etc.</td>
</tr>
<tr>
<td>Brennen S., Kreiss D</td>
<td>The material process of converting individual analog information streams into digital bits.</td>
</tr>
<tr>
<td>Oxford English Dictionary</td>
<td>1. The action or the process of changing data into a digital form 2. Converting analog data to digital.</td>
</tr>
<tr>
<td>Bodrunov S.</td>
<td>A figurative expression encompassing a set of solutions related to the use of modern information and communication technologies mainly in digital form.</td>
</tr>
</tbody>
</table>

Based on the foregoing, in this study, the concept of digitalization refers to the process of converting analog data to digital form, associated with the use of information and communication technologies. The essence of the concept of digitalization lies in the qualitative transformation of the spheres of society with the goal of automation or improving models of interaction between the state, society and business in the context of this study. The most highlighted elements of digitalization or “end-to-end digital technologies” (IV industrial revolution) are considered as [8]:

- Big data;
- artificial intelligence (including neurotechnology);
- neurotechnology;
- technology of the distributed registry (Blockchain);
- quantum technology;
- new manufacturing technologies (including additive technologies, supercomputer technologies, computer engineering);
- industrial Internet;
components of robotics (industrial work, including sensor work);
wireless technology (including 5G);
virtual reality technologies (including augmented reality technologies).

In view of the above, according to the author, in connection with the established concept of “digitalization”, a new concept was born as the “digital economy”.

It means that when moving to a digital data presentation format, the economy moved to a new stage of its evolution. It is also worth noting that “digitalization” is the foundation for the “digital economy”.

As part of the study, the author suggests revealing the essence of the concept of “digital economy”. Consequently, the concept of “digital economy” is understood by the authors as a combination of economic and other relations based on the use of digital information and communication technologies.

In addition, in the framework of this study, the author proposes the concept of the “strategy”.

### Table 2 Definitions of “digital economy”

<table>
<thead>
<tr>
<th>Author/ Source</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neal Lane</td>
<td>The convergence of computer and communication technologies on the Internet and the emerging flow of information and technologies that stimulate the development of electronic commerce and large-scale changes in the organizational structure.</td>
</tr>
<tr>
<td>European Parliament</td>
<td>A complex structure consisting of several levels or layers, interconnected by an almost infinite and constantly growing number of nodes.</td>
</tr>
<tr>
<td>The World Bank</td>
<td>A system of economic, social and cultural relations based on the use of digital information and communication technologies.</td>
</tr>
<tr>
<td>Rouse M.</td>
<td>A worldwide network of economic activities that have become available through information and communications technology.</td>
</tr>
<tr>
<td>Development Strategy of the Information Society of the Russian Federation for 2017-2030</td>
<td>Economic activity in which the key factor of production is digital data, the processing of large volumes and the use of analysis results which, compared with traditional forms of management, can significantly increase the efficiency of various types of production, technologies, equipment, storage, sales, delivery goods and services.</td>
</tr>
</tbody>
</table>

### Table 3 Definitions of the “strategy”

<table>
<thead>
<tr>
<th>Author / Source</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Ansoff</td>
<td>A set of rules for making decisions that guide the organization in its activities.</td>
</tr>
<tr>
<td>Economy. Dictionary</td>
<td>A set of rules according to which actions taken should depend on circumstances, including natural events and other people's actions.</td>
</tr>
<tr>
<td>N.N. Yakovenko</td>
<td>The process of awareness and formulation of a long-term task, analysis of the internal and external environment of the area of its solution, the choice of alternative solutions to the problem and the formulation of the main direction of movement (as well as the methods and methods used) to solve the problem.</td>
</tr>
<tr>
<td>A.J. Strickland, A.A. Thompson</td>
<td>A generalized model of the decisions necessary to achieve the goals by coordinating and allocating company resources.</td>
</tr>
<tr>
<td>V.P. Sladkevich, A.D. Chernyavski</td>
<td>A detailed comprehensive overall plan designed to ensure that the organization’s mission and objectives are met.</td>
</tr>
</tbody>
</table>

On the basis of the above, in this study, a strategy is understood as a long-term comprehensive plan designed to ensure the achievement of goals and objectives.

In accordance with the Federal Law dated 28.06.2014 No. 172-FL “on strategic planning in the Russian Federation” a strategic planning document means “documented information developed, reviewed and approved by government bodies of the Russian Federation, government bodies of constituent entities of the Russian Federation, local governments and other participants in strategic planning”.

Also based on the Federal Law dated 28.06.2014 No. 172-FL “on strategic planning in the Russian Federation” the strategy of socio-economic development of the subject of the Russian Federation is “a strategic planning document that defines the priorities, goals and objectives of public administration at the level of the subject of the Russian Federation for the long term”.

It is worth noting that the strategy for the socio-economic development of the constituent entities of the Russian...
Federation depends on the guidelines of the state authorities of the Russian Federation, the formation of a post-industrial society, the digitalization of the economy of the Russian Federation, etc., namely, on a set of factors, conditions and trends that affect development goals society in a single society.

In connection with the above, The President of the Russian Federation approved and signed the Presidential Executive Order dated 07.05.2018 No. 204 “on national goals and strategic objectives of the development of the Russian Federation through to 2024”. The purpose of this regulatory act is to establish national development priorities of the Russian Federation in order to achieve a scientific, technological and socio-economic breakthrough. The deadline for the implementation of national projects is December 31, 2024.

In the light of the information provided above, 13 key strategic directions were formulated, namely:

- digital economy;
- science;
- housing and urban environment;
- safe and high-quality roads;
- healthcare;
- education;
- ecology;
- international cooperation and export;
- demography;
- culture;
- small and medium enterprises and support of individual entrepreneur initiative;
- labor productivity and employment support;
- comprehensive plan for modernization and expansion of the trunk infrastructure;

At the regional level, the implementation of the above national projects occurs through the introduction of indicators from federal projects and the inclusion of additional development indicators taking into account regional specifics.

On the example of the Sverdlovsk region, 55 regional projects have been developed and are being implemented. The implementation of regional projects occurs at the expense of the regional budget, agreements on the implementation of a regional project (federal budget), or extra-budgetary investments.

2. RESEARCH METHODOLOGY

As part of the study, the authors will apply an expert method for the purpose of analyzing the implementation of the national project “Digital Economy” in the strategies for the socio-economic development of the constituent entities of the Russian Federation.

In the framework of this method, experts propose the following three-point rating scale:

- 1 - there is no regional component of the national project “Digital Economy” in the strategy of socio-economic development of the subject of the Russian Federation.
- 2 - there are some elements of the regional component of the national project “Digital Economy” in the strategy of socio-economic development of the subject of the Russian Federation, but without highlighting the field of the digital economy.
- 3 - implementation of the regional component of the national project "Digital Economy" in the strategy of socio-economic development of the subject of the Russian Federation.

3. RESEARCH RESULTS

Throughout this study, the authors will consider such a national project as “Digital Economy”; the passport of which was approved by protocol dated 04.06.2019 No. 7 by the Presidium of the Presidential Council for Strategic Development and National Projects.

The following aims are presented in the national project “Digital Economy” for implementation:

- The increase in domestic costs for the development of the digital economy from all sources (in terms of the share in the gross domestic product of the country) is at least three times higher than in 2017.
- Creating a stable and secure information and telecommunications infrastructure for high-speed transmission, processing and storage of large amounts of data, accessible to all organizations and households.
- The use of mainly domestic software by state bodies, local governments and organizations.

The structure of the specified project is the following:

- Normative regulation of the digital environment.
- Information infrastructure.
- Personnel for the digital economy.
- Information security.
- Digital technology.
- Digital government.

According to the mentioned above, the authors propose an analysis of socio-economic development strategies for the implementation of the regional component of the national project “Digital Economy” on the example of such subjects of the Russian Federation as: Moscow Region, Leningrad Region, Republic of Tatarstan, Krasnodar Territory, Sverdlovsk Region. The authors selected these territories for analysis due to the fact that the above subjects of the Russian Federation were in the top ten in the ranking of the socio-economic situation of the regions - 1 quarter 2020.
Table 4 Comparative characteristics of the implementation of the regional component of the national project "Digital Economy" in the strategies of socio-economic development of the constituent entities of the Russian Federation as of 2020.

<table>
<thead>
<tr>
<th>Comparative parameters</th>
<th>Moscow Region</th>
<th>Leningrad Region</th>
<th>Republic of Tatarstan</th>
<th>Krasnodar Territory</th>
<th>Sverdlovsk region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Normative regulation of the digital environment</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Information infrastructure.</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3. Personnel for the digital economy.</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4. Information security.</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. Digital technology.</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6. Digital government.</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

4. THE DISCUSSION OF THE RESULTS

According to the results of a comparative description of the implementation of the regional component of the national project "Digital Economy" in the strategies for the socio-economic development of the constituent entities of the Russian Federation as of 2020, the authors established the following:

- in the strategy of socio-economic development of the Leningrad and Sverdlovsk regions until 2030, no changes were made taking into account the current provisions of the national project “Digital Economy” and other national projects;
- the legislative and executive authorities of the Russian Federation are responsible for the normative regulation of the digital environment. Taking into account that many regulatory projects in the field of the "digital economy" have not been adopted, then there are huge risks (including threats) of negative consequences from not adopting such regulatory acts on time;
- in the strategies for socio-economic development of the Leningrad and Sverdlovsk regions, as well as the Krasnodar Territory, there is no reflection of such a direction as information security, which is a huge prevention while ensuring the stability and security of the functioning of the information infrastructure of these constituent entities of the Russian Federation;
- the formation of digital competencies is one of the main goals in accordance with the national project “Digital Economy”. Unfortunately, the implementation of the goal of training personnel for the digital economy in the Republic of Tatarstan is fully laid down;
- the development of digital technologies and digital public administration is an emerging reality in view of the adopted national project “Digital Economy”, therefore, an economic breakthrough cannot be achieved without clearly defined goals and objectives in the strategies for socio-economic development of such subjects of the Russian Federation as the Leningrad and Sverdlovsk Regions.

A feature of these strategic documents is that there is no emphasis on changing the traditional system of legal acts on digital legislation.

This aspect cannot positively affect the regulation of business in the digital sphere by state authorities. At the same time, it is necessary to note one more feature of the “digital economy” as the emergence of digital platforms that allow coordinating the economic activities of independent agents for the market.

It is also worth noting that the following points in the context of the digitalization of the economy may become the upcoming problem points in the regions of the Russian Federation:

- non-adoption of “digital” legal acts;
- transformation of working places (including forms of economic relations);
- an increased risk of financial and business operations due to cyber threats.

Furthermore, the upcoming challenges in regional strategies in the context of digitalization will be the following aspects:

- training of the population in the skills to use information and communication technologies;
- ensuring simultaneous digitalization of the entire population of the Russian Federation;
- creation and improvement of the “digital” regulatory framework of the Russian Federation;
- increasing the efficiency of using information and communication technologies in the public sector when interacting with citizens on a variety of issues.

But consequences may arise in the absence of elements of a “digital economy” in regional strategic documents:

- exhaustion of qualified personnel (technological unemployment);
- violation of information security of citizens;
- threat of "digital sovereignty" of the state;
- the gap in digital education and the level of well-being of citizens;
- conflicts in the enforcement of legal acts in the context of digitalization of society.
5. CONCLUSION

Currently, the implementation of the parameters of the “digital economy” is one of the main challenges for the Russian Federation. Changing the current structure of the economy at the moment is not going at such a fast pace, and therefore, further delaying and not realizing the goals and objectives of the national project “Digital Economy” can result in significant losses for the Russian Federation, including a slowdown in the rate of gross domestic product, decrease in the level of economic security of the country.

In this study, the authors have analyzed the existing strategies for the socio-economic development of the constituent entities of the Russian Federation with a view to introducing the main priorities of such a national project as “Digital Economy”. It is worth noting that units from the constituent entities of the Russian Federation implement the parameters of the national project “Digital Economy” in their strategies for socio-economic development. Other entities implement the national project “Digital Economy” through regional programs (the regional component of national projects).

According to the authors’ point of view, the implementation of the parameters of the “digital economy” should be at all levels of management of socio-economic systems. Therefore, it is extremely necessary to include elements of the digital economy in long-term comprehensive plans, and subsequently put them into practice.

In addition, based on the analysis, the authors identified features and problem points in strategic regional documents in the context of digital transformation, as well as formulated challenges and possible consequences in the absence of digitalization elements in strategic regional documents.

REFERENCES