

Global networked economy as a factor for sustainable development

Ayna Salamova*

Chechen State University, st. Sheripova 32, 364024 Grozny

Abstract. Towards the end of the twentieth century, certain features of economic development were clearly defined that will become the dominant features of the economy of the next century. Modern advances in the development of global information and communication technologies have led to the formation of a global electronic environment for economic activity, which has opened up new opportunities for organizational and institutional design in business and other areas of human socio-economic activity. The article discusses the prospects for the development of the world global economy.

1 Introduction

The global economy continues to experience periodic fluctuations. Economic performance has become even more bipolar, with anemic growth in countries that had large imbalances before the crisis and activity in many other countries [1].

One of the names for the new environment is “networked economy”, often referred to in combination with the word “global”. In a report prepared by the European Commission, the global networked economy is defined as “an environment in which any company or individual, located anywhere in the economic system, can contact easily and at minimal cost with any other company or individual about working together, for trade, to exchange ideas and know-how or just for fun”. “As a result, a branchless, network economy appears, based mainly on horizontal links.”[13].

There are four main processes that strengthen the position of the network economy:

1. Since the network economy can “live” only in the information and communication environment created by the global Internet, the basic condition for its existence is the development and spread of Internet technologies.

2. The attractiveness and efficiency of the network economy depends on the presence in it of a critical mass of economic agents and the corresponding infrastructure, which makes their activity possible (in the West, this action is called “network externalities”). Numerous attempts by individuals and organizations to use the capabilities of the global network lead to an expansion of the scale of socio-economic activity in the network economy.

3. New opportunities for global communication between people give them new tools for reorganizing the forms of their joint activities. These tools are used to develop the

* Corresponding author: salamova_chgu@mail.ru

principles of "network organization". Mass practice is the embodiment of these principles when modernizing existing or creating new organizations, which gives them a new quality, thanks to which they can no longer be attributed to either a hierarchical or a market form.

4. Various types of economic infrastructure also become more efficient when they begin to take advantage of the possibilities of Internet technologies. This leads to the modernization of infrastructure in the economy and the creation of networked institutional structures.

2 Methods and types of analysis of the information society

Sustainable development is a path based on maintaining for a long time the expanded reproduction of production potential, human resources and the natural environment. With sustainable development, a balance is ensured between three closely interrelated elements of the system: economic (informational), social sphere and environment [10].(See Fig. 1)

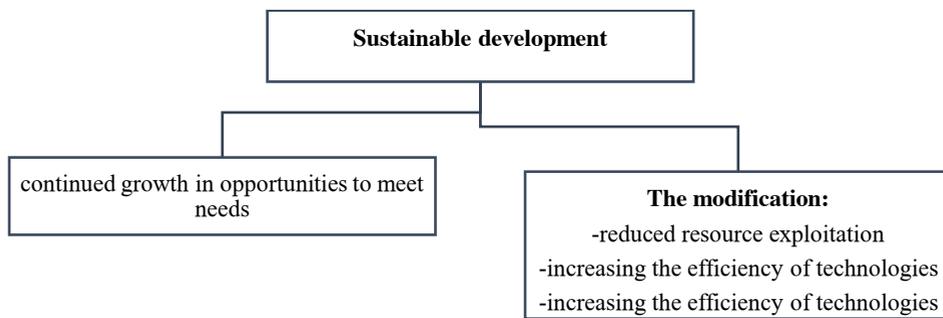


Fig. 1. What persists and what changes in the context of sustainable development

The nature of the world economy, following scientific and technological progress, has changed many times, but these changes have taken place over decades. The pace of change in the networked economy creates significant problems in various areas of human activity.

The creation of a networked economic space inevitably leads to:

- globalization of industrial and commercial activities on the Internet;
- restructuring of traditional ties with business partners using network technologies, which implies access to the commercial mechanisms of the enterprise and the formation of flexible ties with partners;
- forming a circle of potential consumers, establishing direct relationships with them on a personal basis;
- use and support of knowledge banks by creating integrated corporate databases and equipping employees with means of access to them;
- developing new business models and assessing their impact on the business;
- search for new business opportunities and their implementation when working, both with consumers and with business partners.

Usually job is characterized by stable, low profit and low financial risk in a developed market. In contrast, emerging markets are attractive with high rates of return, but with higher risks [2].

The level of informatization of society is the most important indicator of competitiveness in the modern global economy [4]. There are several ways to measure the level of participation of countries in the networked economy. One of the methods for comparing countries by the level of informatization is the compilation of indices of participation in the networked economy. For example, the Informational Soc was derived,

which since 1996 has been calculated and published jointly by two organizations - World Times and IDC (International Data Corporation).The indicators are aggregated into four factors [11]. (See Table 1)

Table 1. Indicators of informatization of society

Computer Infrastructure	Infrastructure Internet
Number of PCs per inhabitant	E-commerce level
PCs sold for home use	Number of Internet users at home
Sold to organizations and enterprises PCs for units labor force	Number of Internet users at work
PCs are connected to the network	Number of Internet users in the education system
Software / hardware costs	
Information Infrastructure	Social Infrastructure
Telephone lines / household	Acceptance rate among educational establishments
Telephone faults / line	Rate of admission to higher education
Cost of a local phone call	Reading newspapers
Number of TVs / resident	Freedom of the press
Number of radios / resident	Civil rights
Number of faxes / resident	
Number of cell phones / resident	

The information economy based on the large-scale use of the Internet and information and communication technologies (ICT) is of great importance for improving the quality of life of citizens, especially in the regions of the Russian Federation. It increases the country's competitiveness, expands the possibilities of its integration into the world economic system, and increases the efficiency of public administration [3].

A special place in sustainable development also belongs to the institutional environment, which we can consider as a means of reconciling the economic, social and environmental components of sustainability. Institutionalism as a direction of economic theory was formed in 1920-1930 to study the totality of socio-economic factors (institutions). Institutions in institutionalism are the primary elements of the driving force of society, considered in historical development. Among the institutions are: social institutions - family, state, legal norms, property, monopoly, competition, etc.[5] Using the agricultural model as an example, indicators of sustainable development can be considered.

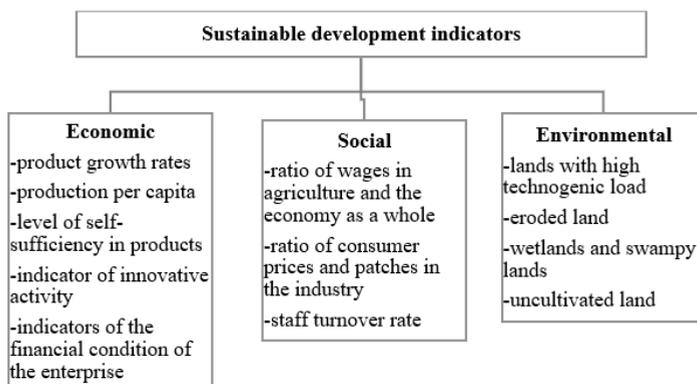


Fig 5. System of indicators for sustainable agricultural development

Informatization is a global process of formation and large-scale use of information resources; in industrially developed countries it becomes the main link that unites all

aspects of qualitative transformations in society. As a result of informatization, scientific research and development, production, management, all spheres of social life of society rise to a new level, the parameters of economic growth are changing [6].

In Asia with an emerging market, economic activity remains robust. South American countries also show strong economic growth, although it is slightly lower in the Caribbean and Central America. Many countries in Sub-Saharan Africa (SSA) are accelerating economic growth. Social unrest has negatively impacted economic growth in some countries in the Middle East and North Africa. Information and knowledge are the foundations of the information economy, those the "currency" of modern societies. Today, in the context of the growing globalization of the economy, all companies involved in economic activity, including those in developing countries, must learn how to effectively acquire and use information in order to succeed in business [7].

3 Analysis of economic development and economic stability

The central problem of the transition to a new growth model (supply economy) is improving the business climate. And the central challenge in this area is the ongoing weakening of Russia's position in institutional and investment competition [8]. An analysis of the institutional dynamics of Russia shows that in recent years Russia has worsened its position, having moved from the second echelon of this group of countries to the end of the third echelon. This demonstrates the lag of Russia in institutional improvements from the main competitors in the investment market. In the Doing Business rating, Russia lost 23 positions, showing the worst dynamics of all countries. In the IMD competitiveness rating, Russia in 2007 ranked 5th in the panel of ten leading developing countries, and in 2011 it was only 9th. In the ratings of the World Bank, which characterize the quality of regulation and legal environment (Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption), Russia has also demonstrated the maximum deterioration of its positions over the past five years. Note that over the past five years, the institutionally weakest countries have improved their performance (China, Brazil, Indonesia), while the institutional "leaders" (Malaysia, Thailand) have shown regression [6].

Analysis of the most acute problems allows us to speak about the problem of low business activity associated with unfavorable factors of the business environment and government regulation and the problem of low internal competition as the central disadvantages of the Russian market. The main negative factors in this area are [9]:

- inequality of rights of market agents,
- barriers to market entry for new companies,
- the distorting influence of the state and monopoly sectors,
- excessive and ineffective regulation,
- insufficient rates of restructuring of old companies receiving government support,
- corruption.

The initial conditions for the global competitiveness of the Russian economy are determined by its intermediate position between rich and poor countries, which sets the parameters of the main factors of competitiveness. Assessed from this point of view, the competitiveness of the Russian economy in comparison with other developing countries - leaders of catching-up development has been declining in recent years. Over the years, Russia has become a country with one of the highest levels of GDP per capita among developing countries. At the same time, in terms of the level of institutional development and the quality of the business environment, Russia has noticeably worsened its position due to the absolute decline in some indicators and due to insufficient dynamism in improving others in comparison with its "neighbors" in the group of dynamically

developing countries. In terms of “wealth,” Russia has overtaken developing countries with the most comfortable business and investment climate (Malaysia, Mexico, Turkey, South Africa), while in terms of the quality of the business environment it has caught up with the most “poor” (India, Indonesia). Estimating the aggregate dynamics of indicators in the main international rankings (GCI WEF, WCI IMD, Doing Business WB) over the past 5 years, we can state the maximum regression of Russia from 10 countries - leaders of catching-up development (Russia - -12 points; South Africa - -9 points, Brazil - +3, China - +5, Turkey - +11, Indonesia - +14) [9].

In July, the heads of the EU countries agreed on a budget for 2021-2027 and approved a plan to recover the economy from the damage caused by the coronavirus pandemic. The total budget will amount to a little over 1 trillion euros, the cost of the plan will be 750 billion euros. The funds included in the recovery plan will be issued to European countries in the form of grants (390 billion euros) and loans (360 billion euros). The EU plans to borrow funds for the formation of the “anti-crisis fund” on international financial markets - the EU plans to repay these loans no earlier than 2058 [12].

4 Conclusions

At present, the informatization of the economy in the territory of the Russian Federation occurs spontaneously and unplannedly, with the exception of some large cities. As a result, in the economic space of the country, there is an increase in uneven regional development. For Russia, where the infrastructure (transport, information, etc.) is poorly developed in two-thirds of the vast territory, the formation and rapid development of the information economy is important, contributing to the further development and deployment of productive forces, as well as to leveling the pace of economic development in the regions. The spread of the information economy throughout the entire economic space requires the development of a state development concept adapted to the conditions of Russia.

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