Transformation of territories and reengineering of business processes as basic management technologies

Iryna I. Nadtochi

Received: 3 Augusts 2020
Accepted: 14 September 2020

Abstract. The purpose of the article. The aim of the article is to define new concepts of transformation and reengineering of business processes, their types, properties and research of significance in the development of territories. Methodology. The theoretical and methodological basis of the study are the scientific works of scientists in the study of business process management in the system of competitive development of territories. To achieve this goal, the following research methods were used: theoretical generalization – providing the basic characteristics of models of economic development in the conditions of transformational changes in national economies; methods of positive and normative analysis – to determine the strategy and priorities for the transformation of regional development. Results. It is proved that transformation is a permanent form of life, a movement in which old and new coexist, in certain conditions innovative spheres survive and develop, such as material and technical and social base of scientific and technological progress, reforms, social consequences and sometimes negative for society neoplasms and deformities. Reforms do not stop historical, evolutionary transformations, they give them new impulses, directions, limit or expand the scale of their impact on all aspects of society. It is substantiated that the strategy of “catching up” and the strategy of “advanced technologies” should be implemented simultaneously, not in turn, as their common goal is to achieve a new technological level of the Ukrainian economy. It is determined that the strategy of “catching up” can be used in the manufacture of household appliances, engines and in the automotive and chemical industries. It is proved that Ukraine can and should pursue a strategy of “advanced technologies” in the production of certain weapons, aerospace and shipbuilding industry, chemical, heavy and energy engineering, transport, information technology, participate in global cooperation in nanotechnology and biotechnology. Prospects for the transformation of territories are identified, including: transition from extensive to intensive management methods, implementation of programs to increase regional production of goods, priority of small farms, development of social reforms, priority of small farms, restructuring of the regional economy. Practical meaning. Models of economic development for transformational changes in national economies can be used by regional public authorities. Prospects for further research. Study of strategy and priorities for regional development transformation.

Keywords: business process, competition, competitive development of territories, scientific and innovative potential, interterritorial competition.
Трансформація територій та реінжиніринг бізнес-процесів як базові технології управління

Ірина Ігорівна Надточій 1, к. е. н., доцент

Стаття надійшла: 03.08.2020
Стаття прийнята: 14.09.2020

Анотація. Метою статті є визначення нових концепцій трансформації та реінжинірингу бізнес-процесів, їх видів, властивостей і дослідження значення в розвитку територій. 

Методологія. Теоретичною і методологічною основою дослідження є наукові праці вчених у дослідженні системи управління бізнес-процесами в системі забезпечення конкурентного розвитку територій. Для досягнення поставленої в роботі мети були використані такі методи дослідження: теоретичне узагальнення – наведення основних характеристик моделей економічного розвитку за трансформаційних змін у національних економіках країн; методи позитивного і нормативного аналізу – для визначення стратегії і пріоритетів трансформації регіонального розвитку.

Результати. Доведено, що трансформація це постійна форма життєдіяльності, руху, в ході якої співіснують старе і нове, народжуються, в певних умовах виживають і розвиваються інноваційні напрямки, наприклад, такі як матеріально-технічна та соціальна база науково-технічного прогресу, реформи, соціальні наслідки, а іноді і негативні для суспільства новоутворення і деформації. Реформи не припиняють історичні, еволюційні трансформації, вони дають їм нові імпульси, напрямки, обмежують або розширюють масштаби їх впливу на всі сторони життєдіяльності суспільства.

Обґрунтовано, що стратегія «наздоганяючого розвитку» та стратегія «прогресивних технологій» повинні реалізовуватися одночасно, а не по черзі, так як мета у них спільна, – досягнення нового технологічного рівня української економіки. Визначено, що стратегія «наздоганяючого розвитку» може застосовуватися у виробництві побутової техніки, двигунів і автомобілебудуванні, хімічній промисловості. Доведено, що стратегією «прогресивних технологій» Україна може і повинна проводити у виробництві деяких видів озброєння, авіакосмічній та суднобудівній промисловості, хімічному, важкому і енергетичному машинобудуванні, транспортній сфері, індустрії інформаційних технологій, брати участь у світовій кооперації по нагір’ї і біотехнології. Визначено перспективи трансформації територій, серед них: перехід від екстенсивних методів господарювання до інтенсивних, реалізація програм новоутворення регіональної економіки.

Ключові слова: бізнес-процес, конкурентність, конкурентний розвиток територій, науковий та інноваційний потенціал, міжтериторіальна конкуренція.
1. Introduction.

Strategic stability of territories is possible only if it is competitive and able to adapt to changes in the market environment. To be competitive, a territory must have a competitive advantage. There are three main ways to gain a competitive advantage: self-improvement or to weaken the negative influence of competitors, or to influence the changing market environment. Define two basic technologies of change management – transformation of territories and reengineering of business processes. Accordingly, the definition of new concepts of transformation and reengineering of business processes, their types, properties and research of significance in the development of territories is quite relevant.

2. Literature review.

Among modern economists, whose research is devoted to the problems of business process management in the system of competitive development of territories, it is necessary to note scientific works, in particular: O. Belorus and D. Lukyanenko (2000), Yu. Kozak, Yu. Yekhanurov and V. Kovalevsky (2014), Yu. Pakhomon, A. Filipenko, D. Lukyanenko, Yu. Makogon and S. Gromenkova (2001), B. Danylyshyn (ed.), D. Klynovyi and T. Pepa (2007), I. Kramarenko (2014), E. Yasin and A. Yakovlev (2004), J. Stiglitz and D. Ellerman (2000), S. Suspitsyn (2007), N. Kukharska and S. Kharichkov (2006), I. Iryshcheva et al. (2020), O. Pryshchepa et al. (2020) and others. However, the complexity and versatility of this study requires the study of the theoretical foundations of business process management in the system of competitive development of territories.

3. Methodology.

The theoretical and methodological basis of the study are the scientific works of scientists in the study of business process management in the system of competitive development of territories. To achieve this goal, the following research methods were used: theoretical generalization – giving the main characteristics of models of economic development in transformational changes in national economies; methods of positive and normative analysis – to determine the strategy and priorities for the transformation of regional development.

4. Research objectives.

The aim of the article is to define new concepts of transformation and reengineering of business processes, their types, properties and research of significance in the development of territories.

5. Results and discussions.

In connection with various transformational changes in the national economies of transition countries, in Ukrainian economics there are six models of economic development (Table 1).

A specific feature of the Ukrainian model, which in some ways resembles the Russian one, is that we have been searching for the optimal strategic direction and defining a strategic goal for a long time. The result is still a lack of clear programs for economic reform and restructuring of economic relations. The action programs of several governments of Ukraine were and are declarative, unsystematic, do not define goals, intermediate stages, specific mechanisms and therefore cannot be purposefully implemented (Danylyshyn, Klinovyi and Pepa, 2007).

In the structure of market transformation of Ukraine, economists of the Institute of Economic Forecasting of the National Academy of Sciences of Ukraine have identified three main transformational flows (Yasin and Yakovlev, 2004):

1) the initial accumulation of capital. The main methods of this accumulation are privatization (which has actually gone much further economically than is presented in formal legal terms) and inflation, which allow in a short time to accumulate large sums of money and redistribute wealth to a small number of private owners;
Table 1. Models of economic development on transformational changes in national economies

| Model                                      | Characteristics                                                                                                                                 |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Chinese (China, Mongolia, Vietnam)         | The transformation of the economy and the transition to market principles is expected in the depths of the old command-and-control system. The process of transformation is defined as progressive, long, gradual. The system of public administration and planning is not eliminated, but adapts to new conditions. |
| Hungarian                                  | Means a gradual transition to market relations. The market environment began to take shape in the depths of the command-administrative system. However, unlike the Chinese model, the command system is not preserved, but gradually dismantled. |
| Polish model of “shock therapy”           | Rapid destruction of the administrative system, accelerated privatization, maximum openness of the economy to foreign goods and capital.        |
| Czechoslovak                               | Economic reforms are based on old traditions of market culture. Privatization of property is carried out by soft, civilized methods, through corporatization and corporatization. |
| Baltic                                     | Its specificity lies in the small scale of the national economy and the effective use of foreign economic aid to stabilize production, consumption and the monetary system. |
| Russian state-capitalist model             | Is based on privatization, privatization, resulting in the formation of large multinational companies of the oligarchic type. However, the state regained control in the oil and gas industry, over part of the military-industrial complex, aircraft and shipyards, VAZ and a number of other large machine-building enterprises. |

Source: Formed by (Belorus and Lukyanenko, 2000; Kozak, Yekhanurov and Kovalevskiy, 2014; Pakhomov, Filipenko, Lukyanenko, Makagon and Gromenkova, 2001).

2) economic restructuring. The main methods of restructuring are the withdrawal of fixed assets from production without replacement and deduction, replacement of old funds with new ones, the creation of new production structures based on new technologies;

3) socialization of the economy. The main points of this process are increasing the role of man, his ability to earn money for personal self-realization, increasing his life and creative abilities and knowledge in production, as well as reducing social inequality and the development of social protection institutions.

All three transformational flows, being relatively independent, are at the same time closely interconnected. They can exacerbate each other’s negative effects, but they can also neutralize them. Thus, the negative consequences of the initial accumulation of capital associated with the social stratification of society can be to some extent offset by socialization, if it is reasonably managed by the state. The interconnectedness of the considered flows in the structure of market transformation does not allow to correctly assess the events that are taking place from the point of view of the prospects of responsible reforms.

Reforms are maturing in the course of many years of transformation processes due to many internal and external factors. However, the scientific analysis of the impact of such processes on the course of reforms is not given due attention. Concepts, approaches, models are studied, foreign experience at ignoring of domestic practice is studied. The inefficiency of the adopted models of reform is associated with basic systems, institutions, structures and methods that are collapsing.

Economic reform is a historically inevitable path of development of the existing social system. This process of development is not carried out in isolation: in the world
There is a need for a non-confrontational transition to a new type of economic growth, the transformation of socio-economic relations to the so-called new post-industrial civilization. One can consider the essence of transformation as part of the process of preparation and implementation of reforms: reforms are ripe, the transformation of the old property into a new one begins; reforms are over and the transformation is over. But evolutionary transformation reflects a continuous, changing, and contradictory process. It is in the course of transformation that reforms, their stages, and local changes mature. Reforms as a manifestation of ripe change are the result of transformational transformations, not the other way around. This is the essence of the problem, and at its core the continuity of economic development.

Thus, transformation is a constant form of life, a movement in which the old and the new coexist, are born, in certain conditions survive and develop innovative areas, such as material and technical and social base of STR, reforms, social consequences, and sometimes negative for society tumors and deformations. Reforms do not stop historical, evolutionary transformations, they give them new impulses, directions, limit or expand the scale of their impact on all aspects of society.

Transformation as a permanently functioning element of system integrity can eventually lead to the consistent implementation of reforms, new relations and the creation of adequate, including market, infrastructure. It is the evolutionary and state-regulated process of economic transformation that has caused (for example, in China) serious structural and institutional changes, primarily in social criteria, international competitiveness, the boundaries of monopoly, and the use of know-how.

A specific feature of transformation as a historical stage is that it interacts with the system of economic cycles. In the absence of such interaction, integrity is not reformed by increasing the slowdown in economic growth and declining economic efficiency. There are structural deformations, scarcity of resources, capital, environmental crisis, lagging behind in infrastructure development. The lack of optimal division of labor and common economic space in the course of reforms unprepared by transformations has a negative effect.

Well-known American scientists J. Stiglitz and D. Ellerman, awarded the Nobel Prize in Economics in 2001, criticizing the results of the Washington Consensus, come to a number of conclusions about economic reforms in the post-Soviet space (Stiglitz and Ellerman, 2000). The first conclusion says: “the transition turned out to be more difficult than expected.” The second conclusion: “Attempts to strengthen the price system by reducing inflation may have the opposite effect.” The third conclusion: “Privatization, characterized by the accumulation of enormous wealth by the oligarchs, not only does not provide the promised benefits in terms of efficiency, but also undermines public capital and leads to a loss of confidence in the market economy.” These world-renowned experts recommend the following macrostrategies for further development: 1) the transition from financial stabilization to growth; 2) correction of errors of the decade; 3) restructuring of the economy from the bottom up; 4) the reproduction of social capital as a result of the formation of the product of social democracy.

It should be emphasized that these scientists cannot be considered critics of market relations. But they show a balanced, realistic approach to assessing reforms in post-Soviet countries.

The integrity, systemicity and even globalism of processes are becoming characteristic of modern society, regardless of its socio-economic status.

The integrity of scientific-reproductive, structural, innovative processes, mediated by the unity of interests of man, region, country
as a whole at the macro, meso and micro levels is brought to the fore. It must have a material and value balance that will reflect social stability.

Such integrity, in the end, represents the continuity of interaction of all elements of the economy, economic factors of real subjects of life and the reproduction of man as a determining productive force. However, in the process of transformation, the “old and the new” take part in a constant dialectical relationship and not only in terms of ideology and politics. This is a certain form of life, but sometimes they try to impose their ideas, concepts, models.

The most common concepts of transformation processes in Ukraine are (Yasin and Yakovlev, 2004):

1) the liberal model of the economy;
2) the model of public economic management;
3) development model based on support for national macro-technological priorities.

According to the first concept, it is necessary to reduce state influence on the economy, its structure, abandon restrictions on domestic trade, significantly reduce quotas and licensing, price regulation, quickly privatize state property, sharply reduce subsidies to enterprises and so on. Well-known politicians and economists V. Pynzenyk, V. Lanovyi, Yu. Yekhanurov, R. Shpek are considered to be apologists for this concept in Ukraine; in Russia E. Gaidar, A. Chubais.

The second concept is based on the emphasis on the domestic market, support for domestic producers, providing favorable conditions for the agro-industrial complex, the cessation of large-scale privatization and the return to nationalization of entire industries. Proponents of this concept are Ukrainian economists T. Kovalchuk, M. Pavlovsky and Russian A. Abalkin, S. Glazyev, D. Lviv. They do not exclude strict administrative management of state-owned enterprises in accordance with the planned tasks, the actual division of the economy into public and market sectors, each of which must function in its “coordinate systems” (Yasin and Yakovlev, 2004).

The third concept is based on the support of scientific and industrial potential and macro-technological priorities. The Strategy of Economic and Social Development of Ukraine (2004–2015) “Through European Integration”, the authors of which are well-known Ukrainian economists A. Galchynsky, V. Geiets and others, proposed two main macro-technologies that will create framework of modern economic transformation. These are “Ukraine a transit state” and “Ukraine a high-tech, aerospace state” (Suspitsyn, 2007).

Macro-technology “Ukraine is a transit country” should be based on the geopolitical advantages of Ukraine. The favorable location of our country on the border of two integration zones – European and Eurasian – and the need to intensify cooperation in both directions will allow Ukraine to reap the benefits of cooperation in these large-scale, deep and powerful integration processes. The presence of a developed transport network will create the necessary conditions for the transit of large volumes of goods.

Macro-technologies “Ukraine is a high-tech, aerospace state” is directly related to macro-technologies “Ukraine is a transit state”, as it provides for the further development of air and space transport in Ukraine. But the main thing here is the high technology used in the manufacture of aircraft and spacecraft. The strategic goal of the high-tech direction of development of Ukraine’s foreign economic relations in the long run is to realize the competitive advantages associated with the formation of a new structure of domestic exports, to transform mainly raw material exports into exports of high value-added products, to master the “new economy”. which corresponds to modern trends and directions of world trade.
Competitive advantages, the source of which is unique high technologies, can become the basis of practical realization of this direction. In the structure of Ukrainian industry and services there are a number of sectors that, having unique high technologies, are able to play the role of export engine. These are, first of all, the aerospace industry, shipbuilding (development of the commercial fleet on the basis of mastering the achievements of military shipbuilding), space services for launching objects into Earth orbit, software development services, etc. It is in this direction that the transition of Ukrainian society from industrial to post-industrial, from traditional to “new economy” will take place.

The application of the above macro-technologies, the development on their basis of two complexes of transport and high-tech, should be the subject of special attention of the state, which should integrate the existing set of tools of state regulation into a comprehensive mutually agreed strategy to promote and develop globally competitive industries. Such a strategy should change the existing division of resources, directing them to priority areas (Kukharska and Kharichkov, 2006).

Real life and invisible transformation processes also take place at the micro level. For modern reforms, the closest self-government, regional and interregional social relations, the formation of economic and technological integrity. Apparently, today it is not enough to limit the activities of man and society to the concerns of survival, to link it to the problems of resources, property, wealth, its distribution, use, evaluation. The question arises about the processes of transformation associated with the future of man, society, earth. In this context, the reproduction of fixed assets gives way to the priority of human reproduction, the development of its spiritual substance and productive power.

The main reasons for the failures of economic transformations in our country lie in the conceptual unpreparedness of economic reforms, ignoring the advanced achievements of world and domestic economics, misunderstanding of the structural features of the Ukrainian economy in the transformation period.

Based on the world experience in the field of industrial development of countries that differ in both scientific and technical level and resource potential, we can identify the following types of strategies and priorities of transformation (Table 2).

Due to the huge differences between economic sectors and production groups, as well as taking into account their external competitive advantages and given their weaknesses, Ukraine will be able to choose only one of the strategies listed above.

At first glance, the second strategy is more suitable for Ukraine. But for this, as noted by I. Buleev (2006) requires a single unifying national idea (it can be improving the quality of life) and the national elite, which has, first of all, national interests, the formation ethics, morality and responsibility, fostering a sense of deep patriotism, belonging to the Ukrainian nation, to the state.

Therefore, the strategy of “catching up” and the strategy of “advanced technologies” should be implemented simultaneously, and not in turn, as their goal is common – to achieve a new technological level of the Ukrainian economy.

The strategy of “catching up” can be used in the manufacture of household appliances, engines and automotive, chemical industry. Ukraine can and should pursue a strategy of “advanced technologies” in the production of certain types of weapons, aerospace and shipbuilding industries, chemical, heavy and energy engineering, transport, information technology industry, participate in global cooperation on nano and biotechnology.
Table 2. Strategies and priorities for transformation

| Type of strategy                                      | Characteristic                                                                                                                                                                                                 | Countries that followed the strategy                                                                 |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Strategy for the use of natural resources             | Its essence is the development and export of natural resources with foreign investment and further use of income to improve the welfare of the population and the development of a number of industries focused on the domestic market. As a rule, these are small states that are able to live for a long time by exporting raw materials and fuel. | Gulf countries, Venezuela, Colombia                                                                     |
| Catch-up development strategy                         | Its essence is that the industry, relying mainly on cheap labor, masters the production of competitive products previously produced in industrialized countries, and complements niches in markets from which these countries are being replaced by cheaper goods. In the first stages, the consumer is not offered new products: the main emphasis is on the reproduction of already created samples at a lower price. Only after gaining a foothold in the markets, the companies of the “catching up” countries move to better and more original goods. | Japan, South Korea, Taiwan, other countries in Southeast Asia, partly China                            |
| Strategy of “advanced technologies”                   | The essence of this strategy is that, based on the achievements of STP, to create new products and technologies, to form demand for them and to develop new markets. The classic and most successful example is the computer revolution and the development of information technology. | USA, Germany, Great Britain and other countries of Western Europe, Japan (last 35 years)               |
| Breakthrough strategy                                 | Focused on creating new products that are ahead of modern models by two generations. It is based on the concept of “overtaking without catching up”, has a selective nature and is based on innovative enterprises. | Japan, South Korea, Taiwan, Singapore, Hong Kong                                                      |

Already today it is absolutely obvious that the objective need for transformation of Ukraine’s economy is:

- transition from extensive to intensive management methods. This requires significant changes in the structure of the agricultural and industrial sectors of the country, which consist in the creation of deep and comprehensive processing of mainly local raw materials, expansion of related and service industries and industries that meet the needs of domestic (regional) and foreign markets;

- implementation of programs to increase production of consumer goods, balanced with the dynamics of effective demand (focused on wage growth, no delays in its payment, recovery of savings), ensuring the effectiveness of social reforms, the availability of necessary resources, optimizing the use of working capital, government orders. guaranteed payment, etc.;

- priority of small forms of management that ensure maximum efficiency in solving various problems: from the development and creation of science-intensive technologies, processing of scarce natural raw materials to their introduction into industrial production in order to saturate domestic and foreign commodity markets with competitive high-quality products;

- restraint of inflation, indexation of all quantitative parameters, economic indicators, elimination of deformations and on this basis structural elements that determine the cost (production costs), profit, parameters of its distribution, especially from the standpoint of
maintaining rational proportions of reproduction;
- development of the social orientation of the reforms leading to increase of well-being of the people, increase of expenses for health care, rest, education, retraining, all parameters of reproduction of the able-bodied person;
- expansion of knowledge-intensive industries, taking into account the provision of highly qualified personnel, opportunities for their training in the required time;
- implementation of structural restructuring of the economy on the basis of the latest technologies, while increasing resources for basic research.

I. Kramarenko believes that “The advantages of reengineering are: a clear description of the enterprise and all its divisions; regulation and simultaneous determination of the results of each employee; ease of automation and informatization of the process management system; staff reduction, clear description of qualification requirements; transparency of business system-budgetary mechanisms; flexibility and freedom of choice in building organizational structures.” (Kramarenko, 2014).

6. Conclusions.
It is proved that transformation is a constant form of life, movement, in which old and new coexist, are born, in certain conditions survive and develop innovative areas, such as material and technical and social base of scientific and technological progress, reforms, social consequences, and sometimes negative for society tumors and deformations. Reforms do not stop historical, evolutionary transformations, they give them new impulses, directions, limit or expand the scale of their impact on all aspects of society.

It is substantiated that the strategy of “catching up” and the strategy of “advanced technologies” should be implemented simultaneously, not in turn, as their common goal is to achieve a new technological level of the Ukrainian economy. It is determined that the strategy of “catching up” can be used in the manufacture of household appliances, engines and automotive, chemical industry. It is proved that Ukraine can and should pursue the strategy of “advanced technologies” in the production of certain types of weapons, aerospace and shipbuilding industry, chemical, heavy and energy engineering, transport, information technology industry, participate in world cooperation on nano and biotechnology.

Prospects for the transformation of territories are identified, among them: transition from extensive to intensive management methods, implementation of programs to increase regional production of goods, priority of small farms, development of social orientation of reforms, priority of small farms, structural adjustment of regional economy.

References
Belorus, O. G., Lukyanenko, D. G. (2000), “Global transformations and development strategies”, Oriyane, Kyiv, Ukraine, 424 p.
Buleev, I. P. (2006), Transformatsiya obschestva i ekonomika: opyt i perspektivy [Transformation of society and economy: experience and prospects”, Institute of Industrial Economics NAS of Ukraine, Donetsk, Ukraine,336 p.
Danylyshyn, B. M. (ed.), Klynovyi, D. V., and Pepa, T. V. (2007), Rozvytok produktyvnykh sil i rehionalna ekonomika [Development of productive forces and regional economy], Publishing House “Aspect Polygraph”, Nizhyn, Ukraine, 522 p.
Irtyshcheva, I., Kramarenko, I., Shults, S., Boiko, Y., Blishchuk, K., Hryshyna, N., Popadynets, N., Dubynska, L., Ishchenko, O. and Krapivina, D. (2020). “Building favorable investment climate for economic development”, Accounting, vol. 6, issue 5, pp. 773–780, doi: http://dx.doi.org/10.5267/j.ac.2020.6.006
Kozak, Yu. H., Yekhanurov, Yu. I. and Kovalevskyi, V. V. (2014), Mizhnarodni stratehii ekonomichnoho rozvytku [International strategies of economic development], CNL, Kyiv, Ukraine, 555 p.
Kramarenko, I. S. (2014), Reinzhrinyh navchalnoho protsesu: vid teorii do praktyky [Reengineering of the educational process: From theory to practice], FOP Shvets VD., Mykolaiv, Ukraine, 64 p.

Kukharska, N. O. and Kharichkov, S. K. (2006), Mizhnarodna ekonomichna diialnist Ukrainy [International economic activity of Ukraine], Odissy, Odessa, Ukraine, 456 p.

Pakhomov, Yu. N., Filipenko, A. S., Lukyanenko, D. G., Makogon, Yu. V. and Gromenкова, S. V. (2001), Mezhdnarodnye strategii ekonomicheskogo razvitiya [International strategies for economic development], DNU, Donetsk, Ukraine, 239 p.

Pryshchepa, O., Kardash, O., Yakymchuk, A., Shvec, M., Pavlov, K., Pavlova, O., Irtyshcheva, I., Popadynets, N., Boiko, Y. and Kramarenko, I. (2020), “Optimization of multi-channel queuing systems with a single retail attempt: Economic approach”, Decision Science Letters, vol. 9, issue. 4, pp. 559–564, doi: http://dx.doi.org/10.5267/j.dsl.2020.8.002

Stiglitz, J. and Ellerman, D. (2000), “New bridges across the chasm: Macro- and micro-strategies for Russia and other transitional economies”, Zagreb International Review of Economics and Business, vol. 3, no. 1, pp. 41–72.

Susubitsyn, S. A. (2007), “Development of methods for measuring spatial granularities of the economy”, Region: economics and sociology, vol. 4, pp. 3–18.

Yasin, E. and Yakovlev, A. (2004), “Competitive capacity and modernization of the Russian economy”, Voprosy Ekonomiki, no. 7, pp. 4–34, doi: https://doi.org/10.32609/0042-8736-2004-7-4-34