

Sharing Economy and Transformation of Network Information Technologies



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Abstract: *Subject/topic of the research is background and prospects for the transformation of political institutions during the development of the sharing economy and network information technologies. Object of the research is the transformation of political institutions during the development of the sharing economy and network information technologies. The aim of the paper is to analyze the concepts of social economy and the economy of shared access in the context of the transformation of political institutions at the present stage of socio-economic development. Methods. The following general scientific research methods were used in the work: method of induction, deduction, analysis and synthesis, comparison and generalization, as well as structural and graphical methods for visualizing the results obtained. Results. The paper discusses the concept of sharing economy. The four driving forces of the development of the sharing economy at the present stage are characterized. The postulates of the concept of modern sharing are revealed. Russia does not stand aloof from global trends, and the sharing economy is gradually penetrating into Russian society, becoming an effective tool for the national socio-economic development in times of crises. However, the development of domestic sharing has its own specific features that somehow affect the functioning of the sharing economy in Russia. Therefore, the authors carried out a SWOT analysis of the domestic sharing economy. It allowed identifying some opportunities, prospects, barriers, and threats to its development.*

Index Terms: *barriers and threats to development, joint consumption, opportunities, political institutions, prospects, sharing economy, SWOT analysis.*

I. INTRODUCTION

Today, social issues are more often heard precisely in the economic context, since there is an acute need for the

transformation of traditional political and economic institutions for a qualitatively new model of socio-economic development. It will even be correct to speak about their adaptation to social and economic changes that take place in the era of network information technologies. Increasingly, questions are raised about the development of the sharing economy, social entrepreneurship, inclusiveness, social responsibility and the like. In the list of these tasks, studies of the social economy as a significant component of the national socio-economic system are gaining increasing interest. Moreover, in the context of institutional changes and significant technological progress being observed, there is a certain transformation of political and economic realities. People are witnessing a change in approaches to consumption and, as a result, the creation of new business models. It is about the development of a shared access economy – a so-called sharing economy. At this stage of development, the modern world is observing an extremely rapid transformation of such a thing as the sharing economy (another name is the economy of public consumption) as a new global trend. It is based on the sharing of goods and services, and not on their ownership. At the same time, the previously prevailing industrial model, in which companies own and people consume, is pushed into the background, just as the Internet has supplanted traditional TV, and the blogosphere has done it with the media. It allows one to act simultaneously as a consumer and a producer, as well as take advantage of the possible financial income from the consumer value produced. The aim of the paper is to analyze the concepts of social economy and economy of shared access in the context of the transformation of political institutions at the present stage of socio-economic development.

II. LITERATURE REVIEW

The study of the social economy and the economy of shared access in Russia is not given sufficient attention, probably due to the complexity of the current stage of socio-economic and political development. At the same time, at the level of the European Union, the issues of social economy are actively studied [1-5]. Now a large number of studies are devoted to this issue in the UK, the USA, Australia, Canada, etc. [6-10]. The development of the phenomenon in the economy of shared participation has attracted the attention of many researchers. Among domestic scientists, this issue was considered by Shved [11].

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The analysis of the model of joint participation economy and its premises is covered in Lyman [12], Akhmetshin *et al.* [13], Stepanova *et al.* [14].

However, this phenomenon is most reflected in the works of foreign researchers, in particular, Botsman and Rogers [15], Laurell and Sandström [16], Frenken and Schor [17], Slee [18] and others.

Thus, this study once again proves that sharing is one of the most popular and most important trends for the present time, which creates a completely new model of the economy and forms a new way of life of the society, confirms the advisability of imitating the concept of sharing, not just ownership, by the Russian public. It can also be useful to those who are interested in creating and developing new projects in the field of sharing in the Russian market.

Not so long ago, namely in 2010, the *Time* magazine called the sharing economy (a frequent synonym: common economy) one of 10 ideas that would change the world [19]. Now it is developing at an unprecedented speed, acquiring new forms, complemented by new features and capabilities.

Sharing economy is a new popular trend in the economy, which is forming a new consumption model and is rapidly conquering the modernity. This new economic phenomenon is a socioeconomic system based on sharing human and physical resources. It makes it possible to create strong ties between any number of people, reduce transaction costs, time and distance to almost zero, creating communication space, instant access from a smartphone or computer anywhere and anytime [20]. The main players in this “field” are sharing Internet platforms. Such Internet sites, connecting a huge number of like-minded people and allowing one to build trust online, enable people to share goods, knowledge, money, skills, networks, content and other consumer values. With the help of such platforms, people’s ability to make even more significant contributions to society and the economy is returning.

Thus, it can be stated that the sharing economy is a modern trend phenomenon that arose with the development of communication technologies and the digitalization of society. That is, sharing in the form it exists now was born of technological progress. However, one should not ignore the fact that a number of historical premises made a significant impact on its appearance.

The modern concept of sharing and the sharing economy was formed in 2010 by Botsman and Rogers, co-authors of the book “What’s Mine Is Yours: Rise Of Collaborative Consumption” [15]. The basis of this concept of modern sharing is formed on the following postulates:

- 1) Saving time and resources (example: there is no need to buy a car to leave the city once a month).
- 2) Benefit (example: the provision of housing for rent reduces the cost of its maintenance).
- 3) Rational consumption (example: optimal use of transport reduces harmful emissions).
- 4) Trust. The social effect of sharing helps to increase the overall level of trust in society. The general ideology of the sharing economy is illustrated by the “win-win” principle, when both sides benefit from the interaction. Trust is the foundation on which the sharing platforms are built. The main “building material” is the reputation, which in turn is built

“brick by brick”.

5) Use of communication technology. Communications in this case are considered as a key sharing driver. Indeed, the popularity of sharing is due precisely to the development of communication technologies. The availability of mobile communications and the Internet is one of the key drivers of the sharing economy. According to the International Union of Communications [21], today the Internet is available to almost 50% of the world’s inhabitants. As of 2018, the number of Internet users totals more than 3.5 billion people. Also, there is a regular increase in the number of users of mobile applications.

III. METHODS

A. General description

The following general scientific research methods were used in the work: induction, deduction, analysis and synthesis, comparison and generalization, as well as structural and graphical methods for visualizing the results obtained.

B. Algorithm

Moreover, the development of the sharing economy at the present stage is caused by the 4 drivers, namely:

1. Peer-to-peer (that is, those based on the equality of all participants) social networks and real-time technologies have radically changed the behavior of a huge number of people;
2. The global economic crisis forced to abandon thoughtless consumption;
3. Problems are increasingly affecting the economy and everyday life;
4. The fourth factor, according to a social innovator and well-known expert in the field of the sharing economy Rachel Botsman, sounds as “a revived belief in the importance of communities and a rethinking of what the words “friend” and “neighbors” really mean. In other words, people began to trust each other more and help neighbors more often.

Proponents of the sharing economy are convinced that in this decade, these four drivers act in concert. Therefore, civilization is undergoing a revolutionary transition from the hyperconsumption characteristic of the 20th century to the trend of the 21st century – joint consumption.

Thus, the idea of sharing makes one reconsider and rethink the existing values of the “consumer society”. The rational use of things, instead of thoughtless ownership, is especially relevant in the context of caring for the environment and the ever-growing need for careful treatment of limited resources. The new philosophy of consumption fits perfectly into the concept of freedom (from circumstances, money, borders) while creating a sense of community, ownership, goodwill towards each other.

IV. RESULTS

The main players of the sharing economy are sharing Internet platforms – online platforms for the exchange of various consumer values.

Such platforms form the sharing market. Now the list of sharing Internet platforms includes hundreds, if not thousands of projects around the world. However, the main share of such projects falls on Europe. The largest number of European sharing platforms is in the UK, France, Spain, Germany, Holland, as well as in Sweden, Poland, Italy, and Belgium.

It should also be noted that the market for sharing platforms is constantly growing. All new and new platforms are gaining popularity. The following statistics confirm the positive trends in the market of sharing platforms, as shown in Fig. 1 and Fig. 2.

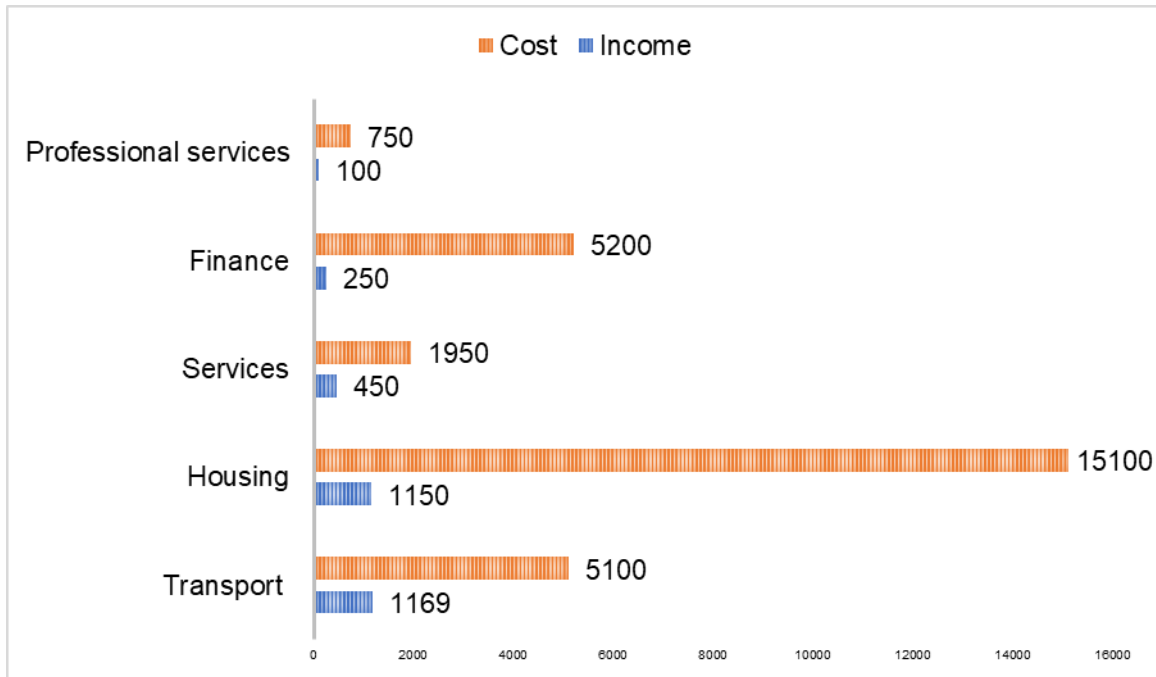


Fig. 1. Revenues and the total transaction value of European sharing companies in 2018 distributed by 5 main categories, million euros

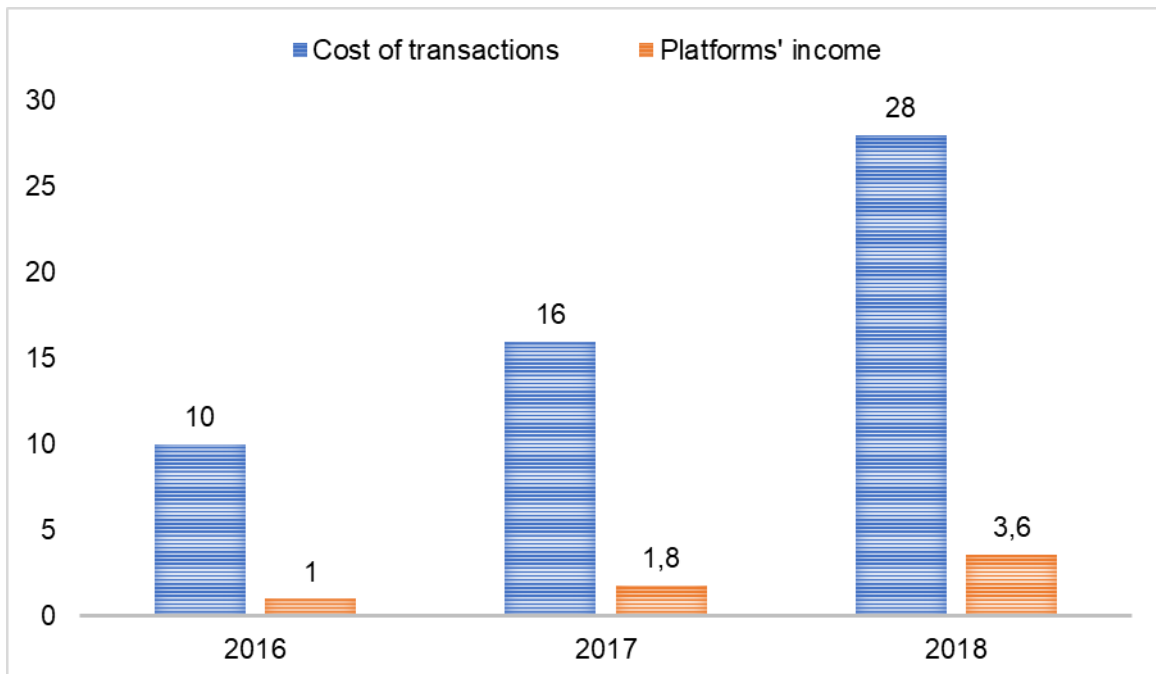


Fig. 2. Graphs of revenue growth and the total value of transactions generated by European sharing Internet platforms in 2016-2018, billion euros

Thus, according to the above graphs, one can confidently say that the activities of the sharing economy throughout Europe have significantly accelerated in recent years (2016-2018), and there is also a certain modification of the initial form of the sharing economy due to changes in the

leading categories of sharing and the emergence of new ones.



Now let us consider a number of global trends in the field of sharing [22], which are being formed and lay the foundation for the coming years.

1. Active introduction of new technologies into existing sharing Internet platforms. Already today, one can observe the introduction of various prototypes from the sphere of VR (virtual reality) with transport sharing platforms, such as, for example, Uber. Elements of the “smart home” are tested at some Airbnb facilities. The People.ai platform is engaged in automated search and selection of personnel for business.

2. Transition from charity to business.

3. Importance of public transport. Public transport is the basis of movement in all cities of the world. In 2017, many innovative technological projects were created that could improve the situation with public transport. The Hyperloop startup from the creator of the world-famous Tesla and SpaceX, Elon Musk, to create a vacuum “train” that will carry passengers from San Francisco to Los Angeles in 30 minutes (instead of six hours) can be safely referred to such projects [23]. However, this is just the beginning. Obviously, such developments will be trendy in 2018. So, of course, they will not be left without attention of startups in the field of sharing.

4. Crowdfunding is a phenomenon that started with GitHub and spread over a large number of other platforms.

5. Fight against corruption.

Thus, the main recent trends of the sharing economy have been considered, which in the coming years will set the direction in the development of sharing platforms around the world.

Moving from a study of the development of sharing at the global level to the local, it is worth noting that the development of the sharing economy in Russia does not fall out of global trends, but at the same time it has its own local features.

Let us turn to the first driving force of the sharing economy – peer-to-peer social networks and real-time technology. As is

known, the functioning of social networks and Internet sites is based on the widespread use of the broadband mobile Internet. Domestic Internet operators are now actively developing 3G and 4G networks. Their capabilities are quite sufficient for the needs of the sharing economy. Therefore, the technological base for it in Russia, if not ideal, then is quite satisfactory.

The second factor is the economic crisis. Despite all its negative manifestations, it encourages people to abandon ill-conceived, excessive consumption, and spend money rationally. That is, the sharing economy in the conditions of the crisis, which is still observed in Russia, ideally meets the needs of Russian society.

In Russia, changes in the psychology of society, on which the sharing economy is based (a revived faith in the community, etc.), often come into conflict with people’s habits and stereotypes. Therefore, one can assume that this also contributes to a good trend in the development of the sharing market.

Thus, the sharing economy in Russia is not such a rare occurrence. Domestic sharing Internet platforms are being created, are functioning, and some of them really achieve significant results. However, in order for domestic beginner platforms that are just starting their journey to repeat this success or even get ahead of their predecessors, before starting their activities, first of all, it is necessary to take into account the specifics of the Russian sharing market.

Obviously, the sharing economy for the Russian society is a mixed phenomenon. Therefore, in order to analyze the possibilities and prospects of Russian sharing, as well as to identify the main barriers and threats to its development, the authors will carry out SWOT analysis. The essence of this analysis is to separate the factors and phenomena that affect the functioning and development of sharing in Russia into four categories: strengths, weaknesses, opportunities, and threats. A SWOT analysis of the sharing economy in Russia is displayed in Table I.

Table I. SWOT analysis of the sharing economy in Russia

Strengths	Weaknesses
1) Intensified activation of the distribution of all types of resources and their rational use. 2) Flexible working arrangements. 3) New sources of income and profit. 4) Emergence of new areas of activity, creation of new consumer values. 5) Destruction of borders in the allocation of resources. 6) Low prices compared to traditional services. 7) Development of information and communication technologies. 8) Formation of a new consumption model, a new lifestyle and social values (the main emphasis is trust). 9) A new tool for solving social and global problems (environmental problems, poverty, unemployment, excessive consumption, etc.).	1) Challenges for the existing economy and traditional business companies. 2) Undeveloped legal framework. 3) Low relationship between the sharing economy and the tax system. 4) Lack of statistical data of the sharing economy does not allow taking into account the influence of sharing on the real economy of Russia.

Opportunities	Threats (barriers)
1) Easy start of a business that does not require large upfront costs; quick launch of commercial Internet projects.	1) Problems in the regulation of the sharing market that create uncertainty.
2) Development of socio-economic innovations, service models, impact on the efficiency and competitiveness of Russian business without significant investment.	2) Legislative barriers to the spread of the ideology of the sharing economy in domestic markets, therefore, in the field of frequency resource allocation, there is a lack of technological neutrality.
3) Opportunities for business beginners.	3) Problems in the protection of sharing Internet platforms, the security of sharing interactions, insurance.
4) Creation of new market places, expansion of markets for the consumption of Russian products, services, and labor resources, commercial globalization.	4) Financial barriers to the work of Russian companies in global markets, namely in terms of the unhindered receipt of funds in accounts opened in Russia.
5) Development of Russian cities and Russian society.	

Source: compiled by the authors

Thus, as a result of a SWOT analysis of the Russian sharing economy, it can be said that sharing in Russia will definitely gain further momentum, like in the whole world. However, this development path is not free from obstacles. Basically, the development of domestic sharing depends more on political institutions, trust in Russian society, changes in the prevailing system of values and, of course, the development of the information and communication space and new technologies. However, already at the existing stage of sharing in Russia, it is necessary to take care of creating the appropriate legislative, legal, accounting and other systems in the field of sharing, involving the relevant state institutions.

It should also be noted that sharing is an evolutionary phenomenon, that is, it arose in an evolutionary way. It does not have artificially formed demand, is not intruded by global corporations or the state (unlike goods or services). Sharing is, in fact, what people do for themselves. To promote sharing in Russian society, some specific marketing actions will not be enough. The main, and, as the international experience shows, the most effective means remains the so-called word of mouth. In the case of sharing, the key component is a high level of trust among the audience of this word of mouth. That is, the success of domestic sharing platforms will always depend on how they prove themselves, how reliable their service will be, and whether transactions are safe. However, similar difficulties had to be overcome by sharing business projects in Western markets, so solving this problem is not impossible.

V. CONCLUSION

Today, due to the emergence of new technologies and the development of communication space, people are freed from the limitations of the past. Instead, they are increasingly exchanging consumer values with people they do not even know personally. Such a common lifestyle (sharing) is spreading at an incredible speed, becoming a global trend in society.

Never before in history have people shared things, knowledge, or skills at that level. This radical change in behavior has led to the fact that modern society is no longer too interested in traditional ownership.

Therefore, at this stage of the development of society, the stage of the rapid spread of sharing, more and more sharing projects are being created, the so-called sharing Internet platforms (for example, Uber, OLX, BlaBlaCar, etc.), which even at an intuitive level make it clear that due to new

technologies they will be able to move the existing traditional market. Moreover, the technology of sharing platforms already dictates to the economy the “win-win” principle when both parties benefit from the interaction.

Having completed studies of the current level of development of sharing and the sharing economy in this paper, the authors conclude that sharing as a social phenomenon had a number of historical, evolutionary premises in its development. However, with the rapid development of communication and information technologies, the importance of rational consumption and the growth of trust in society have moved to a new level, turning into a completely new socio-economic model of consumption, the main drivers of which are:

- 1) peer-to-peer social networks and real-time technologies;
- 2) economic crisis;
- 3) environmental and social problems;
- 4) renewed belief in the importance of communities and rethinking of social values.

The sharing economy also does not stand still, but is rapidly changing, supplemented by new functions, creating new opportunities, capturing new areas and reaching higher levels. At the same time, more and more new trends appear in the development of sharing. For example, for 2018 and subsequent years, it is assumed that the sharing economy will develop due to:

- 1) active implementation of the latest technologies;
- 2) reasonable transition from charity to business;
- 3) growing importance of public transport;
- 4) spread of crowdfunding;
- 4) enhanced anti-corruption.

It should also be noted that Russia does not stand aside from global trends, and the sharing economy is gradually penetrating into Russian society, becoming an effective tool for the country’s socio-economic development in a crisis. However, the development of domestic sharing has its own specific features that somehow affect the functioning of the sharing economy in Russia. Therefore, the authors did a SWOT analysis of the domestic sharing economy. It made it possible to identify the opportunities, prospects, barriers and threats to its development.

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