Institutional models of the new economy development

Modelos institucionales del desarrollo de la nueva economía

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ABSTRACT:
The topic is determined by the modern tendencies of a new economic paradigm development in the context of institutionalism and its peculiar features, such as the sharing economy and human capital. The aim of the article is to develop a methodological approach to the institutional models of the sharing economy and the human capital formation, as well as the causes and the prospects of their evolvement. The basic method of the study was content analysis, which allowed the representation of the sharing economy growth factors and to define its features and models through the combination of the institutions. The result of the research is the development of the theoretical basis for the sharing economy institutional paradigm as the important component of the new economy, which does not correspond to the current business models that regard the human capital as the mean but not the aim of the economic evolvement. The authors present the scientific knowledge of the sharing economy practical forms in accordance with the institutionalism.

Keywords: institutional economy, sharing economy, human capital

1. Introduction
The phenomenon and the definition of the new economy appeared in the science at the end of the previous century; however, we still do not have a common understanding with regard to this. The economic theory does not place greater focus on the current structural and institutional changes, which allows us to investigate the new economy in the context of the sharing economy and human capital.

The transformations that occur in the modern economy and society are based on the absolutely new changes in the role, status, possibilities, motivation and values of the economically active person. The given statement is based on our research results and issues (Kolomiiets & Golovkova, 2017; Tkach, 2012; Tkach & Radieva, 2014), as well as the other scientists’ works (Ali, Egbetokun & Memon, 2018; Geissinger, Laurell, Öberg & Sandström, 2019; Bosman & Rogers, 2010; Ming, 2019; Rifkin, 2015) and prove the fact that the world of exchange and trade has changed a lot. The sharing economy is becoming a high-growth business model and influencing the cooperation of the manufacture and the customer. The role of the human resource as the most powerful and required capital asset and interest motivation is fundamentally different. The sharing economy and human capital have brought a new matter to the current economics.

As far as the sharing economy is concerned, scientists study it in terms of its essence and forms (Bosman & Rogers, 2010), conceptual development (Ritter & Schanz, 2019) and features (Ming, 2019), reasons and motives for participation, ownership costs (Kolodny, 2016), business models (Winterhalter, Wecht, Krieg, & 2015) and social contacts (Miller, 2018), resource efficiency increase (Geissinger, Laurell, Öberg, & Sandström, 2019), and other features of the phenomenon. Some works are devoted to the study of the cases and possibilities that appear in the current sharing economy in terms of operations management and its influence on manufacturing and consumption; others, to the exchange platform’s mediating role, crowdsourcing management, and operation problems.

The sharing economy is regarded as an important building block for sustainable economic growth and presents a complex structure of the categories of business models, which defines four segments of the resource-sharing market, namely, the elementary transactions model, the subscription-based model, commission-based platforms, and unlimited platforms. This provides a better implementation of the sharing economy for the economic growth and innovative business models development (Richter, Kraus, Brem, Durst, & Giselbrecht, 2017).

Human capital is regarded as the most important non-financial factor for the development of the new economic paradigm (Ali, Egbetokun, & Memon, 2018; Boronos, Plikus, & Aleksandrov, 2016). Human capital presents the quantitative estimation of employees’ skills’ economic value. Human capital concept admits that employees are not equal and their professional qualities can be improved with investment. The employees’ education, experience, and abilities have economic value as for their employers and for the economy as a whole (Investopedia, 2018).

From the business owner’s point of view, human capital is an asset, although an investor regards it as a present value of the future profits. The financial and time-taking investments (higher education, on-the-job training, and social skills improvement) can increase the individual human capital. Human capital is regarded as an asset that should be the part of every investment portfolio. The illiquid and non-tradable human capital must be the key factor for the investor, and be hedged with the financial capital; but not vice versa (Brian, 2018).

The complex of social institutions and national interests, where the basic economic institutions are integrated, are regarded as the ones that form human capital. The low rate of human capital development in some countries is connected with the following factors: low rate of the education and health financing, low qualification level, low education and living rate, and unemployment (Kolomiiets & Golovkova, 2017).

In the existing surveys, it was possible to correlate the new economic phenomenon with IT development and the generated platforms. The main paradigmatic concepts of the sharing economy’s fast growth, and human capital changes in terms of the institutions construction, are not defined by the modern science.
Researchers are in the process of a new concept development, which could solve the problems connected with the means of production and consumption. There is the necessity of not specifying and extending the existing statements, but forming a new, theoretical knowledge paradigm about the sharing economy and the human capital features, as the most important forms of the new economy. The authors point out the importance of the definition of the new economy, which appeared at the end of the last century, although there is not a common understanding of its subject matter.

The logic of the given study is determined by the current economic science tendencies of the structural and institutional changes interpretation. The goal of the research is to analyze the new economy in terms of such important components as the sharing economy and human capital, leaving out other characteristics. The above mentioned characteristics are not connected with each other; however, in our opinion, one follows from the other. It is difficult to imagine that sharing use and consumption, which are more often based on the complete trust between the process subjects, could exist and have high potential.

YouGov Company conducted a survey in England, in order to clarify the question of the sharing economy essence understanding. Only 5% of the respondents could characterize the sharing economy phenomenon, and 76% of them have never heard about such a phenomenon (Miller, 2018).

Such definitions as the sharing economy, sharing consumption economy, sharing use economy, the economy of exchange, the independent economy, the collaborative economy and the peer economy, are often used as synonyms. The analysis showed that the sharing economy is a specified economical system of exchange, and thus, as any other system, it has a definite organization and hierarchy. For the first time, we admit that institutional economic theory and property rights determine the theoretical base of the sharing economy. More complete realization of these rights became possible only at the stage of the transition to the new economy and the informative society. New quality of human capital introduces the foundation for the sharing economy that determines the methods and the structure of the research.

The research hypothesis is the following: the basic institutional changes of the phenomena under the analysis are caused by the property rights development (their complete specification). That becomes evident when the access is more important than the ownership.

2. The Research Methods

2.1. Procedure

In order to realize the goal of the research, namely the evaluation of the distribution speed of the sharing services consumers in definite sectors of the economy in several countries, the method of a complex sampling (five sectors) was used. This method is designed to represent the entire economy with a certain probability.

The income flow and the transactions integrated value are defined as the evaluation variable of the sharing economy development rate. The analysis of the institutional model of the sharing economy, and human capital development, is based on the research programs of the new economic institutional theory. On the basis of this theory, the processes under investigation are defined as a set of the fundamental principles that provide the possibility to identify the “hard core” and the “protective cover” of the theory. This allowed us to identify the basic institutions of the sharing economy components, in terms of the content and new organizational forms.

2.2. Measuring

The analysis of the distribution of the sharing economy elements, and the psychometric assessment of the attitude to this distribution of Polish citizens were compared to results obtained by other researchers for the USA, Germany, and India (Sundararajian, 2016).
2.3. The scheme of the research
To confirm the hypothesis, an institutional modeling method was used and developed, in terms of which there was made an attempt to define and generalize the basic institutions that characterize the sharing economy, determined by the new quality of human capital. The existing sharing economy business models were analyzed my means of the specific institutions and transactions peculiarities. That allowed us to show the advantages and limitations of each model in the context of the author’s understanding of the essence of the institutional model of sharing economy and the prospects for its development.

The causes of the sharing economy and its structure are defined as a result of a broad specification and ownership development. The problem is that the idea of the sharing economy has been adopted and is increasingly being used by large business entities for their commercial interests. Within the institutional paradigm, the solution of this problem is determined by the formation and legitimization, the correspondent rules and regulations.

The basis of the sharing economy study is formed by the methods that are determined by the specification and erosion of the ownership as a complex of competencies, when the competency for the same resource may belong to different subjects. The development of the sharing economy creates a mechanism to eliminate the discrepancy between the needs and the goods availability, as a form of the exemption system overcoming to get the certain benefits, established as a result of the specification of the ownership rights (Tkach, 2012).

In the process of the sharing economy concept analysis the research method of the extrapolation was used. The analysis of the ownership institualization in the transactive economy in terms of “one thing – many owners” definition of the sharing economy provided the opportunity for the scientific projection for its development in the context of the competencies dissipation among the exchange process participants (Tkach & Radieva, 2014).

The method of the institutional modeling, based on I. Lakatos’s research program, was used to define the essence and the structure of the sharing economy and human capital, as the main components of the new economy. Its essence is the formation of the sharing economy and human capital institutional model, which consists of “the hard core” (the fundamental principles system) and “the protective belt” engirdling it. “The hard core” combines the auxiliary hypotheses that are modified in accordance with the research program content integrity and protection. “The protective belt” is used as the derivate of the “hard core” basic institutions.

3. The institutional models of the economic change
The institutional model is the combination of the “hard core” and “the protective belt”, which was formed by the fundamental economic institutions. This is the cover, which forms the protective belt to maintain the balance of the current economy, which essence is determined by the basic institutions.

It is obvious that the economic changes can be evolutional and discreional, with the gradual accumulation of new rules and norms in “the protective belt” and under certain conditions can influence the basic institutions of “the hard core”, creating the basis for a new institutional model of the economy.

The formation of the new economy presents the changes in the basic institutions of the hard core of the research program (namely: ownership, power, management, capital, human capital, knowledge, information, intelligence, innovations). The new components accumulation provides the cover for the formation of the institutional research program.

New economy is characterized by the following features: transformation of the knowledge, intelligence and innovations into basic resources for the economic development; transformation of the information into the basic instrument of the economic development; service sector dominance in the economic development model; globalization of the informational networks, goods and services electronic market, cloud technologies, the
virtualization of the economy; human capital promotion in social development, through creativity, innovative activity and communication; global network communications competition development.

Studying the new economy in the context of its most distinctive features in comparison with the industrial era economy, we come to the conclusion that it presents the leading role of the economy of the knowledge, as well as the intellectual and innovative components.

4. Sharing economy development analysis

Sharing economy, that has become widespread in a number of countries in recent decades, is a form of changing of the economic interaction rules that were characteristic for the capitalism, with their main goal of making profit. The appearing “sharing” institutes are not the result of the economic transactions, but their contrary. These are unprofitable and sometimes noncommercial enterprises, the so-called the “social enterprises” in the goods and services market.

Ownership expenses often exceed their cost. Talking about the causes of the sharing economy promotion, we should point out, that the elite community has admitted, that to own the villas in different parts of the world, fleet of expensive cars, planes and yachts is more expensive than to share them with other people (L. Kolodny, 2016).

The process of the institutional transformation of the current exchange is more often called “the sharing economy” because of the internet communications. This definition means that there are numerous processes that can become the basis (foundation) of the new economy. This is presented first of all in the terminology itself, which defines the phenomenon of the sharing economy. We can partly accept D. Miller’s point of view, that the sharing economy is the economic principle. However, we cannot define the phenomenon as the new technology for making the goods and services exchange easier (D. Miller, 2018). The question is about to arise: Where is the new economy and innovation demonstration? For instance, the transport companies of UberB kind made the innovative approach of the sharing economy the basis of their service, however founded on its base the classical capitalistic firm that has nothing in common with the new economy (Rifkin, 2015). At the same time, we observe how the projects, started in the capitalistic sphere, gradually become socially significant phenomena, such as Facebook and Google.

The institutional model of the sharing economy, which defines four types of its actors’ cooperation, is first introduced in fig. 1.

**Figure 1**

Institutional models of the sharing economy
Model C2C – “consumer – consumer”, when the consumers exchange the services and goods through the mass media and social networks communication, without the direct business involvement. The given institutional model characterizes the essence of the sharing economy, namely, “mine is yours” (Bosman & Rogers, 2010). On the contrast to the traditional exchange modals, this one forms not only new economic, but social institutes of cooperation.

Model C2B – “consumer – business”, which allows the manufacturers (enterprises) to gain the profit from the consumers and vise versa. In this model enterprises gain the profit from the consumers’ willingness to fix their price or provide data to a marketing company, while the consumers benefit from the flexibility, the direct payment for preferential products and services. This model is characterized by such institutions as commercial transaction, online sale, Internet trade, Internet applications and marketing mix. The business diversifies it, adding some services for new or special consumer. The given model is sometimes used by Amazon and GoogleAdwords branches.

Model B2C – “business – consumer” is the most common commercial transaction between the manufacturers and the consumers, when the enterprises sell their goods and services to the consumers. In that form the following institutions are defined: flexibility, direct payment, benefits, diversification and new services. This refers to online sales and to digital application, when the manufacturers and the retailers sell their goods through the Internet. Walmart, American Eagle, Colourpop Cosmetics are referred to such companies.

The analysis of the defined institutional models of the sharing economy provided the formulation of some basic principles. Namely:

- Ownership transformation through its intensification and diversification both in terms of market assets and human capital;
Changes in market and non-market communications of all economic entities;
- Involvement of the underused assets into the exchange process;
- Operations expansion and the Internet platforms use;
- Individual and business need for the expenses optimization. The need of the appropriate integration of free resources into the current demand provides the opportunity to level or even eliminate the existing discrepancy of the expenses. As a result the institutional model of the sharing economy is formed.

At first the sharing economy was presented in its true essence. That is the joint use economy. In the institutional context it is based on the principles of good will and complicity. Then the new form appeared, that was presented by the activity of the prosumers, who earn as the producers in the consumption process; for instance, with the help of the Internet shops. But the new sharing form of the market services became the most widely spread and the capitalist companies started using it for the development in the given sphere. New business model appeared, that from the market relations point of view does not correspond to the original principles of the sharing economy. The companies are first of all based on the commercial interest but not on the consumers’ profit. Such business model became popular due to the opportunity to minimize the expenses, and therefore prices.

The dynamic growth of the sharing economy means that the income generated b in five key sectors (financial and professional services, transport, hotel business, tourism) will reach 335 billion US dollars until 2025 [18].

For example, 44.8 million residents of the United States used a sharing economy in 2016, and by 2021 the growth is expected to 86.5 million. In the US and in Europe 162 million people, or 20-30%, provide the platforms for the joint use [18]. The sharing companies’ transactions incomes in 2015 (5 main spheres) amounted to 3.600 million dollars, and the total value of the transactions was 28.1 billion dollars. (Fig. 2).

**Figure 2**
The sharing companies’ incomes and the total value of the transactions in 2015 (5 main spheres, million dollars)

The analysis of the situation in the sharing economy market indicates its rapid development, and more people and companies’ involvement. For example, about 40% of the Poles have heard about the Internet services, and 26% of them are the active users (Kurasz & Molębiewski, 2016).

The new basic institutions foundation provides the opportunities to fill the “hard core” of the
Changes in the institutional model cover occur constantly, and they do not necessarily cause the transformation of the “hard core”. The institutional model formation is caused by the gradual accumulation of new properties in the cover, which form a critical mass in the basic institutions, as a result, the content of the basic institutions of the institutional model “hard core” changes (Radieva, 2018).

The transition to a new institutional model can perform the evolutionary or revolutionary change of the economic relations character, caused by new rules and norms of the subjects' interaction that appear in new institutional framework. Among the key components of the sharing economy, we highlight the “trust is gold” institution (Kwiatkowski, 2016).

There is an opinion, that the sharing economy is the platform only for the millennials, and most industrial enterprises are not interested in it, and what is more, it can become a threat (Wallenstein & Shelat, 2017). The analysis of the B2B model, which is presented by big companies, shows that its main advantages are content management; leads recharge technologies, web analytics as well as the integration and optimization of the target client’s communication channels the given components are devoted to the main problem solving, namely the demand generation, with the help of the specified tools. This unites such business models as C2B, B2C, B2B, but is almost not applicable to C2C model. This model is based on the institutions of the not so much the economic, but the social kind of people behavior and cooperation.

Some researchers declare that the essence of the sharing economy is not in the new cooperation relations but in the economic design (Wallenstein & Shelat, 2017). Such conclusions can be made only in relation to the definite kind of the sharing economy, namely
C2B, B2C and B2B. As for C2C, it has the goal of a disinterested, or rather equal, exchange of goods and services as the essence. The other models, however, are based on the capitalist exchange principles. For them, the use of the sharing platforms creates the possibility for the costs reduction, the additional services offer, insurance, goods and services compliance monitoring, consumption expanding, that was previously unavailable for many of them, and in general, the consumption quality improvement. But all this does not fundamentally change the essence of economic relations; they are based on the financial gain. The surveys show that the majority of the sharing economy users prefer benefits, and only later the other advantages, which have become the keystone of a new economic model.

5. The institutional model of the human capital development in terms of the new economy

One of the main conditions for the sharing economy development is the new quality of human capital as its main asset, being the component of its structure at all the stages. The integral thinking formation in the study of the new economy development process determines the necessity to revise the existing theories and practices of the human capital realization. Such a theoretical context was proposed in the last report of the Club of Rome, and it fits completely into the new institutional model of the human capital development. Creating an institutional model for the human capital development in the era of the information society, knowledge economy, digital economy, behavioral economics and neuroeconomics is the basis of the new economy.

The comparative analysis of the human capital determinants, which was made by many researchers in different periods, provided the definition of the basic components of the human capital institutions. These are the education, knowledge, abilities, skills, health and experience.

The defining institution of the modern society that forms the human capital is considered to be the combination of social institutions and national interests, where the basic economic institutions are integrated. Low level of human capital development in some countries with a low development rate is caused primarily by such factors as: poor financing of the education and health care; insufficient qualification; low education index and standard of living; unemployment (Kolomiiets & Golovkova, 2017).

For the formation of the basic institutions of human capital development it is necessary to create a certain institutional environment. Its basic components are the following: culture, traditions, religion; education system and rate; professional abilities; motivation; ideology, mentality; family, parenting; law and penal system. The components of the institutional environment form the “cover” of the “hard core” of human capital development model. Each institutional system is a combination of the old institutions and the creation of new ones in the process of human capital development (Nort, 2000). The inefficient informal institutions are supplanted by the legitimate norms, which influence the economic entities behavior. This contributes to the institutional field expansion, the homogeneity of the institutions, their functioning synchronization, the institutionalization of the mechanisms of business and government cooperation (Tkach & Radieva, 2014).

The development of human capital is closely connected to such institutions as education, motivation, qualifications and professional activities, traditions and religion, customs and parenting, family and ideology, mentality and culture, law and penal system (Fig. 4). Such basic economic institutions as private property, competition, transaction expenses, contractual relations, and the labor market have an indirect effect on human capital. Human capital is limited in its actions by the institutional structure of the society. The problem is how to overcome these institutional limitations of the opportunism.

**Figure 4**
The institutional model of human capital development
Institutional environment in the institutional theory is considered as a set of basic social, political, legal and economic rules that define the human behavior. This category is related to the person and limits his behavior. Close interaction of the institutional environment components not only determines the development and the effective functioning of the human capital; the institutional environment also influences the very existence of human capital. The institutional environment is a natural social entity that follows a family pattern, unlike an artificial one — for example, enterprises (Tkach & Radieva, 2014).

The influence of the institutional environment is presented as human capital formed under the influence of a certain institutional system, and its actual ability to produce gross product and its effective (or noneffective) use to manage the human capital. The influence of the human capital on the environment is ambiguous. Since human capital is inseparable from a person, it becomes unique on a personal level.

Some researchers consider the impossibility of the continuity as the negative characteristic of human capital. The other researches point out the human capital ability to develop and accumulate. Although, the stage of accumulation as definitely followed by the stage of destruction. We would agree with it, if not taking into account the achievements of neuroeconomics, which expanded our understanding of behavior and decision making principles.

The unpredictability of human behavior and actions in the conditions of uncertainty, are primarily connected with his psychology, which causes significant difficulties in the process of human capital institutionalization. The formation of the human capital institutions and the improvement of existing ones, always bring into question the effectiveness of their implementation.

6. Results

The authors presented the means of the institutional changes in the research program of human capital development, which are considered to be the turning point for understanding the nature of human capital and its influence on the institutional environment.
the role and importance of social, political, economic, educational, legal, mental or religious institutions. This change in the way of thinking and acting combines the development of human capital with the motivation and control mechanisms. Their effectiveness depends on the strength and direction of the impact, as well as the joint creation of the factors that determine the constant changes.

In the context of the research program, it was possible to define the practical implementation of the human capital economic theory in terms of the institutional structure. Possible institutional changes are presented in the form of the hypotheses that can be the basis for the implementation of new institutions of a sharing economy.

The following problem solving elements were presented for institutional research program update: globalization role in the income and wealth distribution and inequality increase acceptance; projects, connected with the negative demographic, migration changes and significant financial imbalances; finding ways to overcome existing irregularities, food production and health care.

To solve these problems, the institutional models have been presented that structure the institutions of the sharing economy of human capital in terms of the new economy development. The comparative analysis of human capital determinants, which was made in different periods, made it possible to identify the components that we can call the basic institutions of human capital. These are the following: education, knowledge, abilities, skills, health and experience. The most important institutional changes that should become the driving forces of the new economy are defined.

7. Conclusions

1. The new economy development is primarily connected with the formation of the global information space and new economic relations.

2. Methods of the institutional economic analysis provided the new approach to the studying of the essence and the structure of the sharing economy and human capital, as the basic components of the new economy.

3. It is assumed, that the sharing economy is the result of the ownership transformation caused by definite institutional and economic determinants.

4. Existing sharing economy is the economy of the joint use in the capitalist business models, where the humanistic ambitions and the interaction of people, who started it but did not manage to defend it, are used to gain the profit. Such business models do not properly correspond to the sharing economy essence.

Provided institutional models of the sharing economy and human capital development present the opportunities for the transition to the economy of knowledge and the study of the individual as the aim of the new economy development but not the production factor.

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