Formation Features of Institutional Space of Economic Agents in Trade in the conditions of Digital Transformation

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Abstract. The article considers the formation features of institutional space for economic agents in trade industry in the conditions of digital transformation. This paper examines the features that are manifested in structural shifts in interaction, interrelation, interpenetration of various types of formal and informal institutions; institutions aimed at consumer's decision-making; institutions that determine the success of a trade business. The role of institutional environment as a key element of institutional space is demonstrated in the paper. The authors analyze main stages of institutional space formation in the process of development of institutional trade policy, which to a large extent determine the effectiveness and prospects for the development of economic entities in trade industry.

1. Introduction

At present day, effectiveness of long-term social and economic development of economic agents in trade industry is determined by formation of optimal institutional space in the sphere of circulation. It particularly refers to filling the institutional space with institutions that not only meet the demands of population in various services, but also themselves serve as leading factors in production and economic growth. Digitalization is now becoming such a key factor of social and economic development [1].

Success of Russian economy is now largely explained by the establishment of new institutions that determine the "rules of the game" for the economy, and also by the development of new approaches to organizing and managing the economy in the conditions of digitalization [2].

In the context of growing digital transformation, economic agents expecting high efficiency should pay special attention to the institutions that mediate the Internet of Things and Omnichannel technologies, which form the basis of digital transformation. Nonetheless, the institutions of digital economy are not observed as an alternative to the traditional ones, but as their support that ensures better response to the demands of different population segments.

Timely identification of institutional space elements allows to determine the institutional status of economic entities, to assess the institutions used at the moment in order to identify ineffective ones - or, so called "institutional traps" - and subsequently restructure the system of institutions and the instruments applied by economic entities to implement institutional trade policies.

2. Setup

The object of study is institutional space of economic agents in trade in the conditions of increasing digital transformation of reproduction processes in production, distribution, exchange and consumption of material goods.

The first stage of the research deals with the characteristics of institutional trade environment, which consists of an external and internal institutional environment and fills the institutional space. Internal institutional environment is where the effectiveness of corporate management at a trade organization while making managerial decisions is manifested, in terms of choosing possible scenarios for the development of economic activity and mechanisms for their implementation [3, p. 10].
Rapid development of digital content becomes a prerequisite for the successful development of any economy in the world and represents the implementation of "Industry 4.0" project [4]. As a set of economic, social and cultural relations, digital economy is based on the use of digital information and communication technologies. The development of the latter is followed by qualitative changes in business processes, increase in their efficiency [5] and radical transformations of the respective institutions. These institutions make up the main content of institutional space and form its structure.

3. Method

The study of institutional space for trade organizations is an important element of institutional analysis in the framework of social and economic development of economic agents under digital transformation. The research in this field also serves as a prerequisite for the development of institutional policies for further development of the agents.

By institutional space we consider economic and non-economic relations in society, which are formed on the basis of uniform rules for their regulation. The structure of institutional space can be observed in accordance with different classification features.

Thus, in relation to the legislative framework, it is possible to identify formal and informal institutions [6]. On the one hand, the study of formal and informal institutions in the institutional space makes it possible to present the legal field that determines the functioning of economic entities. On the other hand, it helps to identify informal background of the economic entities development. The interaction between these components provides a certain level of efficiency of economic entities and forms their institutional attractiveness.

As catalysts of all reproductive processes, formal institutions have a decisive role in the whole set of institutions. They are mostly manifested in institutional agreements, systematized sets of laws, federal and regional laws, and subordinate acts that determine the economic development of agents. At the same time, informal institutions supporting the development of economic agents cover a wide range of relations and are implemented through such instruments as habits, customs, traditions, social norms of behavior, shadow norms, etc. If changes within any of these aspects are taken into account it is possible to increase the level of development efficiency for economic agents. Thus, a competent institutional policy provides for the use of both, formal and informal institutions, as well as their instruments.

It is interesting to consider the content of institutional space in terms of rules and restrictions that determine the mechanism of consumer's decision-making in relation to the purchase process. Special attention should be paid to such a phenomenon of institutional space at modern commercial enterprises as the convergence of traditional institutions and digital economy in terms of informing the consumer (by this we mean the combination of traditional advertising and wide use of Internet advertising and search engines). At the stage of choosing the necessary product, a consumer is provided not only with traditional fitting rooms, but also with navigation inside a store by the Internet of Things, virtual mirrors and virtual fitting rooms. When it comes to paying for the product, a customer can pay by cash and credit cards, buy on-line, as well as use no-contact stores (Amazon.go). In terms of loyalty improvement, customers get individual basket profile besides loyalty cards. Linear logistics system is complemented by reduction in the number of logistics legs and sharing assets (collaborative consumption economy, allowing to share resources) [7].

The complex use of traditional and digital economy institutions by economic agents in the sphere of circulation is connected with the need to involve all social groups of the served region (youth, children, elderly people, middle-aged population) in the process of selling goods. Targeted realization means the implementation of micro-segmentation of population, which has a beneficial impact on the volume of activity dynamics at economic entities. Obviously, the mentality of the elderly population predetermines the preference of this segment in traditional institutions. While, the young and middle-aged people tend to choose the institutions of digital economy. Meanwhile, a well-made combination of institutions should provide business with superior financial results, and save time for consumers, which will signify the life quality improvement of the population, taking into account the interests of various participants in the reproductive process [8].

Another important aspect of institutional research is the description of institutional environment, and its differentiation into internal and external ones [9, p. 34].
While the external institutional environment covers the rules and regulations of a political, sociological, and legal nature, the internal institutional environment affects the sets of rules covering various activities within the organization - in terms of marketing, indicative planning, pricing, taxation, financial planning, etc. Specific sets of relevant rules that determine the development of economic entities are rather individual and result from their management decisions. Thus, it is possible to state that institutional environment plays the key role in the formation of institutional space for the development of economic agents in trade.

Moreover, we can identify a set of key success factors or elements of institutional infrastructure of multimillion (trillion dollar) companies - leaders in digital economy, such as Google, Amazon, Facebook, Apple. According to Scott Galloway, these factors include: product differentiation; "ideological capital" or capital built on expectations of business exclusivity; global business model; business popularity; vertical integration; artificial intelligence; career opportunities; geographical location (large cities)" [10, p. 183].

If take a closer look, the above mentioned factors de facto reduce the success of digital economy companies to multilateral institutionalization of key consumer innovations in order to achieve market power or monopoly position in the market (virtuous circle): taking the leading position in a promising industry significant for millions of consumers on the basis of modern technologies (digital transformation in any form) allows to provide access to capital, talent, unlimited network PR opportunities, as well as to overcome geographical boundaries of markets by creating entry barriers for followers and competitors.

In our opinion, special attention should be paid to another significant factor, that is not unique to the digital economy, but is inherent for most successful business models and determines the industry structure of digital markets and institutional environment - network externalities, or so-called "network effect". In the "network externalities" paradigm, the value of a network product or service increases together with the growing number of participants or customers. Thus, the success of Facebook is based on the multimillion audience, which chose this network as its "habitat". The appeal and commercial success of the Amazon platform is built on the introduction of an intersection point between the buyer's expectations and sellers aimed at comprehensive coverage. This can be considered as an option for effective institutionalization in the form of innovative business model. (Numerous attractiveness factors provide a comprehensive coverage and attraction of various population segments). In this case, network advantage is achieved only by those economic entities that are partners in the economic and spatial network [11].

Speaking about prospects of economic agents’ development in trade, it is necessary to emphasize the necessity to create the mechanism for formation of institutional space for trade enterprises as a basis of institutional trade policy development (see Fig.1).

Stage 1: Identification economic agents’ institutions in trade industry. Characteristics of traditional and digital economy institutions, as well as options for their convergence.

Stage 2: Grouping the institutions used by economic agents into clusters depending on the specifics of economic activity, its scale, and factors that determine the development of institutional environment. For example, within the internal institutional environment, clustering can affect such groups of institutions as planning, financing, taxation, marketing ones, etc.

Stage 3: Assessment of institutional status of economic agents in trade, including procedures for comparing the institutions used by economic entities and their standards.

Stage 4: Identification of institutional transformation segments as inefficient institutions (institutional traps) aimed at optimization of agents' economic activity.
Stage 5: Identification of major success factors or elements for the institutional infrastructure of specific economic agents: forecast expectations of buyers and sellers with the definition of their intersection point and focus on the maximum coverage of participants.

Stage 6: Measures to improve the institutional space for specific economic entities.

Stage 7: Calculations of the institutional space efficiency.

Fig.1 Block Diagram of the Mechanism for Formation of Institutional Space of Economic Agents in Trade

Identification of institutions of economic entities in trade is the first stage of institutional space formation. Moreover, the basis for successful enterprise functioning in the industry depends on the implementation of an integrated approach to the dynamics of institutions, taking into account both, digital economy institutions and traditional ones.

The second stage of the suggested mechanism is clustering of institutions in order to form a complete picture of institutions used by economic entities in the context of relevant blocks that determine the main directions of development, whether it is marketing, planning, employee incentives, etc.

At the third stage of institutional space formation, assessment of institutional status of economic entities in trade is carried out, including the determination of the deviance degree of economic agents.

At the fourth stage, the so-called "weak links" of the institutional space are identified in order to replace them with more effective institutions. In other words, "institutional traps" are identified.

At the fifth stage, a description is given to the main factors that ensure the success of economic development for specific economic entities in trade, or elements of their institutional infrastructure, as a framework for the effective institutional development providing modeling of sustainable development of megalopolis organizations in the context of limited resources[12].

At the sixth stage, business processes can be regrouped within the framework of the used institutions, such as planning and financing, or inefficient institutions can be fully eliminated. As a result, institutional reengineering of business processes is carried out.

At the seventh stage, calculations of effectiveness of institutional space elements are carried out in order to further develop more effective institutions, which is envisaged by economic agents in the development of institutional trade policy for the future.

4. Results

Based on the definition of the "institutional space" category and its use in the study of digital transformation development, the authors identify key formation features for economic agents in trade in modern conditions. Its role as a catalyst for social and economic development of economic entities is also shown in the paper.

Establishment of the institutional space content through the prism of differentiation of institutions into formal and informal ones, allows to identify their interrelations, and use free niches for the development of informal relations and appropriate tools. Ranking the institutions according to the buyer's perception of goods offers, allows to reach the maximum number of buyers, due to the simultaneous use of traditional institutions and digital ones in terms of informing customers. That is also relevant for the institute of goods selection, loyalty institute, incentives and remuneration institute, institute of procurement and supplier management, logistics institute etc. In addition to that, differentiation of institutional environment into external and internal ones within the institutional space allows to identify the components of internal environment as an object of corporate management.
Factors for successful development of economic entities in trade in the digital segment, including the emergence of a "network effect" at the intersection of expectations of buyers and sellers in the conditions of mass coverage of different buyer's segment are demonstrated as well.

5. Conclusion

Institutional analysis of development processes of economic agents in trade in the conditions of digital economy transformation includes a study of institutional space as the basis for trade policy design, and clarification of procedures for its formation.

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