

Platform economy in Russia: regional aspect

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Abstract—The article analyzes the impact of digital transformation on small and medium-sized businesses. Revolutionary changes in business models based on the use of digital platforms can lead to a radical increase in market size and competitiveness of SMEs. On the basis of the system approach conceptual models-matrices of factors of influence on the sector of enterprises of SMBs taking into account their features were developed. Implementation of the proposed approaches will enhance the involvement of SMEs in the development of the region

Keywords—platform economy, factors of competitiveness of small and medium business, organizational innovations, digital transformation

I. INTRODUCTION

Currently, the greatest attention in regional policy is paid to the development of small business, which is the basis of economic growth. This fact is especially important for those regions that need to increase the market value of enterprises in the production sector of the economy. Industrial and agricultural enterprises will be the main source of growth for the manufacturing/food industry, high-performance jobs, and areas of import substitution and export saving. It will form the basis for the budget creation of the entity of the Russian Federation. However, today the amount of small enterprises get behind of the needs for the national economy of Russia.

II. CLASSIFICATION OF SMALL MANAGEMENT FORMS

To analyze the growth opportunities of SMEs, we will build a classification of small businesses adopted in various industries, presented on fig. 1.

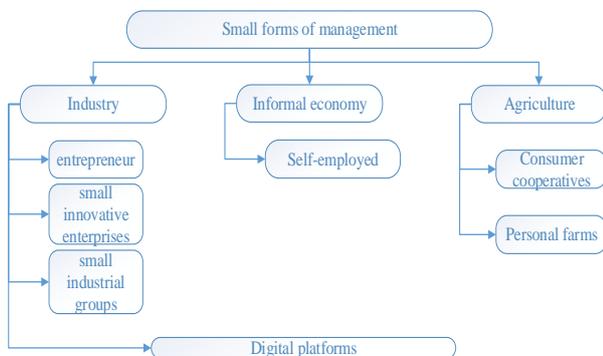


Fig. 1. Classification of small management forms

III. EFFECTS OF PLATFORM ECONOMY

The forms of development of industrial, agro-industrial and informal sectors, detailed analysis of the problems and directions of development are investigated in various sources. While the digital platforms have not yet been sufficiently explored.

Digital economy - a program directed to creating an ecosystem in which data in digital form is a key reason of production (approved by the order of the Government of the Russian Federation of 28.07.2017 No 1632-p). Digital transformation is a revolutionary change in business models based on the use of digital platforms that lead to a radical increase in market volumes and competitiveness of companies.

The companies significantly reduce transaction costs and the time interval for bringing a new product to the market through the use of digital platforms and associated ecosystems, which are not owned and controlled by the product companies.

The effect of the platform is that it represents greater potential for innovation and growth than a single product-oriented firm can generate alone. Platforms, in a broad sense, are the "building blocks" of the economy that attract investment and innovation from other companies to develop complementary products and services [1]. The digital platform as a tool for the development of small businesses is a high-tech business model that creates value by facilitating exchanges between two or more interdependent groups of participants. The capitalization of companies actively using digital platforms in 2016 increased significantly compared to 2011, thereby displacing from the first places such giants as General Electric, Exxon Mobile, Shell, etcUnits

The digital platform has the following characteristics:

- Interplay between platform participants are described in special protocols. They are algorithmized. Adjustment of the interaction system is possible only from the initiator of the platform;
- The relationship between the participants of the platform is based on the principle of mutual benefit. The benefits can be both economic and communicative;

- The platform has a global scale. The principle of involvement of the platform participants in the development of regional, Federal, global economy.
- Unified information environment for interaction of participants has a certain configuration.

The classification of digital platforms developed by the participants of the program "Digital economy of the Russian Federation" under the leadership of B. M. Glazkov [2] is given in table 1.

TABLE I. TYPES OF PLATFORMS

Main specification	Types of platforms		
	Digital tool platform	Infrastructure digital platform	Digital application platform
Main activity based on the platform	Development of special platform software solutions aimed at simplifying the work of the platform	Development of special services and support systems based on user experience and intelligent systems	Exchange of product offerings of market participants
The result of the activities on the platform	Product (software or hardware and software) for information processing as a tool	IT service and the result of its work - the information needed to make a decision in business activities	Transaction A transaction fixing the exchange of goods / services between participants in a given market
Examples	Android OS, iOS, Microsoft Azure	ESRI ArcGIS	Uber, AirBnB, Aliexpress, Booking.com

Some of consulting agencies (for example, J. P. Morgan) notes that when the platform economy concept the mechanisms of interaction of market participants are significantly simplified. Direct interaction "seller-buyer" is carried out on the platforms, the transfer of funds is also carried out through the platform. Platform works in the "24 by 7" format without taking into account the difference in time zones. It get the possibility of growth of the share of the self-employed population. Working on the implementation of digital platforms is at the beginning of its development. And it is too early to give statistics on the implementation of such projects in Russia and in some region.

The purpose of development of digital platforms are declared in development in the region and in the national project "SME Development". We will analyze the impact of endogenous and exogenous factors affecting the development of digital platforms.

The endogenous factors that determine the essential characteristics of the system include:

- the level of management and marketing in small business;
- lack of qualification of managers of small businesses in matters of market and ICT management;

features of intra-industrial relations in small business. The exogenous factors affecting the system from the outside include:

- features of SME development in Russia,
- restrictions on access to information and financial resources and the lack of effective regional infrastructure for SME development;
- severality of small businesses from large businesses.

IV. REGIONAL DIGITAL PLATFORMS

Consideration of these factors is most important in the development of digital platforms. An example of such solutions is given in the form of a matrix "Form/Factor". Industry principle and types of factors can be used as the fields of the matrix (table 2).

TABLE II. FORM/FACTOR MATRIX OF DIGITAL PLATFORM DEVELOPMENT PROJECTS FOR SMES IN THE REGION

Form	Factor	
	Reducing the impact of endogenous factors	Reducing the impact of exogenous factors
Industrial sector	Creation of a digital platform within the framework of the state program "New opportunities for everyone" and the program of regional/Federal R & d through contracts and grants by non-governmental organizations	Creation of a platform for commercial technologies and a program for commercialization of technologies of regional enterprises; priority access to the state order; exemption of small innovative manufacturing enterprises from income tax for the payback period of the project (regional component of income tax)
The informal sector	Creation of a program for the development of a digital platform for effective business decision-making/ interaction with public authorities;	Implementation of programs to promote the development of startups from successful businessmen in exchange for certain benefits;
The agricultural sector	Implementation of a digital platform for the dissemination of scientific knowledge and the best agricultural practices at the regional level;	Creation of a digital platform for sales of products of regional manufacturers; development of export potential of agricultural producers.

Thus, the implementation of activities will allow activating the work on the creation of digital platforms and building the base for comprehensive involvement of entrepreneurs in the region development. So far, it should be noted that the development of digital regional platforms has evolved from individual benefits for doing business to full-scale multidirectional support. However, these measures are not enough in a rapidly changing world and require more detailed research.

REFERENCES

- [1] James Buster T. Digital platforms in a global economy: current TRENDS AND directions of DEVELOPMENT// https://elibrary.ru/author_items.asp?authorid=943405
- [2] Mesropyan V. Digital platforms –new market power // <https://www.econ.msu.ru/sys/raw.php?o=46781&p=attachment> 3. Digital platforms new market power <https://docplayer.ru/81803517-Cifrovye-platformy-novaya-rynochnaya-vlast.html>

- [3] A. Gawer, M. Cusumano. Industry Platforms and Ecosystem Innovation//J. Prod. Innov. Management, 2014, 31 (3). p. 417-433.
- [4] M. Debra. Amidon. Innovation Strategy for Knowledge Economy. Gardners Books, 2010.
- [5] S. Muegge. Platforms, Communities and Business Ecosystems: Lessons Learned about Technology Entrepreneurship in an Interconnected World//Technology Innovation Management Review, 2013, 3 (2). P. 5-15.
- [6] J. F. Moore. Business ecosystems and the view from the firm// Antitrust Bulletin; Spring 2006; vol. 51, No 1. P. 31-75.
- [7] I. Mootee. What's The Difference Between Platform Strategy Vs. Business Strategy Vs. Product Strategy? <http://www.idr.is>.
- [8] Ph. Simon. The Age of the Platform: How Amazon, Apple, Facebook, and Google Have Redefined Business. Paperback, 2011
- [9] Lund S., Manyika J. How Digital Trade Is Transforming Globalization. Geneva, International Centre for Trade and Sustainable Development and World Economic Forum, 2016. 11 p.
- [10] Bughin J. Go with the Flows: Digital Flows Now Outweigh Goods Flows, February 3, 2017. Available at: <http://www.friendsofeurope.org/publication/go-flows> (accessed 10.12.2017).
- [11] Purdy M., An S. Digital Trade Could Help Reverse Slump. China Daily Asia, 03.04.2017.
- [12] Bughin J., Lund S. The Ascendancy of International Data Flows. Vox EU, 09.01.2017.
- [13] Bhattacharya A., Bürkner H.-P., Bijapurkar A. What You Need to Know about Globalization's Radical New Phase. Boston, BCG Henderson Institute, July 20, 2016. Available at: <https://www.bcg.com/publications/2016/globalization-growth-what-need-know-globalization-radical-new-phase.aspx> (accessed 10.12.2017).
- [14] Baldwin R. The Great Convergence: Information Technology and the New Globalization. Boston, Harvard University Press, 2016. 344 p.
- [15] Lund S., Manyika J., Bughin J. Globalization Is Becoming More about Data and Less about Stuff. Harvard Business Review, March 14, 2016. Available at: <https://hbr.org/2016/03/globalization-is-becoming-more-aboutdata-and-less-about-stuff> (accessed 10.12.2017).