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DIRECTIONS OF DEVELOPMENT OF INDUSTRIAL POLICY AND MANAGEMENT INSTITUTIONS IN THE CONDITIONS OF DIGITALIZATION

The article considers the main directions of development of industrial policy and management institutions in the conditions of digitalization, state regulation of socio-economic systems, intellectual potential of digitalization. Recommendations for the development of industrial policy and management institutions are given.

Key words: *digitalization, industrial policy, digital economy, regulation of digital economy.*

Problem statement Industrial policy and economic management institutions are gaining a new impetus in the context of digitalisation. The first - because the change in technology significantly changes the production base and production relations, the range of products produced and demanded and the requirements for its characteristics. Secondly, because institutions have great conservatism and inertia about technological progress, they tend to slow down the immediate implementation of all technological advances, ensuring the stability of society and creating a time lag to prepare society for change. All this requires a comprehensive study of the current issue of the problems of development of industrial policy in the context of digitalization and digitalization of the economy.

Analysis of recent research and publications The study of industrial policy and management institutions in the context of digitalization and digitalization of the economy in Ukraine is directly related to the problem of feasibility and the degree of impact of state intervention in socio-economic systems. Most research in this area is based on known works [1; 3; 4;].

The aim of the article is to explore the directions of development of industrial policy and management institutions in the context of digitalization and digitalization.

Summary of the main material Digitalisation may lead to faster structural changes at the microeconomic level than in previous decades, which will require a revision of both micro and macro models. It is clear that digitalization leads to more efficient use of existing resources, both capital and labor. The explanation is partly related to the sharing economy, an example of more efficient use of the existing common fleet of vehicles, hotel rooms, etc. New technologies can also help to make better use of existing resources by aligning production volumes with demographic processes, macroeconomic parameters of countries, and so on.

In turn, the strength and timing of the impact of digitalization on economic productivity will depend on government regulation, industrial policy and institutions. In a globalized environment, economic development is determined by political and social forces as much as financial and economic theories and technologies.

On the line. 2.2 Presented data that can be interpreted as the success of the digital economy, explaining the reduction in the cost of taxi services and the expansion of Internet services. However, digitalisation is not the only possible explanation for the changes, but may also be related to declining solvency of a large part of the population and the attempt of carriers to maintain income and / or profits, as well as increase revenues and / or profits in unofficial transport services. more reduced the number of passengers of legal taxi drivers. This example

confirms that the impact of digitalisation should not be considered in isolation. In addition, it is necessary to explore how the digital economy fits into existing economic models and how it can change economic models.

In order to properly assess the possible impact of digitalization on the economy, it is necessary to identify and analyze the basic economic assumptions that go with the current models. It is necessary to take into account the influence of the digital economy on a certain benchmark of neoclassical economic theory and the stimulus of economic activity - maximizing the usefulness and impact on the usefulness of network effects of economic agents characteristic of the digital economy.

The standard microeconomic model is based on a number of assumptions used to understand how incentives and actions can lead to different outcomes depending on preferences, attitudes, and other factors.

For the individual, the so-called "working model of the horse" involves a form of maximization of utility, usually associated with a compromise between work, leisure and consumption. It is assumed that a person works to be able to consume. There is also a certain "futility" of work, and

The meaning of equilibrium is the marginal futility of work in comparison with consumption directly related to real wages. Of course, these perceptions greatly simplify the links between economic characteristics that affect human actions. Researchers have repeatedly tried to weaken these assumptions or to develop another, more realistic but fundamental idea of utility maximization remains one of the basic principles of economics. Digitalization does not change the principle of maximum utility, but in some dimensions makes the "working model of the horse" less realistic, and in others more realistic depending on other factors.

For firms, the standard model minimizes production costs and sets prices for goods and services on the basis of marginal costs, where there is ideal competition

in the market, and on the basis of marginal revenue, when the firm is a monopolist. Between the extremes of perfect competition and monopoly models, different forms of imperfect competition and price behavior are explored with different results depending on factors such as market structure, elasticity of demand, brands, advertising, research and development.

There are several aspects of the economic "working model of the horse" that may be affected by digitalization. At a basic level, it seems reasonable that digitalisation will not change preferences and attitudes toward risk, although they may change over time for other reasons. However, digitalization can change factors that are exogenous in this model and affect the decisions of economic agents about work, leisure, trade, etc. Digitalization can change the production function compared to the standard model in terms of production and distribution of goods.

Economists have long debated the growth of economies of scale generated by network effects, where modern physical production is markedly different from digital. The effect of the network is that the value of the network increases with the number of participants. According to Metcalfe's emotional law, the usefulness of the network is about half a square meter in terms of the number of participants. There is a strong correlation between the scale and importance of network effects in business. Larger scale leads to greater value for users, which in turn attracts other users and further scales.

As the scale increases, fixed costs, ie investments, quickly become relatively small, with an increase in the number of units or services sold. Increasing the impact of scale is most easily demonstrated by the example of telephone services. When there are only two phone users, they can call each other; and with three or more users, the number of combinations grows very quickly, as does the usefulness of the service. Compared to telephone communication in digital networks, this effect increases as the network effect extends to all possible actions. The

possibilities of digital technology are so great that voice communication, as an analogue of telephone communication, can be considered as just one of an infinite number of possibilities. This feature of digital technology can affect economic growth. In practice, however, there are regulatory barriers, tax problems and language barriers that hinder the expansion of networks from local to state and further around the world.

The digital economy is not just about companies that own digital platforms. These are companies from all sectors of the economy that use the opportunities of digitalization for growth and development. Having a strategy for dealing with digital solutions and knowing how to use them becomes even more important than having such a solution in your property. According to the International Data Corporation, by 2018, more than 50% of large organizations and more than 80% of companies with advanced digital strategies will create their own digital platforms or enter into partnerships with existing ones. IDC also estimates that by 2018, the number of industrial cloud solutions will exceed 500 (at the time of the study there were just over 100).

Examples of digital platforms used are the Cloud CRM Salesforce platform, the Amazon AWS cloud and the Amazon AWS IoT platform, as well as Alibaba AliCloud.

Business models based on digital platforms have three main features:

1. Network effect from the market in two parts, when user groups (usually creators and consumers of the product) create added value for each other;

2. Easier distribution. With network effects, business models can make a profit by avoiding cost increases that are inevitable with classic linear scaling;

3. Asymmetric growth and competition. Equalized labor costs in the main and "non-core" markets. Asymmetry occurs when competing companies move towards the same market goal, using different approaches, allowing each of them to find their market niche.

The widespread use of social networks not only as a means of communication but also as a tool of commerce has led to the conclusion that there are so-called reverse network effects, due to which the cost of the network does not

The inverse network effects are manifested in the fact that as the size of the network increases, all three aspects of its value may deteriorate. The reasons for reducing the cost of networks, in our opinion, may be:

1) increase in the number of connections, which leads not only to an increase in orders, but also to an increase, rejection of agreements, claims, etc .;

2) The attractiveness of online opportunities for unscrupulous sellers and / or sellers of substandard goods and services, which undermines the reputation of good-natured sellers, complicates the actions of buyers and requires certain restrictions. In addition, too large a network becomes resource-intensive for servers;

3) Inhibiting the development of the network and updating the products and services offered through it, caused by the difficulties of introducing newcomers to avoid the first two types of reverse network effects.

As the size of the network increases, all three aspects of its value may deteriorate under the influence of inverse network effects. Reverse network effects cannot be completely overcome, and therefore large networks will be periodically eliminated "under its own weight".

In general, we can agree with the opinion of T.N. Yudina and IM Tushkanov that "the digital economy is now the engine of economic growth with its contradictory consequences."

The category of digital economy for research should be expanded to include a set of regional economic effects in connection with the use of digital technologies in the socio-economic activities of the region.

Increasing the perception of the positive and negative aspects of network effects in the economy is an important research area, one of their main tasks is to

assess the scope and speed of network effects in the economy. This information can be used to better understand the potential for economic growth.

Currently, Internet of Things development programs are now being adopted in various countries around the world. For example, China has adopted the Internet of Things Roadmap until 2020, India has developed a draft Internet of Things Development Strategy until 2020, and Singapore has a national ICT development plan. The United States has adopted programs in the field of network and information technologies, cyberphysical systems development programs, etc.), Great Britain (Technology Strategy Council plan), Germany (Industrie Initiative 4.0). In the Strategy for the Development of the Information Society in the Russian Federation for 2017-2030, the Internet of Things is seen as a concept of a computer network that connects things (physical objects) equipped with embedded information technology to interact with each other or the environment without human intervention. According to Ushakov, in a broad sense, the Internet of Things is defined as a concept that considers the proliferation of physical and virtual objects connected to the Internet, with the possibility of remote control and management with minimal human involvement. With Ushakova Yu.O. it can be agreed that the concept of the Internet of Things is based on the introduction of Internet technologies in various sectors of the economy, the greatest potential of which has the volume of production, including, in our opinion, applies to the regional economy.

Projects for the development of regional platforms "Safe City" include data integration subsystem, integration geoinformation subsystem, electronic communication subsystems, integrated monitoring, integrated information and notification, information security. Currently, 27 regional IT projects can be identified

First of all, the situation center is provided with a flow of information about planned and unscheduled activities, as well as tools for analytics and forecasting in

geoinformation. The organization of the situational situation is appropriate at the final stage of creating a comprehensive automated system as effective

such a center is possible only in the presence of technological and functional subsystems to ensure its operation.

It can be concluded that the general trend of informatization in the development of regional digital platforms is aimed at introducing a hybrid cloud and providing services that meet global trends and adoption of various programs in the fourth industrial revolution, reflecting a large-scale transition to a new technological order. economies based on digital platforms aimed at improving the economic efficiency of production. Thus, in our opinion, the regional digital economy is a system of economic relations based on regional digital platforms.

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