

Digital Development of The Economy And Its Role In Improving The International Competitiveness Of Ukraine

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Abstract

The article describes and analyzes the five major technological attributes of the digital economy. The directions of the transformation of the value chain in which new digital technologies can be used are considered. Companies are matched by their digital maturity. The principles of digitalization have been analyzed. The concept of digital economy development until 2021 in the aspect of digitalization of business is considered. Conclusions have been made regarding the state of the digital transformation of Ukrainian enterprises.

Keywords: Digital Economy, Economy, Infrastructure, Digital Enterprise Transformation, Hyperlinking, Sharing Economy, Sustainable Growth, Personalization, Business Model.

INTRODUCTION

Today we are witnessing a radical transformation in world production that has no analogues in the past. It became clear that the digital economy is significantly changing the traditional business processes, called digitization of economics abroad (in the industry – digitization of industrial organization), and we use either the English tracing paper “digitalization”, or the new concept of “digitalization” or “digital transformation” is increasingly being used. The new digital economy is affecting all businesses, and companies that have failed to rethink their businesses may lose all competitive the benefits they have in the market.

LITERATURE REVIEW

The topic of the digital transformation of enterprises has been considered by many scientists. Various aspects of this issue have been explored by well-known scientists and economists, among whom D. Bonnet, P. Crey, A. McAfee, A. Manu, D. Neal have made significant contributions, M. Wade, S. K. Gupta, G. Westerman, and S. Hauser. Among domestic scientists can be distinguished V. Apalkov, A. Maslova, N. P. Reznik, T. Bogdan, S. Volosovich, V. Pleskach, S. Tsyganova, M. Tarasyuk, S. A. Lizote and others.

Paying tribute to the experience of domestic and foreign economists, carried out in the field of theory and methodology of the digital transformation of enterprises, it should be noted that the problem of digitization of business entities has not found its final decision in Ukraine, which determines the relevance of the research topic of the article.

RESEARCH METHODOLOGY

The purpose of the study is to review the main aspects of digital enterprise transformation and to analyze the situation in Ukraine.

Competitiveness is considered as a factor of sustainable and dynamic development of Ukraine. The authors made an attempt to consider the main factors and results of the development of competitive relations in Ukraine, the most important parameters that determine the state of the competitive information environment. Based on the study of world economic thought, the experience of developed countries and countries in a transition economy, analyze the state and main tasks of competition

policy in Ukraine, determine the path of development of competitive relations in the most important markets. The main idea and purpose of the team are to draw public attention to this range of issues and the need to translate the concept of competitiveness in government digital strategy and policy.

RESULTS

The major technological trends that characterize the digital economy (hyperconnection, supercomputer, cloud computing, cybersecurity and smart products) have created the world, where traditional product and service boundaries no longer exist. Individuals, businesses, and societies connect in real-time, creating a more friendly, intelligent and responsive. Over the last decade, we have seen significant changes in the way people and business come together to produce well. Based on the popularity of social networks, businesses have created their own business networks to connect suppliers, customers and internal systems. The result is growing global trade, which, according to SAP experts, will reach 65 trillion by 2021. \$ USA. Add to that the growth of the Internet of Things with approximately 45 billion device connections by 2021, and in you is an endless business environment. To adapt successfully, first need to understand the five key technological attributes of the digital economy.

Digitization and tracking. In the digital economy, analogue objects generate digital signals that can be measured, tracked and analyzed for better decision-making. The need to control and control both the various individual mechanisms and machines and the environment, transport flows, production, business, health, safety, social processes, has led to the creation of a large number of devices that are connected by humans, data centres and among themselves. Their effective work requires the creation of a global communication system that can serve the Internet.

Solving this problem has given birth to an Internet-based concept of device-to-device communications, dubbed the Internet of Things (IoT). The colossal growth of connected devices in the world, according to Gartner, will be more than 2021 50 billion pieces, has already provided a sharp drop in prices for microprocessors and wireless gadgets – by 80% over the past four years. This could not but reflect the changing paradigm of the use of these devices by many modern companies, especially in the formation of new business models.

Hyperlink. Linking assets, suppliers, employees and stakeholders through digital platform-based wireless communication enables people to make decisions, data-driven, thereby enhancing enterprise security, efficiency and clarity.

The role of digital platforms has gained global prominence, and some researchers define the digital platform as “a business based on value creation through interaction between external manufacturers and consumers. It provides an open infrastructure for the participants of the interaction and sets for them institutional “rules of the game”, i.e. certain “regulatory regimes”. The main task of the platform is to unite users and facilitate the exchange of products or social currency between them, contributing to value creation for all participants» [1].

Sharing. The digital economy works on a shared basis (the term “sharing economy” is commonly used in popular literature). First of all, it should be noted that the term “sharing economy” is used to refer to the sharing of homogeneous or complementary resources for commercial purposes. Examples are the sharing of vehicles by commercial transport companies, the merger of dedicated one's routes by airlines, radio frequencies by mobile carriers, as well as numerous platforms such as Uber, Airbnb, Avito and more.

Personalization. Another characteristic of the digital economy is customer personalization. Personalization means that customers receive customized products and experiences from their loved one's brands when and where they want. The Boston Consulting Group (BCG) has prepared a study, “The Power of Personalization: The Global Retail Banking Market in 2018”, to analyze major trends in retail banking this year. BCG analysts have come to the conclusion that the main trends are the personalization and active adoption of digital technologies. “Personalization is fast becoming a

paramount mechanism in banking both in terms of customer satisfaction and in terms of economic benefits”. [2] Increasing personalization has also been made possible with modern technology. Now it is easier for banks to evaluate the individual circumstances of a particular client, the features of their financial behaviour, and prepare a personalized proposal, develop appropriate advertising, or more accurately assess the risks.

No intermediaries. The digital economy also allows companies to eliminate unnecessary intermediaries or channels and create a more direct buyer-seller relationship. The simplified ecosystem has less friction and lowers the barrier sign-in for players in the other part of the value chain.

The concept of digital transformation has three major benefits relevant to any type of business: improving the efficiency of existing infrastructure; the emergence of qualitatively new business models; increase in revenue or decrease costs in existing business models. Digital Trans business formation goes far beyond the ICT industry, it has an impact on the entire value chain. In particular, there are three areas where new digital technologies can be used:

- Customer Search: Businesses can use digital information and social networks to engage their customers in new ways. For example, they can create digital user communities for added value.
- Operational processes: Digital technologies can deliver great results in operations across all stages of the value chain.
- Business models: digital transformation enables the creation of completely new forms of value creation and acquisition.

The implications of digital transformation in business models are diverse. For example, digital technologies allow you to reorient the boundaries of firms to more global levels. Common digital models businesses tend to lead to a higher level of engagement between different participants. Such businesses tend to compete on a larger scale than traditional businesses because of their low geographic boundaries and resource requirements for customer satisfaction. Because search costs and communications have dropped significantly, with operating costs typically much lower than traditional businesses. Internet technologies have increased competition, reduced entry barriers, led to more substitutes and increased the power of consumers.

Therefore, profitability has decreased in most industries. And, as a consequence, digital businesses drive the economic development of an environment often characterized by dynamic competition and high consumer surplus.

Cardinal changes are already awaiting all traditional sectors of the economy in the near future. Only those who are well-prepared today will be able to beat competitors tomorrow. The advantage of the first player will be phenomenal as preparation it takes time to switch to digital significant resources and fundamental reform of the company culture. As a result, the “me too” competition formula will not work, and many companies will be eliminated from sources of profit in their industries in the future. All companies that have understood the importance of digital transformation can be divided into three stages by their digital maturity:

The first stage. At this stage, companies are characterized by investments in the latest digital tools, such as drones, for delivering cargo to remote production sites, AR glasses, and the like. At the same time, executives do not understand how it is all related to the business as a whole. One industrial company has invested tens of millions of dollars in a joint project to develop unmanned lorries, though freight logistics is less than a percentage of the total unit cost. Even if development is successful, there will be little impact on cost-benefit innovation, given the current infrastructure constraints and 4G coverage.

The second stage. Companies prioritize investing in digital projects. The system will report on a systematic understanding of where digital solutions can create the greatest value for an existing business model of the company, what investments are needed, what the expected impact of the

implementation, and the risks of changing the existing business model through the introduction of new digital technologies in the industry. Companies are learning how to build a balanced portfolio of digital projects for the short and long term, build a system for monitoring and updating it.

The third stage. The company has an effective digitalization strategy that allows it to structure efforts and use “anchor points” by engaging in promising “digital battles”. At the same time, Uber did not initially understand that the company would move, for example, toward unmanned transportation. But it clearly articulated for itself a digital future – “using technology to connect passengers and drivers.” The first strong points for Uber was to create a convenient driver's call application and the ability to pay for a bank card. Already within the second wave, the company taxi service was launched, then – UberX (more democratic taxi) services, the Uber pool shared travel service, as well as the OTTO project – the development of unmanned cargo transportation. Successful prototypes give businesses the opportunity to feel the value of digitalization, but the company does not can benefit from the implementation due to the lack of ability to deploy these technologies across all operational activities. And top management understands that businesses need a complete digital transformation, well thought out and structured, to ride the wave of digital change and not miss out on future sources of revenue. Different companies need different times to grow from the first stage and reach the third, for different reasons, both internal and market dependent. Cisco survey at the Intuitive Network Forum held in Kyiv in November 2017 confirmed the importance of digital transformation for the Ukrainian market: 38% of respondents said they see a significant impact of this trend on their companies' business strategy, which will continue within one to three years and 50% influence to some extent. This is why managing the ever-increasing traffic is needed automation tools that will replace the “manual” processes of setting up and managing network resources. The obvious and paramount importance of information security is that information is the main strategic resource on which the success of individual enterprises and states equally depends [3]. More than half of those polled – 56% – are concerned about cybersecurity, 39% are very concerned and only 5% are not concerned at all. Significantly, over the last 12-18 months, only 3% of respondents have not experienced IT security incidents. During this period, such incidents were more commonly referred to as viruses, mail spam and phishing, trojans, DDoS attacks and ransomware. These attacks resulted in system failure (31% of responses) and data destruction (20%). As regards the main obstacle to providing protection against cyber threats, budget constraints were leading by a large margin here. According to the respondents, they also occupy a leading position in the list of obstacles to the digitization of their companies (49%). They are followed by unprecedented leadership in linking this trend with business (14%), as well as a lack of understanding of what digitalisation is and what it can bring to the company (13%) [3].

Of course, the process of digital transformation must also take place at the state level as a whole. In January 2018, the government approved the Digital Economy Concept by 2021 [4]. The document provides a plan of measures for the next two years, the outcome of which should be, according to the calculations Cabinet, GDP growth by 5%. In addition, the authorities expect that the implementation of the concept will accelerate the attraction of investments into the Ukrainian economy and help modernize the industry by creating high-tech industries.

One of the important provisions of the document is bridging the “digital divide” in Ukraine, which is understood to mean limiting the capacity of the social group due to its lack of access to modern means of communication. For this purpose, the concept implies the development of both infrastructure (broadband fixed and mobile Internet access, digital television), as well as the introduction of digital services in various spheres of life (medicine, education, transport, government services).

In addition, the concept implies appearance “Digital” jobs, which is a new approach to organizing work, where communication and computer technologies are playing a leading role. This, in turn, should increase the efficiency of employees.

Another important aspect of the concept is digitalisation in the real economy. “The digitalization of industry (Industry 4.0) and the agricultural sector, the development of digital agriculture is a priority of economic policy” – the concept emphasizes. National-scale digital transformation projects are another concept in the concept. Digitization should touch on such areas of Ukrainian life as education, health care, tourism, ecology and environmental protection, urban life, and more.

What are the concrete steps to be taken in 2020?

Most of the activities involve organizational and regulatory work. So, to coordinate the implementation of the concept will be a “digital” governmental committee, which should be set up in the first quarter of this year. Among the normative work on this year – the introduction of digital terminology, the launch of digital statistics collection, the implementation of the digital by default principle in the preparation of regulations, and the development of digital transformation roadmaps basic industries. In addition, the concept envisages the development of basic digital services in education, medicine, transport, etc. but does not contain any specifics.

This year also includes a number of measures for the development of digital exports. In particular, in the third quarter, so-called “digital attachés” should appear for submission Ukraine in the international markets. It is also planned to develop measures to simplify the foreign economic activity in the digital sphere, as well as to modernize education to support the digital industry.

In addition, the digital government's tasks include the introduction of interactive content for educational institutions, which implies the provision of online educational institutions. The blockchain technology was also ignored by the Cabinet of Ministers. It is planned to be actively used in the state and other spheres. As you know, pilot projects in this area have already started. In particular, last year the State Land Registry transferred this technology. Also in concept, the attributes of the digital economy are mentioned, such as the Internet of Things, 3D technology, and more.

CONCLUSIONS

The digital transformation of business models is of great importance because it provides the following benefits [5]:

- More customers (75%). Digital transformation enhances interest and enhances the customer experience. Through online channels and customer communication, any business can learn not only what customers think and what they want but also the impact-chickpeas on their decisions.
- Increased customer satisfaction (63%). People are increasingly using technology not only for search and training purposes but also for comparing products and services.
- Increase in lead generation (49%). Lead generation is the generation of consumer or customer interest in an enterprise's products or services. Starting in a digital environment, more people will be able to learn about and contact the company.
- Increased traffic (53%) - Using digital channels in the business, many customers and consumers will start appearing through them. Most consumers are looking for the right products and services online, and digital transformation is key to attracting new customers. About 400 digital startups appear in Ukraine annually, 20 of them that survive become stable companies and only one or two turns into very successful businesses. These are the results of a study by the international research company A.T. Kearney Digital-64 Entrepreneurship in Ukraine. How Ukraine can create a world-class ecosystem» [6]. The active development of the digital economy contributes to the country's GDP growth, as proof of the successful experiences of Sweden, South Korea, Estonia, Ireland and Israel, which have increased GDP by up to 20% over five years thanks to the active development of the digital economy.

Naturally, the digitalization path of each enterprise will be individual in both approach and time, but the transformation is necessary, and the main thing for the managers of enterprises is the awareness of the feasibility and relevance of active measures introduction of new technologies into production.

The creation of an external climate oriented to the digitization of enterprises through the formation of the regulatory framework, as well as the natural processes of digitization of the society will provide in the short term the screenings of enterprises producing low-quality products, not interested in improving the competitiveness of production [7, p. 15]. In our opinion, within 7-10 years, most domestic enterprises should bring their own capabilities in line with the state requirements in the field of digitalization.

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