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**FEATURES OF THE TRANSFORMATIONAL CHANGES OF  
BUSINESS STRUCTURES IN THE DIGITAL ECONOMY**

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***Abstract***

This article addresses the problems of introducing and developing digital transformations affecting the business sector. It discusses the ways of internal transformation in building business processes in three areas: customer experience, operational processes and a business model. The development of enterprises that have made the transition to digital business models with the maximum use of the effect of synergy, scale and network development is analyzed. Particular attention is paid to studying the experience of world companies in various sectors of the economy that are most prepared for digital transformation. A hybrid approach is also described, providing for the adaptation of progressive traditional business companies to new technological realities and their integration into digital infrastructure. It is proved that the digitalization of business entities is becoming the most important tool to increase the competitiveness of business structures and the growth of innovative activity of enterprises. Important is the problem of increasing the efficiency of introducing innovative developments into the economy. Technologies for the targeted search for innovative solutions using digital technologies are becoming the main tool of a modern entrepreneur operating in the context of globalization processes. They allow not only conceptually substantiating new entrepreneurial ideas, but also significantly reducing the amount of entrepreneurial risk, preventing or timely preventing negative trends that may arise when innovations are implemented.

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## **1. Introduction**

Today, entrepreneurship is one of the most important institutions and a key element of a market economy. The importance and significance of this study is growing due to the need for entrepreneurship to achieve the goals of implementing the main directions of state competition policy in the development of the digital economy, which act as priorities for business, society and the state. As practice shows, the introduction of digital technologies allows entrepreneurs to increase the competitiveness of companies, increase labor productivity, reduce production costs, and also increase the degree of customer satisfaction. Modern technological innovations in the digital sphere provide new opportunities for business development, open up great potential for creating new business values for companies, for the transition to digital production. All this requires studying the impact of the introduction of digital technologies on the entrepreneurial activities of companies, adapting entrepreneurial structures to function in the digital economy, which determines the relevance of the chosen topic.

## **2. Problem Statement**

Currently, domestic and foreign authors are showing an increasing interest in the development of models, directions, management mechanisms and monitoring tools for the development of innovative entrepreneurial activity. The authors rely in their study on conceptual provisions that reveal the essence of the digital economy of entrepreneurship, formulated by Russian economists such as Ananyin, Zimin, Lugachev, Gimranov, and Skripkin (2018), Babkin and Chistyakova (2017), Lukyanova (2019), Tyaglov and Takmasheva (2018), Ustinova (2019). From the western authors it should be noted works of Müller and Hopf (2019), Nadeem, Juntunen, Shirazi, and Hajli (2019) and others.

## **3. Research Questions**

During the study, the authors pursued the solution of a number of problems:

- Describe the current situation and identify the main directions and methods of digital transformation of business structures;
- Analyze the activities of leading companies that have in their balance sheet a dominant part of intangible assets (innovative intellectual developments);
- Assess the impact of the introduction of digital technologies on the activities of companies;
- Identify strategic directions for the development of digital entrepreneurship.

## **4. Purpose of the Study**

The object of research is the process of development of modern entrepreneurship in the transition to a digital economy. The purpose of the work is to identify ways to increase the competitiveness of entrepreneurs in the digital economy. At the same time, the study of new business models based on digital technologies and the analysis of the experience of foreign corporations in the digital economy are of undoubted interest.

## 5. Research Methods

It is necessary to consider the modern aspects of doing business, and the features of its functioning in the current economic conditions. When describing the key components of modern business structures and their competitiveness, it is impossible to ignore their integration with digital marketing, without which modern business is not scalable and practically not promising. Therefore, in the presented study, such scientific methods as theoretical analysis and synthesis, generalization and comparison, and the hypothetical-deductive method were effectively used.

## 6. Findings

Digital transformation is the next step in the development of the digital economy after digitalization, at which the business and operating model of the organization is transformed based on the use of innovative technologies that allow not only optimizing efficiency and increasing the productivity of companies, but also creating fundamentally new value chains and issuing unique innovative, more profitable products and services. Accordingly, the company's profit and investment attractiveness are growing. Today the development potential of any socio-economic system is due to increased integration, increased efficiency and the introduction of innovative digital technologies (Tyaglov, 2018).

There are three areas of digital transformation: customer experience; operational processes; business models. Each company chooses its own path of digital transformation based on the characteristics of activities and management considerations. Some choose a growth strategy due to a better understanding of the client (Kail, Shokhnekh, Samsonova, Lamzin, & Elsukova, 2019). Others - due to digitalization and reengineering of internal processes and increasing employee productivity. Still others change the boundaries of business models, create digital products and service add-ons, and develop new markets or create them. The most promising options for digital transformation seem to be the direction of change in the business model and operating model. However, there are some nuances. Business models of companies focus on how the organization conducts its business, creates and provides value for the market (Babkin & Chistyakova, 2017). Operational models focus on the effectiveness of internal business processes. It is important to note that the transformational path through changing the operating model of activity is rather risky for companies seeking to growth in the digital economy. A much more expedient and more rational way is to build a digital business model. They are not burdened with assets, rely on data on direct interactions with customers and use digital platforms to build direct innovation and investment interactions with partners. The development of companies that have made the transition to digital business models is carried out iteratively, with the maximum use of the effect of synergy, scale and development of the network. While companies solve the problems of increasing the efficiency of their internal business processes in operational models, they spend insufficient attention and resources on transforming business models focused on the external environment of the organization, on understanding how efficiently the organization introduces innovations, how using of digital technology provides value to customers, etc. Hence too deep development of operational models follows as a result. It prevents the prosperity of companies in the digital environment. Understanding the difference between digital transformation based on operational and business models is fundamental to gaining and building competitive advantages in a

developing digital economy. The most striking example is Uber, the revolution that the company made in the taxi transport market is not based on a platform, but on a new business model of the company. The emerged term “Uberization” does not mean the introduction of innovative digital technologies and platforms, but the radical transformation of business, the economy and society as a whole (Lukyanova, 2019).

Digital technologies have a significant impact on the possible types of digital business models. In turn, new business models define new operational models, so prioritizing the latter hinders the company's digital transformation: integrating digital technologies into existing operating models can increase business efficiency, but will not lead to breakthrough revenue growth (Müller & Hopf, 2019). Therefore, it is extremely important to understand the difference between the transformation of operating models and the transformation of business models, as well as the role that business models play in digitizing the economy. Changing a business model does not have to be radical or risky.

There are opportunities for an evolutionary path of digital transformation that adds value and changes customer relationships. New “digital” businesses capture not only market share, they dramatically reduce prices, which causes explosive demand growth in most causes. However, with a similar expansion of market volumes, companies that remain in the familiar format are rapidly losing efficiency and are forced to leave the market or transform. Gradually, understanding of the importance of industry-specific digital platforms comes not only as effective technological solutions, but also as a powerful factor shaping the economic space, determining the growth of gross product and increasing labor productivity. Economic activity on the basis of numbers of new platforms, which facilitate transactions, is often referred to as a “sharing economy”. Schering business models are able to identify, accumulate and use currently unused assets on the basis of digital technologies in order to obtain additional usefulness, create new value in the form of reputation, and as a result manage customer experience (Nadeem et al., 2019).

Platform technologies in the transformation of business models of companies provide: - the implementation of one or more critical functions in a specific economic sphere; - defined standards and procedures for the overall architecture of solutions / products; - open or semi-open entrance for other companies, for development opportunities based on network interaction and partnership; - admission to participate in the development of the platform both complementary companies and competitors. Some foreign experts note that "the world community is rapidly entering the era of the digital platform economy, in which the tools and mechanisms based on the Internet and online platforms form the foundation of economic and social life" (Ustinova, 2019, p.35).

Traditional business models include asset creators and service creators; the digital age has predetermined the creation of two other types of business models - these are technology creators and creators of networking companies. World studies show that network-based companies based on platform technologies are characterized by a 2-4-fold increase in market value and an increase in market capitalization of about 200% (Ananyin et al., 2018). Like so much in the digital economy, the collaborative economy instantly became a global phenomenon. According to PricewaterhouseCooper, five of today's key sectors of the joint economy have the potential to increase global income from \$ 15 billion in 2014 to \$ 335 billion by 2025. The dynamic of the development of a digital collaborative economy is expected in other industries.

The pioneers who have successfully applied the business model of sharing in the digital age are Uber taxi service and Airbnb rental service. It was Uber who first set the goal to encourage consumers to abandon personal cars in favor of a taxi. Now he works in 250 cities around the world. Uber gave birth to neologism "Uberization", which refers to companies that are transformed from suppliers of specific goods into service providers. As Uber does not offer the car itself, but the service of moving from one point to another, so the manufacturers of medical equipment do not sell the equipment itself, but the very ability to do an ultrasound or MRI. Such a business model can significantly reduce operating costs compared to traditional. Since "Uberization" arose partly due to the economy of shared consumption, services related to these models can also usually be attributed to the sharing economy.

Airbnb's housing service has done the same with the hotel industry, turning into a full-fledged competitor. In 2016, the number of active Airbnb users grew ten thousand times - at that time 500 thousand travelers, or 115 million people a year, used the service. Now the company is more expensive than the giants of the hotel business Hilton and Hyatt combined and offers to rent more rooms than Marriott after the merger with Starwood. The model of a business based on networking through a digital platform is certainly effective in the digital economy and provides companies using it with an undeniable competitive advantage.

Progressive traditional business companies, whose business model cannot be transformed, strive to maintain their business and gain competitive advantages in the digital environment. They find a way out in a hybrid approach, which involves combining several types of business models, in particular: - a number of pharmaceutical companies develop new drugs (acting as creators of technologies) and produce these drugs (creators of products); - most automobile companies produce cars (the main business model is the creators of the products), while at the same time providing financial and insurance services (the creators of services), and increasingly, they provide new digital services (the creators of innovations). Five well-known global companies such as Apple, Alphabet, Microsoft, Amazon and Facebook can be cited as an example of successful practice of a hybrid approach to transforming of a business model. One of the components of today's success is the combination of the main business model with the digital business model. This allowed these companies to achieve a synergy effect within their model, to differentiate key elements of services in terms of growth, profitability and market value and become "digital supercomputers" (Eigenraam, Eelen, van Lin, & Verlegh, 2018).

In order to create a successful business model of a company in the conditions of the digital economy, it is necessary not only to connect to a digital platform, but also to manage effectively the channels and capacities of its ecosystems and use them in a multilateral system model of digital business interaction. In each economic industry the most progressive companies that embarked on the path of digital transformation are building new digital business models of direct network interaction. The synergy effect of systemic business interaction increases due to profit growth, customer satisfaction, improving business efficiency, and reduced transaction costs (Verhoef et al., 2019).

Let us consider the experience of some world companies in economic sectors as examples of successful practices of digital transformation through the introduction of a business model based on a digital platform. Major car manufacturers have begun introducing networking by investing in or buying service-oriented digital business platforms. It is very reasonable that some have created separate business units to

manage these activities using operating models and personnel, for example, the Daimler Moovel Group and Volkswagen MOIA.

Most media companies are faced with significant threats to their core business model – broadcast and content production based on advertisement. In response to the threat of competition in digital technology, the German mass media company ProSiebenSat.1 decided to add digital commerce and online markets to its range, expanding its competence in attracting and monetizing a large consumer audience. At the same time print media companies Schibsted in Norway and Naspers in South Africa have deployed their business models through networking with a portfolio of online sites, portals, auctions and private sites. This allowed Schibsted to achieve record operating profits in 2017, while Naspers continued to grow by almost 20-30% per year.

In the retail sector more and more European retailers have begun to implement a business model based on digital network. French electronics retailer Darty entered a third-party trading platform in 2014 and expended dramatically the selection of products. Significantly expanding the traffic to its website, it received twice as much profit from products sold on the market, compared to its traditional trading business. Zalando, a successful European fashion and clothing e-commerce site, has recently integrated networking into its business model, opening its digital platform to third parties.

Examples of successful networking in the telecommunications industry are Nordic Telenor, which invested in an online business as part of its new digital strategy, BT Global Services, which created a highly innovative cloud services platform, Telco, which focuses on connectivity for corporate IoT. In this industry the digital transformation process is only gaining momentum (Sedera, Lokuge, Grover, Sarker, & Sarker, 2016).

As regards banking services European banks are beginning to understand the growing role of networking, partly due to open banking regulation (“PSD2”). Leaders such as the ING Group, striving to remain competitive leaders, create ecosystems of third-party services based on the digital business platform that go beyond banking. Having introduced platform service and network interaction into the business model, Deutsche Bank introduced multi-bank aggregation services and the retail deposit market to the market. Thus, it led the creation of a pan-European cross-industry digital identity Verimi. Fintech and digital leaders such as Alibaba continue to target high-yield retail banking services with low-transformation business models such as Alipay for online and mobile payments. In insurance the Chinese group Ping An became the market leader due to the success of its digital ecosystem management strategy, which allows it to remain the most attractive for customers using the services of third-party companies. Indeed, Ping An positions itself as a technology company with financial services licenses.

Digital business growth is a prerequisite for a growing digital economy. The introduction of new business models based on digital platforms ensures the competitiveness of enterprise structures in the digital economy. Therefore, Russian enterprises need to quickly recognize the possibility and need for innovative changes to their business models in accordance with the challenges of the digital economy. Innovative digital technologies, through the application of which a number of companies have won leading positions in the modern economy, can be introduced and used in companies of any size and industry to accelerate the process of digital transformation.

## 7. Conclusion

Thus, the study of the features of the digital transformation in socio-economic systems indicates the absence of a universal mechanism and algorithm for the implementation of transformational changes. The key position that makes up the totality of the features of digital transformation is the need for priority digital transformation of the public administration system as the main institution of activating, regulating and supporting the processes of digitalization and digital transformation of society. To this end, it seems appropriate to use the positive experience of digital transformation of state regulation in other countries, taking into account Russian specifics and the use of digital platform technology. The accelerated formation and constant development of the competence potential of the enterprise personnel involved in digital transformation processes is a prerequisite and objective necessity for the success of the ongoing digital transformations, which will allow us not only to quickly adapt in the digital space, but also ensure the normal functioning of the company. The evolutionary transformation of a company's business model based on the introduction of a digital network model is undoubtedly an effective solution in the digital economy, which provides companies with an undeniable competitive advantage.

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