DISRUPTION OF BUSINESS MODELS IN THE CONTEXT OF DIGITALIZATION

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Abstract

The article examines the main trends in the modern transformation of economic systems in relation to digitalization and identifies the factors of economic growth in the context of restructuring business models. In particular, it considers changes to the business models of trading and digital companies, which have led to new approaches to conducting activities across all areas. The article describes how trading and digital companies operate in these new conditions and how they use various kinds of resources, including those arising in the digital space. It is noted that the adoption of new business models significantly alters the approaches to defining the value proposition and operating model, leading to disruption throughout the entire chain of interrelated elements (resources, costs and revenues). Particular attention is paid to the risks of corruption for enterprises that are unable to adapt to new conditions. However, the opportunities that digitalization offers if there is a timely transition to new ways of doing business are also highlighted.

Keywords: business model, disruption, innovation, technology, transformation, digital economy

I. Introduction

Modern processes of business model disruption occur under the influence of digitalization of all spheres of life, affecting the activities of companies in all countries of the world. Digital transformation is fundamentally changing the key trends, technology drivers, industry cases and challenges that organizations face at the current stage of development. Special attention for the purposes of further research should be paid to the ongoing changes in industry, retail, the financial sector and service companies, as well as issues of integrating new IT solutions and developing ecosystems arising due to the digitalization of personnel and infrastructure barriers.

Digitalization has become a key driver of transformation and disruption of business models in recent years. With the rapid technological development, the growth of cloud services, artificial intelligence and the Internet of Things, companies are forced to rethink traditional approaches to creating and delivering value. According to expert estimates, digital transformation is becoming a matter of survival for businesses and one of the main national priorities until 2030.

II. Methods

Regarding the theoretical aspects of the key foundations of the ongoing disruption of business models, it should be noted, firstly, what it represents.

Business model disruption is the process of radical change or replacement of traditional business models under the influence of new technologies and market conditions [14]. In recent years, the development of the Internet, IoT, big data and learning systems has led to the emergence of new models such as subscription, sharing economy, platform and ecosystem solutions.

Digital transformation involves not only the implementation of individual IT solutions, but also a fundamental restructuring of operational processes, interactions with clients, partners and employees, as well as the creation of new sources of income.

To understand the overall integrity of the changes taking place, a comprehensive and system approach to research is necessary, which requires the use of such methods as general scientific methods of cognition, description, characteristics and generalizations, methods of statistical observations and time series. Based on a number of studies already conducted and practical experience, albeit small at this stage, it can be concluded that incorrect interpretation and understanding of the ongoing changes can cause significant damage to the activities of companies, loss of their financial stability due to problems in making incorrect management decisions. Of great importance, in this case, is the correctness of organizational and management approaches to new types of business, and in existing ones, timely reconfiguration to the use of modern technologies (in their entire spectrum) is necessary to strengthen their positions in sales markets and maintain the stability of key indicators.

The aim of this article is to examine the key features of the construction and functioning of business models, and to identify the main drivers of their sustainability and growth.

The working hypothesis consists of studying the entire depth and scale of the innovative component of modern companies, which is manifested not only and not so much in their technical and technological re-equipment, but in the development of new ideas for growth and expansion of supply, creating value for manufactured products or services.

An innovative business model is a model that aims to change the dominant industry logic in such a way that the customer receives more value and the company receives a competitive advantage and greater profits [15]. In this case, the disruptive business model will have a unique innovativeness that creates a competitive advantage in the value creation for the customer from competing companies in this area.

Currently, “traditional” business model formats are not effective, so it is necessary to revise the conceptual approach to the formation of business models from the position of rethinking the impact of the “digital revolution”.

III. Results

Given that disruption itself implies natural selection, strengthening in the market of goods and services will be achieved by those companies that can promptly respond to changes in a timely manner, using an appropriate innovative model of their functioning, offering the market something exclusive. In this way, companies acquire a certain set of characteristics that enable them to evolve among mass producers.

One of the most important features of modern companies using digital technologies is the frequency of formation of growth and development strategies, which in traditional conditions are carried out two or even three times less often [8]. According to research conducted by IBM and BCG (Boston Consulting Group), the vast majority of innovative companies (over 70%) [8]

regularly review their business model, since current changes require adequate adjustment to market demands.

In this regard, modern companies using disruptive business models focus not so much on creating a high-quality product that is needed by the market, but on creating its value for the market. It is the value of the product that creates a competitive advantage for the company compared to other manufacturers in this field. The creation of value for a modern product serves as a kind of basic asset, using which a company can strengthen its market share, while increasing its profits.

Digitalization, innovation and new technologies are launching new logistics chains when traditional channels and methods of production, supply and sales cease to be effective. New levels of competition are created, based not on the scale and volume of production, but on the achievement of set goals and results obtained.

The vertically/horizontally integrated systems of value creation used by companies in the traditional economy assumed step-by-step management of commodity, information and cash flows, which was a strategically correct construction of business models at that stage of development, but led to at least two negative consequences: the growth of transaction costs and the increase in the scale of production as fundamental components of the creation and growth of surplus value [13].

With the growth of the scale of traditional business models that underlie the functioning of most large companies, the conditions of competition have become more toughen, in which incorrect and unfair methods of competing for sales markets have begun to be used at an increasing rate. As a result, prices for goods and services rise regardless of the consumer value produced. An increase in the scale of production, that is not supported by a corresponding increase in effective demand, leads to a decline in sales, which is unacceptable in the new conditions, when goods quickly become obsolete and will not be in demand by the market, even under the condition of an adequate and moderately low price.

Modern companies can avoid or minimize these negative trends by using innovative business models. The most well-known model today is the so-called Freemium model, which is based on expanding the customer base by offering some goods/services for free (basic ones, without a heavy cost base), while the premium level (promoted by the company) requires payment (which usually covers the cost of the free offer).

It is obvious that such a model cannot be used in all areas of business activity (it is mainly used by such companies as Spotify, Linkedin, Canva.com, MailChimp), but its elements can be widely distributed [15].

There is also a subscription model, the essence of which is to promote a product over time. A service or product can be purchased on a subscription basis, where the customer pays not once, but periodically for the duration of the contract. This makes it possible to attract more customers and expand the boundaries of receiving and paying for services/goods, while simultaneously expanding the range of offers, service quality, etc. (marketplaces, Internet platforms, Internet providers, etc.).

Other business models based on methods such as on-demand models, the model of sharing economy, a trading platform, etc. are also being actively implemented. Each of the models has its own set of tools, with the help of which the goal of a unique offer is achieved through a different configuration of its elements: free services; service support; duration of interaction with the client, supported by the expansion of options for the sold product/service, etc. The use of innovative business models not only helps to reduce costs, but also to gain competitiveness among the many producers of goods and services.

Today, it is already possible to identify the key drivers of digital disruption.

1. Cloud technologies

Cloud services allow companies to quickly scale their IT infrastructure, reduce costs, and

accelerate the launch of new products. In 2024, cloud technologies were named one of the most popular technologies, and the cloud solutions market in Russia is growing by 40% annually.

2. Artificial Intelligence and Big Data

AI and data analytics are at the core of process automation, personalized offerings, and supply chain optimization. Companies use AI to forecast demand, manage inventory, provide customer service, and even create new digital products.

3. Internet of Things (IoT)

IoT allows one to collect and analyze data from physical objects, increasing the transparency and manageability of business processes. In industry, IoT is used for equipment monitoring, predictive maintenance, and production optimization.

4. Platform and ecosystem solutions

Platform-based business models connect producers, consumers, and partners into a single digital ecosystem. This allows companies to expand their range of services, increase their customer base, and create new sources of income.

The evolution of companies using new business models occurs under the influence of the following factors:

1. Digitization of organizational culture – with the ever-changing digital technology environment, hiring, training and encouraging learning ability among employees.

2. Using modern technology solutions such as cloud and mobile technologies rather than the mainframes of the past.

3. Developing or restructuring an existing R&D (research and development) unit – seeking new business opportunities that use digital technologies at the periphery or perhaps in adjacent areas of current offerings, even if they may consume existing businesses [5].

4. Reflections on how digital capabilities can transform core business.

The primary focus should be on improving customer service quality through digital channels, as customers expect a simpler, more intuitive, and compelling digital experience as they become more complex.

5. While the pace of change today is rapid and means that many current organizational architectures need to change, it is important to map out a path for making changes in stages. These changes should be evolutionary rather than revolutionary, but it is important to set a course, measure progress or lack thereof, and adjust course as companies learn to find new innovative solutions [6].

The above-mentioned factors for a company's transition from the physical world to the digital world with the sale of both physical goods and digital goods and services can very likely indicate that depending on the product and customer convenience, the model will change to achieve maximum efficiency.

Digitization is reimagining the process of maximized production in very disruptive ways. In fact, of all the steps and business models described in this article, this one has the most disruptive effect, as it can destroy entire industries. The rethinking of the fact that several customers can simultaneously use digital goods that can be replicated at zero marginal cost reduces prices to zero. For example, large-scale open online courses provide education at near-zero marginal cost.

Understanding the innovative development of modern business models should not be based on a narrow perception of technical and technological innovations, but on the level of building relationships with customers – from loyalty to expanding opportunities.

IV. Discussions

Thus, not only companies using new business models are being transformed, but also industries. For example, in 2023, the volume of the Russian market for digitalization of industrial

business processes reached 300 billion rubles, showing a 20% increase compared to the previous year. Large enterprises are actively implementing IoT, automation, digital twins and cloud solutions to improve production efficiency and reliability [12]. Particular attention is paid to the integration of new IT systems with existing ERP and CRM, as well as ensuring information security.

The financial sector is also developing dynamically, where the introduction of digital platforms and AI allows banks and fintech companies to offer clients new services – from instant payments to personalized financial products. Not only digital banks are developing, but also decentralized financial services (DeFi), which leads to a decrease in the role of traditional banks and the emergence of new monetization models [11].

Retail actively uses cloud technologies, AI and analytics to optimize supply chains, manage product ranges and personalize customer experience [14]. In 2024, the growth of phygital models (integration of online and offline channels) is observed, as well as the development of social and subscription services.

Small businesses are increasingly integrating digital solutions through partnerships with IT companies and startups. Flexibility, speed of innovation, and the ability to build win-win partnerships are becoming key success factors.

At the same time, digitalization creates significant barriers and threats for companies and the economic system as a whole. Among them, the most pressing issues today are personnel shortages, cybersecurity, data management, and for certain countries – import substitution and integration due to the breakdown of established international economic ties.

Personnel shortages.

The shortage of specialists in digital technologies and AI, as well as insufficient digital literacy of staff, remains an acute problem.

Import substitution and integration.

In conditions of limited access to foreign software, companies are forced to switch to domestic solutions and ensure compatibility between new and old systems, which requires significant investment and expertise.

Cybersecurity.

The growth of digitalization leads to an increase in the risks of cyber-attacks and data leak, which requires the implementation of modern security tools and compliance with regulatory requirements.

Data management.

The significant growth in data volume requires the development of storage infrastructure, integration of disparate sources and the implementation of a single digital loop for end-to-end analytics.

Trends and prospects for 2025.

- Accelerated cloud-based expansion: many companies are switching to cloud services to increase flexibility and resilience.
- AI Integration and automation: AI is becoming an integral part of business processes, from customer service to production management.
- Transition to ecosystems: companies are building partner networks and digital platforms, combining various services and products.
- Focus on information security: a significant share of investments is directed towards protecting data and critical infrastructure.
- Import substitution and development of domestic IT solutions: Russian companies are actively introducing local digital products and services.

In general, the digital economy presents new opportunities and is undoubtedly a positive factor in the socio-economic life of society. Intangible (digital) assets play a significant role in the capitalization of companies and in modern conditions, they are taking priority positions.

Digital data is a key resource of the digital economy. Economic growth is ensured on the basis of digital data and digital technologies. The digital economy is characterized by an increase in the share of knowledge, innovation, and growth in the share of the service sector that dominates over the production sphere. At the same time, the implementation of digital technologies in a company depends on its organizational [8] knowledge of Internet technologies, mobile communications, electronic payment technologies, logistics, and technologies for creating and using robotics.

The disruption of business models in the context of digitalization is becoming an integral part of modern business. The success of companies is determined by the ability to quickly adapt to technological changes, integrate innovative solutions and build effective ecosystems. Key challenges remain personnel shortages, cybersecurity issues and the need for comprehensive integration of IT systems. In the coming years, we can expect further acceleration of digital transformation, development of domestic solutions and increased competition in the digital ecosystem market.

CONFLICT OF INTEREST.

Authors declare that they do not have any conflict of interest.

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