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# Development of the Organization Ecosystem through the Implementation of Digital Technologies

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Abstract : The article examines the main problems that Russian organizations face when implementing digitalization in the process of developing their ecosystem through the use of modern digital technologies. main approaches to the development of the organization's ecosystem through the implementation of digital technologies. The paper presents the results of a study of stakeholders , in particular the owners of organizations that are actively implementing digital technologies in their business processes. Successful examples of the implementation of digital technologies in organizations are presented, which helped to understand the features of the implementation of digital technologies in the ecosystem. The article provides a SWOT analysis of the assessment of strengths and weaknesses, opportunities and threats to the organization's ecosystem in the context of the implementation of digital technologies. To develop the ecosystem of organizations, the author notes the need to implement cloud technologies, use big data, develop mobile applications and automation business processes .

Today, digital technologies play a key role in the development of an organization's ecosystem. There are many reasons why digital integration is important, the first of which is the increasingly extensive digitalization of the world and every daily aspect that makes up human life.

Most studies focus on the challenges organizations may face when integrating new digital tools and services into existing operational business processes. First of all, the studies note that successful integration often requires significant time and resources to train staff in new technologies [1, p. 44 ]. New tools may not support integration with existing systems, which leads to additional costs for modernization [2 ]. Assessing the return on investment from implementing digital tools can be difficult, and sometimes the results do not meet expectations [3 ]. Developing and scaling new technologies within an ecosystem requires additional effort and resources, as successful implementation of the ecosystem requires a change in organizational culture and approach to interaction [4 ].

The presence of these problems is confirmed by the study "Monitoring the Digital Transformation of Business" by the Institute for Statistical Studies and Economics of Knowledge (ISSEK) of the National Research University Higher School of Economics, conducted in 2023, which showed that about 50% of Russian organizations use digital technologies in their activities [5. ]These problems require careful and strategic study in the process of introducing digital technologies into business and developing the organization's ecosystem.

The main objective of the study is to study the main approaches to the development of the organization's ecosystem through the introduction of digital technologies.

In accordance with the stated objective of the study, the following tasks were defined:

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- define the essence and concept of the organization’s ecosystem;
- determine the role of digital technologies in the organization’s activities;
- to reveal the main approaches to the development of the organization’s ecosystem through the introduction of digital technologies.

The main methods used in the study include

- Case method. Studying successful and unsuccessful examples of digital technology implementation in organizations will help to understand best practices and possible mistakes.
- In-depth interviews: Conducting conversations with key stakeholders to gain more detailed information about their opinions and experiences.
- SWOT analysis: assessment of strengths, weaknesses, opportunities and threats to the organization's ecosystem in the context of the implementation of digital technologies.

Today, there is much talk about ecosystems and platform economies of organizations (hence the expression "platform economy "). In essence, these are technological and, above all, organizational and business innovations that have and will have an increasingly profound impact on organizations, the economy and society as a whole. A business ecosystem is understood as a network of organizations that interact with each other to create and exchange sustainable value through cooperation and competitiveness (competitive cooperation) [12, p. 80 ].

Digital transformation integrates the entire ecosystem involved, promoting transparency, exchange and inclusion . This approach places the final recipient at the center of the process, ensuring efficient and informed access to the services offered, whether tangible or intangible assets or data.

To study the main approaches to developing an organization's ecosystem through the introduction of digital technologies, a survey of stakeholders was conducted , in particular the owners of organizations that are actively introducing digital technologies into their business processes.

According to the study, out of 100 digital transformation decision makers, 75% would choose a phased digital transformation strategy rather than implement it all at once. Among those who do not yet have a digital transformation strategy (24%), most agree that going digital is important. However, the same respondents also added that they do not have the means to implement it (59%).

Most stakeholders note that the implementation of digital technologies improves work efficiency and accelerates business processes when forming an enterprise ecosystem. Many participants emphasize that successful integration of technologies requires additional training of employees and their advanced training.

Stakeholders emphasize the importance of cross-functional collaboration, which is supported by digital tools. Some participants mentioned the presence of outdated systems and equipment, which makes it difficult to implement new technologies. It was revealed that some employees are afraid of new technologies and prefer familiar ways of working.

Most stakeholders agree that digitalization improves customer service and increases customer loyalty.

Private sector participants emphasize that digital technologies provide new opportunities for data analysis and business management. Stakeholders express confidence that the implementation of technologies will lead to economic benefits and competitive advantages in the long term. Participants’ opinions point to the importance of a clear strategy and action plan for the successful implementation of digitalization .

The discussions revealed that combining different digital solutions can lead to a more powerful and integrated ecosystem. The study revealed an imbalance between awareness and action. On the one hand, respondents were aware of the need to implement a digital transformation strategy. But on the other hand, few had actually developed a strategy. In this regard, a digital transformation strategy also depends on collaboration between different departments within a company. For example, the IT department may consider investing in the cloud. Operations will focus on ensuring that these investments are used for data analysis. Instead, the marketing department will prefer to invest in digital channels. These departments must be aligned, and the digital transformation strategy must take into account and meet these different departmental needs.

Thus, interviews with key stakeholders provided valuable information that will help develop and implement more effective strategies for introducing digital technologies into the enterprise ecosystem.

The study examined successful cases of implementing digitalization in organizations that have their own ecosystem.

Russian Post has developed a mobile application and web platform through which you can track parcels, pay for services and even order home delivery. The introduction of a queue management

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system in branches allows you to reduce waiting times and improve customer service.

Automation of business processes was implemented:

1. Sorting procedures. The introduction of modern automated sorting complexes accelerates the processing of postal items and reduces the likelihood of errors.

2. Use of AI. Artificial intelligence technologies help in analyzing data on customer preferences and optimizing logistics routes.

However, the implementation of digital technologies in Russian Post encounters many difficulties. Despite attempts to improve work through digitalization , problems with the quality of service and slow adaptation to new technologies remain relevant.

The following problems of introducing digitalization into the Russian Post ecosystem can be identified. Implementation problems

1. Infrastructure limitations: Some departments are left with legacy systems, making it difficult to transition to new technologies.

2. Need for staff training. Implementation of digital solutions requires training of employees, which is also a challenge for the organization.

Despite the difficulties, the implementation of digitalization at Russian Post is already bearing fruit in the form of increased convenience for users and acceleration of internal processes. However, to achieve complete success, it is necessary to continue working on adapting technologies and improving the customer experience.

Russian Railways is actively implementing digitalization in train traffic management and logistics. JSC Russian Railways has developed and is implementing a single digital platform for managing all processes, including cargo transportation planning, train traffic management and passenger services. The use of monitoring and data analysis systems has improved the safety and efficiency of transportation. Using analytical tools to process large volumes of data, allowing us to predict service needs and optimize logistics.

Today, there is an active creation and development of mobile applications for passengers, allowing them to quickly purchase tickets and track the schedule.

It should be noted that the need to integrate new digital solutions with legacy systems can create difficulties during the implementation process. It is also important to train staff to effectively use new technologies and systems.

Digitalization in the JSC Russian Railways ecosystem opens up new horizons for improving the quality of services and the efficiency of the company. Successful implementation of these initiatives can significantly change the face of rail transport in Russia, increasing its competitiveness.

A SWOT analysis of the assessment of strengths, weaknesses, opportunities and threats to the organization's ecosystem in the context of the implementation of digital technologies showed the following results :

- The strengths of Russian companies include the availability of investments, the willingness of employees to undergo training, and access to modern digital technologies.
- The weaknesses of Russian companies include insufficient integration of existing systems with digital technologies and limited financial resources for the implementation of innovations.
- The main threat remains rapid changes in digital technologies, which require constant updating of employees' knowledge and additional financial resources.
- The main opportunities for the Russian market remain increasing productivity through the implementation of digital solutions, as well as attracting new clients through the implementation of innovative solutions.

A common mistake is to focus a digital transformation strategy solely on the business, while ignoring who it is intended for. Taking the interests of the end consumer into account should be a key element in developing a digitalization strategy . It is important to invest time and resources in understanding your target audience, their needs, values, and desires. It is necessary to look at the situation from the eyes of the organization's customers, research their needs and anticipate their expectations. Based on this information, it is necessary to form your value proposition. Modern technologies and processes, such as big data and predictive analytics, play a decisive role today.

The development of a company's ecosystem through digitalization can be achieved in various ways:

1. Implementation of cloud technologies. The transition to cloud solutions allows access to data and applications from anywhere in the world, improving collaboration and reducing IT infrastructure costs.
2. Use of Big Data. Big data analysis helps identify trends and customer preferences, allowing you to tailor offers and improve service quality.

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3. Mobile Application Development: Creating mobile applications for customers and employees simplifies access to services and information, increasing user satisfaction.

4. Automation of business processes. Implementation of automation systems helps to optimize routine tasks, reducing the human factor and increasing the speed of operations.

Thus, digitalization opens up many opportunities for the development of the company's ecosystem, improving both internal processes and interactions with customers and partners. Continuous investment in new technologies and adaptation to changes remain key factors for successful growth.

Today, digitalization opens up opportunities for the implementation of new technologies and business models, such as the Internet of Things ( IoT ), artificial intelligence and blockchain . This allows the company to remain competitive in a rapidly changing market.

Digitalization facilitates more efficient interaction within the company and with external partners, which increases coordination and reduces risks.

Thus, digitalization becomes a key factor for the development and sustainability of a company in modern conditions. It helps not only to optimize internal processes, but also improves interaction with customers and partners, which ultimately leads to business growth and success.

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