## BUSINESS ADAPTATION TO THE DIGITAL TECHNOLOGIES IN THE CIS AND BELARUS

## Адаптация бизнеса к цифровым технологиям в СНГ и Беларуси

Digital transformation is a process in which companies implement advanced digital technologies to optimize business processes, improve customer experience and increase competitiveness in the market. In the CIS countries and Belarus, digital transformation is becoming particularly relevant as regional businesses begin to adapt to global standards and actively implement innovative solutions.

The aim of this study is to explore how businesses in the CIS countries, including Belarus, are adapting to digital technologies. The research focuses on key aspects of this process, highlighting its advantages and disadvantages. It seeks to analyze the impact of digitalization on competitive strategies, its effects on traditional industries, and the challenges and opportunities it presents for businesses in the region.

In recent years, the CIS countries and Belarus have begun to actively invest in digital transformation, striving to get closer to world standards. More and more companies in Belarus are eyeing cloud solutions in an effort to increase scalability and accessibility of data. At the same time, much attention is paid to cyber security since the increased use of digital technologies raises the chances of cyber attacks.

Another important area is the creation of digital ecosystems that include comprehensive services for customers. Such ecosystems allow companies to retain customers by offering them not only basic products, but also additional services. For example, in Belarus, Alfa-Bank has created an entire ecosystem combining financial, educational and entertainment services, which is becoming an increasingly popular practice in the CIS countries.

It is also worth noting the transition to remote work and hybrid models, which accelerated significantly with the onset of the COVID-19 pandemic. These changes require a review of management processes and enhanced data protection measures. In Belarus and other CIS countries, many companies have already implemented hybrid work models to adapt to new conditions.

While the prospects for digital transformation in the CIS countries are glaringly obvious, there is a number of challenges that will slow down the pace of new technology introduction. First, the significant costs in terms of finance required for digitalization act as a serious deterrent, especially for small and medium companies, to cover the expenses of technologies like artificial intelligence and cloud services.

In addition, the shortage of qualified personnel remains one of the key problems. For successful digitalization, businesses need specialists in the field of IT, analytics and data management, and this disadvantage slows down the processes of introducing new technologies.

Another problem is the increased threat to data security associated with an increase in the number of digital transactions. Companies are forced to spend significant amounts of money on protecting information by developing cybersecurity strategies, which can also constrain the process of digitalization.

The situation is further complicated by the existence of administrative and bureaucratic barriers, which sometimes impede access to the latest technologies and complicate the digitalization process for businesses in the CIS countries and Belarus.

For the successful development of digital transformation in the CIS countries and Belarus, it is necessary to focus on several strategic directions. First, it is important for states to develop IT infrastructure and implement business support programs, providing tax incentives for IT companies and startups, which will accelerate the pace of digitalization.

To sum up, digital transformation is an opportunity for CIS companies and Belarus to adopt modern challenges and raise their competitiveness in the international arena. Introduction of new technologies improves not only management processes but also opens new perspectives.

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## THE INTEGRATION OF INFORMATION TECHNOLOGIES AND MATHEMATICAL MODELING IN ENHANCING BUSINESS EFFICIENCY

## Интеграция информационных технологий и математического моделирования в повышение эффективности бизнеса

As globalization and digital transformation reshape the business landscape, organizations face unprecedented challenges and opportunities. In this context, information technologies (IT) and mathematical modeling have emerged as indispensable tools that enhance operational capabilities and notify strategic decisions. IT encompasses a wide range of technologies, including data management systems, artificial intelligence, and machine learning, which alleviate the collection and analysis of large datasets

The integration of IT with mathematical modeling operates on daily basis resulting in the analytical reports of organizations. Thus, businesses can enter real-time data into