



DIGITAL TRANSFORMATION IN INDUSTRIAL ENTERPRISES IMPORTANCE AND PROSPECTS

Ruhshona To'ychiyeva Arslonbek qizi
2nd Year Student of TSTU

Abstract

This article discusses the application of digital transformation in industrial enterprises, the main issues in organizing digital transformation processes in enterprises. The purpose of this study is to identify the main problems and opportunities in organizing digital transformation processes in industry based on statistical analysis methods. The main problems of digital transformation were analyzed, a number of problems and obstacles to digital transformation were studied. The article also presents opinions on foreign experiences of the digital transformation process, its role in the economy, advantages and disadvantages, and solutions.

Keywords: Digital transformation, digital economy, digital technologies, internet, innovation, process digitization, industrial enterprises, digitization, business models, digital business model, ecosystem, digital transformation ecosystem, digital innovations.

Introduction

Digital transformation offers industrial companies the opportunity to reimagine their businesses with new digital processes and tools. However, as with any change management initiative, industrial companies face people challenges, structural challenges, technical barriers, and everything in between during the transformation process.

Digital transformation is the integration of digital technologies into all areas of business, fundamentally changing the way industries operate and deliver value to their customers. It is also a cultural shift in the industry that requires industries to constantly challenge existing situations, experiment, and avoid failure. Digital transformation is essential for all industries, from small businesses to large industrial enterprises. Digital transformation plays a critical role in how businesses can compete in today's



increasingly digitalized world. However, many business leaders still do not understand what digital transformation means. In particular, one of the important tasks for industrial business owners is how to effectively use digital transformation for the activities of industrial enterprises. Digital transformation is a major challenge for small and medium-sized enterprises today. In particular, it can create difficult situations for traditional industrial enterprises that are losing their ability to adapt to the threat of digital transformation. Therefore, it will be necessary to choose alternative options for the development of industrial enterprises, and in this case, business owners should pay more attention to the opportunities of digital transformation. A fully digitalized industry is a powerful combination of people, technology and organizational skills that are well adapted to today's economic and social environment. In particular, digitalization offers significant advantages and opportunities. Digital technologies are changing the global economy and the rules of business in industrial enterprises, introducing new business models and redefining the category of business success.

Due to digital transformation, industrial enterprises and organizations are changing the way they work, that is, digital technologies allow them to do things faster and more cost-effectively, and in many cases contribute to creating convenience for their customers and offering additional opportunities. Digital transformation enables the creation of different models of tasks in industrial enterprises and allows for the creation of a completely new portfolio of coordination mechanisms based on modern information and communication technologies. Digital technologies play a significant role in digital transformation and include computer hardware, software, transmission networks, servers, programming languages, large-scale integrated circuits, algorithms and all the components and practices related to these various technologies. Digital technology enables the integration, storage and transmission of large amounts of data in industrial enterprises and rapidly changes the way employees can work. Digital transformation is more about the introduction of new software, technologies and processes that are more efficient and automated than traditional business practices. It is a completely new, innovative way of doing business. Digital transformation can be difficult to define because it looks different for every company. However, in a general sense, we define digital transformation as the integration of digital technologies into all areas of a business. The result is a fundamental change in how industries operate and how they deliver value to customers. It is also a cultural shift that requires



industries to constantly challenge existing situations, experiment frequently, and fail. This sometimes means that long-standing business processes built by industrial enterprises are still being used and working in favor of new practices over the old ones.

The "Digital Uzbekistan - 2030" strategy sets the following goals for the digital transformation of industrial enterprises: Development of "driver" industries and full utilization of the industrial potential of the regions. Through this, it is planned to produce import-substituting products by large enterprises and expand cooperation with regional enterprises. To increase the volume of added value in the industry to \$ 45 billion and create 2.5 million high-income jobs. To establish modern technological industrial zones in each district. It is planned to develop industry in these regions through the introduction of digital technologies. To increase the number of IT park residents by 10 times, to increase the share of the volume of services provided by them in GDP to 2.2 percent, and to increase the number of jobs created in them to 100 thousand. Through this, it is planned to widely introduce digital technologies in industrial enterprises.

As one of the enterprises that have successfully undergone digital transformation in Uzbekistan, one can cite the example of Tashkent Thermal Power Plant JSC. Automated control systems for technological processes have been introduced at this enterprise, and the power unit is being operated effectively. This shows that the "Digital Uzbekistan - 2030" strategy is being implemented in practice. The "Digital Uzbekistan - 2030" strategy also sets goals such as fully covering all settlements with the Internet and increasing its speed by 10 times, and bringing the speed of international Internet connection to 5000 Gbit/s. This creates the basis for the digital transformation of industrial enterprises.¹

Industrial enterprises must understand that digital transformation is a completely new, innovative way of doing business, and not just about implementing new software, technologies and processes that are more efficient and automated than traditional business methods. It is a process in which industrial enterprises consider how people respond to change, how it affects customer relationships, costs, and how it meets business objectives when implementing a digital transformation initiative. This

¹ "Digital Uzbekistan – 2030" strategy



process allows industrial enterprises to pass on their business to the next generation and allows companies to compete and expand into new areas.

In short, today it is impossible to imagine the activities of industrial enterprises, leading companies, the administrative sector and services without digitization and digital transformation. Today, digital transformation is the integration of digital technologies into all areas of business, fundamentally changing how a company operates and how it delivers value to customers. It is also a set of cultural changes that require industrial enterprises to confront existing situations, constantly change their work processes, experiment and deal with failure. We believe that in order to overcome the challenges of digital transformation in industrial enterprises and to enable enterprises to realize their potential by leveraging new digital systems and technologies, the following actions need to be taken:

1. Ensure that the company is always ready for new changes:

All employees should be prepared for the changes that may occur during the digital transformation process. Among them, influential, innovative and reliable employees should be identified. These high-level change-ready leaders should be used to form a cohesive team. This team will help create a vision for the digital transformation process that is aligned with the business goals of the industrial enterprise. In addition, organizations can proactively approach digital transformation initiatives, focusing on the human aspects of change, and ultimately accelerating digital transformation.

2. It is necessary to cooperate with consulting firms engaged in digital transformation: In industrial enterprises, a new change does not mean that a digital transformation has occurred. Digital transformation is a complete restructuring of core processes, tools and experiences. Most industrial enterprises have never experienced a full transformation process and are afraid to move into a digital transformation process. In this, companies are mainly helped by consulting firms engaged in digital transformation processes. Consulting firms develop strategies for implementing digital transformations that are suitable for the industrial enterprise, predicting their results and preparing employees for it.

3. Align your business goals with your digital transformation strategy: First, you need to understand the reasons for your business's digital transformation. When implementing digital transformation processes, you need to have complete control over the work being done in your business. You need to identify your customers' needs, as well as pain points and bottlenecks in your products and services. You need



to analyze your current processes to identify outdated systems that need improvement. The transformation process should directly align with your business's core goals. This enables employees to perform their job functions better, improve customer experience through intuitive systems that solve more customer problems, and increase organizational revenue.

Implementing digital transformation projects is a complex process that requires careful planning, coordination, and execution. Even with proper planning and coordination, governance failures, problematic thinking, and culture still serve as barriers to successful implementation. While these challenges may seem insurmountable, they can be overcome with focused action and careful planning. By doing the above, you can successfully implement any digital strategy and increase the organization's chances of achieving its goals.

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