

Chapter 2

Digital Transformation of Small and Medium Businesses

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ABSTRACT

This chapter examines the essence and importance of digital transformation in developing small and medium-sized businesses. It is noted that digitalization uses computer technology to reshape business so that all decisions are made based on data. The main objectives of the digital transformation of SMEs are shown. The technologies accelerating digital transformation include the internet of things, artificial intelligence, e-commerce, big data, cloud technology, blockchain, etc. The tasks of managing an organization in the context of digitalization include changing the company's business processes based on advanced digital technologies, maintaining a high level of knowledge of company management and specialists in the field of modern technologies, maintaining a high degree of preparedness for changes and challenges of the external environment. The authors consider the digital transformation of SMEs in the industrial, agricultural, and commercial spheres, as well as e-commerce.

INTRODUCTION

The Essence and Significance of Digital Transformation in The Development of Small and Medium-sized Businesses

Digital transformation is a restructuring of technologies, business models and processes that provide the formation of new values for customers and employees in a constantly changing business environment in order to develop the digital economy (Aubakirova, 2020). These processes place new demands on small and medium-sized businesses (SMBs), forcing them to adopt elements of digitalization. Their importance to business is clear, as they contribute to scientific and technological progress, and open up

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opportunities for growth and sustainable competitiveness, affecting the entire production and supply chain. In addition, there is a direct correlation between the digitalization of business and its profitability. The McKinsey Global Institute estimates that productivity in digitized sectors of the economy is significantly higher because of data-driven business models. Therefore, companies around the world prefer digital technologies. Thus, according to experts' forecasts, 30% of companies from the Global 2000 list (the largest public companies in the world in 2020) will allocate at least 10% of revenues to finance their digital strategy.

Technologies accelerating digital transformation include

Internet of Things, artificial intelligence, e-commerce, big data, cloud technology, blockchain, etc. They help expand markets and export potential, often turning SMEs into micro transnational companies. Today, more and more businesses are digitizing their operations, thereby transforming their value chains and becoming more productive, competitive, and profitable.

BACKGROUND

Digitalization efforts are creating a new society where human capital is actively developing - the knowledge and skills of the future are nurtured from a very young age, business efficiency and speed are increasing through automation and other new technologies, and the dialogue of citizens with their states is becoming simple and open.

The challenges of managing an organization in a digitalized environment include the following:

- Changing the company's business processes on the basis of advanced digital technologies;
- Maintaining a high level of knowledge of company management and specialists in the field of modern technologies;
- Maintaining a high degree of readiness to changes and challenges of the external environment.

In today's environment, organizations should look at their own business in the context of the digital economy. Like it or not, the costs of research, development, consulting services, and employee training will inevitably rise as part of the digitalization of the company. Companies that are not ready for such developments will sooner or later leave the market. On the other hand, digitalization should not be an end. It is necessary to calculate the efficiency of these or those changes to be sure that the key processes at the enterprise will significantly improve because of digital technology implementation.

Companies that have already gone digital are facing the challenge of having to change their approach to organizational management to reflect the new digital reality. Digitalization should not be equated with automation: Automation is primarily the replacement of manual labor with the use of electronic machines. Digitalization is the use of digital computer technology to redesign a business so that all business decisions are based on data. It is not possible to digitalize a single part of a company. Digitalization cuts across the entire company, thereby achieving synergy between each area on a single digital platform. According to a study by the Boston Consulting Group (BCG), reflected in the article "Kazakhstan on its way to the digital economy," Kazakhstan ranked 50th out of 85 nations in 2016 in terms of the level of digitalization of the economy and is in the nascent digital economy group.

The digital gap between the leading countries and the lagging countries is increasing year by year. The key to maintaining the competitiveness of Kazakhstan's economy is the development of the digital

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