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Business Strategy Transformation: The Impact of Global Digitalization and COVID-19 Pandemic Factors

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ABSTRACT

The article aims to consider the business strategy transformation process in the context of global digitalization and the COVID-19 pandemic in business and the economy. To achieve the goal, the authors analyzed the notions of "IT strategy", "digital strategy" and "digital transformation strategy" and established their hierarchy; the key features of the strategy in the digital world are identified, namely: risk as the basis for development, people as the main business value and the formation of the right mindset of participants in digital transformation; the process of implementing the digital transformation strategy in the company is considered. The objective of the article was achieved through a review of the literature and the use of scientific methods, namely: comparative analysis, synthesis, and historical and logical methods. The results obtained contribute to the understanding of scientists and professionals about the development management process in the digital world.

KEY WORDS: Digital transformation, digitalization, business strategy, e-commerce, COVID-19.

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Transformación de la estrategia empresarial: El impacto de la digitalización global y los factores de la pandemia de COVID-19

RESUMEN

El artículo tiene como objetivo considerar el proceso de transformación de la estrategia empresarial en el contexto de la digitalización global y la pandemia de COVID-19 en los negocios y la economía. Para lograr el objetivo, los autores analizaron las nociones de "estrategia de TI", "estrategia digital" y "estrategia de transformación digital" y establecieron su jerarquía; se identifican las características clave de la estrategia en el mundo digital, a saber: el riesgo como base para el desarrollo, las personas como el principal valor empresarial y la formación de la mentalidad adecuada de los participantes en la transformación digital; se considera el proceso de implementación de la estrategia de transformación digital en la empresa. El objetivo del artículo se logró a través de una revisión de la literatura y el uso de métodos científicos a saber: análisis comparativo, síntesis y métodos históricos y lógicos. Los resultados obtenidos contribuyen a la comprensión de científicos y profesionales sobre el proceso de gestión del desarrollo en el mundo digital.

PALABRAS CLAVE: Transformación digital, digitalización, estrategia empresarial, comercio electrónico, COVID-19.

Introduction

Digital technologies have become the driving force that changes the way enterprises develop, overcomes difficulties, and creates new opportunities for building relationships with stakeholders to create value for the business. In the era of digital technologies, only companies that accept the rules of the digital environment and put their transformation and agility as the priority ways of doing business will be able to remain competitive. At the same time, a lot of "immature" enterprises make a strategic mistake when they make an emphasis on technologies and do not understand how important strategic management is in the process of enterprise development. Thus, they become unprepared for the constant need to adapt to the changing digital world.

The purpose of the research is to consider the transformation of the notion of "business strategy" in the context of digitalization and the COVID-19 pandemic as well as to study the impact of digital technologies on the strategic planning and implementing of business strategies, particularly in e-commerce enterprises. To achieve the goal, the authors decided to break it down into the following objectives:

- to conduct a comparative analysis of the concepts "IT strategy", "digital strategy", and "digital transformation strategy" for a better understanding of the relationship hierarchy;
- to identify the distinctive features of strategies in the digital world which differ them from the traditional offline strategy;
- to consider the process of planning and implementing the digital transformation business strategy.

1. Literature Review

Digital transformation is an important phenomenon due to its relevance and importance in economic and social development. The study of the digitalization processes and digital transformation and their impact on various aspects of enterprise functioning is becoming increasingly relevant, and the focus of both developed and developing countries is on finding ways for the sustainable development of enterprises, as well as increasing their resistance to system calls, for example, COVID-19. At the same time, researchers continue to study the concept of business strategy, its impact on the survival and performance of the organization, and its ability to respond to system calls.

The issues of digital transformation of business and economy are reflected in many scientific studies, including the following: Battisti E. (2022); Gaglio C. (2022); Kao L.-J. (2022); Katsamakos E. (2022); Li L. (2022); Peng Y. (2022); Piepponen A. (2022); Proskurnina N. (2020); Tabaghdehi S.A.H. (2022); Tian G. (2022); Weber E. (2022); Wu K. (2022); Xue L. (2022). Yu H. (2022). Among the actual themes of the digital transformation impact on business strategies, the authors can highlight the issues of managing the digital transformation process; the impact of digital technologies both on individual processes and on the value proposition of enterprises as a whole; improving understanding of how the introduction of digital technologies affects the actions of owners, top management, staff, and consumers of enterprises during distribution, and how their impact on the development of the enterprise can be conceptualized, as well as the relationship between the introduction of digital technologies and the effectiveness of the company. At the same time, the significant number of publications was aimed at the impact of digital transformation on the risk adoption by enterprises in varying degrees, which became especially relevant during the COVID-19 period, when enterprises are forced to work in an environment characterized by a high degree of risk and uncertainty regarding the future. Thus, the efforts of researchers are

increasingly focused on studying the issues of changing the essence of business strategy in the context of digitalization and how it makes enterprises more sustainable and competitive.

The use of different methodology helps to increase the acquisition of valuable insights in the research process: for example, research uses both qualitative (Piepponen, 2022) and quantitative methodology (Proskurnina, 2022), as well as a mixed approach (Kao, 2022), which allows scientists to approach the consideration of such a complex phenomenon as business strategy from different perspectives.

The authors of the article (Piepponen, 2022) consider the impact of digital transformation on the value proposition as a key element of the company's business model. Researchers use the method of a single case study to understand how digital technologies change the nature and content of value propositions as well as key factors and the consequences of value elements transformation. The research of scientists (Tian, 2022) was investigated the impact of digital transformation processes of companies on their corporate risk-taking. According to the authors' results, it is determined that digital transformation has a positive effect on risk-taking and brings a set of positive operative and financial effects. The aim of the study (Gaglio, 2022) was to identify the relationship between digital technologies, productivity, and innovation efficiency. The result of the study made it possible to identify the positive impact of digital technologies on innovation, which in turn affects labor productivity.

In the research (Peng, 2022) the possibilities of stimulating the innovative impulse with the help of digital technologies were investigated. The authors used the panel measurement model and concluded that reducing costs, increasing revenue, improving efficiency, and encouraging innovation are the main ways of digital transformation for the development of enterprises.

The study (Weber, 2022) examines the concept of leadership in digital transformation, where the authors investigate the relevance of the existing roles of the system of competitive value (CVF). Researchers also emphasize the need to complicate the existing behavioral roles of leaders to overcome the leadership challenges caused by digital transformation. The researchers' article (Kao, 2022) is focused on developing the dimensions and criteria for assessing the status of digital transformation in the retail industry with the use of focus groups interview (FGI) and data development analysis (DEA). The result of the

study shows that management of internal operations is crucial and control of resources and scale allocations is necessary to prevent reductions in technical efficiency.

The author of the research (Tabaghdehi, 2022) considered the digital economy and the digital transformation in the context of overcoming uncertainty during COVID-19. The author also provides a study of the structure of digital supply and digital consumption, as well as its opportunities and challenges in the transition of enterprises to the digital economy. The authors of the article (Xue, 2022) consider the role of digital transformation in promoting green technology innovations and the need for the government to formulate a financial policy aimed at supporting such enterprises. This financial policy should include supporting the readiness of enterprises to introduce green technology innovations and increase the volume of digital transformation of enterprises.

Given the significant number of publications, the question of how exactly the business strategy is transforming in the context of global digitalization and the impact of COVID-19 on business remains insufficiently studied.

2. Methodology

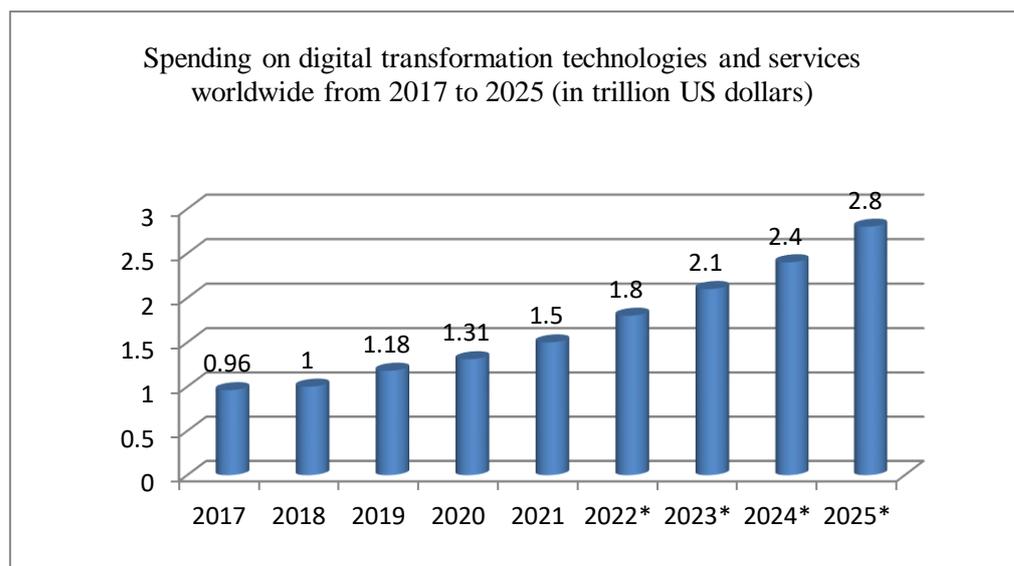
In this study, the authors use literature review and scientific methods of comparative analysis, synthesis, historical, and logical methods. The transformation of the strategy is explored with the use of systemic approach which allows considering the phenomenon of digital transformation through a set of interconnected elements connected by interconnections and a single purpose, which causes their awareness as a single whole. Among the advantages of using the system approach are universality, logicity in use, significant cognitive potential, and significant opportunities for research structuring (Gonta, 2017). The systemic approach will allow the authors to consider a company operating in the context of digital transformation as a system. This approach allows the authors to consider different aspects of the phenomenon for more comprehensive understanding. The systemic approach is used by the authors in forming the process of digital transformation strategy implementation.

3. Results

Digital transformation makes it possible for business to gain competitive advantages and neutralize the negative impact of such global events like COVID -19. Digital technologies

are spreading rapidly, occupying a solid place in business and the economy. Statista shows that spending on digital transformation technologies and services worldwide from 2017 to 2025 (in trillion US dollars) (Fig.1) will be tending to increase (Statista, 2022).

Figure 1. Spending on digital transformation technologies and services worldwide from 2017 to 2025 (in trillion US dollars)



Source: built by the authors from (Statista, 2022).

To gain the maximum effectiveness from investment on technology, companies must understand what place technologies have in the company's overall understanding of its future development. The key drivers and impacts are the main forces in implementing digital transformation in the business activity (Fig.2). Among such traditional attributes as digital technologies, digital capabilities, business models, value chain, such attributes as digital transformation strategy, digital maturity, and digital culture find their reflection according to new digital reality. The influence of these components on the development of the company cannot be underestimated.

The key conditions for the strategic development of companies in the era of digital transformation are to respond to positive opportunities and threats of the external environment, to search for action algorithms in the conditions of the new reality, as well as to transform "the traditional values into digital values" (Turuk, 2020). Simultaneously, the problem of many companies is the principle of "technology for technology", which can neutralize the number of positive effects of digital transformation, when the company does

not realize the difference in chances that can help it radically change the way of functioning and making profit.

The problem of this approach is partly that many authors still cannot agree on the concepts of "digital transformation", "digitalization" and "digitization", thereby "fixing" the maximum level that can be achieved by making focused efforts on the strategic development of the company. For example, OECD explains that "digital transformation refers to the economic and societal effects of digitization and digitalization" (OECD, 2022). But this approach limits the essence of digital transformation by reducing it to obtaining a relatively limited cost saving effect on business processes by increasing the efficiency of these processes. Thus, the use of digitalization allows optimizing operations, form large networks of qualitatively new links and exchange information in the process of distribution of goods from producers to consumers (Ivanova, 2022).

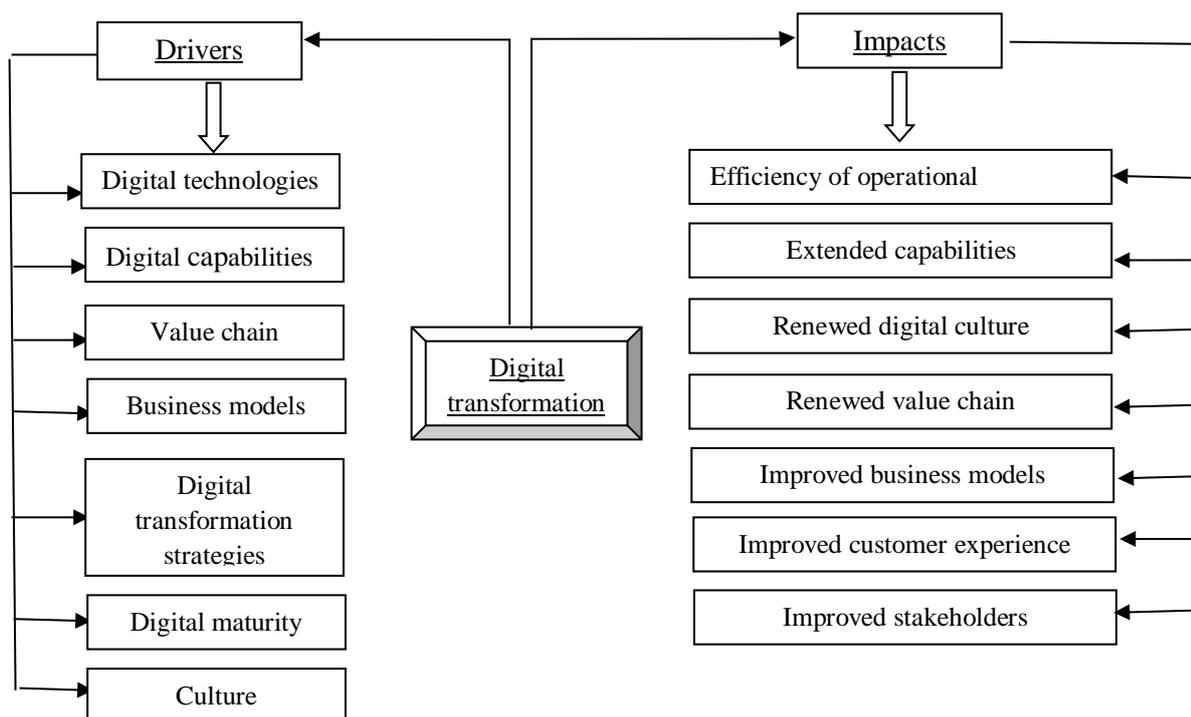
According to (Ilcus, 2018) digitalization of the enterprise could bring the following benefits:

- improve business process efficiency, quality and consistency;
- integrate records with digital systems;
- improve accessibility and facilitate better knowledge sharing;
- improve response time and client service;
- reduce costs;
- to increase staff flexibility;
- increase confidence in business continuity;
- increasing customer satisfaction.

But it is a mistake to assume that such changes can significantly change the company's activities because certain aspects of the processes are susceptible to change while the company's philosophy about doing business remains unchanged. Thus, there is no transformation of the company's understanding of the opportunities it acquires from changing the way of doing business. Some authors emphasize the need to distinguish between the concepts of "digitalization" and "digital transformation". According to Bloomderg, digitalization is "the process of employing digital technologies and information to transform business operations" while digital transformation "refers to the customer-driven strategic business transformation that requires cross-cutting organizational change as well

as the implementation of digital technologies" (Forbes, 2018). The need to maintain such significant changes in the company requires strategic management of the digital transformation process in the company. Horlach (2017) claims that digital transformation entails tactical and strategic business moves that are triggered by data-driven insights and the launch of digital business models that allow new ways of capturing value.

Figure 2. Key drivers and impacts of digital transformation



Source: built by the authors

At the same time, the issue of how technology adoption affects the business strategy of enterprises becomes relevant. In this context, e-commerce technologies are of interest, which are broadly defined as “the process whereby traditional trade is carried out by electronic methods” (Qin, 2014: 3). Among the existing points of view on the concept of electronic commerce, (Kalakota, 1997) distinguish communication, business process, service, and online perspectives. Basarir-Ozel (2017: 2) emphasize the “transformational initiative for organizations” necessary for survival in the digital environment. For example, Alzahrani (2018) claims that the introduction of e-commerce has affected the planning processes in enterprises, as well as their business strategy. The authors emphasize the need to adapt the strategies of enterprises under dynamic changes to increase the survival and competitiveness of the enterprise.

The transfer of value in the process of interaction between the enterprise and the consumer becomes the key essence of business strategy in the context of digitalization. According to Laudon (2013), e-commerce is only fully exploited when value is exchanged in the form of goods and services outside the firm, and profits come from the high value perceived by the consumer of the products and services (Li, 2012). At the same time, it is information and communication technologies (ICT) that provide the opportunity to reconfigure existing business and trade relationships, as well as the opportunity to introduce new operations (Burt, 2003). In this case, it is the presence of a strategy adapted to modern realities that can catch the changed processes and relationships, as well as give them a new meaning and direct them to development.

These differences in understanding the role of strategic development led to the fact that many companies perceive digital transformation as a series of projects to automate business operations and introduce technologies into separate strategies of activity (marketing, logistics, etc). According to Demirkan (2016: 14) "the profound transformation of business and organizational activities, processes, competencies, and models to fully leverage the changes and opportunities brought by digital technologies and their impact across society in a strategic and prioritized way". This definition makes it possible to understand the importance of having a thoughtful and long-term action plan made by top managers that affects the whole company and the way it creates ideas and acts in the digital environment.

The changes in strategy in the process of digital transformation are fast and disruptive which requires deeper scientific research for a better understanding of their essence. The issues of what exactly the strategy in the digital world is, the levels of its implementation, and the degree of coverage of the company's main business processes are required for a better understanding among scientists. The main difference between digitally 'mature' companies and 'immature' companies is that the latter represents the IT strategy as the main strategy that they must manage in their operations, often ending their pursuit of digital transformation there.

It should be noted that the IT strategy that "immature" companies take as the leading strategy is "Focused on solving discrete business problems with individual digital technologies" (Kane, 2015: 3) Using this approach, companies manage IT infrastructure and

operational activities, paying little attention to innovation and transformation of value based on the process of interaction with the client (Matt, 2015). This makes it possible to argue that the IT strategy is one of the functional strategies of the company but cannot play the main role and guide companies in their activities. This is confirmed by the shift in the focus of perception of the IT strategy as subordinate to the general business strategy of the company. Bharadwaj (2013: 473) states that digital business strategy "is much more than a cross-functional strategy, and it transcends traditional functional areas (such as marketing, procurement, logistics, operations, or others) and various IT-enabled business processes (such as order management, customer service, and others)". But this approach to strategic transformation cannot be considered final and comprehensive because it lacks transformational steps, or, in other words, tactical actions leading to the ultimate goal.

The authors of this article accent that the digital transformation process is most accurately and comprehensively covered by the digital transformation strategy, which, according to Matt (2015: 339) "serves as a central concept to integrate the entire coordination, prioritization, and implementation of digital transformations within a firm".

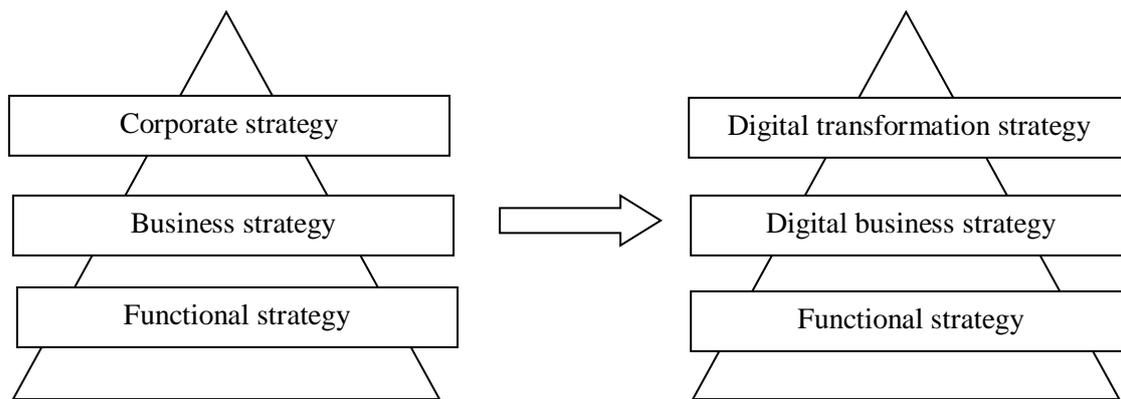
A digital transformation strategy is considered to be an overarching and company-wide strategy guiding an organization in its entire digital transformation journey. The authors states that it helps companies to clarify the initial goals and outline ways to use opportunities and resources, as well as transform the company's activities into three key areas: operational, customer-focused, and business models. Illustratively, the transformation of the concept of strategy in the digital world is shown in Fig. 3.

There are three key elements of strategy development: the ability to plan and execute the activities for realizing those plans, and the ability to respond to both threats and opportunities in a timely manner (Turuk, 2020). The implementation of the strategy in the company's system provides the opportunity to interact with stabilization and economic development, the satisfaction of social needs and social responsibility, and safety of the environment as the key elements of sustainable development (Ivanova, 2022).

Essentially, the strategy is a "safety cushion" that allows companies to reduce the negative effects of emerging obstacles on the way to the company's development. In the era of digital transformation, these negative effects can manifest even faster and more radically, which requires constant updating of existing information about changes that occur in the

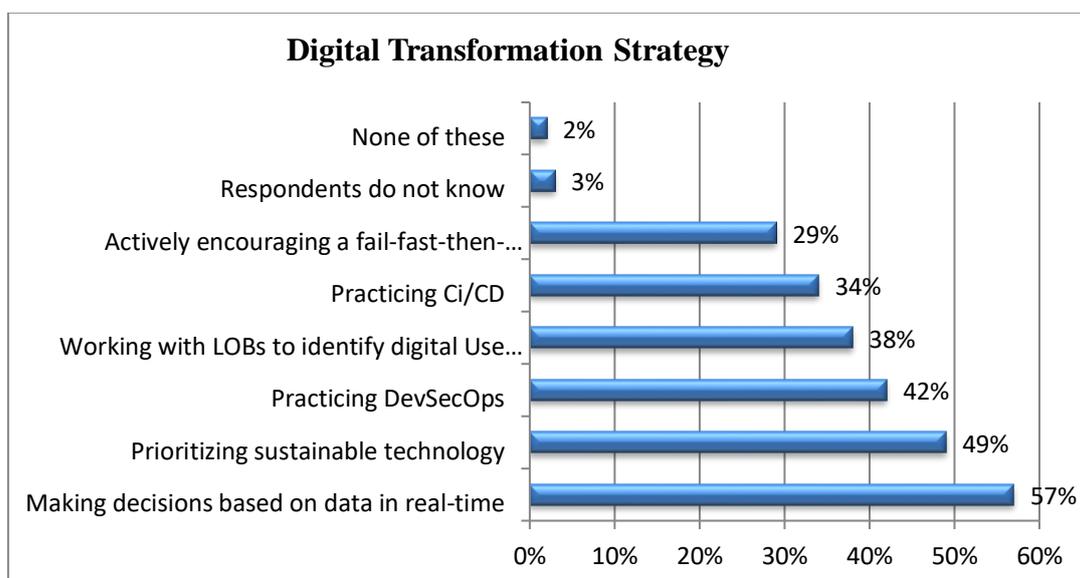
external environment, and the formation of an adequate response to these changes. According to Dell Technologies (2020), among the main barriers to digital progress, 18% of companies argue for the lack of coherent digital strategy and vision. According to Dell Technologies (2020), the most common steps that companies are doing for implementing their digital transformation strategy are presented below (Fig. 4).

Figure 3. The transformation of the concept of strategy in the context of digital transformation



Source: adapted by the authors

Figure 4. Steps for implementing digital transformation strategy in companies, 2020



Source: built by the authors from (Dell Technologies, 2020).

As can be seen in Fig. 4, the majority of companies are focused on making decisions based on data in real-time which can prove the desire of companies to become more flexible

and agile to the changes within the internal and external environments of companies. Companies prioritize sustainable technologies which foster both the economic and social effects of digital transformation. However, 5% of respondents don't understand the importance of digital strategies. And this lack of understanding results in a huge waste of financial, time, and labor resources.

The authors can highlight the following features of strategy in the era of digital transformation. Firstly, risk-taking becomes a basic component of the company's activity. Risk-taking is becoming a cultural norm" (Kane, 2015). The absence of risk makes companies "inflexible" and unable to react to market changes, customers' potential needs, competitors' actions, and the appearance of new trends and technologies. The culture must encourage risk-taking and tolerate failures to succeed (Kane, 2015; BCG, 2022). Moreover, the failure, in this case, can be considered "as a prerequisite for success", because companies are thus moving towards "new levels of competitive advantage" (Kane, 2015: 3). The fear of risk-taking forces companies to refuse promising opportunities, which threatens to further slow down long-term development. Accepting risk as an adequate form of activity contributes to the correct thinking of the company's management. Netflix for example took a risk by moving completely into the online space, which later made it the leader in the streaming content market. Traditional and digital companies should use digital opportunities in all spheres of their activity. Turuk (2018: 63) claims that "Entrepreneurs who do not agree with the transformation process will lose their competitive positions in the market and may face the consequences".

Secondly, people become the driver of strategic development, creating both opportunities and obstacles in the way of the company's strategic development in the era of digital transformation. Among the opportunities, it is possible to highlight the innovativeness that arises in the process of team interaction on the way to transform the value of their products/services. Digital talents and a team of specialists become the long-term asset of the company, creating synergistic effects in their activities. Currently, there is a tendency to fight for digital talents who are looking for the best digital companies and opportunities. The leadership of the company will help to get the best specialists in the practice market, as they will contribute to the formation, implementation, and correction of the company's digital transformation strategy. It should be noted that the formation of a

digital culture within the company, which is difficult to imitate by competitors, can be an excellent basis for the subsequent strategic development of the company.

Thirdly, strategic business development becomes possible due to the right mindset for all participants in the process in the era of digital transformation. Thus, there are the leaders of companies who become the flagships of digital transformation, capturing the entire staff, and giving new value to existing proposals. And the right attitude among employees ensures the implementation of the strategic vision of the leader of the company. New roles such as Chief Digital Officer (CDO) gain key competencies in the implementation of digital technologies in companies, constantly interacting with senior management and the CEO to perceive and overcome the complexities in the implementation of the digital transformation strategy. They also provide training in digital skills to employees and shape the right mindset of employees regarding technological transformations in the company. Thus, internal resistance to change, formed by fear of new technologies, often arises among employees. Such resistance can slow down or change the company's course, making it extremely difficult to achieve the initial strategic goals. A key approach to solving this issue is to involve employees in the digital transformation process, train their digital skills, and demonstrate that digital transformation is about opportunities rather than threats.

Using this approach allows employees to become those insiders who will provide valuable insight to management about the process of implementing a digital transformation strategy in the company because they could become more knowledgeable about the company's affairs than external experts. It can also be argued that a digital transformation strategy is an ongoing process that starts and then develops and reviews and corrects constantly. Chaniias (2019) emphasizes that digital transformation strategy is a permanent process that should not be stopped. In addition, developing the digital transformation strategy may differ from traditional strategic planning.

The distinctive feature of strategies in the digital environment is a leading role in a period of crisis. An effective company development strategy becomes key during crisis upheavals and periods of uncertainty, ensuring the company's survival and guaranteeing its future recovery and prosperity.

Digital technologies help businesses to function continuously in a volatile environment. But during this time, companies need strategic management more than ever.

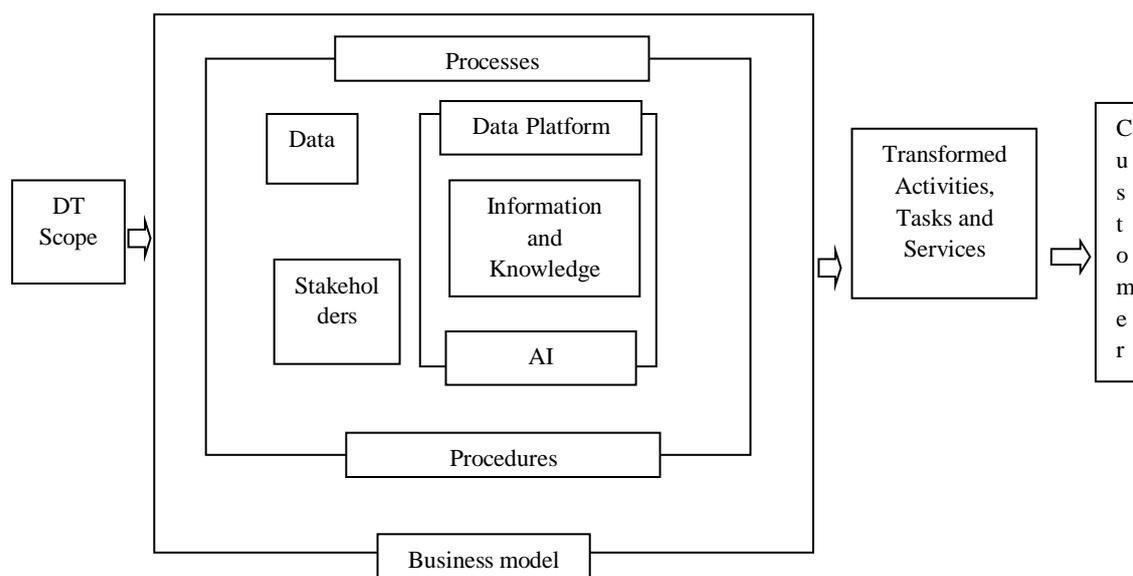
The formation of strategies in times of uncertainty should be first and foremost, based on McKinsey Digital (2022), aimed at developing strategies based on scenarios detailing customer behavior shifts, business-model opportunities, and their implications on digital and technology choices. It helps to understand opportunities to create value for the customer and how to achieve them by making changes to companies' business models.

The main phases of the digital transformation strategy, also known as "the digital transformation cycle" (Zineb, 2020: 502) include:

- digital transformation strategy formulation;
- digital transformation implementation;
- digital transformation management.

The primary process of formulating the digital transformation strategy provides an understanding of the need for transformation of the company. Among the reasons for such transformation, there may be the decrease in sales, the ineffectiveness of existing business strategies; the decrease in customer satisfaction, and their preference over other competitors. The decision made by the leaders is communicated to all employees of the company. Next, the assessment of the existing state of the infrastructure, labor and financial resources, and business processes is assessed. The next stage is the initial formulation of the digital transformation strategy and preparation for its implementation.

Figure 5. Digital transformation strategy implementation



Source: adapted by the authors from (Correani, 2020)

As can be seen from Fig. 5, the beginning of the implementation process of the digital transformation strategy is connected with the rethinking of the organization's vision of the process of its further development and the definition of goals and the scope of the transformation process. These insights make changes to the company's existing business model. This process occurs due to the influence of information received in real-time and processed with the help of specific artificial intelligence techniques to generate information and knowledge, which are further used to obtain transformed types of activities, tasks, and services (Correani, 2020).

The process of digital transformation occurs during the distribution of work roles and the formation of a set of strategic partners, as well as the adjustment of procedures and processes within the company (Correani, 2020). The process of managing digital transformation is to use the most logical and optimized solutions in a specific situation for the further implementation of the strategy, and, if necessary, to make adjustments to it. This course of action is the most relevant, as it allows the company to take all steps from the idea to the implementation of the strategy. As a result, a new value is formed and the company and its experience with customers are developed.

4. Discussion

Supporting the results presented in the article (Wu, 2022), it should be noted that the study of the impact of the company's digital transformation on the risk of stock price collapse in China is relevant. The study provided evidence that digital transformation can significantly reduce such risks and provided recommendations for further driving the digital transformation process of enterprises.

We believe that the authors' study (Katsamakos, 2022) on the use of a systemic approach is appropriate to prove the importance of formulating and implementing sustainable business models in the digital transformation strategies of enterprises.

An interesting study (Battisti, 2022) analyzed the economic and financial impact of remote work and the introduction of digital technologies on workers during the spread of COVID-19. The study provided an opportunity to contribute to the management literature on issues related to digital transformation.

We share the opinion of scientists (Li, 2022) that it is appropriate to analyze the relationship between digital transformation and sustainable productivity. It is noted that

while digital transformation accelerates economic performance, it reflects an inverse U-shaped relationship with environmental performance.

Research devoted to the analysis of digital transformation management processes during re-internationalization is becoming more and more relevant (Yu, 2022). As a result of the study, two types of transformation were identified: operational and strategic. The authors emphasize the need to regulate the processes of strategic digital transformation during the re-internationalization of SMEs.

The results of the study (Proskurnina, 2022) are of practical importance, scientists managed to form an omnichannel strategy of a retail enterprise in the era of digital transformation using the example of a domain network of pharmacies. The focus of the research is the connection of managed digital resources, as well as the formation of team skills of performers led by a leader in a digital environment.

Conclusion

While digitalization leads to an increase in the efficiency of activities due to saving resources and optimizing processes, digital transformation is the highest step in the process of changing the company's philosophy and the processes of creating and transforming value for consumers. In this process, understanding the importance of strategic development is key to the long-term success of companies.

It was found that the IT strategy is only one of the functional strategies and cannot be considered a comprehensive way to achieve the effects of the use of technology. Digital business strategy is an organic combination of IT strategy with business strategy and goes beyond traditional functional areas. However, the most complete description of the company's transformation process in the era of breakthrough digital technologies is the digital transformation strategy, which conceptually guides the organization on the path of transforming its vision and creating a new company philosophy. The main features that the strategy acquires in the context of digital transformation of business and economy are:

- risk as a source of development opportunities;
- people as a driver of implementation of strategic development;
- changing the mindset of all participants in the digital transformation process;
- the creation of new positions (CDO, etc.);
- continuity of strategic development and informality of strategic planning;

- the key role of strategies in the periods of crisis and uncertainty.

The process of developing digital transformation strategies includes the following phases: digital transformation strategy formulation; digital transformation implementation; digital transformation management. Each of these phases has its characteristics and peculiarities. Given the achievements in solving this issue among scientists, there is still a need for the following additional research:

- development of recommendations for the implementation of digital transformation strategies for companies that are just planning to enter the online environment, as well as companies for which the digital environment is key to their functioning;
- evaluation of the effectiveness of the implementation of digital transformation strategies;
- comparison of implementations of strategic development of companies of different industries to identify distinctive and similar features of development;
- the question of the desired scale of digital transformation of companies depending on the fields of activity.

The obtained results will be useful to scientists and practitioners who plan to develop digital transformation strategies for companies and will create a better understanding of this process in the conditions of the leading role of digital technologies.

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