

Analysing the Impact of Digitalisation on the Strategic Management of an Enterprise: Highlighting Key Aspects of Transformation

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Abstract

For digitalisation and digital transformation to be effective and deliver results, they must become strategic objectives. But any strategic direction requires a strategy. A company's development strategy is a long-term action plan that can adapt to the external environment and market conditions. At the same time, digitalisation can become a tool to ensure more efficient digital decision-making and implement a phased action plan to achieve a strategic result. Given the relevance of the chosen research topic, the purpose of the study may be to analyse the impact of digitalisation on the strategic management of an enterprise by highlighting the key aspects of transformation. To achieve this goal, it is necessary to define the essence and content of digitalisation, outline the role of digitalisation in the process of forming and implementing company strategies, and develop a strategic map for implementing a company management strategy in the context of digitalisation. To obtain the result, the author used both general scientific methods, in particular, analysis, synthesis, deduction, induction, systematisation, and a specific method of modelling strategic maps, which allows to present in a comprehensive manner the strategic directions of business development in four main projections: finance, customers, business processes, and personnel. As a result of the study, the role of digitalisation in the transformation of approaches to strategic management was determined. It has been established that digitalisation processes can significantly improve management decision-making by processing large amounts of various information. The paper also builds a strategic map for implementing a company's management strategy in the context of digitalisation, which can become a visual tool for achieving the strategic goals of company development, with the strategic goal being the growth of business value in the long term.

Keywords: Digitalisation, Digital Transformation, Digital Tools, Strategy, Profit, Company Value, Sustainable Development, Financial Development, Personnel Development, Esports Clubs.

Introduction

One of the main directions of increasing the company's competitiveness in modern conditions is the definition of strategic values and the

formation of factors for their achievement, taking into account the rational combination of resource, economic, production and industry base, professional management, and customer-oriented marketing of the company (Viu-Roig & Alvarez-Palau, 2020). The development of strategic planning in the digital economy certainly leaves a certain imprint on both the planning process and the choice of methods and tools used. It is necessary to pay attention to the fact that in the context of digitalisation, a prerequisite for the effective functioning of a business is the availability of a well-developed and well-founded strategic plan aimed at ensuring the sustainable development of the organisation in the future (Pan et al., 2022). The modern methodology of strategic planning is based on various approaches that include a wide range of strategic tools. The main promising areas for the development of strategic planning in the digital economy include, firstly, improving the regulatory framework governing the development of the digital economy, and, secondly, the use of economic and management methods based on the introduction of a digitalisation platform for strategic planning. activities of economic entities, which will ensure static sustainability, stability, and competitiveness of companies in the future. In an increasingly competitive environment, strategic planning is still the main tool for ensuring the stable development of companies.

Today, in the era of global integration of information and digital technologies into everyday life, strategic planning in large companies is based on digital developments in the field of economics, analysis, and audit. Therefore, the existing methods of financial analysis, planning, and forecasting need to be adapted to the peculiarities of the modern digital way of economic activity of business entities of various forms of ownership (Jiang, 2020). A few decades ago, the concept of digitalisation of economic processes was somewhat blurred, and its use in the management activities of a business entity was uncertain and unclear in terms of efficiency and necessity. This concerned both the individual stages of building a development strategy and the complexity of strategic management. The use of the latest digital devices and software systems has become indispensable in planning

activities in large companies, forecasting activities, and choosing a strategic direction for the enterprise's development.

From the standpoint of the evolutionary approach and retrospective analysis of the concept of digitalisation, it is worth noting that there is not sufficiently clear and unambiguous definition of this term in the scientific literature. When conducting a comparative analysis of existing approaches to defining the digital economy, we note that some researchers consider it appropriate to apply two approaches to this concept.

The first (classical) is based on the specifics of the goods and services produced - it is a digital economy that is based on digital technologies and is characterised exclusively by the sphere of electronic goods and electronic services (this includes distance learning, telemedicine, and media content trade) (Cichosz et al., 2020; Shkarlet et al., 2020; Orhani, 2023).

On the other hand, in the extended approach, digitalisation is seen as an economic sphere of using digital technologies. And in this aspect, such an economy is considered to be based on digital computer technologies, modern methods of data generation, processing, storage, and transmission (Nurgaliyeva et al., 2022; Omelchuk et al., 2022; Volodymyrovych et al., 2021).

Thus, as a comparative analysis of existing approaches to the definition of digitalisation has shown, there is still no consensus on the definition and content of this term, which leads to problems in identifying the elements that make up digitalisation. For example, representatives of The Boston Consulting Group (BCG) (Researching the capital markets is hard, 2023), which is considered an authoritative expert on the digital economy, include e-banking, e-commerce, online advertising, electronic payments, and online gaming as the main elements. Many scientific sources (Barykin et al., 2021; Barykin et al., 2022; Srijani et al., 2023) take into account the contribution of companies engaged in the development, creation, and sale of information and communication technologies to calculate the share of the digital economy in GDP. It is important that this sector deals only with technical means used by enterprises in other industries to carry out operations in the field of e-banking,

e-commerce, etc. Summarising the diverse views of researchers, we can conclude that they all agree that the results of the development of certain segments of the digital economy have a decisive impact not only on related sectors and industries (social sphere, banking services, public finance sector) but also from the innovative basis of the technological order, including the so-called Internet of Things, which involves system integration and synchronisation of many common everyday goods and services in the Internet environment.

According to the analysis of scientific sources, a deeper approach to defining the content of the “digital economy” is quite complex (Riabov&Riabova, 2021). It indicates that digitalisation in the economic sphere has three levels. The first is the level of markets for scientific and technological innovations, which includes the interaction of consumers and suppliers based on digital platforms. The second covers end-to-end technologies and includes analytics and database processing, virtual reality, artificial intelligence, neural networks, i.e. the technologies that underpin the first level. The third level includes the conditions necessary for the functioning and development of the first and second level organisations. This includes the creation of a regulatory framework, relevant legislation, information infrastructure and information security, and personnel training.

The resulting point of view among the existing points of view is that digitalisation is seen as a form of infrastructure superstructure for the real sector of the economy, which simplifies and optimises the interaction of production, distribution, and consumption actors, which is realised in increasing the productivity of social labour. However, this infrastructure superstructure cannot replace real production (Zaloznova&Trushkina, 2019; Hurzhyi et al., 2022; Afanasieva, 2023). The creation and implementation of digital technologies should be carried out in parallel with the development of traditional production. In general, it is safe to say that an effective corporate governance strategy in the current business environment is more important for an organisation than ever before, and special attention should be paid to its development.

Given the relevance of the chosen research topic, the purpose of the work can be defined as analysing the impact of digitalisation on the strategic management of an enterprise by highlighting the key aspects of transformation. To achieve this goal, it is necessary to define the essence and content of digitalisation, outline the role of digitalisation in the process of forming and implementing company strategies, and develop a strategic map for implementing a company management strategy in the context of digitalisation.

Methodology

The completeness and objectivity of the proposed recommendations is ensured by the use of an integrated approach to studying the impact of digitalisation on the strategic management of an enterprise by highlighting the key aspects of transformation. In general, the results obtained were obtained through the use of a number of general scientific and special research methods: systematic analysis and synthesis, comparison, and generalisation.

Due to rapid changes in equipment, technology, and production organisation, the importance of managing strategic planning of enterprises is growing, as a properly chosen company development strategy ensures an appropriate level of sustainable and competitive development in the market. Digitalisation is changing the traditional models of strategic management for corporations and entire industry markets, which generally increases the level of competition among economic actors and necessitates adjustments to approaches to strategic planning. The key problem is the development of a mechanism for managing the company's strategy, which reflects the effectiveness of financial, production, and personnel management, as well as the process of financial and economic activity. In this regard, it is logical to assume that the development of strategic directions for the development of domestic enterprises and organisations should take into account the systemic features of changes in the digital economic order.

Results

In the new business environment, modern companies need new approaches to strategic planning that will allow them

to look at the organisation and its activities from the perspective of the digital economy, i.e., change internal communications, logistics schemes of interaction with external counterparties, approaches, and decision-making processes, as well as the final assessment of performance. The specifics of the digitalisation of modern business mean

that in an unstable environment, new, more advanced solutions are needed and there are likely to be several of them, with changes in the external environment leading to their adjustment. Many researchers have identified the following aspects of the transformation of strategic management in the current environment (Table 1).

Table 1. Transformation of approaches to strategic management in the context of digitalisation

Aspect	Traditional strategic planning	The latest in flexible and adaptive strategic design
Tasks.	Improving the existing financial and economic situation	Modelling a future that doesn't exist yet
Direction.	From top to bottom	From the bottom up
Process.	Linear	Iterative
Communications	Verbal	Visuals.

Source: Compiled by the author based on (Volodymyrovych et al., 2021; Storozhyk, 2024; Rudenko & Kharkiv, 2023)

Given the new business environment, it seems quite reasonable that many domestic and foreign economists pay special attention to the need for a proactive approach to formulating an enterprise development strategy, as well as the expediency of using flexible planning models, which are extremely relevant in the rapidly changing conditions of the digital economy.

Today, there is no doubt about the need for effective management of the development strategy of a modern enterprise in the context of the transition to the digital economy. Managing the company's development strategy in the digital economy allows for operational control over the company's income and expenses using information technology, managing the company's inventory, avoiding overstocking by automating accounting systems, and as a result, stimulating cost minimisation through the introduction of special economic analysis and forecasting programmes (Li et al., 2020; Levchenko et al., 2022; Rakhimov & Mukhamediev, 2022).

It is worth noting that in the context of the transition to the digital economy, the problem of choosing the most effective methods of strategy management in order to maintain balance, stable solvency, and investment attractiveness of the enterprise is acute. At the same time, the main purpose of the introduction of digital technologies

is to make the fullest use of information and technology resources in order to increase the productivity of the enterprise and reduce production costs in order to improve the financial result. It can be concluded that the modernisation of the strategic management process is a regularity of the transformation process and, as it expresses the established stable relationships that depend on the conditions of the external environment. The dynamic development of the new economy is ensured by strengthening the company's position by increasing the number and improving the quality of adequately applied financial instruments, as well as by coordinated interaction and clarity of the structure of financial institutions. The practical application of digital technologies in the process of developing and implementing a company's development strategy can ensure the company's economic development, increase the number of its successful projects, improve cybersecurity, and ensure the availability of financial services to customers and financial stability at a conceptually new level.

Today, it is necessary to develop new additional criteria for economic growth that would take into account the information technology component of the modern economic model, as well as new approaches to creating a digital platform for controlling, monitoring, and regulating

the process of forming an enterprise's strategy. Currently, digitalisation is taking place mainly in the area of technological development of digital technologies with a significant lack of economic methods and administrative algorithms for their application. At the same time, there may be a phenomenon when the new capacities and capabilities of the digital economy will be mainly used to accumulate and store large amounts of information without transforming them into management decisions.

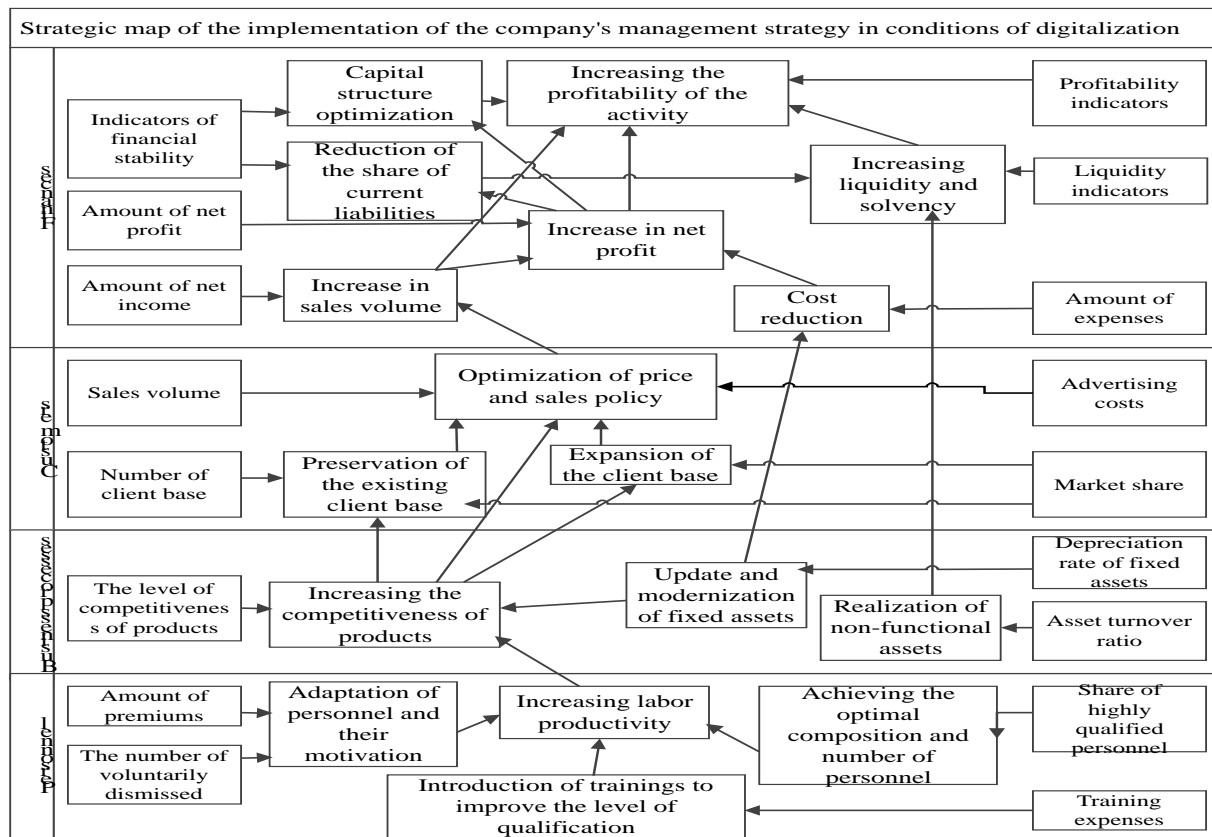
It is important to understand that further reforms of strategic planning of enterprises in the context of digitalisation should be synchronised with the corresponding improvement of the regulatory framework.

Accordingly, without adjustments to the existing digital economy programme, large investments in industrial

software are likely to be made, but without corresponding returns and significant impact on the economy. However, the creation of software and mathematical software is no less important than the creation of technological hardware and also requires significant costs, not always foreseen by companies implementing the latest digital technologies (Pererva et al., 2021; Suprunenko et al., 2023; Kolomiets et al., 2017).

In general, the strategic goal of an enterprise in the context of digitalisation is to maximise its market value and profit using modern digital tools. Achieving the strategic goal is possible through the implementation of a system of organisational, production, marketing, and financial goals reflected in the strategic map for implementing the company's management strategy in the context of digitalisation (Fig. 1).

Figure 1. Strategic map for implementing the company's management strategy in the context of digitalisation

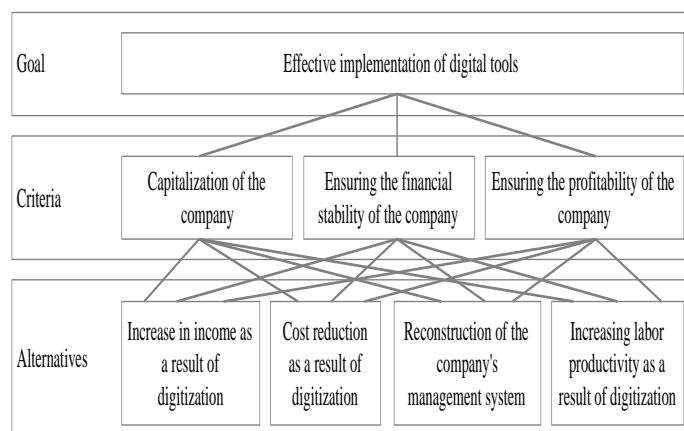


Source: Compiled by the author based on (Iskakova, 2023; Sayed, 2023; Yuryk et al., 2021)

Strategic goals describe the planned results. Each strategic goal is associated with one of the organisation's development prospects, each of which can be digitised and digital tools implemented. The structure of a classic strategic map has four levels (financial position of the company; customers and sales market; internal business processes; company development and personnel), into which the strategy is decomposed for its implementation. The lowest level of the strategic map is represented by the "Personnel" projection. This projection allows to characterise staff training, organisational culture, technology, and skills of the company's employees. (Iastremska et al., 2023; Sembiyeva et al., 2023; Sydorenko, 2023).

For a reasonable selection of priority areas for the implementation of the strategy, as shown in Fig. 1, it is proposed to build a hierarchical model - Fig. 2.

Fig. 2. Decomposition of the problem of the hierarchy of choosing directions for implementing the company's digitalisation strategy



Source: Compiled by the author
 After constructing the decomposition of the hierarchy problem, the priority of criteria is determined when choosing alternatives on the basis of pairwise judgements. The system of pairwise evaluations of judgments by the method of hierarchy analysis by T. Saaty leads to a result that can be presented in the form of an inverse symmetric matrix, presented in Table 2.

Table 2 - Matrix of pairwise comparisons of judgements by T. Saaty's hierarchy analysis method

Factor	1 (j-thfactor)	...	N
1 (i-thfactor)	1		a (,j)
...		1	
n	a (,j)		1

Source: Compiled by the author

The prioritization of criteria when choosing an alternative is carried out according to the formulas (1-2):

$$w_i = \sqrt[n]{\prod_{j=1}^n a_{ij}}, \tag{1}$$

$$w = w_i / \sum_{i=1}^n w_i \tag{2}$$

where W is the component of the eigenvector of the matrix (the average value of the priority scores);

W – normalised vector of the pairwise comparison matrix (priority vector);

a_{j} – values of matrix elements

The assessment of priority coherence is carried out using the formulas (3-5):

$$I = \frac{1}{n} \sum_{i=1}^n \sum_{j=1}^n a_{ij} \times w_i \tag{3}$$

$$I_c = (I - n) / (n - 1) \in [0, 2] \tag{4}$$

$$OC = I_c / I_{cc} \in [0, 1] \tag{5}$$

Where – eigenvalue of the matrix;

I – consistency index

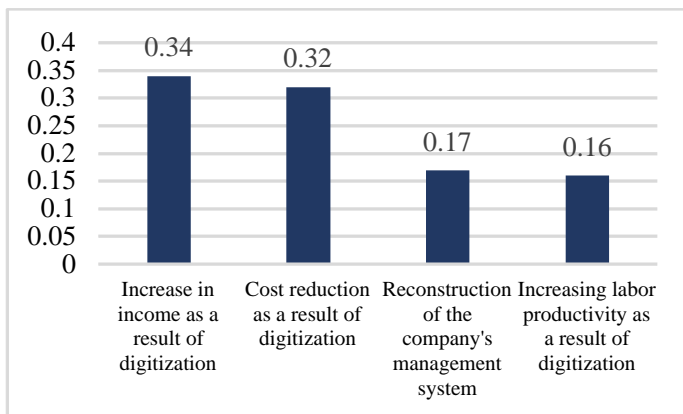
I – average value of the consistency index

– consistency ratio

n – number of criteria (alternatives).

The global priority of alternatives is determined by multiplying the priority matrix of alternatives for each criterion by the priority matrix of criteria (Fig. 3).

Fig. 3. Prioritisation of alternatives for choosing directions for implementing the company's digitalisation strategy



Source: Compiled by the author

According to Fig. 3, we can state that for a company implementing a digitalisation strategy, the key indicators to be focused on should be cost reduction and profit growth as a result of digital technologies. Whereas the issues of company restructuring and labour productivity increase in this context become secondary.

Achievement of the strategic goal involves the implementation of the following stages in the field of human resources management: staff adaptation and motivation, increasing labour productivity, achieving the optimal composition and size of the enterprise.

Along with business management, human resources management is one of the components of an enterprise as an integral production and economic system, where the management process can be significantly enriched by introducing the latest digital tools.

Due to the growing role of the human factor in modern production, one of the most important functions of HR management is staff development, not just bringing its number in line with the availability of jobs, which requires a new approach to making management decisions that should

be based on the results of staff performance analysis. While such analysis can be carried out through the use of advanced digital technologies, such as those that can determine the rational use of working time or the optimal workload of each employee. To achieve the optimal composition and number of staff, it is necessary to monitor the share of highly qualified personnel. To introduce trainings to improve the level of employees' qualifications, it is necessary to estimate the costs that the company will incur in conducting them.

The next block of the company's strategy is business process management. A business process is a set of different activities in which one or more resources are used as inputs, and as a result of these activities, a product of value to the consumer is created as an output. Digitalisation can greatly enrich the financial processes of an enterprise and significantly contribute to financial analysis or business process modernisation. The Business Processes projection of the company's strategy aims to achieve the following goals: increasing the competitiveness of products, renewing and modernising fixed assets, and selling non-functional assets. Digitalisation makes it possible to model business processes and identify weaknesses in them.

The implementation of the measures proposed in the strategic map will ensure the solvency and financial stability of the enterprise, the efficiency of resource use and neutralise the negative impact of external factors, thereby ensuring the growth of market value, which is the strategic goal of the enterprise. At the same time, digitalisation is an auxiliary tool for the effective implementation of each of the strategy blocks.

Conclusion

In today's world, only a well-balanced and properly built strategy allows an organisation to work as a single mechanism, for each employee to move in a coordinated manner, to make efforts in one direction, and thus to move towards one goal. That is why strategic planning today is a central part of strategic management for any company, which makes it possible to determine the current state of the enterprise, goals, and benchmarks for its further development, as well as possible plans for the future. It

should be noted that in the process of formulating strategic plans for the company's development, traditional methods of planning and forecasting are not enough. In the context of an unstable environment, political uncertainty, and economic crises, which undoubtedly have a negative impact on the activities of enterprises, digitalisation is becoming increasingly important, as it helps to analyse large amounts of data and support and argue for management decisions that will be of great importance for the strategic development of the business.

Based on the analysis of the methodological and digital tools for forming the company's strategy, the author proposes an author's strategic map for implementing the company's management strategy in the context of digitalisation, which moves information flows within the company and focuses on four basic projections. Increasing the level of satisfaction of needs, conquering new and retaining old markets, optimising pricing, and sales policy leads to an increase in the volume of net income of the enterprise. Optimisation of the sales policy, sale of non-functional assets, and use of upgraded equipment help to reduce the company's expenses. Taken together, reduced costs and increased revenues lead to an increase in net profit and, in the longer term, to an increase in its market value. The increase in net profit, in turn, leads to an increase in profitability, turnover of economic and financial resources, optimisation of the capital structure, and expansion of the company's operations through reinvestment of profits.

The gradual implementation of the measures proposed in the strategic map, combined with the gradual introduction of digital tools, will ensure the solvency and financial stability of the enterprise, increase the efficiency of operations and neutralise the negative impact of external factors, thereby ensuring stable operation, which is the main goal of the enterprise's strategy.

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