Управління фінансово-кредитними системами та соціально-гуманітарна компонента їх розвитку

Management of financial and credit systems and the socio-humanitarian component of their development

DOI: 10.26565/2786-4995-2023-2-05 UDC 338.3

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DIGITAL TRANSFORMATION OF BUSINESS

Abstract. In the conditions of the digital economy, managers face new tasks, and their roles and principles of business management are changing. In particular, they face the question: what technologies and principles of the digital economy must be implemented? The article outlines the main problems of the management organization of the company that arise in the conditions of business digitalization. The paper analyzes international standards and research that are directly related to the organization of the management process in companies.

In the course of the study, the main shortcomings associated with the implementation of digital technologies were identified, which include, in addition to possible risks of data security violations, and social issues associated with a possible reduction in the number of personnel. The article notes that all these problems can contribute to the loss of the company's reputation and trust in it.

In today's conditions, the digitization of the organization's management processes requires the restructuring of its entire management system and the development of standards necessary for effective management, therefore, the use of existing own experience and knowledge necessary for the profitable operation of the company in the conditions of digitalization of the economy is relevant.

Keywords: digital economy, digital technologies, company management, digital transformation.

Formulas: 0; fig.: 3, tabl.: 1, bibl.: 16

JEL Classification: M20

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Introduction. In the conditions of the global transition of society and the economy to general digitalization, the issue of new approaches to managing companies in the digital economy is gaining particular relevance. This is a certain challenge for managers, who are faced with several questions regarding choosing an effective direction of company management in conditions of digitalization, the need to introduce elements of the digital economy, balancing the use of new technologies and professional capabilities of staff, possible risks, etc.

Research analysis and task formulation.

Numerous works by domestic and foreign scientists are devoted to issues of digitization at all levels of the economy, including Bagaeva I.V., Ilyin I.V., Kannan P., Kalyazina S.E., Safronchuk M.V., Svetunkov S.G., Smirnov S.A., Tupkalo V.M., Hunshuan A., Yusupova O.A., who studied both the theoretical aspects of the digitalization of society and the problems of the digital economy for various types of economic activity. Despite this, there is a need to continue studying this issue. Therefore, the purpose of the study is to determine the main problematic issues in the organization of the management process in companies in the conditions of digitalization of society.

Research results. Investigating the issue of digitization, we will find out what the digital economy is. Today, there are two main approaches to the term "digital economy".

The first approach is classical and is based on the fact that the digital economy is an economy based on digital technologies, and at the same time it is more correct to characterize exclusively the sphere of electronic goods and services. Examples of this approach are distance learning, sale of media content (movies, TV, books, etc.).

The second approach is more extensive and defines the digital economy as economic production using digital technologies [8]. It should be noted that most external and internal communications between economic entities (people, companies, the state) in the digital economy are carried out using digital technologies in the online environment [10].

The digital economy is also defined as a set of activities based on digital technologies, as well as the infrastructure that ensures the functioning of digital technologies. In turn, digital technologies in this case should be understood as technologies related to the creation, collection, processing, storage, and transmission of information based on digital systems [13].

The digital economy involves the widespread use of modern information and communication technologies. This directly affects management methods both at the macro level and at the level of a separate economic entity. The main features of such innovative management methods and tools include the big data method, expert systems, blockchain, and decentralization, etc. In the future, the use of these methods and tools will have a radical impact on all levels of the economic system, while there is no reliable forecast of future changes.

Advanced digital technologies can be divided according to the directions presented in fig. 1.

When studying the issue of the digital economy, it is necessary to branch out the two concepts – "digitalization" and "digital transformation", which are often equated. Digitization is the "digitization" of the company's current processes, which ensure the transition to a new model of business management. Digital transformation, in turn, is a change in the company's business model using digital tools (platforms) that create added product value or a new product. So, these concepts are not identical but are constituent parts of each other. At the same time, transformation is impossible without effective digitalization.

Today, digital transformation is actively developing and entails a change in the structure, management system, and culture of the enterprise, organization, institution, or company that implements it [4]. In these conditions, managers face new tasks, functions, and their role and management principles may change, which requires certain professional training. For example, taking into account that in the conditions of the digital economy, data becomes one of the company's assets, in connection with this, the range of processes and functions of the top management expands, and part of the functions related to the management of the company's data is transferred to it, i.e., management symbiosis business and information technologies in the field of working with data.

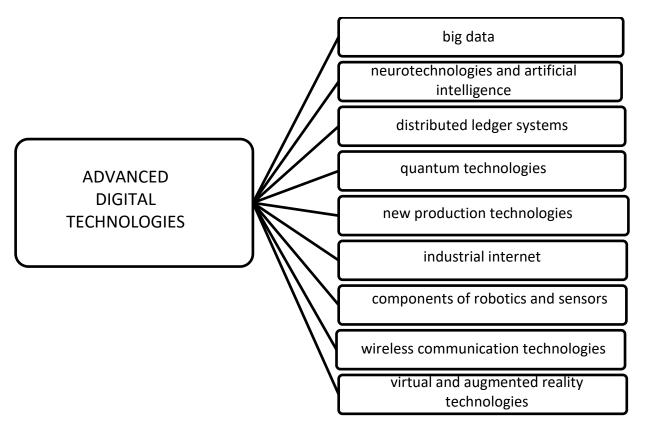


Fig. 1. Components of advanced digital technologies

For companies that are in a state of digital transformation, the issue of change management, i.e., the human aspect of project management, which includes discipline in the team, is of particular relevance. Digital transformation for a company is quite a complex process and the person who manages the changes must have advanced professional skills in this direction.

The main participants in the implementation of the change management project regarding digital transformation are:

- the sponsor of the project, usually this is the general director or director by direction, the person responsible for allocating resources and exercising overall control;
 - project manager an employee who ensures operational management of the project;
- change manager can be a separate person or combine this function with the project manager.

The next participants of the project are the head of the employees of the unit in which the project (change) is being implemented and the employees of this unit directly.

Schematically, the main stages of implementing changes are presented in fig. 2.

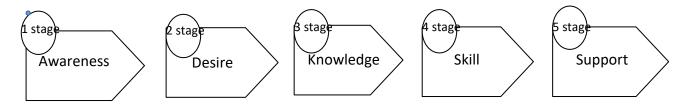


Fig. 2. The main stages of implementing changes

In the first stage of awareness, initial information about the change, its goals, and objectives is provided; in the second stage, the motivation for bringing the changes to the end is presented; at the third stage, full information about the change, its impact, consequences is provided; the fourth stage involves the ability to implement changes; at the last stage, it is envisaged to receive an award

and feedback on changes [9].

Having an HR business partner (HRBP) who would solve the task of intra-corporate change promotion can be an effective option for implementing changes.

The following competencies are necessarily required from HR functions within the framework of digital transformation processes:

- assessment and development for a quick understanding of key internal leaders and their development;
- training and adaptation for quick results from the implementation and support of new processes and changes;
 - intra-corporate change promotion to reduce resistance factors [5].

A digital transformation leader simply needs a set of competencies to implement the human aspect of change, otherwise, any project may be doomed. Implementation options can be:

- creation of a separate organizational branch of change management in the company;
- development of the current HR department and assigning responsibility for human and personnel changes to them;
- development of one's own human change management competencies (if resources are available).

There are certain contradictions in digital management: on the one hand, managers are obliged to create new jobs, thereby fulfilling the social responsibility of business to the state and the population. On the other hand, managers must implement advanced production technologies that allow the enterprise or company to save important resources.

In this regard, a vivid example of digital transformation is the implementation of the "1C: Accounting" program, at the beginning of which there was confidence in the possible reduction of accountants. However, this did not happen. The use of this program increased the mobility of the accountants themselves, which is very relevant today, first in the conditions of the pandemic, and then, in the state of war, in which Ukraine has been for more than a year. Moreover, the use of the program made it possible to earn additional income from bookkeeping for small entrepreneurs, and entrepreneurs - the opportunity not to keep an accountant permanently and to save on this.

As an example of the development of digital technologies at a high state level, we can cite the Development Strategy of the National Bank of Ukraine (NBU) until 2025 [7]. This program presents a list of technologies that the NBU will develop within the financial sector of Ukraine, which is presented in fig. 3.

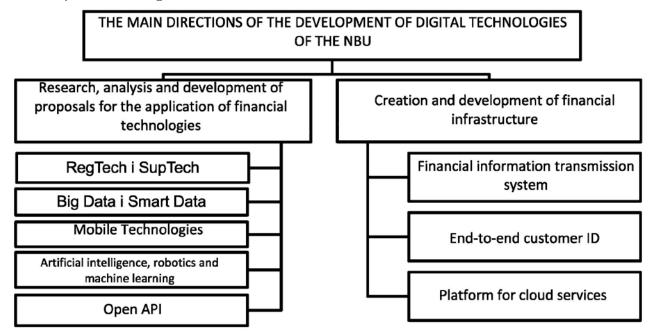


Fig. 3. The main directions of the development of digital technologies of the NBU

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Based on the specified list of the latest technologies in the financial sector of Ukraine, it can be concluded that when they are developed, complete information about users of the banking system will be collected on the servers of Ukrainian banks, up to obtaining some biological data of the client (facial contour, retina, and fingerprints). At the same time, some problems are aimed at guaranteeing the security of this kind of information and responsibility in case of leakage or dishonest processing of information, and they must definitely be solved.

It should be noted that even though the application of digital technologies is a complex process, their implementation is a condition for the sustainable development of any enterprise or company. It is worth noting that there are unsuccessful examples of companies with a world name that did not unconditionally develop the latest digital technologies for the development of their business, which subsequently led to their bankruptcy.

A possible rejection of the implementation of digital technologies is the lack of a unified approach to the application, management, definition of the limits of their use, and the potential of today's technologies. Currently, it is necessary to find new standards and new knowledge that will help to develop successful company management strategies in the conditions of the digital economy.

Today, the movement towards the digital transformation of business is taking place in four key areas: work with customers, operational processes of the firm, business models of the firm, and digital competencies. The systematization of elements of digital transformation is presented in table. 1 [2; 5].

Table 1

Components of digital transformation

Branch	The essence of the activity
Work with customers	Deeper understanding of customers;
	Increase in revenue from existing customers;
	Finding new points of interaction with customers;
Operational process	Automation of production processes;
	Realization of the creative potential of employees;
	Performance management based on "big data" analysis;
Business model	Spot introduction of new technologies;
	Implementation of previously non-existent digital business models;
	Digital globalization;
Digital competences	Social and behavioral skills;
	Cognitive skills;
	Digital skills;

For a better understanding of the issue, let's take a closer look at the digital competencies that are necessary for the implementation of digital transformation in business.

Social-behavioral skills include social-emotional skills and personal qualities; willingness to gain new experience, conscientiousness, tact, and emotional stability; self-regulation, willingness to compromise, decision-making, and interpersonal communication skills.

Among the cognitive skills, the following should be highlighted: literacy and mathematical skills, logical and creative thinking; ability to solve problems; verbal literacy, numeracy, memory, and thinking speed.

The digital skills that must be possessed when implementing digital changes in business include:

information literacy and working with data, which in turn includes: formulation of information needs; searching for and gaining access to data, information, and content in the digital environment and orientation in them; creating and updating personal search strategies;

communication and collaboration, which aims to interact using different digital technologies and understand the appropriate means of digital communication for a given context;

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creation of digital content in various formats, self-expression using digital means;

security, which includes: protecting devices and digital content, understanding risks and threats in the digital environment; knowledge of measures to ensure security, and paying due attention to issues of reliability and confidentiality;

problem-solving, that is, identifying and eliminating technical problems when working with devices and using the digital environment and solving more complex problems [7].

As the analysis of digital competencies shows, it is necessary to have appropriate training for the introduction of digital transformation in business and its effective use in the future.

So, it is possible to outline some shortcomings regarding the implementation of digitization and the latest digital technologies and identify the main ones, including the frequent lack of a clear vision of digital operations; frequent resistance to system transformation; economic benefits are not always clear; high requirements for financial investments; insufficient competence and qualification of specialists; lack of digital standards, norms, and certification; a reduction in the number of employees is possible, which may lead to social conflicts, etc.

Separately, unresolved issues regarding data protection and possible risks of data security violations should be highlighted, which include: high risks of liability due to data loss; unauthorized removal or alteration of data within the internal data flow of the enterprise; loss of reputation and loss of trust due to data loss; improper use of data when exchanging information with partners, etc.

Conclusions. Today, the introduction of digital methods into the practice of managing an organization requires a radical restructuring of the entire management system.

The conducted analysis showed that there are not enough standards necessary for management to carry out effective management. In these conditions, using their experience and best practices, managers should themselves become the initiators of creating similar standards and summaries of knowledge that meet the new challenges of the company's functioning in the digital economy.

Currently, the business has a unique opportunity, based on its practice of using digital technologies, to demonstrate the leading position of the company not only as a leader in its field of activity but also as an international business innovator. Many people will want to experience such innovation, which can allow the company to monetize its knowledge.

Список використаної літератури

- 1. Wrede M., Velamuri V. K., Dauth T. Top managers in the digital age: Exploring the role and practices of top managers in firms' digital. Managerial and Decision Economics. 2020. Vol. 41, no. 8. P. 1549-1567. URL: https://doi.org/10.1002/mde.3202 (дата звернення: 18.04.2023)
- 2. Шевцова Г. 3. Синергетичний менеджмент як концепція організованої синергії в управлінні підприємствами. Економіка промисловості. 2012. № 1-2. С. 202-214
- 3. Müller Klaus-Christoph. Getting Started with Digitization. How to Find the Right Strategy for Your Enterprise. https://itelligencegroup.com/wp-content/usermedia/expert-paper-digitization-strategy-glo-en.pdf (дата звернення: 18.04.2023)
- 4. Торнхілл Д. «Четверта Промислова революція» Клауса Шваба». URL: https://zbruc.eu/node/46560 (дата звернення: 18 04 2023)
- 5. Умнов А.Л. Інтернет речей (огляд концепції). URL: https://ecoimpact-ple.com/documents/411.html (дата звернення: 18 04 2023)
- 6. Тупкало В.М. Бізнес інжиніринг сучасних процесно орієнтованих підприємств : монографія. Київ : ДУТ. 2016. 281 с.
- 7. Стратегія Національного банку України до 2025 року. URL: https://bank.gov.ua/admin_uploads/article/Strategy_NBU.pdf (дата звернення: 18.04.2023)
- 8. Шлапак О. А., Коваленко О. О. Модель багатокритеріальної оптимізації комунікаційного середовища підприємств. Інвестиції: практика та досвід. 2017. № 11. С. 43–48.
- 9. The Nine Elements of Digital Transformation. URL: https://sloanreview.mit.edu/article/the-nine-elements-of-digital-transformation/ (дата звернення: 18.04.2023)
- 10. Юсупова О.А. Інтернет-банкінг як напрям діджиталізації банківського бізнесу: стан, проблеми, перспективи. Фінансова аналітика. Проблеми та рішення. 2016. №34(316). С.12-15.
- 11. Звіт про управління McKinsey. URL: https://www.mckinsey.com/~/media/mckinsey/locations/europe%20and%20middle%20east/ukraine/overview/management-report-2020.pdf (дата звернення: 18.04.2023)

FINANCIAL AND CREDIT SYSTEMS: PROSPECTS FOR DEVELOPMENT

- 12. Розпорядженні КМУ «Про схвалення Концепції розвитку цифрової економіки та суспільства України на 2018—2020 роки та затвердження плану заходів щодо її реалізації». URL: https://zakon.rada.gov.ua/laws/show/67-2018-%D1%80#Text (дата звернення: 18.04.2023)
- 13. Ільїн І.В., Свєтуньков С.Г., Калязіна С.Є., Багаєва І.В. Основні тренди цифрової трансформації бізнесу // Наука і бізнес: шляхи розвитку. 2019. № 7 (97). С. 137-143.
- Сафрончук М. В. Вплив цифрової трансформації на бізнес і ділове середовище // Цифрова економіка. 2018. Т. 3.
 № 2. С. 38-45.
- 15. Смірнов С. А., Шарафутдінов Д. Р., Ябурова Д. В. Трансформація системи управління підприємством при переході до цифрової економіки // Підприємництво. 2018. Т. 19. № 5. С. 1711-1722.
- 16. Kannan P. K., Hongshuang A. Li. Digital marketing: a framework, review and research agenda // Inter-national Journal of Research in Marketing. 2017. N. 34. P. 22–45.

 Стаття надійшла до редакції 15.04.2023

 Статтю рекомендовано до друку 22.05.2023

References

- Wrede, M., Velamuri, V. K., Dauth, T. (2020). Top managers in the digital age: Exploring the role and practices of top managers in firms' digital. *Managerial and Decision Economics*, Vol. 41, №8, 1549-1567. Retrieved from https://doi.org/10.1002/mde.3202 [in English].
- 2. Shevtsova, H. Z. (2012). Synerhetychnyy menedzhment yak kontseptsiya orhanizovanoyi synerhiyi v upravlinni pidpryyemstvamy [Synergistic management as a concept of organized synergy in enterprise management]. *Ekonomika promyslovosti*, №1-2, 202-214 [in Ukrainian].
- 3. Müller Klaus-Christoph. (2017). How to Find the Right Strategy for Your Enterprise. *NTT DATA Business Solutions*. Retrieved from https://itelligencegroup.com/wp-content/usermedia/expert-paper-digitization-strategy-glo-en.pdf. [in English].
- 4. Tornkhill, D. (21.01.2016). «Chetverta Promyslova revolyutsiya» Klausa Shvaba ["The Fourth Industrial Revolution" by Klaus Schwab]. *Zbruch*. Retrieved from https://zbruc.eu/node/46560 [in Ukrainian].
- 5. Umnov, A.L. Internet rechey (ohlyad kontseptsiyi) [Internet of Things (concept overview)]. Retrieved from https://ecoimpact-ple.com/documents/411.html [in Ukrainian].
- 6. Tupkalo, V.M. (2016). Biznes inzhynirynh suchasnykh protsesno oriyentovanykh pidpryyemstv: monohrafiya [Business engineering of modern process-oriented enterprises: monograph]. Kyyiv: DUT [in Ukrainian].
- 7. Natsionalnyi bank Ukrainy. *Stratehiya Natsional'noho banku Ukrayiny do 2025 roku* [Strategy of the National Bank of Ukraine until 2025]. Retrieved from https://bank.gov.ua/admin_uploads/article/Strategy_NBU.pdf [in Ukrainian].
- 8. Shlapak, O. A., Kovalenko, O. O. (2017). Model' bahatokryterial'noyi optymizatsiyi komunikatsiynoho seredovyshcha pidpryyemstv [A model of multi-criteria optimization of the communication environment of enterprises]. *Investytsiyi: praktyka ta dosvid,* №11, 43–48. [in Ukrainian].
- 9. The Nine Elements of Digital Transformation. Retrieved from https://sloanreview.mit.edu/article/the-nine-elements-of-digital-transformation/ [in English].
- 10. Yusupova, O.A. (2016). Internet-bankinh yak napryam didzhytalizatsiyi bankivs'koho biznesu: stan, problemy, perspektyvy [Internet banking as a direction of digitization of banking business: state, problems, prospects] *Finansova analityka. Problemy ta rishennya*, №34(316), 12-15 [in Ukrainian].
- 11. McKinsey&Company (2020) *Zvit pro upravlinnya McKinsey* [Management report] Retrieved from https://www.mckinsey.com/~/media/mckinsey/locations/europe%20and%20middle%20east/ukraine/overview/management-report-2020.pdf. [in Ukrainian].
- 12. Verkhovna Rada Ukrainy (2018). Rozporyadzhenni KMU «Pro skhvalennya Kontseptsiyi rozvytku tsyfrovoyi ekonomiky ta suspil'stva Ukrayiny na 2018–2020 roky ta zatverdzhennya planu zakhodiv shchodo yiyi realizatsiyi» [Decree of the CMU "On the approval of the Concept of the development of the digital economy and society of Ukraine for 2018-2020 and the approval of the plan of measures for its implementation"]. Retrieved from https://zakon.rada.gov.ua/laws/show/67-2018-%D1%80#Text [in Ukrainian].
- 13. II'yin, I.V., Svyetun'kov, S.H., Kalyazina, S.YE., Bahayeva, I.V. (2019). Osnovni trendy tsyfrovoyi transformatsiyi biznesu [The main trends of digital business transformation]. *Nauka i biznes: shlyakhy rozvytku*, №7 (97), 137-143 [in Ukrainian].
- 14. Safronchuk, M. V. (2018). Vplyv tsyfrovoyi transformatsiyi na biznes i dilove seredovyshche [The impact of digital transformation on business and the business environment] *Tsyfrova ekonomika*, T. 3, №2, 38-45 [in Ukrainian].
- 15. Smirnov, S. A., Sharafutdinov, D. R., Yaburova, D. V. (2018). Transformatsiya systemy upravlinnya pidpryyemstvom pry perekhodi do tsyfrovoyi ekonomiky [Transformation of the enterprise management system during the transition to the digital economy] *Pidpryyemnytstvo*, T. 19, №5, 1711-1722 [in Ukrainian].
- 16. Kannan, P. K., Hongshuang, A. Li. (2017). Digital marketing: a framework, review and research agenda. *Inter-national Journal of Research in Marketing*, №34, 22–45 [in English]. The article was received by the editors 15.04.2023
 The article is recommended for printing 22.05.2023

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ЦИФРОВИЙ МЕНЕДЖМЕНТ В БІЗНЕСІ

Анотація. В умовах цифрової економіки перед менеджерами постають нові завдання, змінюється їхня роль і принципи управління бізнесом. Зокрема перед ними постає питання: які саме технології та принципи цифрової економіки необхідно впроваджувати? В статті окреслено основні проблеми організації менеджменту компанії, які виникають в умовах діджиталізації бізнесу. В роботі проведено аналіз міжнародних стандартів та досліджень, які безпосередньо пов'язані з організацією управлінського процесу в компаніях.

В ході дослідження визначено основні недоліки, що пов'язані з впровадженням цифрових технологій, які включають крім можливих ризиків порушення безпеки даних, і соціальні питання, які пов'язані з можливим скороченням чисельності кадрів. В статті зазначається, що усі ці проблеми можуть сприяти втраті репутації компанії та довіри до неї.

В умовах сьогодення діджиталізація процесів управління організацією потребує перебудови всієї системи її менеджменту та розробці стандартів, необхідних для здійснення ефективного управління, тому актуальним є використання існуючого власного досвіду та знань, необхідних для прибуткової роботи компанії в умовах цифровізації економіки.

Ключові слова: цифрова економіка, цифрові технології, управління компанією, цифрова трансформація.

Формул: 0; рис.: 3, табл.: 1, бібл.: 16.