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DIGITAL TRANSFORMATION OF THE BANKING SECTOR: STRATEGIC ASPECTS OF HUMAN CAPITAL MANAGEMENT

Babenko M.V.
PhD

ORCID: 0000-0001-6792-3465

V. N. Karazin Kharkiv National University, Kharkiv, Svobody Sq., 4, 61022

Lytvynenko A.O.
c.e.s., as.prof.

ORCID: 0000-0003-0372-5130

Simon Kuznets Kharkiv National University of Economics, Kharkiv, Nauky Av., 9a, 61165

Lytvynenko O.D.
c.e.s., as.prof.

ORCID: 0000-0002-8360-4461

State Biotechnology University, Kharkiv, Alchevskykh Str., 44, 61002

Novikova T.V.
c.e.s., as.prof.

ORCID: 0000-0002-0428-4181

V. N. Karazin Kharkiv National University, Kharkiv, Svobody Sq., 4, 61022

Abstract. The article explores the strategic aspects of digital transformation in the banking sector, emphasizing its impact on human capital management. Digitalization is considered not only as the introduction of advanced technologies but also as a comprehensive transformation that changes customer interaction models, optimizes business processes, and influences organizational culture. Particular attention is given to the role of human resources in ensuring successful transformation, as HR professionals are responsible for change management, employee engagement, development of digital competencies, and building a culture that is open to innovation and continuous learning. The study outlines the importance of training and retraining programs, the creation of competency frameworks, and the implementation of flexible recruitment and retention strategies aimed at addressing the shortage of digital talent. Furthermore, the article highlights the necessity of cooperation with educational institutions and external partners in order to form a sustainable talent pipeline for the digital economy. The results demonstrate that the success of digital transformation depends on aligning technological innovation with human capital strategies. It is concluded that banks capable of combining investments in digital infrastructure with strategic development of human resources will achieve higher customer satisfaction, long-term competitiveness, and sustainable growth in a dynamic financial environment.

Keywords: digital transformation, banking sector, human capital management, change management, digital competencies, digital talent, human resources, organizational change, competitive advantage

Introduction.

Digital transformation has become one of the most powerful drivers of change in the global economy, reshaping traditional industries and accelerating the transition to new business models. The banking sector, being highly sensitive to technological progress, faces both unprecedented opportunities and serious challenges. The rapid development of fintech companies, the spread of mobile technologies, the use of



artificial intelligence and big data analytics have fundamentally altered the ways financial institutions interact with clients and manage internal processes.

Despite obvious advantages, the process of digitalization in banking is accompanied by a number of issues. Among them are the need to ensure data security, the growing competition with fintech startups, and the pressure from customers who expect high-quality digital services. At the same time, banks must transform their organizational culture, retrain employees, and create an innovative environment that stimulates continuous improvement. These challenges demonstrate that the success of digital transformation depends not only on investments in new technologies but also on the ability of banks to strategically manage human capital.

Therefore, the relevance of this article lies in the need to investigate the relationship between digitalization processes in banking and human resource management strategies. Particular attention is paid to change management, development of digital competencies, and the formation of an organizational culture that is ready for continuous adaptation. The purpose of this study is to systematize the main directions of human capital management in the context of banking digitalization and to determine the prospects and risks of these processes for the sustainable development of the financial sector.

Literature Review.

The issue of digital transformation in the banking sector has been actively discussed by scholars, both in Ukraine and abroad, reflecting the increasing role of technology in ensuring the competitiveness and sustainability of financial institutions. Ukrainian researchers emphasize the importance of digitalization for the modernization of domestic banks. Aleksieienko and Herich [1] argue that the competitiveness of Ukrainian banks increasingly depends on the successful integration of digital technologies into management systems. Similar conclusions are drawn by Bondarenko and Podarin [3], who highlight that digital transformation has become a necessary condition for maintaining efficiency and customer trust. Bezhan and Roshko [2] also underline both the prospects and difficulties of digital transformation in Ukraine, noting regulatory challenges and the need for systemic change.



Several studies focus on the role of digital channels and innovative services in reshaping customer experience. Hasii, Skorba, and Roshko [6] demonstrate how internet banking and mobile applications increase accessibility and convenience for clients, while Fuchs and Isenberg [5] emphasize that digital customer experience is a decisive factor in building long-term loyalty. Singh, Gupta, and Kumar [9] similarly stress that digital channels are central to customer engagement and retention, making them an indispensable tool for modern banks.

At the international level, researchers pay attention to barriers, risks, and strategic implications of digitalization. Diener and Špaček [4] analyze managerial perspectives, noting that organizational resistance and lack of digital competencies remain key obstacles to transformation. Shanti, Avianto, and Wibowo [8] provide a systematic review of global banking digitalization, pointing to both opportunities and risks in implementation. Suntsova [14] broadens this view, stressing that digital transformation of the global economy creates both challenges and opportunities for sustainable growth.

A number of publications also address the regulatory and institutional framework. The Law of Ukraine No. 1953-IX “On Financial Services and Financial Companies” [7] and the Law No. 1667-IX “On promoting the development of the digital economy in Ukraine” [15] establish the legal basis for digitalization processes in finance. Kovalenko and Krynytsia [12] examine institutional support mechanisms for digital transformation of the financial system, while Vyhovska, Sholudko and Balytska [11] provide a comprehensive review of Ukraine’s digital transformation policy in 2019–2024. At the international level, the Development Committee [10] of the IMF emphasizes the link between digitalization and economic development.

Finally, scholars also draw attention to innovation and financing in the context of digital transformation. Samorodov and Kotkovskyi [13] analyze innovative financing instruments in Ukraine, stressing their importance for supporting business development in the digital economy. These ideas align with the general trend of strengthening the role of innovative financial and credit systems in global economic transformation.



In summary, the literature indicates that digital transformation is a multidimensional process that influences competitiveness, customer behavior, regulatory frameworks, and institutional development. At the same time, a recurring theme across studies is the importance of human capital and managerial strategies in ensuring that digital technologies are successfully integrated into banking practice. However, despite the wide range of publications, there remains a research gap in systematically analyzing how change management, workforce training, and digital talent development can be strategically combined to secure sustainable digital transformation in the banking sector.

Purpose, Objectives, and Research Methods.

The purpose of this article is to analyze the strategic aspects of digital transformation in the banking sector with a specific focus on human capital management. The study aims to demonstrate how HR strategies contribute to the success of digital initiatives and to identify the key challenges and opportunities associated with this process.

To achieve this purpose, the following objectives were formulated:

1. To examine the role of change management in digital transformation within banks.
2. To explore the importance of training and retraining programs in closing digital skill gaps.
3. To analyze the development of an organizational culture that supports innovation and adaptability.
4. To assess strategies for attracting, retaining, and developing digital talents.
5. To determine the main risks and prospects of banking digitalization in relation to human capital management.

The methodological basis of the research is a combination of general scientific and specific methods. The study employs analysis, synthesis, comparison, and generalization of theoretical approaches to digital transformation and HR management. Elements of systemic and strategic analysis were applied to identify interconnections between technological development and human capital strategies. In addition, the study



relies on the review of recent academic publications and practical reports to ensure a comprehensive understanding of current trends in banking digitalization.

Research Results.

Digital transformation in the banking sector is a comprehensive process of digitalization that fundamentally changes the way banks operate and serve their customers. This process includes the large-scale application of innovative service delivery methods, which leads to strategic changes and affects organizational culture. The importance of digital transformation in the banking sector lies in its ability to significantly improve business performance, including improving customer service, optimizing operational processes, and creating new business models with innovative approaches that transform traditional banking practices. In addition, digital transformation plays a key role in economic development, as it promotes the active implementation and maximum use of digital technologies, which is important for economic modernization.

From an HR perspective, change management and digital talent development are critical aspects of digital transformation in the banking sector. The role of HR in the banking context, especially in the context of full-scale disruption, carries a significant emotional burden and requires effective change management strategies. HR professionals are constantly exploring different approaches to managing corporate behavior in the banking sector to ensure sustainable economic growth [4].

Also, in the context of HR management, the banks' career program websites are being updated to make them more candidate-oriented and interactive for both internal and external talent pools, which emphasizes the importance of digital skills development (Figure 1).

Digital transformation in the banking sector is a strategic process that involves the introduction of digital technologies to promote cultural change and improve business operations. It plays a key role in improving the customer experience, optimizing operations, and contributing to economic development. The success of digital transformation largely depends on effective change management and development of digital talent in the banking sector.

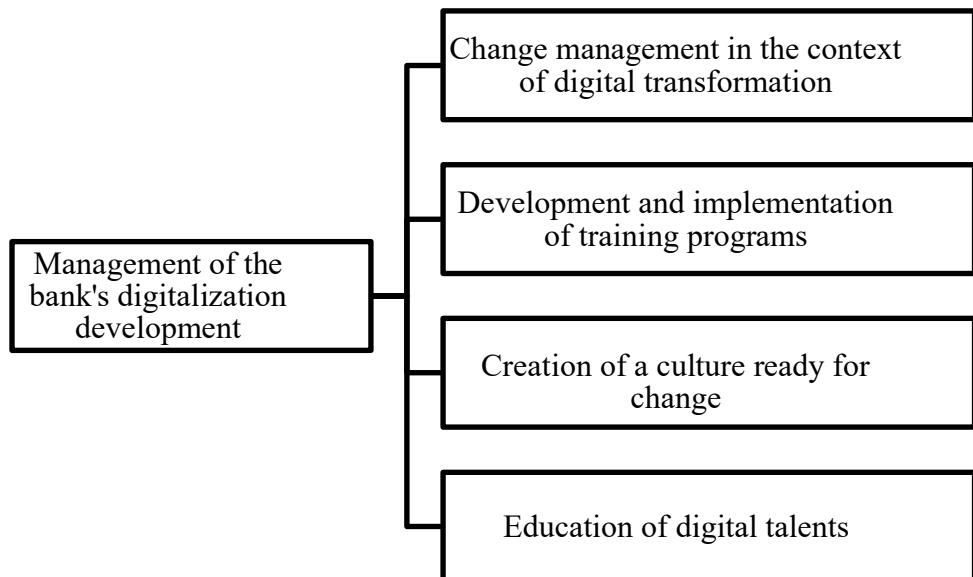


Fig. 1. Management of the bank's digitalization development

Source: compiled by the authors

1. Change Management in the Context of Digital Transformation

In the context of digital transformation, HR plays a critical role in managing organizational change. The HR department is responsible for developing communication and awareness strategies, which include effectively communicating the goals and benefits of digital initiatives to employees, as well as ensuring their understanding and support.

In addition, HR is responsible for fostering a change-ready mindset among employees by implementing strategies to increase their engagement and motivation during the transformation process.

Another important task of HR is to align employees with the strategic goals of digital initiatives. By integrating HR strategies with the overall business strategy, HR professionals can effectively guide employees to achieve organizational goals of digital transformation.

2. Development and implementation of training programs

To create effective training programs, it is first necessary to identify the skills gaps in the existing staff. This requires a detailed assessment to understand in which areas employees may need additional knowledge and skills. Once these gaps have been identified, customized training modules can be developed to address them, especially



in the context of digital upskilling.

An important aspect is to measure and evaluate the effectiveness of training initiatives to ensure that the desired results are achieved. This involves putting in place reliable evaluation mechanisms that measure the impact of training on the workforce. Such evaluations can include employee feedback, performance indicators, and other relevant metrics to assess the success of training programs [5]. In addition, the broader impact of digital transformation and automation on employee skills and competencies must be considered.

In the process of workforce development, it is also important to consider the specific needs of different sectors, such as healthcare. Understanding the training needs of the public health workforce is key to creating programs that meet the unique challenges and requirements of this sector. In addition, curriculum development should consider the impact of technological advances such as big data and artificial intelligence on the industry and the workforce.

Overall, designing and implementing training programs requires a comprehensive approach that includes identifying skills gaps, creating customized training modules, and accurately evaluating training effectiveness. By leveraging research data and industry best practices, organizations can ensure that their training initiatives meet the changing needs of the workforce and the demands of the digital economy.

3. Creation of a culture ready for change

To create a culture ready for change, organizations should prioritize the development of adaptability and flexibility, promote innovation and risk-taking, and create feedback mechanisms to address problems and challenges. An organizational culture that supports innovation, risk-taking, and learning ensures that the company is prepared for change. In addition, ethical leadership and a culture of performance in the organization are important prerequisites for a positive attitude towards change.

To foster innovation and risk-taking, it is necessary to create an organizational culture that encourages creativity and innovation. Management decisions and internal processes can have a significant impact on innovation and risk-taking. Organizations that support innovation tend to act quickly and flexibly, being open to change. It is also



important to keep in mind that the overconfidence of managers when implementing environmental innovations can affect the company's approach to risk management [8].

Establishing feedback mechanisms to address problems and challenges is key to building a culture that is ready for change. This includes developing individualized approaches to increase employee engagement and effort during change implementation. Readiness strategies should focus on factors that influence the specific change goals of the organization. Leadership plays a crucial role in creating an environment that fosters the adoption of new ideas through feedback and problem-solving.

Therefore, creating a culture that is ready for change requires a comprehensive approach that includes developing adaptability and flexibility, encouraging innovation and risk-taking, and implementing feedback mechanisms. By leveraging knowledge of organizational culture, leadership, and innovation, companies can create an environment that is ready for change and able to thrive in a dynamic environment.

4. Education of digital talents

To identify the digital skills needed, organizations should conduct an in-depth analysis of the digital environment and technology trends. This includes keeping abreast of the latest advances in digital technology, understanding the impact of new technologies such as artificial intelligence, machine learning, and blockchain, and being aware of the changing demands of the digital marketplace.

By analyzing the digital environment and technology trends, companies can identify specific skills and competencies that are in high demand and tailor their talent development strategies to meet these requirements. This includes creating a competency framework for digital roles that defines the required skills, knowledge, and behaviors for different positions in the digital sphere.

Collaboration with business units is key to prioritizing skills, and engaging with different departments helps to understand what specific skills and competencies are needed for a successful digital transformation within the organization. To attract digital talent, organizations need to develop a compelling employer branding strategy that emphasizes their commitment to digital innovation, adoption of the latest technologies,



and creating a dynamic work environment [9].

Innovative approaches to recruiting for digital positions include applying flexible recruitment methodologies, using predictive analytics to attract talent, and implementing technological assessment tools. Leveraging digital recruitment channels, such as social media platforms and digital advertising, helps organizations expand their reach, target specific talent groups, and create a seamless experience for candidates.

To retain digital professionals, it is necessary to develop competitive compensation and benefits packages that reflect the high value of their skills and experience.

Opportunities for continuous learning and career development are key to retaining and developing digital talent. Organizations should invest in upskilling and retraining programs, provide access to online learning platforms, and offer mentoring and coaching for digital professionals.

By aligning talent development strategies with the most sought-after skills and competencies, collaborating with business units, creating an attractive employer brand strategy, and implementing innovative recruitment and retention methods, organizations can effectively manage digital transformation and attract the necessary digital talent for the company's sustainable operation.

A supportive and inclusive work environment is crucial for retaining digital talent. This includes fostering a culture of innovation, supporting cross-functional collaboration, and encouraging diversity and inclusion in digital teams. By creating such an environment, organizations can increase employee engagement, foster creativity and collaboration, and strengthen a sense of belonging among digital professionals.

Hence, developing digital talent requires a strategic approach that includes:

- defining digital skills;
- attracting and hiring talent;
- retaining and developing digital professionals.

By analyzing the digital environment, collaborating with business units, creating a competency framework, developing an attractive employer brand, using digital



channels to recruit, implementing innovative hiring practices, developing competitive compensation and benefits packages, providing continuous learning opportunities, and creating a supportive work environment, organizations can effectively develop a pool of skilled and motivated digital talent to drive their digital transformation initiatives (Figure 2).

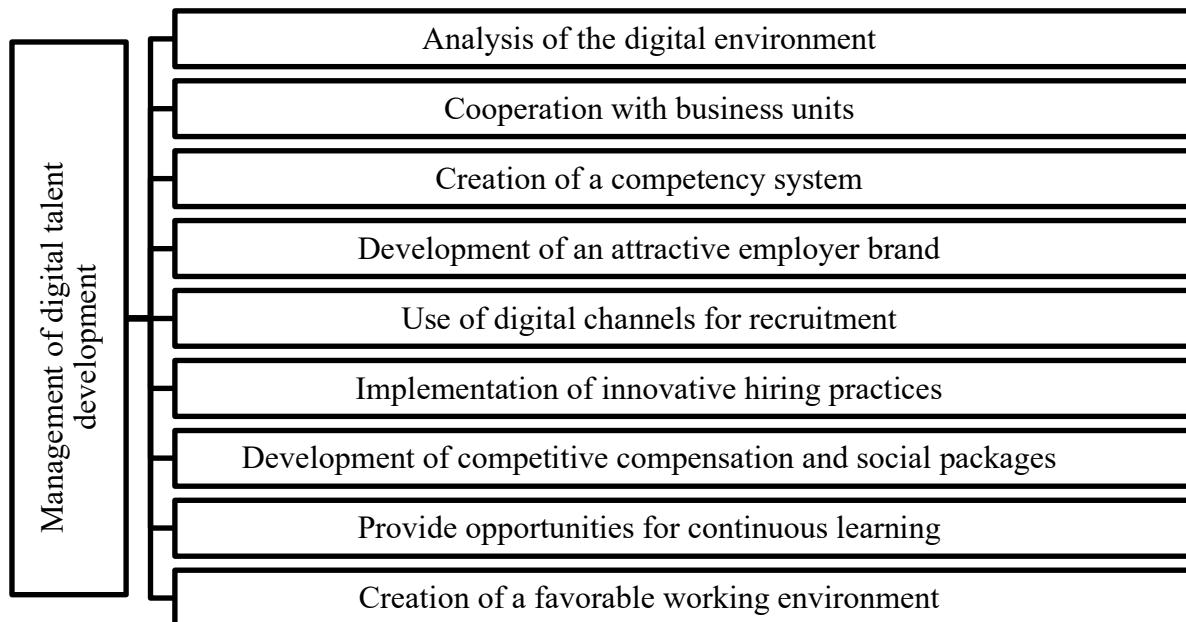


Fig. 2. Management of the bank's digital talent development

Source: compiled by the authors

Digital transformation in the banking sector has become extremely important, especially with a focus on human resources (HR) strategies. Successful digitalization in this area is associated with the development of digital banking solutions that meet the needs of customers, such as interest rate liberalization, big data, mobile financial services, risk management, and customer relationship management.

The relationship between digital transformation and the business strategy of digitalization has contributed to the creation of an inductive model of workforce reengineering that includes planning, attracting, adapting, and developing talent. However, the introduction of digital approaches in the financial industry is accompanied by certain risks that may impede a smooth digital transformation, especially in the banking sector [10]. Despite these challenges, digital transformation



in the banking sector is recognized as key to achieving competitive advantage, in particular by enhancing interaction between customers and companies through information and communication technologies. However, the active adoption of digital technologies and full-scale disruption have highlighted the growing need for digital transformation of the banking sector, focusing on the risks associated with customer satisfaction in the context of digital banking in Ukraine.

Thus, a successful digital transformation in the banking sector with a focus on HR strategy includes meeting customer needs through digital banking solutions, as well as overcoming challenges and risks to ensure a high level of customer satisfaction and achieve competitive advantages. Based on the study, it is possible to formulate prospects for the future and new trends in the management of human capital in the context of digitalization.

Digital transformation has become critical for the banking industry, requiring a strategic approach to ensure sustainable growth. This process has opened up both new opportunities and challenges, emphasizing the importance of developing digital competencies among professionals. However, organizations are facing a shortage of digital talent, making it difficult to successfully implement digital transformation initiatives. To overcome this problem, HR professionals and managers are advised to implement strategies to upskill and engage digital professionals, support them in developing digital skills, and provide clear career prospects. In addition, the banking sector is undergoing a transformational shift, viewing digital transformation not only as an opportunity but as an integral part of reality.

Customer experience, satisfaction, loyalty, and financial performance in the context of digital banking are largely influenced by customers' perceptions of digital services. The growth of new financial services provided by Fintech companies is driving banks to implement operational innovations to achieve sustainable competitive advantage. As a result, the banking industry is focusing on various aspects, such as the impact of digitalization on banks' operations, digital transformation frameworks, jobs and human resources, and customer behavior.

The development of digital talent is crucial for the digital transformation of the



banking industry. It is important to coordinate efforts with other development initiatives to create solutions that maximize efficiency in the banking sector. The strategic role of recruitment in the digital transformation of organizations is crucial to renew the talent base, which is a prerequisite for successful digital transformation [8]. The internal mechanism by which morale and talent jointly promote individual creativity provides theoretical guidance for improving individual creativity in the digital transformation process.

The future prospects and emerging trends of digital transformation in banking in terms of change management and digital talent development are influenced by the need to address the digital talent shortage, develop digital competence among talent, and strategically manage recruitment to support digital transformation initiatives. The banking industry's shift to operational innovation and the perception of digital transformation as a "parallel world" further shape the future outlook for digital transformation in banking.

In light of the human resources perspective of change management and digital talent development in the context of digital transformation in banking, it is imperative that organizations take a proactive approach. The following recommendations are offered to successfully navigate this transformation journey:

- 1) Implementing effective training and development initiatives to upskill and retrain existing employees.
- 2) Focusing on digital literacy, new technologies and new skills required for the digital economy.
- 3) Encouraging a culture of continuous learning so that employees remain adaptable and well-prepared for new roles.
- 4) Developing a comprehensive talent acquisition strategy that aligns with the goals of digital transformation.
- 5) Hiring people with a strong digital mindset, technical knowledge, and a willingness to change.
- 6) Collaborating with educational institutions and industry partners to find talent and stay ahead in a competitive digital environment.



7) Investing in leadership programs that prepare executives and managers to lead in the digital environment. Equipping them with the skills to inspire and guide their teams through the transformation process by developing a culture of innovation, flexibility and collaboration.

8) Adopt flexible HR practices that support the dynamic nature of digital transformation.

9) Foster cross-functional collaboration, shorten decision-making cycles, and implement flexible work schedules to meet the changing needs of digital talent.

10) Prioritize employee engagement and well-being initiatives to maintain a positive work culture in times of change.

11) Regularly monitor feedback, ensure transparent communication, and reward employees for their contributions to digital transformation.

As the banking sector undergoes an unprecedented digital transformation, the role of the workforce is becoming pivotal to organizational success. Managing change and developing digital talent are not just strategic imperatives; they are integral to the survival and growth of banks in the digital age.

The future of digital transformation in the banking sector is promising, as it has the potential to improve customer experience, increase operational efficiency, and introduce innovative financial services. The role of HR will be characterized by adaptability, flexibility, and a deep understanding of the changing needs of human capital.

Summary and conclusions.

The conducted analysis has shown that digital transformation in banking is a complex and multidimensional process that goes far beyond the technological domain. It directly affects the strategy of human capital management, requiring new approaches to recruitment, professional development, and retention of staff. One of the central findings is that banks that integrate HR strategies into their overall digital agenda are more successful in achieving competitive advantage and ensuring customer loyalty.

Firstly, effective change management is a decisive factor. Employees need to understand the objectives and benefits of transformation, which makes transparent



communication and leadership engagement crucial. Secondly, the development of digital competencies through continuous training and professional growth programs ensures that the workforce is capable of meeting the demands of the digital economy. Thirdly, creating a culture open to innovation and experimentation supports organizational resilience and accelerates the adaptation to technological disruption.

Another important conclusion is that the shortage of digital talent remains a key barrier to successful transformation. To overcome this challenge, banks should not only focus on internal upskilling but also strengthen cooperation with universities, professional associations, and external experts. This will allow them to build a sustainable pipeline of digital professionals. At the same time, the development of attractive employer branding strategies and inclusive work environments contributes to retaining skilled specialists in the long term.

In summary, digital transformation should be approached as an integrated process that unites technological innovation with human capital strategies. The future of banking will largely depend on the ability of financial institutions to combine investments in digital infrastructure with investments in people, thus ensuring high-quality customer service, operational efficiency, and long-term competitiveness. Prospects for further research involve a deeper exploration of the role of artificial intelligence, blockchain, and machine learning in shaping HR practices, as well as the study of new models of digital leadership in the financial industry.

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