



Economics and Business Management

16(2), 134-151

Journal homepage: <https://economicscience.com.ua/en>

Received: 27.12.2024 Revised: 31.03.2025 Accepted: 22.05.2025

UDC 336.71 043.86:658.1:338.22:658.1](477)

DOI: 10.31548/economics/2.2025.134

Viktoriia Kostiuk*

PhD in Economic Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0001-7671-3603>

Oleksii Muravskyi

PhD in Economic Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0002-7117-7335>

Lidiia Avramchuk

PhD in Economic Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0000-0002-7496-0392>

Vitaliy Lutsenko

PhD in Economic Sciences, Associate Professor
National University of Life and Environmental Sciences of Ukraine
03041, 15 Heroiv Oborony Str., Kyiv, Ukraine
<https://orcid.org/0009-0009-6177-1806>

Ghenadie Ciobanu

Doctor of Economics, Senior Research
National Scientific Research Institute of Labour and Social Protections
010643, 6-8 Povernei Str., Bucharest, Romania
Artifex University of Bucharest
060754, 47 Economu Cezărescu Str., Bucharest, Romania
<https://orcid.org/0000-0002-2361-9717>

Evolution of digital banking services in Ukraine: Impact on business development and financial infrastructure

Abstract. The research relevance is determined by the rapid digitalisation of Ukraine's financial sector and the need to provide small and medium-sized businesses with effective tools for accessing finance in the context of economic transformation. The study aimed to assess the impact of digital

Suggested Citation:

Kostiuk, V., Muravskyi, O., Avramchuk, L., Lutsenko, V., & Ciobanu, G. (2025). Evolution of digital banking services in Ukraine: Impact on business development and financial infrastructure. *Economics and Business Management*, 16(2), 134-151. doi: 10.31548/economics/2.2025.134.

*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

banking services on SMEs' access to finance in Ukraine. For this purpose, a comprehensive analysis of the regulatory framework, statistical data on the share of non-cash transactions, the activity of financial technology companies, and digitalisation trends in the banking sector was conducted. An analysis of statistics for 2023-2024 showed that the share of non-cash transactions with payment cards reached 94.6% by number, and the total number of such transactions was 8.65 billion in 2024. The number of identifications through the NBU's BankID system more than doubled from 42.9 million in 2023 to 87.7 million in 2024. The mobile apps of the largest banks, including Monobank and Privat24, were downloaded more than 10 million times each in 2024. In 2024, entrepreneurs received more than 16,000 loans worth more than 62 billion UAH under the Affordable Loans 5-7-9% programme. In 2025, the level of digitalisation of banking services for business in the regions of Ukraine will exceed 80%. These results indicate a deep integration of digital banking services into the financial activities of small and medium-sized businesses, a significant increase in access to financial resources, and a significant increase in financial inclusion. The practical significance of the study is the creation of a framework for improving the digital financial infrastructure, which will contribute to the further development and increase the availability of financing for small and medium-sized businesses in Ukraine

Keywords: digital banking; financial technology; digital transformation; online banking; mobile banking; blockchain

INTRODUCTION

The digital transformation of banking services is becoming key to building an efficient financial system, supporting business activity and modernising market infrastructure. This issue is particularly relevant for Ukraine, which is facing both global and domestic challenges: technological breakthroughs, the effects of military operations, economic restructuring, and the need for transparent and affordable financial mechanisms to support small and medium-sized businesses. In these circumstances, digital banking services are becoming a central link in ensuring the continuity of financial flows, expanding access to capital, and increasing the financial inclusion of the population and entrepreneurs.

The development of the Ukrainian financial system is accompanied by the rapid spread of digital technologies, which is leading to fundamental changes in the way banking services are delivered, through the growing role of mobile and digital banking, remote banking and digital platforms. N. Danik & A. Torlopov (2024) showed that mobile platforms, cooperation with financial technology (FinTech) companies, process automation, and personalisation of services increase the efficiency of banks. The authors also highlighted the growing role of cybersecurity and new staff competencies. The proliferation of digital services in the banking sector

necessitates an updated customer service system and a revision of approaches to financial transaction management. T. Staverska & Y. Litvinova (2024) examined the mechanisms for improving the efficiency of banking activities in the context of digitalisation, particularly the impact of online services, electronic document management and automation on simplifying procedures and reducing costs. The study also noted the increasing role of omnichannel services and individualisation of financial solutions, which form a new quality of bank-client interaction.

Digital technologies are radically changing approaches to banking, necessitating the adaptation of traditional financial institutions to new market conditions. A. Meshcheriakov *et al.* (2023) studied the impact of digital tools on the transformation of banking processes, focusing on the development of remote services, the use of artificial intelligence, and the integration of financial technology FinTech solutions. The study identified the main benefits of digitalisation, including increased efficiency, reduced costs, and increased customer focus. The active digitalisation of the banking sector is occurring in the context of economic instability, which requires adaptation to new challenges and revision of development strategies. M. Shevchenko *et al.* (2023) studied the dynamics of the

digital transformation of Ukrainian banks, focusing on adaptation to crisis circumstances, changing approaches to risk management, and the introduction of innovative technologies. The authors emphasised that digital solutions ensure continuity of customer service, increase the level of remote interaction, and reduce dependence on physical infrastructure.

The challenges of digital transformation in the financial sector require active improvement of management tools and interaction between banks and customers. Y. Khudolii & A. Hlushko (2023) studied the main stages of development of digital banking services in Ukraine, focusing on the benefits of remote banking, reduction of transaction costs, and increased financial inclusion. The study also emphasised the importance of digital tools for empowering banks in times of economic instability and military operations. The rapid adoption of digital services in the banking sector is leading to a transformation of approaches to organising financial transactions, customer service and the formation of a new structure of financial interaction. Y. Verheliuk *et al.* (2025) studied the impact of digitalisation on banks' development strategies, emphasising the growing role of FinTech services, increased productivity through automation, and the expansion of e-service channels. The study also highlighted the need to harmonise regulatory mechanisms with digital trends. The intensive introduction of digital solutions into the banking environment is transforming financial interactions, requiring new management approaches and infrastructure adaptation. A. Semenog *et al.* (2024) analysed the development of digital financial technologies in Ukraine, focusing on digital banking tools, digital platforms for customer service, and the effectiveness of implemented services. The study noted the positive impact of digitalisation on reducing costs, increasing transparency of operations and improving customer experience.

Despite active research on the digitalisation of the banking system, the impact of digital services on entrepreneurship remains insufficiently covered, in terms of access to finance for small and medium-sized businesses, the efficiency of innovative banking instruments, the development of new models of interaction with financial

institutions, and the participation of non-banks in financial inclusion. These aspects require a systematic analysis to describe their role in supporting business activity and the long-term sustainability of the financial infrastructure. The study aimed to determine how digital banking services affect the ability of small and medium-sized businesses to obtain financing in Ukraine. To achieve this goal, the following objectives were set: to analyse the stages of digitalisation in the banking sector of Ukraine; to assess changes in financial accessibility for entrepreneurs in the context of digitalisation of banking services.

MATERIALS AND METHODS

This study was practical and covered the period from 2019 to February 2025. It defined the role of digital banking services and their types based on the research of A.A. Mohamed (2024) and N. Mujtaba & A. Yuille (2024). These sources were chosen due to their relevance, depth, and comprehensiveness in covering technological trends in digital financial services, in the areas of security, automation, and innovative payment solutions, which are substantial for the transformation of banking processes. The study of the regulatory framework included an analysis of key documents, such as the Law of Ukraine No. 675-VIII (2015), which lays down the fundamental legal framework for the use of electronic contracts, electronic signatures and remote user identification. The authors also took into account Resolution No. 43 (Board of the National Bank of..., 2014), which regulates the procedure for registration of payment systems and payment infrastructure operators, as well as the Regulation on Electronic Money (Resolution No. 481) (Resolution of the Board of the National Bank of Ukraine No. 178, 2008), which regulates the issuance and circulation of electronic money in Ukraine. The Law of Ukraine "On Payment Services" No. 1591-IX (State Tax Service of Ukraine, 2023), which implements European directives and defines the legal status of new market participants, in particular FinTech companies and non-bank payment service providers, as well as lays the foundation for the concept of open banking and further development, is also considered separately.

The share of non-cash transactions in 2023-2024 was analysed (National Bank of Ukraine, 2025a), as well as the dynamics of the use of the BankID electronic identification system of the National Bank of Ukraine (NBU) (Ukrinform, 2025). Particular attention is paid to the number of transactions using payment cards (Interfax-Ukraine, 2025). The study examined the dynamics of FinTech companies in 2022-2024 and the introduction of relevant technologies (National Bank of Ukraine, 2024b), which was analysed using descriptive statistics and monitoring of changes in this area. An analysis of the statistics on the use of online banking and digital platforms by entrepreneurs was developed. The percentage of use of mobile applications and digital banking was analysed. An analysis of the statistics on the use of online banking and digital platforms by entrepreneurs from 2019 to 2024 was developed using data from Privatbank (n.d.), Oschadbank (n.d.) and Monobank (n.d.). To assess trends, methods of dynamic analysis and comparative analysis of user activity were used. The number of loans received by entrepreneurs in 2024 under the "Affordable Loans 5-7-9%" programme was estimated (PrivatBank is a participant..., n.d.; Ministry of Economy of Ukraine, 2025). A comparison of digital services for small business lending at PrivatBank, Monobank, and FUIB was developed (Pumb, n.d.) using content analysis of the functionality of mobile applications and platforms, as well as integration with accounting and CRM systems. Barriers to entrepreneurs' access to digital banking products were also identified. The participation of non-banks in the formation of the digital financial ecosystem and ways to improve the efficiency of small businesses' use of digital services, which has become a substantial aspect of the study in the context of the development of innovative financial technologies and ensuring broad access to financial resources for sustainable development, were addressed.

RESULTS AND DISCUSSION

Transformation of banking services under the influence of digitalisation: Conceptual and regulatory frameworks

Digital banking services are a set of financial transactions provided by banking institutions

using information technology, without the need for a customer's physical presence in a branch. Their development reflects the general trend towards digitalisation of the financial sector, focused on convenience, speed, personalisation and reduction of transaction costs. Digital banking services are based on Internet banking, mobile banking, e-wallets, virtual cards, automated customer identification systems, and artificial intelligence services. The introduction of such services optimises internal processes, reduces the burden on physical branches, improves the quality of customer service, and expands market coverage (Ranjan, 2024).

The most common types of digital banking services include digital banking, which is the remote management of accounts through bank web portals and provides access to basic financial transactions: transfers, bill payments, opening deposits, monitoring balance and transaction history. In parallel, mobile banking is actively developing, providing similar functionality through mobile applications. Thanks to the active use of smartphones, mobile applications have become the main channel of banking services for small businesses, providing quick and convenient access to financial transactions without visiting the office (Feyen *et al.*, 2021). Electronic payment instruments, such as e-wallets, virtual bank cards, Quick Response (QR) codes, and contactless payments, are a separate area of digital banking services. Their use simplifies the process of paying for goods and services, increasing the speed of service, and reducing operating costs for businesses. The latest digital banking tools include the open banking concept, which can be used by third-party developers to integrate banking services into their platforms via APIs (application programming interfaces). This creates new business opportunities, particularly in the areas of financial planning, reporting and accounting automation (Mohammed, 2024).

The development of digital technologies in Ukraine's banking sector has gone through several key stages, reflecting the gradual transformation of the industry and its adaptation to modern challenges. Until 2015, basic digital services were being developed, including the first internet banking platforms and electronic payment systems. During this period, banks

began to introduce remote customer service, but large-scale digitalisation was limited due to technical barriers and low digital literacy among users. In 2015-2019, there was an active expansion of the functionality of digital platforms and the development of mobile banking. The first financial technology companies (FinTechs) emerged, and the regulatory framework began to adapt to the needs of digitalisation, stimulating the introduction of new digital products and services. Banks have significantly improved the availability of their services through mobile applications, which has helped to increase customer outreach. In 2020-2022, the number of online transactions increased rapidly, driven not only by technological developments but also by the challenges of the COVID-19 pandemic. In the first six months of COVID-19 alone, the number of transactions within open banking increased by 832%. During this period, artificial intelligence, process automation and remote customer identification technologies were widely implemented, through the Bank Identification (BankID) system. Digital platforms have become the main channel of interaction between banks and customers, ensuring continuity of service and increasing operational efficiency. Since 2023, the financial sector has been undergoing a systemic transformation, including the introduction of integrated digital ecosystems, harmonisation of the regulatory framework with European standards, development of open banking, and strengthening of cybersecurity. Special attention is paid to increasing financial inclusion and expanding access to digital banking products for small and medium-sized businesses. This stage forms the basis for a sustainable and innovative financial infrastructure capable of meeting modern economic challenges (Demchyshak *et al.*, 2024).

A substantial area of innovation is the use of artificial intelligence and data analytics in banking. Machine learning algorithms are used to personalise offers, detect fraudulent transactions, assess credit risk, and automate customer service through chatbots. For entrepreneurs, such tools accelerate financing decisions, better describe their solvency, and provide individualised recommendations. The Law of Ukraine No. 675-VIII (2015), which lays down the legal

framework for the use of electronic contracts, electronic signatures and remote identification of business entities, is substantial in shaping the regulatory framework for digital financial services. In this context, the BankID system from the National Bank of Ukraine is key, providing legally significant customer verification in the digital environment. Its implementation provides entrepreneurs, in particular small and medium-sized businesses, with access to banking and public services without physical presence, which significantly reduces transaction costs and increases financial inclusion. Digital banking services are gradually integrating new customer identification formats, including remote verification via BankID, video identification and the use of biometric data. These mechanisms simplify the creation of bank accounts, submitting loan applications, and participating in financial programmes. At the level of by-laws, the NBU has adopted several regulations, including the Regulation on the Procedure for Registration of Payment Systems, Payment Infrastructure Service Operators and Postal Service Operators (Resolution No. 43) (Board of the National Bank of..., 2014), the Regulation on Electronic Money (Resolution No. 481) (Resolution of the Board of the National Bank of Ukraine No. 178, 2008), as well as regulations on cybersecurity and personal data protection in the digital environment. Such a regulatory framework helps to increase business confidence in digital financial products, creating the preconditions for their active use in the context of the digital transformation of the economy (Mujtaba & Yuille, 2024).

In the context of the NBU's growing role as a key institutional driver of the digital transformation of the financial sector, the issue of regulatory support for these processes is of relevance. The NBU's institutional support not only stimulates the implementation of innovative solutions in the banking sector but also creates a favourable regulatory environment for the development of digital financial services. Changes in the regulatory framework directly contribute to expanding access to modern financial instruments for small and medium-sized businesses (SMEs), which in turn improves financial inclusion and increases the efficiency of business processes.

The regulatory framework for digital financial services for business in Ukraine is being developed in the context of the overall strategy of digital transformation of the financial sector, which is a priority for the National Bank of Ukraine and the government. The basis of legal regulation is the Law of Ukraine "On Payment Services" No. 1591-IX, which came into force in 2021 and is gradually being implemented (State Tax Service of Ukraine, 2023). This law implements the main provisions of the European Union (EU) Directive PSD2 (Payment Services Directive 2) (European Central Bank, 2018) and defines the legal status of new market participants such as non-bank payment service providers, FinTech companies, e-money and digital wallets. The law provides for the principle of open banking, which ensures access to third-party services to the banking infrastructure with the client's permission, and forms the basis for the development of new models of interaction between businesses and financial institutions through APIs. In addition, Ukraine is a party to the Association Agreement between Ukraine and the EU (Association Agreement between Ukraine..., 2018), which provides for the harmonisation of national financial legislation with European standards. This leads to Ukraine's integration into Europe's digital single market and opens additional opportunities for exporting FinTech services, scaling digital services, and attracting international investors (National Bank of Ukraine, 2024a). The practical consequence of these regulatory changes is the active implementation of digital services, which are of particular importance for small and medium-sized businesses. The most popular solution among entrepreneurs is mobile lending, which provides quick financing without the need to visit bank branches. For example, PrivatBank has launched a programme of lending for Ukrainian machinery with state compensation of 15% of the cost, where the minimum loan amount is 240 thousand UAH and the interest rate starts at 7% per annum. This makes lending more affordable and faster for SMEs (PrivatBank launches a new..., n.d.) Electronic reporting, which greatly simplifies tax compliance and reduces administrative burden, and integration with accounting platforms, which automates accounting and provides timely control

of financial flows. These tools help SMEs reduce operating costs, improve business management efficiency and respond more quickly to market changes. In addition, the Affordable Loans 5-7-9% programme in 2025 attracted more than 5 billion UAH in loans for businesses in high-risk areas of war, and average monthly lending volumes more than doubled (Ministry of Economy of Ukraine, 2025).

In 2024, the share of non-cash transactions by number reached 94.6% of the total volume of payment card transactions, and by value 51%. Payments in the retail network accounted for the largest share by number of transactions (73.4%), while card-to-card transfers (31.1%) and online payments (14.7%) prevailed by value. This structure of non-cash transactions indicates a high level of integration of digital payment instruments into the everyday financial behaviour of households and businesses (National Bank of Ukraine, 2025a). A significant indicator of digital integration is the dynamics of the use of the NBU's BankID electronic identification system. In 2023, 42.9 million successful identifications were recorded, while in 2024 this figure rose to 87.7 million, an increase of 104%. Most calls (over 81 million) were made by non-commercial subscribers (public services, including the Diia portal (Diia, n.d.)), and the rest by financial institutions. This indicates that BankID is actively involved in the national digital ecosystem. The NBU's stimulation of mobile banking development is also marked by positive dynamics (Ukrinform, 2025). In 2024, the number of transactions using payment cards totalled 8.65 billion, of which the majority were non-cash. The structure of customer service is dominated by the remote format: as of the beginning of 2024, the number of payment service users reached 82 million, of which a significant share (over 79% of individuals and 89% of legal entities) were served online. At the same time, the popularity of banks' mobile applications continues to grow, with Monobank (Monobank, n.d.) and Privat24 (Privatbank, n.d.) apps reaching over 10 million downloads each in 2024 (Interfax-Ukraine, 2025).

Another strategic direction of digitalisation is to support innovation within the so-called "regulatory sandbox". This tool can be used to test financial technologies in a controlled

environment without regulatory risks. In 2024, 256 FinTech companies were operating in Ukraine, which is 10 more than in 2023. Between 2022 and 2024, 17 new companies entered the market (AIN, 2023). According to the Ukrainian Association of FinTech and Innovative Companies, 75% of FinTech companies have already reached the break-even point, which confirms the effectiveness of the NBU's regulatory support. In addition, the NBU encourages the introduction of payment instruments such as QR codes and Near Field Communication (NFC) (Apple Pay, Google Pay) (AIN, 2023). In 2023, the share of non-cash transactions was 91.9%, which was accompanied by the active use of contactless terminals (449.5 thousand, of which 99.2% supported NFC). In 2024, the number of payment card transactions increased to 8.65 billion, and a significant portion of them were made using contactless technologies (National Bank of Ukraine, 2024b).

The study by P.T.T. Tran *et al.* (2023) analysed how digital banking services affect customer loyalty in Vietnam. In contrast, the current analysis considered digitalisation as a tool for improving access to finance in the context of banking sector transformation. A common thread in both papers was the recognition of the importance of mobile banking, online lending, and digital service channels. However, the approach of P.T.T. Tran *et al.* was behavioural, focusing on customer expectations, while this study addressed regulatory changes, open banking infrastructure, and practical cases of digital interaction. S.S. Ashurova & M.F. Meyliyeva (2025) presented a conceptual vision of digital banking in Uzbekistan, focusing on its evolution, government strategies, and international experience. In contrast, the current study is more applied in nature, analysing the direct impact of digital services on users' financial behaviour. Common to both sources is the focus on aspects such as cybersecurity, institutional support for digitalisation, and FinTech integration. At the same time, S.S. Ashurova & M.F. Meyliyeva addressed mainly at the macro level, while the second study was based on the analysis of specific digital tools and statistical data. A completely different perspective was presented in the study by A. Panagariya (2022), which focused on the link between

financial reforms and economic growth in India. While both studies recognise the importance of a well-developed financial infrastructure for stimulating the economy, the approach of A. Panagariya's approach focuses on macroeconomic indicators and policy mechanisms, while this context focuses on digital platforms.

The similarity of the thematic guidelines is present in the study of T. Onunka *et al.* (2023) on the impact of digital financial services in Nigeria. The study addressed field data and user satisfaction with digital products. In contrast, the current study was based on the regulatory framework, the dynamics of online transactions, and the impact of government initiatives, which provides a broader perspective on digital transformation through the lens of policy and institutional development.

Digital banking services have become a substantial element of financial sector transformation, providing convenience, speed and accessibility to users. In Ukraine, the development of such services is supported by the NBU through regulatory frameworks, identification systems and innovative tools. The growing share of non-cash transactions and the popularity of mobile banking indicate a deep digital integration of financial services. These results confirm the effectiveness of digitalisation as a means of increasing financial inclusion and modernising banking processes.

Assessing the impact of digital banking instruments on access to finance for small and medium-sized enterprises

Amidst economic instability and growing demand for the efficiency of financial transactions, online banking has become one of the key tools for ensuring the flexibility, accessibility and continuity of businesses' financial activities. For small and medium-sized businesses, digital banking services are critical in minimising time and transaction costs, making payments, obtaining financing, keeping records and communicating with government platforms without a physical presence. In 2025, FUJB (Pumb, n.d.) became the leader in online lending to entrepreneurs, having issued loans to individual entrepreneurs (IEs) in the amount of over 1.2 billion UAH. More than 3,000 entrepreneurs have used this

service, which demonstrates the popularity of remote lending (MinFinMedia, 2025). In the Fin-Tech sector, more than 35,000 entrepreneurs have opened accounts with NovaPay digital bank (NovaPay, n.d.). Overall, 67% of entrepreneurs in Ukraine use digital channels for sales, which indirectly confirms the high level of digitalisation of financial services (Kazantsev, 2025).

Among all cardholders in Ukraine, 94% use digital banking, and 75% use mobile applications. About 51% of Ukrainians are ready to completely switch to digital banking services without physically visiting branches. This indicates that the digital transformation of banking services has become widespread among entrepreneurs (Zhiri, 2023). From 2019 to 2024, the number of active users of digital banking services in Ukraine changed: a decrease at PrivatBank (-44%) and Oschadbank (-55.1%) contrasts with explosive growth at Monobank (944%), indicating a shift towards mobile services. In 2024, about 80% of individuals managed their bank accounts remotely via internet banking and mobile apps, whereas in 2019, only half of authorisations were made via mobile apps (Privatbank is the best Ukrainian digital..., n.d.; Slesaruk, 2021).

In 2024, Ukrainian entrepreneurs received 16,656 loans worth 62.2 billion UAH under the Affordable Loans 5-7-9% programme (PrivatBank is a participant..., n.d.), and since its launch, more than 95,600 loans worth 329 billion UAH have been disbursed. Of loans, 16.5% are provided online, through PrivatBank and NovaPay, which in 2024 issued loans to businesses worth over 281 million UAH. The share of small and medium-sized enterprises (SMEs) in the UAH loan portfolio increased to 60.2%, and up to 70% of new business loans are granted to SMEs. It is estimated that more than 50% of such lending takes place through digital channels (Ministry of Economy of Ukraine, 2024). In 2024, the NBU's BankID system recorded 5.8 million successful identifications of commercial subscribers, of which more than 5.1 million were for financial services. This demonstrates the widespread use of electronic identification to access digital services. By the beginning of 2025, 39 identifier subscribers and 110 service providers were registered in the system, including 96 commercial

organisations (National Bank of Ukraine, 2025b).

According to the research by Y. Tarasovsky (2025), the highest level of digitalisation of banking services for business is observed in Dnipropetrovsk, Lviv, and Ternopil regions, which scored 43, 43, and 42 points, respectively, in the Digital Transformation of Regions Index 2025. The lowest scores are typical for rural and less urbanised regions with limited digital infrastructure, including Chernihiv, Kherson, and Zakarpattia regions, which have low high-speed internet coverage and limited availability of modern mobile technologies. However, leading banks provide access to digital services for SMEs across the country.

In 2025, 63% of Ukrainians will use mobile payments via digital wallets or QR codes, and 76% will transfer money via mobile banking apps. At the same time, more than 80% of e-commerce transactions are paid for digitally. According to Mastercard, 37% of users use mobile wallets for contactless payments, which is also common among entrepreneurs (All Retail, n.d.).

In the context of the digitalisation of the banking sector in the 2020s, small business lending practices are taking on a new format, with mobile applications and online services being key. Banks such as Privatbank, Monobank, and FUIB have been particularly active in this area, offering entrepreneurs a full range of digital solutions from opening an account to obtaining a loan without visiting a branch. Privatbank offers a separate Privat24 for Business app designed for individual entrepreneurs and legal entities. Its functionality includes account management, payments, tax payments, currency sales, loans and deposits, and delegation of access to accounts (Which bank should an entrepreneur..., n.d.). A significant advantage is the integration with accounting systems such as Bookkeeper (Bookkeeper, n.d.) and Planfix (Planfix, n.d.a), which provide automated accounting and financial control. In addition, the application supports SmartID for electronic signatures, which simplifies the signing of documents (Bookkeeper SaaS, n.d.). Monobank, being a fully digital bank, implements business functions in its main application. It can be used to open accounts for individual entrepreneurs, make payments, obtain loans, and integrate with tax

services. A substantial feature is the availability of online acquiring and the Base service for accepting payments, which is relevant for microbusinesses. Monobank focuses on speed and simplicity, although it does not have a separate app for business (Planfix, n.d.b). FUIB is also actively developing digital services for entrepreneurs. Their mobile application can be used to open accounts, make payments, apply for loans, use electronic signatures, and for integration with Customer Relationship Management (CRM) and accounting systems via the Representational State Transfer Application Programming Interface (REST API). This approach ensures flexible financial and reporting management (Which bank should an entrepreneur..., n.d.).

All three banks, Privatbank, Monobank and FUIB, participate in the government programme “Affordable loans 5-7-9%” and offer a fully online application process. Privatbank provides loans of up to 50 million UAH for up to 5 years

at an interest rate of 5% with the possibility of a reduction for job creation (“Affordable loans 5-7-9%...”, 2024). Similar terms are offered by Monobank and FUIB, ensuring fast processing of applications and minimal bureaucracy. Digital loans without collateral account for a significant share of the portfolios of all three banks. Privatbank actively uses microloans and credit cards with grace periods; Monobank offers unsecured loans for individual entrepreneurs with a minimum package of documents; FUIB offers unsecured loans with processing within 24 hours. The average amount of online loans varies: in 2022-2023, Privatbank's loan amounts increased to 1.4-1.6 million UAH, Monobank's amounts mostly do not exceed several hundred thousand hryvnias, and FUIB's loan limits can reach 5 million UAH, although average values are not published (Zaihrayev, 2023). Table 1 provides a visual assessment of the advantages of each bank in digital services for small businesses.

Table 1. Comparison of digital services for small business lending in Privatbank, Monobank and FUIB for 2022-2023

Bank	Mobile application	Online lending	Bookkeeping integration	API/CRM	Average loan sum
Privatbank	Privat24 for business	Yes	Bookkeeper, Planfix	Yes	1.4-1.6 million UAH
Monobank	General application	Yes	Bookkeeper, Planfix	Yes	Up to 0.5 million UAH
PUMB	General application	Yes	REST API	Yes	Up to 5 million UAH (assessment)

Note: API/CRM – Application Programming Interface/Customer Relationship Management

Source: compiled by the authors based on E. Zaihrayev (2023), Planfix (n.d.b), Bookkeeper SaaS (n.d.)

Thus, the digital services of the three banks demonstrate a high level of availability of credit resources for small businesses, simplifying financial interaction through mobile platforms, automation and integration with accounting systems. This helps strengthen the business environment and increase confidence in digital banking as a reliable tool for business development. Digital financial services in the context of developing countries were analysed by J.C. Acosta-Prado *et al.* (2024) through the prism of behavioural barriers, digital literacy, and the level of trust of microentrepreneurs in innovation. Their emphasis on empirical methods revealed the extent to which access to digital platforms is determined by human factors rather than

infrastructure. In contrast, this study focuses on comparing digital services for small business lending. A different perspective is demonstrated by G.V. Radhakrishnan & U. Shankar (2024), where digital services were evaluated through the prism of customer experience in India. The study highlighted satisfaction parameters such as convenience, security, and trust in banks. In comparison, the Ukrainian context presented in this study emphasises institutional efficiency, in particular, how digital tools such as mobile banking and online lending expand access to finance.

N.P. Thi Hang (2024) addressed the specifics of digital inclusion in rural Vietnam, where the main barriers were a lack of digital education, weak infrastructure, and low levels of trust in

electronic services. The study argued that financial inclusion is correlated with the level of social support and digital adaptation. At the same time, L. Wewege *et al.* (2020) examined global challenges and trends in digital transformation, including the emergence of neobanks, the spread of blockchain, and the development of the FinTech ecosystem. These technologies are presented as drivers of change around the world. In this study, they are not just listed but analysed in the context of their implementation in the Ukrainian market, addressing the specifics of regulation and digital identification.

Digital banking services have become fundamental for transforming financial services for small businesses in Ukraine. Their widespread adoption reduced transaction costs, facilitated access to finance and optimised financial reporting. Incorporating regional differences, there is a steady upward trend in the level of trust in digital banking, which indicates its sustainability as a mechanism for ensuring the financial stability of businesses in times of economic turbulence.

Prospects for improving financial infrastructure for SMEs in the context of digital transformation

With the deepening digitalisation of the financial sector and the intensification of the FinTech environment, the issue of identifying barriers that prevent small and medium-sized enterprises from accessing digital banking products is becoming particularly relevant. Despite the overall growth in the penetration of online banking in the business environment, there are several systemic obstacles that limit the effective use of relevant tools, requiring an in-depth analysis of their nature and impact on the financial inclusion of businesses. The first group consists of technological barriers caused by both the insufficient level of digital infrastructure and the limited digital competence of business representatives. In rural and peripheral areas, unstable access to broadband Internet is often reported, which complicates the use of mobile banking applications and other digital platforms. In addition, some entrepreneurs have limited knowledge of how digital banking services work, which prevents them

from making full use of such tools in their business activities (Nwoke, 2024).

The next group is financial barriers, which include limited access to lending through digital channels for entrepreneurs due to strict scoring criteria, lack of credit history or required documentation. Automated decision-making systems used by banks often do not address the specifics of micro and small businesses operating in the shadow or semi-formal economy. This reduces the probability of receiving financial support even if a stable but informal income is present. Regulatory barriers include fragmentation and insufficient adaptation of the legal and regulatory framework to digital financial transactions. Cybersecurity, personal data protection, the legal validity of electronic contracts, and electronic identification still need to be finalised. In addition, the complexity of integrating digital financial services with tax and accounting for small businesses creates additional difficulties in their full implementation (Soremekun *et al.*, 2024). Behavioural barriers, including entrepreneurs' distrust of digital channels due to fraud risks, insufficient transparency of financial decision-making mechanisms in mobile applications, and general psychological unpreparedness to switch to a digital financial management model, should be highlighted separately. The lack of consulting and information support from banking institutions exacerbates these barriers, limiting the level of adoption of digital products among the target audience. Thus, to ensure the full integration of small businesses into the digital financial environment, a set of measures is needed, including the development of technical infrastructure, improving financial literacy, adapting the regulatory framework, and increasing the transparency of financial services. Overcoming these obstacles will help strengthen financial inclusion, build institutional trust in digital tools, and boost entrepreneurial activity (Diener & Špaček, 2021).

In the context of the digital transformation of Ukraine's financial sector in the 21st century, the role of non-bank financial institutions is growing as core participants in the formation of an innovative digital financial ecosystem. Their activities not only complement the functions of traditional banks but also create the preconditions

for the accelerated development of financial services focused on the needs of small businesses, people with limited access to bank financing, and innovative market segments. Non-banking entities include financial companies, insurance, factoring, leasing companies, payment institutions and postal operators, as well as the latest FinTech platforms that provide a wide range of digital services. Such platforms include Stripe (Stripe, n.d.), a leading global online payment processing service that provides a wide range of API solutions for e-commerce integration, payment automation, subscription management and fraud protection. Stripe supports a variety of payment methods, including credit cards, digital wallets, and local payment systems, making it a versatile tool for businesses of all sizes. Payoneer (Payoneer, n.d.) is an international payment platform specialising in global B2B transfers and multi-currency payments, providing fast and secure money transfers between businesses and freelancers around the world. Payoneer also offers services for opening local bank accounts in different countries, which simplifies

international transactions and avoids high foreign exchange fees. Using artificial intelligence, cloud technologies, automated application programming interfaces and blockchain technology, these platforms increase transparency, speed of service, reduce costs and expand access to digital financial services for small and medium-sized businesses. One of the key areas for non-banks to participate is to expand the range of financial services. In contrast to banks, which operate in a highly regulated legal environment, non-banks have more flexibility in developing new products and services (Ovsienko, 2021). Summing up the identified barriers to the digitalisation of financial services for small businesses, including low digital literacy of entrepreneurs, limited access to the Internet in the regions, difficulty in using financial applications, lack of integration with accounting systems, and limited government support, it is possible to identify key areas that can significantly improve the efficiency of the use of digital services by small businesses. Table 2 summarises these areas according to the problems identified.

Table 2. Ways to improve the efficiency of digital services for small businesses

Areas for improvement	Expected results	Implementation subjects
Digital financial literacy	Raising entrepreneurs' awareness of digital tools and cybersecurity	Government, banks, business associations
Integration of digital services with accounting systems	Automation of financial accounting, reduction of errors	CRM/Enterprise Resource Planning (ERP) developers, banks
Simplifying access to online lending	Expanding lending through digital risk assessment	Banks, financial companies, NBU
Development of mobile applications for business	Increasing mobility and speed of interaction with the bank	Banks, FinTech companies
State support for SME digital transformation	Reduction of barriers to digitalisation	Ministry of Economy, Diia.Business, local authorities

Source: compiled by the authors based on O. Ovsienko (2021)

Table 2 illustrates a multi-pronged approach to improving the use of digital services by small businesses in Ukraine, covering both technical and organisational aspects. On the one hand, special attention should be paid to improving the digital financial literacy of entrepreneurs, which is critical to reducing the risks of misuse of tools and increasing trust in online banking. On the other hand, the integration of banking products with CRM and ERP systems helps automate accounting processes, which in turn reduces business operating costs. In addition,

the development of digital lending channels using big data analytics improves the accuracy of assessment of the creditworthiness of small businesses, which expands access to finance for entrepreneurs who do not have sufficient collateral or credit history. The "Affordable Loans 5-7-9%" programme, which covers about 40% of the hryvnia corporate loan portfolio and almost 50% of new loans disbursed, actively uses digital tools to simplify lending procedures. This provides SMEs with low-interest loans with fewer bureaucratic hurdles (Landa *et al.*, 2024). Equally

substantial is the increase in mobility through the development of specialised business applications that can be used by entrepreneurs to manage their finances quickly, regardless of their location. The importance of government support for SME digitalisation should also be highlighted, through programmes to compensate for the cost of implementing digital solutions, tax incentives, or soft loans. In August 2024, the Government of Ukraine approved the Strategy for the Recovery, Sustainable Development and Digital Transformation of SMEs until 2027 (Order of the Cabinet of Ministers of Ukraine No. 821-p, 2024), which provides for a set of measures to support SMEs, including digital transformation. It includes programmes to compensate for the cost of implementing digital solutions, tax incentives and soft loans for SMEs. The strategy aims to create favourable conditions for business development, including access to capital, deregulation and innovative development. At the same time, ensuring a high level of cybersecurity is a basic condition for the development of any digital financial services, as the growth of digital activity is accompanied by an increase in cyber threats.

The present study and K.M. Kumar *et al.* (2024) concurred in their conclusions on the role of digital financial instruments for SME development. K.M. Kumar *et al.* emphasised the need for government intervention and institutional adaptation to improve SMEs' access to digital financial services, particularly in a weak financial ecosystem. In contrast, this study focused on practical perspectives of improving financial infrastructure through the introduction of technological solutions, development of electronic identification and interoperable platforms. Both approaches emphasised the importance of digital transformation but differed in scope: K.M. Kumar *et al.* addressed the macro level, while this study focuses on the level of applied changes for SMEs. In the study by H. Harris & K. Sahija (2025), the authors analysed how digital transformation is changing the structure of banking services, focusing on consumer behaviour, the level of trust in digital channels, and the need for personalisation of financial services. The study emphasised the importance of strengthening cybersecurity,

developing digital literacy, and adapting banking models to the needs of new generations of users. In turn, this study focused on the prospects for improving the financial infrastructure for small and medium-sized businesses in Ukraine in the context of digital transformation. In contrast, the study by V. Agarwal *et al.* (2024) focused on changing strategies for banks' interaction with customers in the context of digitalisation. Based on a survey of 600 customers, the authors found a positive impact of digital channels on customer acquisition, satisfaction, and loyalty, as well as challenges of personalisation and trust. Both studies recognised the importance of digital technologies for the transformation of the banking sector but differed in focus: the current study focused on financial inclusion for businesses, while Study V. Agarwal *et al.* focused on the behavioural aspects of customers. The study by O. Pyrog & A. Poritska (2020) noted that digital technologies contribute to the development of flexible business models and the improvement of financial infrastructure in Ukraine, which is central for the evolution of digital banking services and support for entrepreneurship.

In the context of the digitalisation of the financial sector, the issue of overcoming barriers to small businesses' access to digital banking services has become particularly relevant. The study demonstrated that despite the overall growth of digital services, technological, financial, regulatory, and behavioural barriers significantly limited their effective use. A comprehensive approach is needed to ensure that SMEs are fully integrated into the digital environment, including infrastructure development, financial literacy, easier access to credit, and government support. Overcoming these challenges will help increase financial inclusion, build trust in digital services, and boost entrepreneurial activity.

CONCLUSIONS

The survey results confirmed that digital banking services have become a key factor in transforming the financial environment of small and medium-sized businesses in Ukraine. In 2024, the share of non-cash transactions reached 94.6% by number and 51% by value, indicating the deep integration of digital tools into the financial behaviour of entrepreneurs. In

particular, 73.4% of transactions were payments in the retail network, and 31.1% were card-to-card transfers. At the same time, the number of successful identifications in the NBU's BankID system increased from 42.9 million in 2023 to 87.7 million in 2024, an increase of 104%. Of these, more than 81 million were for public services, including the Diia portal, and more than 5.1 million were for financial institutions, which indicates the active use of digital identification for commercial purposes. The role of mobile applications in the banking sector has been growing rapidly. In particular, the Monobank and Privat24 apps exceeded 10 million downloads each in 2024. The share of digital banking users among cardholders reached 94%, and 75% used mobile apps. About 51% of Ukrainians were ready to completely abandon physical visits to branches. This trend was also evident in the dynamics of service: in 2023, 79.5% of individuals conducted transactions remotely, which is almost twice as much as in 2019.

In 2024, Ukrainian entrepreneurs received 16,656 loans worth 62.2 billion UAH under the 5-7-9% programme, and over 329 billion UAH in total since its launch. More than 50% of these loans were provided online, through Privatbank, Monobank and FUIB. FUIB's average online loan for individual entrepreneurs reached 1.2 billion UAH in total, Monobank's loan amount was up to

0.5 million UAH per borrower, and PrivatBank provided loans of up to 1.6 million UAH. Thus, the digitalisation of banking services has significantly improved the speed, accessibility, and quality of financial services for small businesses. At the same time, several barriers need to be removed for full integration: technological, regulatory, financial, and behavioural. Ensuring a coherent digital financial infrastructure and strengthening government support will help deepen financial inclusion, increase SME performance, and create a sustainable business environment. The study was limited to analysing digital banking services only in the context of SMEs' access to finance, without the behavioural aspects of digital services consumption by end users. Further research should focus on assessing the impact of digital financial instruments on the financial sustainability of SMEs in a regional context and studying the effectiveness of government digital initiatives in supporting entrepreneurship.

ACKNOWLEDGEMENTS

None.

FUNDING

None.

CONFLICT OF INTEREST

None.

REFERENCES

- [1] "Affordable loans 5-7-9%": In 2024, Ukrainian businesses received almost 25 thousand preferential loans for over 93 billion UAH. (2024). Retrieved from <https://koda.gov.ua/dostupni-kredyty-5-7-9-u-2024-roczki-ukrayinskyj-biznes-otrymav-majzhe-25-tys-pilgovykh-kredytiv-na-ponad-93-mlrd-grn/>.
- [2] Acosta-Prado, J.C., Rojas Rincón, J.S., Mejía Martínez, A.M., & Riveros Tarazona, A.R. (2024). Trends in the literature about the adoption of digital banking in emerging economies: A bibliometric analysis. *Journal of Risk and Financial Management*, 17(12), article number 545. doi: 10.3390/jrfm17120545.
- [3] Agarwal, V., Garg, A., Olakh, S., Lakshman, K., Sharma, P., Chauhan, D., & Goyal, S. (2024). Impact of digital evolution on customer relationship strategies in the banking sector. *Evolutionary Studies in Imaginative Culture*, 8(1), 877-889. doi: 10.70082/esiculture.vi.1177.
- [4] AIN. (2023). *Ukrainian Fintech 2023: 246 companies, 7 of them founded in 2022*. Retrieved from <https://ain.ua/2023/06/21/ukrayinskyj-finteh-2023/>.
- [5] All Retail. (n.d.). *80% of Ukrainians fully or mostly trust digital payments – Visa Stay Secure 2025 study*. Retrieved from <https://allretail.ua/analytics/80357-80-ukrajinciv-povnistyu-abo-perevazhno-doviryayut-cifrovim-platezham-doslidzhennya-visa-stay-secure-2025>.
- [6] Ashurova, S.S., & Meyliyeva, M.F. (2025). *The concept and evolution of digital banking services*. *Modern American Journal of Business, Economics, and Entrepreneurship*, 1(2), 48-52.

- [7] Association Agreement between Ukraine, of the one part, and the European Union, the European Atomic Energy Community and their Member States, of the other part. (2014, June). Retrieved from https://zakon.rada.gov.ua/laws/show/984_011#Text.
- [8] Bookkeeper SaaS. (n.d.). *Integration with Privat24*. Retrieved from https://help.bookkeeper.kiev.ua/clientbank/privat24_business.
- [9] Bookkeeper. (n.d.). Retrieved from <https://bookkeeper.kiev.ua/>.
- [10] Danik, N., & Torlopov, A. (2024). The impact of digital transformation on the banking sector of Ukraine. *International Science Journal of Management, Economics & Finance*, 3(3), 95-103. doi: 10.46299/j.isjmef.20240303.09.
- [11] Demchyshak, N., Loik, R., & Loik, A. (2024). Development of digital technologies in the banking system of Ukraine: Innovations in creditation, risks and prospects. *Economy and Society*, 61. doi: 10.32782/2524-0072/2024-61-2.
- [12] Diener, F., & Špaček, M. (2021). Digital transformation in banking: A managerial perspective on barriers to change. *Sustainability*, 13(4), article number 2032. doi: 10.3390/su13042032.
- [13] Diia. (n.d.). Retrieved from <https://diia.gov.ua/>.
- [14] European Central Bank. (2018). *The revised Payment Services Directive (PSD2) and the transition to stronger payments security*. Retrieved from https://www.ecb.europa.eu/press/intro/mip-online/2018/html/1803_revisedpsd.en.html.
- [15] Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M. (2021). *Fintech and the digital transformation of financial services: Implications for market structure and public policy*. BIS Papers, 117.
- [16] Harris, H., & Sahija, K. (2025). *The evolution of digital banking: Trends, opportunities, and challenges*. Retrieved from <https://surl.lu/qhapxz>.
- [17] Interfax-Ukraine. (2025). *Demand for the use of the NBU BankID in 2024 more than doubled*. Retrieved from <https://interfax.com.ua/news/economic/1046740.html>.
- [18] Kazantsev, D. (2025). *Fintech in Ukraine 2025: Problems, trends, innovations*. Retrieved from <https://mezha.media/articles/chim-zhive-ukrajinskiy-fintech-sektor-300651/>.
- [19] Khudolii, Y., & Hlushko, A. (2023). The impact of innovation and fintech on the banking business. *ScienceRise*, 3, 41-50. doi: 10.21303/2313-8416.2023.003218.
- [20] Kumar, K.M., Pratheek, S.D., Eshwar, M.V., & Ananya, C. (2024). *Impact of digital banking on traditional banking services*. *International Journal of Scientific Research in Engineering and Management*, 8(11).
- [21] Landa, V., Levchenko, E., & Myronenko, O. (2024). *Accessibility of financial resources for Ukrainian business*. Retrieved from <https://ces.org.ua/wp-content/uploads/2024/07/fin-result-1-dostup-do-finansuvannya-msp-1.pdf>.
- [22] Law of Ukraine No. 675-VIII "On Electronic Commerce". (2015, September). Retrieved from <https://zakon.rada.gov.ua/laws/show/675-19#Text>.
- [23] Meshcheriakov, A., Bodenchuk, L., Liganenko, I., Rybak, O., & Lobunets, T. (2023). Trends in the development of the banking system of Ukraine under conditions of military actions and globalization influences. *Financial and Credit Activities: Problems of Theory and Practice*, 3(50), 8-22. doi: 10.55643/fcaptp.3.50.2023.3993.
- [24] MinFinMedia. (2025). *FUIB is the leader in the volume of online lending to entrepreneurs since the beginning of 2025*. Retrieved from <https://minfin.com.ua/ua/2025/05/26/151373686/>.
- [25] Ministry of Economy of Ukraine. (2025). "Affordable loans 5-7-9%": Since the beginning of 2025, the average monthly lending volumes to businesses in high military risk zones have doubled. Retrieved from <https://me.gov.ua/News/Detail?lang=uk-UA&id=e3cbcd43-4d90-472e-a21e-854fa5207fa9&title=DostupniKrediti>.
- [26] Mohammed, A.A. (2024). A comprehensive review of exploring the dynamic evolution of digital wallets and currencies in the face of challenges, innovation, and the future landscape from 2008 to 2023. *Journal of Electrical Systems*, 20(4s), 2194-2209. doi: 10.52783/jes.2388.

- [27] Monobank. (n.d.). Retrieved from <https://monobank.ua/>.
- [28] Mujtaba, N., & Yuille, A. (2024). AI-powered financial services: Enhancing fraud detection and risk assessment with predictive analytics. doi: 10.13140/RG.2.2.23580.09603.
- [29] National Bank of Ukraine. (2024a). Financial services to become even more convenient for ukrainians. Retrieved from <https://bank.gov.ua/en/news/all/protses-otrimannya-finansovih-poslug-dlya-gromadyan-stane-sche-prostishim>.
- [30] National Bank of Ukraine. (2024b). The second year of full-scale war: The volume of non-cash payments is growing. <https://bank.gov.ua/ua/news/all/drugiy-rik-povnomasshtabnoyi-viyni-obsyagi-bezgotivkovih-rozrahunkiv-zrostayut>.
- [31] National Bank of Ukraine. (2025a). Cashless payments in 2024 significantly prevailed among transactions with payment cards. Retrieved from <https://bank.gov.ua/ua/news/all/bezgotivkovi-rozrahunki-u-2024-rotsi-suttyevo-perevajali-sered-operatsiy-z-platijnimi-kartkami>.
- [32] National Bank of Ukraine. (2025b). NBU BankID system in 2024: The number of identifications has more than doubled over the year. Retrieved from <https://bank.gov.ua/ua/news/all/sistema-bankid-nbu-u-2024-rotsi-killist-identifikatsiy-za-rik-zrosla-bilshe-nij-udvichi>.
- [33] NovaPay. (n.d.). <https://novapay.ua/>.
- [34] Nwoke, J. (2024). Digital transformation in financial services and FinTech: Trends, innovations and emerging technologies. *International Journal of Finance*, 9(6), 1-24. doi: 10.47941/ijf.2224.
- [35] Onunka, T., Raji, A., Osafiele, A.N., & Daraojimba, C. (2023). Banking: A comprehensive review of the evolution and impact of innovative banking services on entrepreneurial growth. *Economic Growth and Environment Sustainability*, 2(2), 66-78. doi: 10.26480/egnes.02.2023.66.78.
- [36] Order of the Cabinet of Ministers of Ukraine No. 821-p "On approval of the Strategy for the Recovery, Sustainable Development and Digital Transformation of Small and Medium-Sized Enterprises for the Period Until 2027 and Approval of the Operational Plan of Measures for its Implementation in 2024-2027". (2024, August). Retrieved from <https://zakon.rada.gov.ua/laws/show/821-2024-%D1%80#Text>.
- [37] Oschadbank. (n.d.). Retrieved from <https://www.oschadbank.ua/>.
- [38] Ovsienko, O. (2021). Digital infrastructure of small business support in Ukraine. *Efficient Economy*, 2. doi: 10.32702/2307-2105-2021.2.84.
- [39] Panagariya, A. (2022). Digital revolution, financial infrastructure and entrepreneurship: The case of India. *Asia and the Global Economy*, 2(2), article number 100027. doi: 10.1016/j.aglobe.2022.100027.
- [40] Payoneer. (n.d.). Retrieved from <https://www.payoneer.com/>.
- [41] Planfix. (n.d.a). Retrieved from <https://planfix.com/>.
- [42] Planfix. (n.d.b.). Integration with Monobank and Privatbank. Retrieved from <https://planfix.com/ready-made-solutions/ntegraczya-z-monobank-ta-privatbank-p6/>.
- [43] Privatbank is a participant in the program "Affordable loans 5-7-9%". (n.d.). Retrieved from <https://privatbank.ua/business/5-7-9>.
- [44] Privatbank is the best Ukrainian digital bank for small businesses: SME Banking Agency. (n.d.). Retrieved from <https://privatbank.ua/news/2025/4/8/privatbank-naykrashchiy-ukrajinskiy-cifroviy-bank-dlya-malogo-biznesu-sme-banking-agency>.
- [45] Privatbank launches a new program for lending to Ukrainian equipment with state compensation of 15% of the cost. (n.d.). Retrieved from <https://privatbank.ua/news/2025/3/5/privatbank-zapuskaye-novu-programu-kredituvannya-ukrajinskoji-tehniki-z-derzhavnoyu-kompensaciyeyu-15-vartosti>.
- [46] Privatbank. (n.d.). Retrieved from <https://privatbank.ua/>.
- [47] Pumb. (n.d.). Retrieved from <https://www.pumb.ua/>.
- [48] Pyrog, O., & Poritska, A. (2020). The formation of digital business factors. *Economics, Entrepreneurship, Management*, 7(1), 10-17. doi: 10.23939/eem2020.01.010.

- [49] Radhakrishnan, G.V., & Shankar, U. (2024). The evolution of digital banking: The role of fintech in transforming financial services. *South Eastern European Journal of Public Health*, XXV(S1), 2939-2952. doi: [10.70135/seejph.vi.2970](https://doi.org/10.70135/seejph.vi.2970).
- [50] Ranjan, R. (2024). [The evolution of digital banking: Impacts on traditional financial institutions](#). *International Journal of Progressive Research in Engineering Management and Science*, 4(9), 753-763.
- [51] Resolution of the Board of the National Bank of Ukraine No. 178 "On Approval of the Regulation on Electronic Money in Ukraine". (2008, June). Retrieved from <https://zakon.rada.gov.ua/laws/show/z0688-08#Text>.
- [52] Resolution of the Board of the National Bank of Ukraine No. 43 "On Approval of the Regulation on the Procedure for Registration of Payment Systems, Payment System Participants and Payment Infrastructure Service Providers". (2014, February). (Invalidated by Resolution No. 137 of 04.07.2022). Retrieved from <https://zakon.rada.gov.ua/laws/show/z0348-14#Text>.
- [53] Semenog, A., Medvid, A., & Dmitrishyn, D. (2024). [Assessment of the use of digital banking as a part of banks' credit management system in Ukraine](#). *Economic Sustainability and Business Practices*, 1(2), 30-39.
- [54] Shevchenko, M., Dzhereleiko, S., & Mykhalchynets, H. (2023). Development of digital financial technologies (FinTech) in the financial sector of Ukraine. *Investytsiyyi: Praktyka ta Dosvid*, 8, 91-96. doi: [10.32702/2306-6814.2023.8.91](https://doi.org/10.32702/2306-6814.2023.8.91).
- [55] Slesaruk, S. (2021). *Banking digitalization*. Retrieved from <https://banksrating.com.ua/analytics/bankivska-tsifrovizatsiya/>.
- [56] Soremekun, Y., Abioye, K.M., Sanyaolu, T.O., & Adeleke, A.G. (2024). A conceptual model for inclusive lending through fintech innovations: Expanding SME access to capital in the U.S. *Contemporary Research and Review Journal*, 2(1), 1-12. doi: [10.57219/crrj.2024.2.1.0025](https://doi.org/10.57219/crrj.2024.2.1.0025).
- [57] State Tax Service of Ukraine. (2023). Law of Ukraine No. 1591: Conditions for the transition of the Ukrainian payment infrastructure to the international payment message exchange standard ISO 20022. Retrieved from <https://dp.tax.gov.ua/media-ark/news-ark/667098.html>.
- [58] Staverska, T., & Litvinova, Y. (2024). The evolution of payment systems: Innovation on the way to the digital future. *Economy and Society*, 60. doi: [10.32782/2524-0072/2024-60-85](https://doi.org/10.32782/2524-0072/2024-60-85).
- [59] Stripe. (n.d.). Retrieved from <https://stripe.com/>.
- [60] Tarasovsky, Y. (2025). *Digital Transformation Index. The Ministry of Digital Affairs has shown the first results of the measurement of regions and communities in 2025*. Retrieved from <https://forbes.ua/news/indeks-tsifrovoi-transformatsii-mintsifri-pokazalo-dosyagnennya-regioniv-i-gromad-13052025-29702>.
- [61] Thi Hang, N.P. (2024). Policy recommendations for digital banking development contributing to sustainable development in Vietnam. *Cogent Business & Management*, 11(1), article number 2389459. doi: [10.1080/23311975.2024.2389459](https://doi.org/10.1080/23311975.2024.2389459).
- [62] Tran, P.T.T., Le, T.T.H., & Phan, N.H.T. (2023). Digital transformation of the banking industry in developing countries. *International Journal of Professional Business Review*, 8(5), article number e01503. doi: [10.26668/businessreview/2023.v8i5.1503](https://doi.org/10.26668/businessreview/2023.v8i5.1503).
- [63] Ukrinform. (2025). *Last year, the number of identifications in the NBU BankID system more than doubled*. Retrieved from <https://www.ukrinform.ua/rubric-economy/3957819-torik-kilkist-identifikacij-u-sistemi-bankid-nbu-zroslo-bils-niz-udvici.html>.
- [64] Verheliuk, Y., Hantsiak, M., & Fomov, D. (2025). Digital transformation of the banking system: Global guidelines for Ukraine. *Finance of Ukraine*, 3, 45-57. doi: [10.33763/finukr2025.03.045](https://doi.org/10.33763/finukr2025.03.045).
- [65] Wewege, L., Lee, J., & Thomsett, M.C. (2020). [Disruptions and digital banking trends](#). *Journal of Applied Finance & Banking*, 10(6), 15-56.
- [66] Which bank should an entrepreneur choose? Analytics for 2025. (n.d.). Retrieved from <https://www.victorija.ua/novyny/iakyj-bank-obraty-pidpriemtsiu-analytika-na-2025-rik.html?print=print>.

- [67] Zaihrayev, E. (2023). *Privatbank: How the war changed the consciousness of Ukrainian business*. Retrieved from <https://forbes.ua/money/privatbank-yak-viyna-zminila-svidomist-ukrainskogo-biznesu-11072023-14594>.
- [68] Zhiriy, K. (2023). *More than half of Ukrainians are ready to use only digital banking – research*. Retrieved from <https://www.unian.ua/economics/finance/bilshe-polovini-ukrajinciv-gotovi-koristuvatisya-tilki-cifrovim-bankingom-doslidzhennya-12206697.html>.

Вікторія Костюк

Кандидат економічних наук, доцент
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0001-7671-3603>

Олексій Муравський

Кандидат економічних наук, доцент
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0002-7117-7335>

Лідія Аврамчук

Кандидат педагогічних наук, доцент
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0000-0002-7496-0392>

Віталій Луценко

Аспірант
Національний університет біоресурсів і природокористування України
03041, вул. Героїв Оборони, 15, м. Київ, Україна
<https://orcid.org/0009-0009-6177-1806>

Геннадій Чобану

Доктор економічних наук, старший науковий співробітник
Національний науково-дослідний інститут праці та соціального захисту
010643, вул. Поверней, 6-8, м. Бухарест, Румунія
Бухарестський університет Artifex
060754, вул. Економію Чезареску, 47, м. Бухарест, Румунія
<https://orcid.org/0000-0002-2361-9717>

Еволюція цифрових банківських послуг в Україні: вплив на розвиток підприємництва та фінансову інфраструктуру

Анотація. Актуальність даного дослідження зумовлена стрімкою цифровізацією фінансового сектору України та необхідністю забезпечення малого та середнього бізнесу ефективними інструментами доступу до фінансування в умовах економічної трансформації. Метою даного дослідження було оцінити вплив цифрових банківських сервісів на доступ малого та середнього бізнесу до фінансування в Україні. Для цього було проведено комплексний аналіз нормативно-правової бази, статистичних даних щодо частки безготівкових операцій, активності фінансово-технологічних компаній і тенденцій

цифровізації у банківському секторі. Аналіз статистичних даних за 2023-2024 роки показав, що частка безготівкових операцій із платіжними картками сягнула 94,6 % за кількістю, а загальна кількість таких операцій становила 8,65 млрд у 2024 році. Кількість ідентифікацій через систему BankID Національного Банку України зросла більш ніж удвічі – з 42,9 млн у 2023 році до 87,7 млн у 2024 році. Мобільні додатки найбільших банків, зокрема Monobank та Приват24, у 2024 році були завантажені понад 10 млн разів кожен. За програмою «Доступні кредити 5-7-9 %» у 2024 році підприємці отримали понад 16 тисяч кредитів на суму понад 62 млрд грн. У 2025 році рівень цифровізації банківських послуг для бізнесу у регіонах України перевищував 80 %. Ці результати свідчать про глибоку інтеграцію цифрових банківських сервісів у фінансову діяльність малого і середнього бізнесу, значне розширення доступу до фінансових ресурсів та суттєве підвищення фінансової інклюзії. Практичне значення дослідження полягає у створенні основ для покращення цифрової фінансової інфраструктури, що сприятиме подальшому розвитку та підвищенню доступності фінансування малого та середнього бізнесу в Україні

Ключові слова: діджитал-банкінг; фінансові технології; цифрова трансформація; онлайн-банкінг; мобільний банкінг; блокчейн