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THE ROLE OF FINANCIAL TECHNOLOGY IN THE TRANSFORMATION OF TRADITIONAL BANKING SERVICES

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Abstract. *The article examines the role of financial technologies in the transformation of traditional banking services and the development of the digital financial environment. The main areas of innovation are considered: mobile and online banking, neobanks, digital payments, P2P lending, blockchain, cryptocurrencies, as well as solutions for improving data security, in particular biometrics, blockchain and multi-level authentication. Changes in customer and business behavior, the growth of accessibility and personalization of financial services, as well as the impact of FinTech on the structure of banking processes and the economy as a whole are analyzed. Examples of successful digitalization in Ukraine and the world are shown, and the importance of regulation and cybersecurity in the context of the rapid growth of cybercrime is emphasized. The article demonstrates that financial technologies not only increase the efficiency and convenience of banking services, but also form new models of interaction between institutions and customers, strengthening trust and stability of the financial system.*

Keywords: *financial technologies, digital transformation, banking services, mobile banking, blockchain.*

The article investigates the profound impact of financial technologies (FinTech) on the evolution of the modern financial landscape. The authors examine key innovations, including mobile and online banking, neobanks, digital payments, P2P lending, blockchain, and cryptocurrencies. The study highlights a paradigm shift in banking, moving from physical branches to digital "mobile-first" platforms where all services — from account

opening to lending — are accessible via smartphones.

Global analysis reveals high digital banking adoption, with Nordic countries reaching penetration rates above 87%, while China leads with 860 million active users. In the context of Ukraine, the researchers identify three evolutionary stages: the initial breakthrough of online banking (2004–2010) pioneered by PrivatBank; the neobank era (2017) marked by Monobank's success; and the current phase of total digitalization (2024–2025), characterized by a cashless transaction share exceeding 94%.

The paper emphasizes the critical role of security technologies, including biometrics, blockchain, and multi-factor authentication, in building user trust amidst surging cybercrime. Furthermore, the authors address systemic challenges such as the depletion of traditional banks' deposit bases, digital inequality among the elderly and rural populations, and the necessity for inclusive financial regulations.

The research concludes that sustainable development of the financial system requires a balanced approach combining innovation with robust regulatory oversight, enhanced cyber defense, and increased digital and financial literacy. The study underscores that FinTech acts as a dual force: significantly increasing service efficiency while demanding adaptive strategies to maintain financial stability and social inclusion.

Reference

1. CoinLaw. (2025). *Mobile banking statistics 2025: How digital finance is redefining banking*. Retrieved from: <https://coinlaw.io/mobile-banking-statistics/>
2. Forbes Advisor. (n.d.). *What is a neobank?* <https://www.forbes.com/advisor/banking/what-is-a-neobank/>
3. InvestNews. (n.d.). *Zakhyst bankivskykh danykh: iak unyknuty shakhraistva ta finansovykh vtrat* [Protection of banking data: how to avoid fraud and financial losses]. Retrieved from: <https://investnews.com.ua/analitika/4563-zakhyst-bankivskykh-danykh-iak-unyknuty-shakhraistva-ta-finansovykh-vtrat/>
4. Law of Ukraine No. 2074-IX. (2022). *Pro virtualni aktyvy* [On virtual assets]. Bulletin of the Verkhovna Rada of Ukraine. Retrieved from: <https://zakon.rada.gov.ua/laws/show/2074-20>
5. Minfin. (n.d.). *Vid paperovykh platezhiv do API-bankinhu — shliakh finansovoi systemy Ukrainy za 34 roky* [From paper payments to API banking — the path of the financial system of Ukraine over 34 years]. Retrieved from: <https://specials.minfin.com.ua/vid-paperovih-platezhiv-do-api-bankingu>
6. National Bank of Ukraine. (n.d.). *Bezhotivkovi rozrakhunki u 2024 rotsi suttyevo perevazhaly sered operatsii z platižnymi kartkami* [Cashless payments in 2024 significantly prevailed among operations with payment cards]. Retrieved from: <https://bank.gov.ua/ua/news/all/bezgotivkovi-rozrahunki-u-2024-rotsi-suttyevo-perevajali-sered-operatsiy-z-platijnimi-kartkami>
7. National Bank of Ukraine. (n.d.). *Natsionalnyi bank initsiiuje vrehuliuвання pytannia P2P kredytuvannia* [The National Bank initiates the regulation of the P2P lending issue]. Retrieved from: <https://bank.gov.ua/ua/news/all/natsionalniy-bank-initsiyuje-vregulyuvannya-pitannya-p2p-kredituvannya>
8. National Bank of Ukraine. (n.d.). *Vymohy shchodo inkliuzyvnosti bude poshyreno na nebankivski finansovi ustanovy* [Inclusivity requirements will be extended to non-bank

financial institutions]. Retrieved from: <https://bank.gov.ua/ua/news/all/vimogi-schodo-inklyuzivnosti-bude-poshireno-na-nebankivski-finansovi-ustanovi>.

9. Oxford University Press. (2022). Financial technology. In *Oxford English Dictionary*. Retrieved from: https://www.oed.com/dictionary/financial-technology_n

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