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DIGITIZATION OF BANKING PROCESSES AND OPERATIONS

Introduction. Due to the total digitization of banking processes and operations, foreign and domestic banks are actively transforming their activities from the traditional format of customer service in bank branches to the remote format of providing services online.

Problem. Banks strive to function in the format of financial assistants available 24 hours a day. Therefore, virtual banks or neobanks which carry out their activities exclusively through remote sales channels with the help of Internet banking tools and mobile applications are actively developing.

The aim of the article is to study foreign trends in the development of neobanks and prospects for the development of neobanking in Ukraine.

Methods. The methods of theoretical generalization, analysis and synthesis, grouping, and systematic approach were used in the research process. DOI: 10.31617/3.2022(123)06

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ЦИФРОВІЗАЦІЯ БАНКІВСЬКИХ ПРОЦЕСІВ ТА ОПЕРАЦІЙ

Вступ. Через тотальну цифровізацію банківських процесів та операцій закордонні та вітчизняні банки активно трансформують свою діяльність з традиційного формату обслуговування клієнтів у відділеннях банків на дистанційний формат надання послуг у режимі онлайн.

Проблема. Банки прагнуть функціонувати у форматі фінансових помічників, які доступні цілодобово. Відтак активного розвитку набувають віртуальні банки або необанки, що здійснюють свою діяльність виключно через дистанційні канали збуту завдяки інструментам інтернетбанкінгу та мобільним додаткам.

Метою статті є дослідження закордонних тенденцій розвитку необанків і перспектив розвитку необанкінгу в Україні.

Методи. У процесі дослідження використано методи теоретичного узагальнення, аналізу та синтезу, групування, системний підхід.

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Results. The key trends in the development of neobanks in Ukraine and the world have been studied. The foreign experience of the licensing mechanism of neobanks is considered. The dynamics of the number of neobanks in the world and their geographical affiliation are analyzed. The global trend of growth in the number of clients-users of neobanks is indicated. The peculiarities of the activity of domestic neobanks have been studied. The general problems and prospects for the development of neobanks in Ukraine have been identified.

Conclusions. Neobanking in the world is in great demand by consumers of financial services and is interesting for investors, so the number of neobanks and their users in the world is growing at a high rate. The domestic banking sector is gradually introducing and implementing innovations in accordance with global trends in the development of banking services. Domestic neobanking gained a particularly noticeable development during the coronavirus pandemic and in the conditions of martial law. Due to the lack of a legislative initiative regarding the licensing and regulation of the activity of neobanks in Ukraine, their potential development is restrained. Currently, the development of domestic neobanks directly depends on state support for their activities, internal regulatory policy and competitive environment.

Keywords: neobanks, digitalization, digital economy.

JEL Classification: G21, G20, O16, F29.

70

Результати. Досліджено ключові тенденції розвитку необанків в Україні та світі. Розглянуто закордонний досвід механізму ліцензування необанків. Проаналізовано динаміку кількості необанків у світі та їхню географічну приналежність. Зазначено світову тенденцію зростання кількості кліснтів-користувачів необанків. Вивчено особливості діяльності вітчизняних необанків. Визначено загальні проблеми та перспективи розвитку необанків в Україні.

Висновки. Необанкінг у світі користується значним попитом споживачів фінансових послуг та є цікавим для інвесторів, відтак кількість необанків та їх користувачів у світі зростає високими темпами. Вітчизняний банківський сектор поступово впроваджує та реалізує інновації відповідно до світових трендів розвитку банківського обслуговування. Особливо відчутного розвитку вітчизняний необанкінг набув під час пандемії коронавірусу та в умовах воєнного стану. Через відсутність законодавчої ініціативи щодо ліцензування та регулювання діяльності необанків в Україні стримує їх потенційний розвиток. Наразі розвиток вітчизняних необанків напряму залежить від державної підтримки їх діяльності, внутрішньої регуляторної політики та конкурентного середовища.

Ключові слова: необанки, цифровізація, диджиталізація, цифрова економіка.

Conflict of interest. The authors certify that they have no financial or non-financial interest in the subject matter or materials discussed in this manuscript; the authors have no association with state bodies, any organizations or commercial entities having a financial interest in or financial conflict with the subject matter or research presented in the manuscript. The authors are working for the institution that publishes this journal, which may cause potential conflict or suspicion of bias and therefore the final decision to publish this article (including the reviewers and editors) is made by the members of the Editorial Board who are not the employees of this institution.

Introduction. The current global trend in banking activities is application of IT and digitalization of banking processes and operations. Foreign and domestic banks have transformed their activities from the traditional format of customer service in bank branches to the remote format providing online services in recent years. Banks strive to function in the format of financial assistants available 24 hours a day. Therefore, virtual banks or neobanks that carry out their activities exclusively through the remote sales channels with the help of Internet banking tools and mobile applications are developing actively now.

Analysis of recent research and publications. The scientific works devoted to the research of the development of neobanks in Ukraine and the world were completed by a number of domestic and international scientists. In particular, the team of scientists M. Guba, A. Linnyk, D. Kolesnyk researched the essence and specifics of neobanks as the newest financial institutions of the modern IT generation, provided a description of the main global trends in their development [1]; scientists S. Teslyuk, N. Matviychuk, O. Derkach, N. Korkh considered theoretical approaches to defining the

essence of neobanks, characterized the mechanism of legislative regulation of their activity in Ukraine, and also summarized the peculiarities of the activities and development trends of the largest European neobanks and carried out an analysis of the influence of modern trends in the banking sector on the reduction of structural divisions of traditional banks, and the readiness of the population for a new type of banking service – the service in neobanks [2]; scientists O. Irshak, O. Tvorydlo revealed the issue of the formation of domestic virtual banks, as the modern banking, which functions on the basis of a license obtained from the parent bank, which provides an updated list of traditional banking services in real time through information and communication technologies [3]. Although a large number of scientific works have been devoted to this topic, today the issues of peculiarities of activity and prospects for the further development of neobanks in Ukraine remain extremely relevant, which determines the high level of relevance of the researched topic.

The aim of the article is to study foreign trends in the development of neobanks and prospects for the development of neobanking in Ukraine.

The tasks of the article are: to research the main trends in the development of neobanks in Ukraine and in the world; to study the foreign experience of the licensing mechanism of neobanks; to identify the problems of domestic neobanks activity; to determine the prospects for the development of domestic neobanks in the future.

Methods. The following scientific methods were used in the research process: theoretical generalization, analysis and synthesis, grouping, system approach. The information and analytical base of the research includes materials of scientific articles, etc.

Results. A key trend in the development of the economy of many countries is the digitalization of the economy with the help of modern information technologies. The global trend of digitalization has led to the rapid development of digitalization of financial services in recent years. Thus, banks as the main providers of financial services cease to be just only banks in the traditional sense, transform and go beyond the boundaries of the financial industry. The emergence of innovative digital banks, which are virtual banks or neobanks, was due to the need for remote provision of financial services and the implementation of related banking processes that accompany any banking operations. The activities of virtual banks or neobanks are based on the principles of convenience for their customers and constant access to accounts without any restrictions. After all, neobanks carry out their activities through remote sales channels using Internet banking tools and mobile applications.

The foreign experience of the development of neobanking, unlike the domestic one, is more rapid. Neobanks appeared in the UK in 2016, although technically neobanks started their activities back in 2010. Neobanks began to gain popularity in 2017, when the German bank N_{2} 26 and the British Revolut first appeared on the EU market. Ukraine is just

beginning its path to the development of neobanks. Considering that domestic legislation does not yet regulate the activities of such institutions, this topic is particularly relevant in the modern conditions of development and functioning of the banking market. It is obvious that the development of neobanks requires regulatory and legal support from the state, a clearly developed legal framework, broad economic and technological development, as well as stable trust of all groups of consumers.

The term «neobank» means a modernized bank that operates without physical branches and provides banking services to clients online using electronic communication channels. The idea of creating and organizing neobanking was precisely to satisfy the need of corporate clients to access their own accounts and carry out financial transactions without leaving the office.

Since the development of neobanks opens up great investment opportunities, demand and interest in neobanks from consumers and investors is growing rapidly. The start of neobanks activity is associated with certain bureaucratic procedures, in particular with obtaining a license to carry out banking activities. There are several types of banking licenses for the opening and operation of neobanks in foreign practice:

Full banking license. A full banking license allows financial institutions to provide all types of banking services, which include traditional customer deposits and lending services. Such license is issued by the authorized supervisory and regulatory bodies of the countries. Depending on the geographical location of neobank incorporation, these authorities can be national banking regulators like Hong Kong Monetary Authority (HKMA), and supranational regulators, for instance, the Federal Reserve (the Fed) in the US or European Central Bank (ECB) in Europe [4].

License on financial technologies. The number of fintech companies has grown significantly in recent years, prompting governments in various countries to issue fintech licenses (or virtual or digital banking licenses). This is a light version of a full banking license that allows institutions to provide financial services, but at a lower regulatory and compliance threshold.

E-money license. The European e-money license is also called EMI, electronic money institution or sometimes the 'e-wallet' license. It can provide payment services such as transfers and card transactions, create digital account or digital wallet for the customers, who can hold funds in that accounts. Such license enables to provide the same banking payment services as a full banking license. But, there are some limitations to e-money license. Firstly, this license does not allow to provide crediting, which is often an important part of banks profit. Secondly, an EMI should use a partner bank for holding customer funds. Thirdly, an e-money license e-wallets and also transaction limits, depending on the level of due diligence/KYC conducted on the client. However, an EMI license can be cost-effective option for a new virtual bank. The regulatory license

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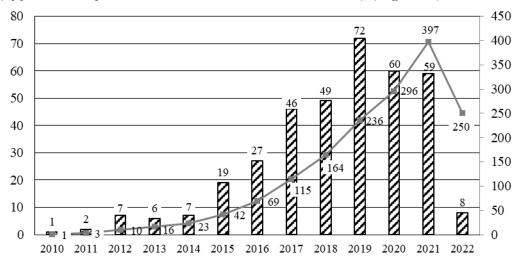
application process can be long and it usually takes for 6–12 months. The fees for the license application range from \notin 75 000–150 000, and the average total cost to set up the neobank varying from \notin 1–2 million [5].

A payment service provider agent model helps financial startups and institutions to start neobank, they do not have to request for a banking license and wait for it for 15 months Instead, fintech companies can operate under the payment service provider agent model. Such agents, which approved by National Competent Authorities (NCAs), can offer digital payment services under their own responsibility. In this way it is faster and easier to start a virtual bank, avoiding the complicated and time-consuming process of issuing a license. [4].

Researching the domestic experience of the development of neobanks in the aspect of their creation and licensing, it should be noted that Ukrainian neobanks have the opportunity to work exclusively on the basis of existing licenses of traditional banks, which is due to the absence of legal acts regulating the licensing of neobanks in Ukraine.

It is worth noting that neobanks are becoming more and more popular every year (*Figures 1, 2*). Until 2021, the number of neobanks was constantly growing.

Researching the global trend of the development of neobanks shows that on July 1, 2022, there are 250 neobanks in the world, 8 of which were created in 2022 (*Figure 1*). The countries with the most developed neobanking market are the USA, Great Britain, South Korea, France, Brazil, and Germany. Regionally, the largest number of neobanks is in Europe – 77 units, which is 31 % of the total number of neobanks, and the smallest – in Africa and the Middle East, where there are only 13 of them (approximately 5 % of the total number of neobanks) (*Figure 2*).



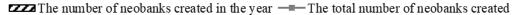


Figure 1. The total number of neobanks and the number of newly created neobanks per 2010–2022

Source: developed by the authors based on [6, 7].

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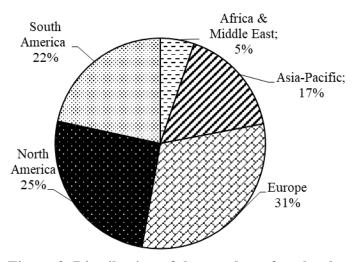


Figure 2. Distribution of the number of neobanks by regions on July 1, 2022, %

Source: developed by the authors based on [6, 7].

As we can see, the European neobanking market is the largest in terms of the number of neobanks (77 units). In our opinion, this can be explained by the favorable influence of certain factors on the development of the financial and technological industry, in particular, the widespread use of FinTech by residents of European countries. *Figure 3* shows the number of neobanks in European countries.

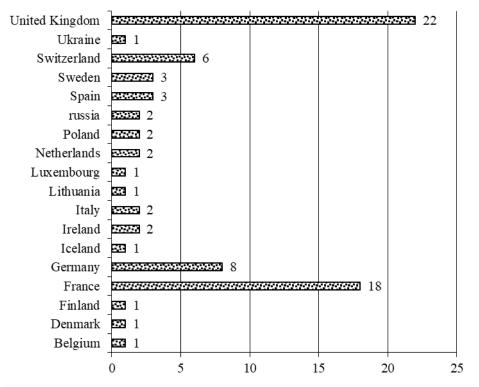


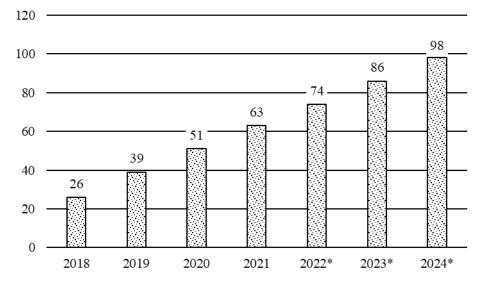
Figure 3. Number of neobanks in European countries on July 1, 2022

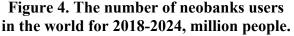
Source: developed by the authors based on [6].

From the data in *Figure 3*, it can be seen that among European countries, the leaders in the number of neobanks are the United Kingdom and France. The third place in terms of the number of neobanks among European countries is occupied by Germany.

According to Grand View Research, the volume of the global neobanking services market is expected to grow from USD 47.1 billion in 2021 to USD 722.6 billion by 2028, growing at compound annual growth rate (CAGR) of 47.7 % during the forecasted period [8]. This surge is driven by several factors, including increased consumer use of mobile apps and FinTech tools, lower interest rates and more favourable regulatory requirements. In addition, an important factor influencing the development of neobanks is the time saving and cost reduction of consumers of financial services, as they do not need to visit banks personally to carry out various financial transactions, thus saving time on the road to the bank and reducing the consumers costs.

Therefore, the global development of neobanks is also due to the growing trend of increasing demand from consumers – clients of neobanks. We consider the dynamics of the client base of neobanks on the *Figure 4*.





* forecast indicators

Source: developed by the authors based on [9].

As we can see from the data in *Figure 4*, every year the number of clients-users of neobanks continues to increase.

The activity of neobanks in different countries of the world has its own characteristics and largely depends on the specifics of legislation, the level of technological development of the country, the system for protecting the rights of consumers of financial services, the interaction of banks and technological companies, traditions and customs that have formed in the financial market of a particular country.

Thanks to the active development of neobanks in the world, in Ukraine the format of the activities of neobanks is gradually being implemented into the domestic banking system, and it is currently developing quite dynamically. The creation of neobanks in Ukraine began in 2017, Monobank became the first domestic neobank, and today there are already 6 Ukrainian neobanks. We consider the characteristics of neobanks in Ukraine in *Table*.

Table

Name of the bank	NBU License (№, dated)	Profit, UAH million	Number of the clients by year, million people	Year of launch	Customer segment
Monobank	Works on the banking license of JSC «Universal Bank» (№ 92, 10.10.2011)	2019 – UAH 533 million 2020 – UAH 685.7 million 2021 – UAH 3.07 billion forecast value for 2022 – USD 8.6 million	2018 - 0.4 2019 - 1.7 2020 - 3.1 2021 - 4 2022 - 5	2017	Individuals, Individual entrepreneurs
Sportbank	Works on banking license of 2 banks: JSC «Taskombank» (№ 84, 10.25.2011) And JSC «Oxy Bank» (№ 247, 15.11.2011)	At the beginning of 2022 losses are being monitored, but it is planned to overcome losses within the year	$2020 - 0.1 \\ 2021 - 0.24 \\ 2022 - 0.3$	2019	Individuals
O.Bank	Works on banking license of JSC «Idea Bank» (№ 96, 04.11.2011)	At the beginning of 2022 unprofitability is observed	2020 - 0.014 2021 - 0.110	2020	
Izibank	Works on the banking license of JSC «Taskombank» (№ 84, 10.25.2011)	At the beginning of 2022 the profit is USD 4.4 million	2021 - 0.1	2021	
NEOBANK	Works on the banking license of JSC «Concord» (№ 230, 07.08.2006)	Data is not available		2021	Individuals and legal entities, individual entrepreneurs
Bank Own Account	Works on the JSC of PJSC «Bank Vostok» (№ 204 18.10.2011)			2021	Individuals

Characteristics of the Ukrainian neobanks on July 1, 2022

Source: developed by the authors based on [10–15].

As we mentioned above, the first domestic neobank was Monobank. This bank was founded in 2017, using a license from JSC «Universal Bank», became the leading domestic neobanking, having no bank branches.

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Monobank provides all services using a mobile application. Communication with clients is carried out using instant messaging applications Viber, Messenger, Telegram. The client base of this bank in 2018 numbered 40 0000 clients, and at the beginning of 2022 – already 5 million users. Monobank clients can be individuals and individuals-entrepreneurs. According to forecasts, the bank's profit by the end of 2022 will reach USD 8.6 million.

In 2019, 2 neobanks started activity in Ukraine: Sportbank under the license of PJSC «Oxy Bank» and JSC «Taskombank», and TodoBank under the license of JSC «Megabank», but the latter ceased its activities in June 2022, due to the recognition of JSC «Megabank» as insolvent bank. The interface of the Sportbank mobile application is quite similar to Monobank, but it is not as successful. At the end of 2020, Sportbank's customer base numbered 100 000 customers, it had grown to 240 000 users in 2021, and at the beginning of 2022 reached 300 000 users. At the beginning of 2022, Sportbank's activity was unprofitable, but it is planned to overcome losses during the year, although it will obviously be quite difficult to achieve this, especially in the conditions of martial law.

In 2020, the fourth neobank started operating in Ukraine – O.Bank under the license of JSC «Idea Bank». O.Bank offered the newest card overdraft service with a grace period of up to 120 days. As a result, in the first half of 2020, O.Bank was able to attract 14,000 customers, and by the end of 2021, it had more than 110 000 users. As of the beginning of 2022 the bank's activity was unprofitable.

In 2021, three more neobanks started operating in Ukraine: NEOBANK under the license of PJSC AKB Concord, Izibank under the license of JSC TASKOMBANK, and Bank Own Account under the license of PJSC Bank VOSTOK. Banks are focused on serving individuals, with the exception of NEOBANK, which was the first among domestic neobanks to start serving legal entities. Currently only NEOBANK and Monobank offer cooperation for individual entrepreneurs.

In general, all domestic neobanks offer traditional banking services, mainly in the retail sector. However, being aware of the tough competition from traditional banks, neobanks are looking for specific niches for themselves for the provision of banking services: Monobank is engaged in brokerage, Sportbank works with physically active people, NEOBANK positions itself as a bank for business and services for individual entrepreneurs, Bank Own Account serves customers of the Fozzy group's retail network, etc. Taking this into account, it can be noted that the activity of neobanks in Ukraine corresponds to the global trend of focusing neobanks on specific market segments, specific regions and specific categories of consumers. Although the level of development of neobanks in Ukraine is not high enough yet, however, in our opinion, today, especially in the conditions of martial law, this can become a catalyst for the development of the domestic banking system.

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It should also be noted that there are a number of problems and shortcomings in Ukraine that prevent the active development of neobanks. In particular, this concerns the licensing of the activities of neobanks. The main normative acts regulating this aspect are the Laws of Ukraine «On Licensing of Certain Types of Economic Activities», «On Financial Services and Regulation of Financial Services Markets», as well as «On Banks and Banking Activities». At the same time, the type of licenses required for the activity of a neobank depends directly on the range of services to be provided. It is doubtful that it will be enough to obtain a license to provide financial loans for the full-fledged activity of neobank. After all, full-fledged neobanking is not only lending. As a rule, the minimum package of neobank services includes maintaining current client accounts and the ability to use the funds placed on it for payments. A problem arises in this direction of the activity, since opening and maintaining current accounts is currently exclusively a banking activity, which is provided for in Art. 47 of the Law of Ukraine «On Banks and Banking Activities». Our legislation does not provide for any «partial» licenses, as in Great Britain. Therefore, the activity of neobanks, which involves maintaining client accounts, is possible only on the basis of a classic bank with a full license of the NBU.

In addition, the issuing and maintenance of payment cards is a rather problematic area of activity of neobanks. Despite the fact that cards can be served by various payment systems, they can only be issued by a bank that has entered into an agreement with the relevant payment organization. This is provided for in Art. 14 of the Law of Ukraine «On Payment Systems and Money Transfer». Thus, the activities of neobanks in Ukraine must necessarily involve cooperation with any existing bank that has a license from the National Bank of Ukraine. This format of the work of neobanks in Ukraine is primarily caused by the lack of the necessary regulatory and legal framework that can ensure the full-fledged activity of neobanks as equal participants of the financial market. The lack of legislation makes it impossible to effectively implement innovative approaches in the field of banking services. So, for now, the development of domestic neobanks directly depends on traditional banks due to the lack of a legislative initiative regarding licensing and regulation of their activities.

Furthermore, the development of neobanking in Ukraine is accompanied by a number of risks, among which there are technological risks, the risk of data loss and cyber security. In particular, they include technological failures and cyber-attacks, such as DDoS attacks, which can interrupt neobanks from working continuously. Such attacks are aimed at blocking access to networks, suspending hosting services through remote control by malicious software. Although Ukraine is not included in the top rating of countries with DDoS attacks, from the beginning of 2022 the banking sector has repeatedly been subjected to such attacks. Another significant risk for neobanks is an insufficiently developed cyber-security system that protects personal data, because due to improper use of data, banks can suffer significant losses. In foreign practice, there are quite strict security protocols defined by the FATF. They include strong authentication to protect accounts from intruders and hackers, as well as system alerts to detect large or suspicious transactions. Neobanks must also comply with security requirements for their mobile applications. In addition, in order to protect and preserve the confidentiality of account holders' information, neobanks must comply with the general data protection regulations in within the limits of the legislation of the European Union on the protection of personal data (General Data Protection Regulation). Therefore, violations of data confidentiality and information security can significantly reduce the level of consumer trust in neobanking.

Conclusions. Summarizing the results of the research, we can conclude that the global financial market is developing very intensively. The emergence of neobanking was an adequate response to the need of consumers of financial services for constant access to their own accounts and savings. The format of neobanks activity ensures satisfaction of the defined need of clients to manage their own funds from anywhere in the world in a convenient schedule 24 hours per day. The number of neobanks in Ukraine and the world is growing. Neobanks are in demand by consumers of financial services and attract the keen interest of investors, because the development of neobanks opens up significant investment opportunities.

The domestic banking sector is gradually introducing and implementing innovations in accordance with global trends in the development of banking services. One of the goals of the NBU Strategy until 2025 is to move towards the activation of financial technologies and an open banking policy, which support society's transition to digital banking. Domestic neobanking gained a particularly noticeable development during the coronavirus pandemic and also now in the conditions of martial law. It is these circumstances that stimulate the development of digitalization of almost all processes in the country and, of course, domestic neobanking. However, the lack of a legislative initiative regarding the licensing and regulation of the activities of neobanks in Ukraine restrains their potential development and, accordingly, prevents the effective introduction of innovative approaches into the domestic practice of banking services. So, for now, the future development of domestic neobanks directly depends on state support for their activities, internal regulatory policy and competitive environment. Therefore, in our opinion, in the near future domestic neobanks due to their competitive advantages will become equal participants of the financial market and will be able to compete seriously with traditional banks. And this should become a catalyst for the recovery of the economy and development of our country in the post-war period.

REFERENCES

- 1. Guba, M., Linnyk, O. A., & Kolesnyk, D. (2019). Development of neobanks in Ukraine and the world. *Regional economics and management*, 2(24), 71-74. [in Ukrainian].
- Teslyuk, S., Matviychuk, N., Derkach, O., & Korkh, N. (2021). Neobanks: the essence and prospects of development in Ukraine. *Economic journal of Volyn National University named after Lesya Ukrainka*, 3, 61-71. https://doi.org/10.29038/2786-4618-2021-03-61-71 [in Ukrainian].
- 3. Irshak, O., & Tvorydlo, O. (2022). Development of neobanks in Ukraine. *Economy* and society, 36. https://doi.org/10.32782/2524-0072/2022-36-10 [in Ukrainian].
- 4. Looking to start a Neobank? Here's How to Get a Banking License. (2021). Surf. https://surf.dev/how-to-get-a-banking-license/ [in English].
- 5. N. Benaissa. Looking at the legal requirements for neobanks (2021). BPS. Retrieved from https://www.bpcbt.com/blog/looking-at-the-legal-requirements-for-neobanks [in English]
- 6. Neobanks App. (2022). https://neobanks.app/ [in English].
- Stegmeier, C., & Verburg, M. (2022). The Future of neobanking. How can Neobanks unlock profitable growth? Simon-Kucher. https://www.simon-kucher.com/sites/default/ files/WP_Neo-Banking_A4_Digital_CBU.pdf [in English].
- 8. *Grand View Research*. Market Research Reports (2021). https://www.grandviewresearch.com/ services/market-research-reports [in English].
- 9. Market size of neobanks in 2021 with a forecast for 2022 and 2030. Statista. *Finance & Insurance. Financial services.* https://www.statista.com/statistics/1228241/neobanks-global-market-size [in Ukrainian].
- 10. Bank Own Account. https://bvr.ua [in Ukrainian].
- 11. Izibank. https://izibank.com.ua [in Ukrainian].
- 12. *Monobank*. https://www.monobank.ua/?utm_source=google&utm_medium=cpc&utm_campaign=pm [in Ukrainian].
- 13. Neobank. https://all.neobank.one [in Ukrainian].
- 14. O.Bank. https://obank.com.ua/ru [in Ukrainian].
- 15. Sportbank. https://sportbank.com.ua [in Ukrainian].

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