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## INTERNET BANKING AS BANKING DEVELOPMENT BASIS

**Abstract.** The paper deals with the urgent issue of informing financial institutions, as the main resource for development of all subjects of financial services market, and interaction of modern technologies with Internet. The NBU Resolution No. 22 «On Approval of the Instruction on Non-Cash Payments in Ukraine in National Currency» has been investigated and, in accordance with it, the concept of Internet banking has been analyzed. A set of measures has been formed to increase the level for protection Internet banking system by institution and its clients. The basic concepts, features of functioning and advantages in activity of Internet banking are investigated.

**Keywords:** internet banking, digitization, informatization, economic environment, financial institution.

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## ІНТЕРНЕТ-БАНКІНГ ЯК ОСНОВА РОЗВИТКУ БАНКІВНИЦТВА

**Анотація.** У роботі розглядається актуальне питання інформатизації фінансових установ, як основного ресурсу розвитку всіх суб'єктів ринку фінансових послуг, та взаємодії сучасних технологій з інтернет мережею. Досліджено Постанову НБУ від 21.01.2004 р. № 22 «Про затвердження Інструкції про безготівкові розрахунки в Україні в національній валюті» та, відповідно до неї, проаналізовано поняття інтернет-банкінгу. Сформовано комплекс заходів для підвищення рівня захисту системи інтернет-банкінгу з боку установи та її клієнтів. Досліджено основні поняття, особливості функціонування та переваги у діяльності інтернет-банкінгу.

**Ключові слова:** інтернет-банкінг, діджиталізація, інформатизація, економічне середовище, фінансова установа.

**Introduction.** In the terms of economics digitalization, effective banking institutions activity depends not only from variety of services and operations provided, but, foremost, from level of implementation modern innovative systems and working technologies with clients. Modern technologies are actively cooperating with Internet network, taking at bank working an increasing share.

Features of methodology and practice Internet banking world development and its application in

Ukrainian realities were investigated by V. Bauer, B. Adamik, K. Basadze, G. Bortnikov, I. Boyarko, I. Karcheva, D. Demyanovskaya O. Yesina, M. Engstler, B. King, L. Liamin, O. Unknown to A. Nikitin, O. Ruda, V. Ogienko, A. Fedorchenko, O. Chub and other scholars and practitioners.

In spite of considerable number of scientist's works, some aspects of this problem remain specialist's attention. A considerable part of the works speaks about expediency and effectiveness of using Internet banking. The protection of institution's Internet technologies and information resources has not been sufficiently analyzed.

The purpose is to study Internet banking system, its possibilities for improvement, given the rapid introduction of information technology in the field of finance, threats analysis and formulation set measures to ensure system.

Digital banking is the introduction of new and emerging technologies in financial services industry, combined with corresponding changes in internal and external corporate and staffing relationships to provide effective customer service [1]. One of these innovative technologies is Internet banking.

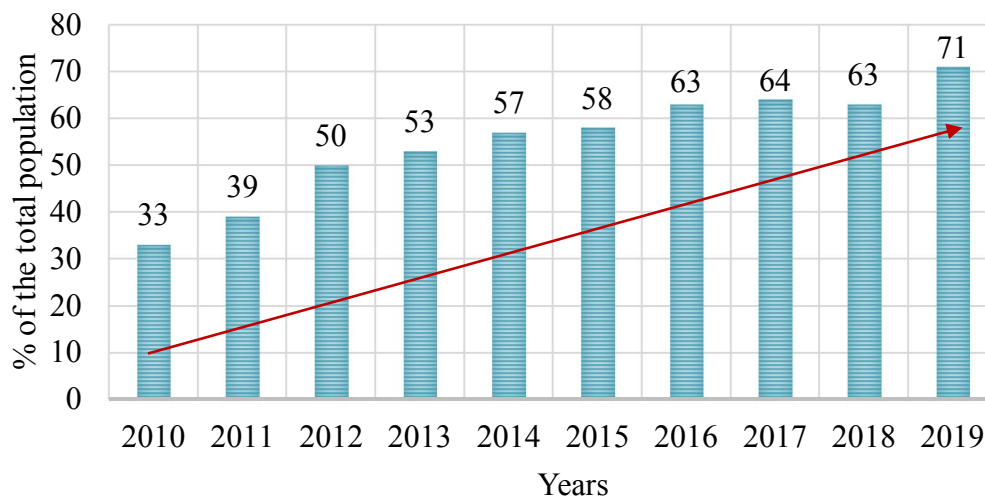
Online Banking (Web Banking) is a type of remote banking service. It provides access to accounts and account operations at any time from any Internet device. Operations use standard browsers such as Google Chrome, Internet Explorer, Opera, Mozilla and more. Therefore, there is no necessity to install additional software. [2]

The idea of creating Internet banking as a system was originate in the United States (October 18, 1995, Security First Network Bank). The restriction in opening bank branches in other states and finding options for providing services to another state or country clients were reasons for it. [3]

In Ukraine it's legally stipulated that Internet banking (the system «client – Internet – bank») is an element of remote banking service. The concept of remote banking is discussing in item 10.1. NBU Resolution №22 since 21 January 2004 «On Approval of Instruction on Non-Cash Settlements in Ukraine in National Currency». The client can conduct his bank accounts promptly and exchange technological information specified in contract between bank and client, client can carry out using remote service systems. The client's accounts can be remotely services by systems «client – bank», «client – Internet – bank», «telephone banking» and others. [4]

Ability to providing online banking services gives customers possibilities to use bank's services quickly and without unnecessary costs. Accordingly, bank is more competitive when it offers more opportunities in Internet banking. There are more banks that introducing programs through the Internet.

Internet banking is gaining in popularity every year, due to the increasing quantity of Internet users (Figure 1).



**Fig. 1. Internet users (% of the total population of Ukraine)**

**\* compiled by the author according to data [5]**

Undoubtedly, creation of Internet banking has significantly simplified relations between bank and client, while not losing market position but increasing them. But it should be noted, new types of services lead to emergence new threat types of institution activities.

Internet banking has a relatively lower level of information protection than client-bank system. It's related with imperfect bank system implemented and negligent attitude system users.

To make an effective data protection, institutions and clients must comply with relevant rules, which are listed in Table 1.

**Table 1**

**Measures for increasing level protection Internet banking system**

For clients	For banks
<ul style="list-style-type: none"> <li>• before every usage of the Internet resource, check the correctness of the bank's Internet address;</li> <li>• do not use the «save entered» function;</li> <li>• forming passwords for login using numbers and letters in a random order;</li> <li>• don't write the password on paper or on a bank card;</li> <li>• install SMS notification system on telephone and e-mail address;</li> <li>• do not provide personal information to unknown persons or in entering to suspicious sites;</li> <li>• change access codes periodically;</li> <li>• clarifying at the institution's hotline all telephone calls from a bank operator.</li> </ul>	<ul style="list-style-type: none"> <li>• installation of licensed antivirus software;</li> <li>• use electronic keys to access databases and store them in secure locations;</li> <li>• installation of licensed software only;</li> <li>• use services own IT specialists to upgrade and technically improve the systems.</li> </ul>

**Conclusions.** At the stage of modern development digital environment, Internet technology is the basic link of development at all branches of country economy, and especially banking sector. Internet banking is the main service that banks have introduced to increase their competitiveness and meet their customers' needs. Thanks to this system, a large amount of services is providing every day without need physical presence in bank.

Each year, Internet users number increases and this is good system forecast, because then number of bank Internet services users increases. But do not forget about losses that can be paid by banks and clients, unless a proper and effective system of protection and behavior of Internet banking users' system is formed.

**Literature**

1. Savenko S. *Behind them the future* [Electronic resource] / Sergey Savenko // *Finance.ua*. – 2017. – Resource access mode: <https://news.finance.ua/en/news/-/416199/za-nymy-majbutnye>.
2. Serbina O.G. *Internet Banking: Ukrainian Practice and World Experience* / O.G. Serbina, Zaguzova OM // *Young scientist*. – 2014 – p.125 – 128.
3. TA Govorushko, IP Sitnik, VN Lyakhovetskaya. *Development of Internet Banking in Ukraine* / T. Govorushko // *Scientific Bulletin of the Kherson State University* – 2015 – Issue 15. Part 5. – P. 146-149.
4. *Instruction on non-cash payments in Ukraine in national currency, approved by the Resolution of the NBU Board of 21.01.2004 № 22* [Electronic resource]. – Access mode: <http://zakon3.rada.gov.ua/laws/show/z0377-04>.
5. *Ukrainian Multimedia Broadcasting Platform Ukrinform* [Electronic resource]. – Access Mode: <https://www.ukrinform.ua/rubric-technology/2797152-v-ukraini-kilkist-internetused-to-23-million.html>.