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## **ACCOUNTING AND FINANCE IN THE CONTEXT OF UKRAINE'S ECONOMIC RECONSTRUCTION: ADVANTAGES OF ARTIFICIAL INTELLIGENCE**

### *Summary*

The development of the world economy in recent years has been supported by the active use of generative artificial intelligence (AI) technology. The simplification of accounting with the help of artificial intelligence has aroused great interest among entrepreneurs, which has led to the development of new financial accounting and electronic reporting tools to solve the problems of globalization affected by serious epidemics, war and economic crisis, which has made it possible to increase practical efficiency and accuracy in conditions of personnel shortage.

The purpose of the article provides a complex and comprehensive substantiation of the peculiarities of business use of modern digital software products in the accounting and finance system based on AI technologies in the context of its restoration in conditions of personnel shortage, for the sake of sustainable development and post-war reconstruction of the economy.

In the process of carrying out the research, general scientific theoretical methods of cognition were used: tabular - for analytical evaluation of programs based on artificial intelligence technologies; analogies, abstraction and formalization - for revealing the peculiarities of accounting and financial management in the conditions of AI implementation; logical generalization - when formulating conclusions.

The conducted scientific research made it possible to substantiate in detail and comprehensively the possibilities of modern software products for accounting and finance based on AI technologies, the active implementation of which in the practice of business use will contribute to overcoming the problem of staff shortage and will contribute to its restoration for the comprehensive reconstruction of the economy of Ukraine after the war.

Modern software products for accounting and finance based on AI technologies were analyzed and the potential for their real implementation in the practice of application by domestic business in the conditions of martial law was revealed.

Prospects for further research in this direction are the analysis of the development of project financing, including its essence, principles of implementation and adaptation to world experience, which is of crucial importance for the reconstruction of the post-war economy of Ukraine.

**Keywords:** financial sector, software, artificial intelligence, staff shortage, electronic reporting, business recovery, sustainable development of enterprises, post-war economic reconstruction.

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### **References:**

1. Bagriy, K.L. (2024). Methodical approaches of the digital economy in the perspective of statistical forecasting methods. *Visnyk Chernivetskoho torhovelno-ekonomichnogo instytutu* [Bulletin of the Chernivtsi Trade and Economic Institute], issue I (93), pp. 77-89. Available at: [http://herald.chite.edu.ua/content/download/archive/2024/doi1/1\\_7.pdf](http://herald.chite.edu.ua/content/download/archive/2024/doi1/1_7.pdf). DOI: <http://doi.org/10.34025/2310-8185-2024-1.93.07> (Accessed 30.09.2024) (in Ukr.).
2. Bagrii, K.L., Kuchinik, R.V., Kuchinik, N.I. (2022). Unemployment in Ukraine during the war: analytical aspect. *Visnyk Chernivetskoho torhovelno-ekonomichnogo instytutu* [Bulletin of the Chernivtsi Trade and Economic Institute], issue II (86), pp. 32-51. Available at: <http://herald.chite.edu.ua/content/download/archive/2022/v2/3.pdf>. DOI: <http://doi.org/10.34025/2310-8185-2022-2.86.03> (Accessed 30.09.2024) (in Ukr.).
3. Benko, M. M. (2021). Automation of accounting in Ukraine: problematic aspects and key achievements. *Visnyk Chernivetskoho torhovelno-ekonomichnogo instytutu* [Bulletin of the Chernivtsi Trade and Economic Institute], issue III (83), pp. 91-104. Available at: <http://herald.chite.edu.ua/content/download/archive/2021/v3/7.pdf> DOI: <http://doi.org/10.34025/2310-8185-2021-3.83.07> (Accessed 30.09.2024) (in Ukr.).
4. Hnatieva, T.M., Melnychuk, V.M., Yakovenko, A.O. (2024). World trends of integration of artificial intelligence in accounting. *Economic Bulletin of the Black Sea Littoral*, issue 5. Available at: <https://www.ebbsl.com.ua/index.php/visnuk/article/view/67> DOI: <https://doi.org/10.32848/agrar.innov.2024.23.32> (Accessed 17.09.2024) (in Ukr.).
5. Dankiv, Y.Ya., Popovych, M.S. (2022). Artificial intelligence in accounting. Available at: <https://ojs.kname.edu.ua/index.php/area/article/view/1838/1741> (Accessed 17.09.2024) (in Ukr.).
6. Darid, A.Kh., Humeniuk, Ya.M., Khmara, M.P. (2023). Implementation of Artificial Intelligence in Business Practice. *Tsyfrova ekonomika ta ekonomiczna bezpeka* [Digital Economy and Economic Security], issue 9(09), pp. 42-50. Available at: <http://dees.iei.od.ua/index.php/journal/article/view/270/257> (Accessed 27.09.2024) (in Ukr.).
7. Zlatova, M.G., Hnatieva, T.M. (2023). Prospects for the implementation of artificial intelligence in accounting and auditing. *Stratehichni priorytety rozvytku bukhhalterskoho obliku, audytu ta opodatkuvannia v umovakh hlobalizatsii. Materialy II mizhnar. nauk.-prakt. konf.* [Strategic priorities for the development of accounting, auditing and taxation in the conditions of globalization. Mat. of the II International of science.-pract. conf.]. Sumy, pp. 40-43. Available at: <http://surl.li/rgezf> (Accessed 17.09.2024) (in Ukr.).
8. Kohut, Yu.I. (2024). *Shtuchnyi intelekt i bezpeka* [Artificial Intelligence and Security]. Consulting Company "SIDCON", Kyiv, p. 294. Available at: <https://jurkniga.ua/shtuchnyi-intelekt-i-bezpeka/> (Accessed 29.09.2024) (in Ukr.).
9. Lemishovska, O.S., Lininska, V.I. (2022). Accounting in the conditions of implementation of information technologies and systems. *Ekonomika ta suspilstvo* [Economy and society], no. 44. Available at: <https://nayka.com.ua/index.php/ee/article/view/718/726>. DOI: <https://doi.org/10.32782/2524-0072/2022-44-23> (Accessed 29.09.2024) (in Ukr.).
10. Malyarchuk, O.V. (2023). Instruments of financial support for the innovative reconstruction of the country's economy. *Visnyk Chernivetskoho torhovelno-ekonomichnogo instytutu* [Bulletin of the Chernivtsi Trade and Economic Institute], issue IV (92), pp. 212 - 222. Available at: <http://herald.chite.edu.ua/content/download/archive/2023/v4/15.pdf>. DOI: <http://doi.org/10.34025/2310-8185-2023-4.92.15> (Accessed 30.09.2024) (in Ukr.).

11. Popovichenko, I.V., Spiridonova, K.O. Andriychuk, A.S. (2024). Application of artificial intelligence in the financial and economic analysis of enterprise activity. *Ekonomichnyi prostir [Economic space]*, no. 189, pp. 81-84. Available at: <https://prostir.pdaba.dp.ua/index.php/journal/article/view/1389/>. DOI: <https://doi.org/10.32782/22246282/189> (Accessed 18.09.2024) (in Ukr.).
12. Savkiv, U.S., Kuzmin, T.L. (2023). Improving accounting and reporting in the conditions of the digital economy. *Aktualni problemy rozvytku ekonomiky rehionu [Actual problems of the development of the economy of the region]*, no. 19, vol. 2, pp. 87-95. Available at: <http://surl.li/rheoh> (Accessed 18.09.2024) (in Ukr.).
13. Sayenko, D.O., Kolisnyk, T.P. (2023). Main areas of application of artificial intelligence technologies in cyber security. *Protydiia kiberzlochynnosti ta torhivli liudmy. Zbirn. mater. mizhnar. nauk.-prakt. konf.* [Combating cybercrime and human trafficking. Collection. mat. international of science practice conf.]. Vinnytsia, May 31, pp. 158-160. Available at: <http://surl.li/kzqnc> (Accessed 18.09.2024) (in Ukr.).
14. Yulia Ursakiy, Valeriya Penyuk (2022). Ukrainian business during the war: state, problems and prospects. *Visnyk Chernivetskoho torhovelno-ekonomicnogo instytutu [Bulletin of the Chernivtsi Trade and Economic Institute]*, issue III (87), pp. 57-69. Available at: <http://herald.chite.edu.ua/content/download/archive/2022/v3/4.pdf/> DOI: <https://doi.org/10.34025/2310-8185-2022-3.87.04> (Accessed 30.09.2024) (in Ukr.).
15. Compiled by Monolit Bizz LLC (2024). *Shtuchnyi intelekt i neiromerezhi. 12 knyzhok v odnii, shcho dopomozhut vam vtility innovatsii v zhyttia* [Artificial Intelligence and Neural Networks: 12 Books in One to Help You Implement Innovations]. Monolit Bizz, Kharkiv, 216 p. (in Ukr.).
16. Top 7 tools for accountants in 2024. Available at: <https://transkriptor.com/uk/%D1%96%D0%BD%D1%81%D1%82%D1%80%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D0%B8-%D0%B4%D0%BB%D1%8F-%D0%B1%D1%83%D1%85%D0%B3%D0%BD%D0%BB%D1%82%D0%B5%D1%80%D1%96%D0%B2/> (Accessed 18.09.2024) (in Ukr.).
17. The labor market in the conditions of war: demographic challenges for Ukraine. (2024). Available at: <https://www.ukrinform.ua/rubric-politics/3909003-rinok-praci-v-umovah-vijni-demograficni-vikliki-dla-ukraini.html> (Accessed 30.09.2024) (in Ukr.).
18. Migration during the war. (2024). Available at: <https://forbes.ua/war-in-ukraine/migratsiya-pid-chas-viyni-blizko-20-ukraintsiv-mozhut-viikhati-za-kordon-u-razi-zagostrennya-situatsii-shcho-krim-bezpeki-sponukae-do-tsogo-naselenna-visnovki-z-doslidzhennya-gradus-research-pro-migr-20032024-20013> (Accessed 22.10.2024) (in Ukr.).
19. The population is shrinking - in 2050 there will be only 25 million of us. (2024). Available at: <https://forbes.ua/money/naselenna-ukraini-skorochuetsya-u-2050-rotsi-nas-bude-lishe-25-mln-yak-derzhava-dolatime-tsyu-krizu-ta-shcho-vzhe-zaraz-robiti-biznesu-za-defitsitu-kadryv-rozpovidiae-zastupnitsya-ministra-sotspolitik-22052024-21289> (Accessed 22.10.2024) (in Ukr.).
20. Artificial Intelligence for the Reconstruction of Ukraine. (2024). Available at: <https://www.epravda.com.ua/columns/2024/10/17/720658/> (Accessed 20.10.2024) (in Ukr.).
21. 11 Best Accounting Software with Artificial Intelligence. (2024). Available at: <https://www.morningdough.com/uk/ai-tools/best-artificial-intelligence-accounting-software/> (Accessed 23.10.2024) (in Ukr.).