ISSN : 2349-543X

INTERNATIONAL JOURNAL OF

TRENDS IN COMMERCE AND ECONOMICS

Indexed by:

ROAD Crossref Universal Impact Factor IMPACT FACTOR SEARCH

10/25 Thamotharan Street, Arisipalayam, Salem, India

Principal Contact

Academic Journal Online

info@academicjournalonline.org

International journal of trends in commerce and economics **ISSN:** 2349-543X VOL. 14. Issue 1
http://academicjournalonline.org/index.php/ijtce/issue/archive
Impact factor 9

THE USE OF DIGITAL TECHNOLOGIES IN AUDITING

Dilora Khasanovna Saydamenova
National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" (TIIAME National Research University), Tashkent, Uzbekistan

Abstract. Currently, the most significant force transforming the global economy is digitalization, which is happening on a global scale. This transformation is shaping organizations, employing professionals who rely on digital business models and frequently updated information technology.

The topic of this article is relevant because digitalization is an inevitable process affecting audit firms, who must adapt to improve their efficiency and increase customer confidence. Organizations are investing heavily in new technologies to benefit from networking, with many undergoing large-scale digital transformations, radically altering traditional business models.

Keywods. Big data, audit, digitalization, Norma, STATAUZ

Introduction

Consequently, the world is becoming more interconnected through data and advanced technologies such as on-demand media access, pervasive automation, and artificial intelligence. The modern digital economy has created new opportunities for the development of various types of economic activities. This has led to improved organizational and technical support for information services, including auditing services. Technologies based on artificial intelligence have the potential to be applied to the digitization of auditing processes, which can speed up information gathering and the transition from manual to automated processing of information and planning algorithms.

Using these technologies in audits allows for analyzing the content of databases generated by an organization's accounting department, monitoring indicators contained in accounting records, verifying compliance of indicators in accounting reports with accounting records, and generating audit documentation.

According to the Computer-Assisted Auditing standards, the main purpose of using computers in auditing is to organize the audit process as a series of audit procedures in order to increase the efficiency of human-computer interaction. During the analytical procedures, auditors calculate a large number of indicators. These calculations can be formalized, leading to the development of specialized computer programs that analyze the financial situation and prospects of an organization.

The basis for these analyses is accounting and statistical reports, as well as data from individual accounting records. Based on research by Russian authors, there are three areas of development in audit practice. Let's take a closer look at each of these areas.

1) Digitalization of the environment is a result of widespread automation of systems and processes, transforming the economy through the use of PCs, mobile

phones, and gadgets. Audits are conducted based on corporate reports and technical protocols of PCs, as well as automation and innovation in devices and specialized software.

2) Big data - the use of large volumes of data, fast information processing, and corporate reporting, characterized by fast processing and analysis, various forms of data presentation, and sources of its occurrence. When conducting an automated audit, several groups of programs are employed:

- Office applications are represented by spreadsheet programs, database management systems, and word processors such as Microsoft Excel, Gnumeric, and LibreOffice Calc. However, for more complex calculations, specialized statistical software is used during the audit process. Some of the most common examples are Statistica, SPSS Statistics, and STATAUZ.

- Legal reference systems (ATP) are essential for legal support during the audit. These are systems that provide legally processed and regularly updated legal information. Some popular examples include Lex.uz and Norma.

- Accounting software is also subject to verification, which involves testing algorithms. One of the most commonly used programs is 1C.

Currently, the use of robotic technologies is a promising area for improving audit processes. For instance, robots are capable of independently and quickly searching for information on a given query. Blockchain and XBRL technologies are also actively being implemented for use in auditing. Thanks to XBRL, it has become easier for organizations to compile reports. Starting in 2018, the Big Four companies launched a pilot project with Taiwanese banks to test blockchain technology for auditing clients' financial statements.

It is worth noting that the systematic development of IT systems and the digitalization of the audit industry are not only changing the audit process itself, but also the models and techniques used. This is also changing the long-term vision for audit development. Among the potential challenges associated with the digital transformation of auditing, there are several issues that need to be addressed.

One issue is the risk of privacy violations due to the use of big data. There is also a threat of hacker attacks that could lead to personal data being sold or resold to third parties. Additionally, there is concern about business security if employees with insufficient knowledge access sensitive information.

Despite the automation of document management processes, software solutions do not fully replace human expertise in cognitive tasks. The role of a qualified auditor remains essential, as the quality of their work directly impacts the reliability of audit opinions. Auditors bring valuable skills, experience, and knowledge to the table, which contribute to the accuracy and thoroughness of their reviews. Additionally, despite the increasing use of automation tools, many routine tasks still consume a significant portion of auditors' time, such as data entry and data validation.

Despite this, some of the world's leading auditing firms have successfully integrated intelligent technologies into their operations. Through the utilization of information technology, the Big Four auditing companies have been able to reduce the time and effort required for information collection and analysis by up to 50%.

Overall, businesses are increasingly influenced by external factors such as geopolitical shifts, technological advancements, digital transformation, cybersecurity threats, and the ongoing pandemic. These external forces introduce new risks and challenges that impact internal audit processes and require adaptability in business strategies and risk management approaches.

The strategy for the transition to auditing using artificial intelligence (AI) technologies was outlined back in 2012. However, the actual implementation and testing of these technologies began in 2014-2015. According to projections from the International Economic Forum, by 2025 approximately 30% of audits are expected to be conducted using AI technologies. This trend is supported by the growth of the global technology market.

Conclusion

The ongoing digital transformation of the audit industry has both positive and negative implications. On the one hand, it contributes to the development and optimization of auditing processes. On the other hand, it presents significant challenges, such as the risk of system failures, errors, and potential "depersonalization" of the audit profession. These challenges have not yet been fully explored, as they have emerged in the industry relatively recently. As a result, it will take time to develop effective strategies to address them.

The introduction of robotic software solutions into the auditing process is a prerequisite for the development of Uzbekistan's digital economy, which should lead to both an improvement in the quality of audit services and increased efficiency within organizations.

References

1. Bakhadirov A.K. What should leasing companies consider when switching to IFRS// Taxation and Accounting. Journal. – Tashkent 2020, No. 7, 58 – B.

2. Bakhadirov A.K. Returnable leasing: advantages and risks// Republic of 20-kp tarmokli ilmiy anzhumani maruzalar typlami. – Toshkent, September, 2020, http//doi.org/10.26739/online_20.

3. Bakhadirov A.K. Uzbekiston Republicasida leasing muomalalariisobi vaisobotini takomillashtirishda khalkaro standartlardan foydalanish masalalari// AGRO ILM. Journal. – Toshkent 2021, 5-ilova (75)-sleep, 119– B.

4. Development of leasing operations in Uzbekistan in the modern life Central Asian Journal of Innovations and Research ISSN: 2091-573X Vol. 1 Issue 3, August – 2021, https://www.sciencepublish.org/index.php/cajir/issue/view/20

5. Bakhadirov A.K. Leasing companyalaring republic of itisodietida tutgan sharni va ularni rivozhlanish boskichlari// Republic of Ilmiy-Amaliy anjumani maruzalar tuplami. – Toshkent, 2008. – B. 257-258

6. Raximova G.M. Buxgalteriya hisobi. Darslik - T.:TDIU, “Innovasiya Nasriyoti» 2022. 356 b. Raximova G.M., Asosiy vositalarni korrelyatsion-regrission usulda xarajatlar qoplanishini hisoblash // "Economic and legal aspects of digitalization in the context of globalization", international scientific symposium (2 ;

2022 ; Chişinău). International Scientific Symposium "Economic and legal aspects of digitalization in the context of globalization", the 2nd edition, March 4-5 2022, Chisinau / scientific committee: Sedleţchi Iurie (Moldova), Puşca Andy (Romania) [et al.] ; organizing committee: Șargu Lilia (chairman) [et al.]. – Chişinău : USEM, 2022. – ISBN 978-9975-3527-3-4.

7. Strielkowski, W., Grebennikova, V., Lisovskiy, A., Rakhimova, G., Vasileva, T., AI-driven adaptive learning for sustainable educational transformation. 2024. // Sustainable Development. Journal. ISSN: 09680802. DOI: 10.1002/sd.3221 Review. John Wiley and Sons Ltd. (SCOPUS Q1, WOS)

8. Kuzmin E, Rakhimova G., Nasirova H.,Namozov J. Coverage of The ESG Agenda in Russian Companies: Metrics and Distribution Strength. // E3S Web of Conferences 574, 03002 (2024) (SCOPUS Q3)

9. Kuzmin E., Yunusova N., Rakhimova G. Structural Changes in CO2 Emissions in Russia: Sector-Specific Features. // E3S Web of Conferences 574, 04006 (2024) (SCOPUS Q3)

10. Kocherbaeva A., Osmonova A., Rakhimova G., Kuzmin E. Big and Small Data in Corporate Human Resource Management. // The Future of Industry. Chapter of the book. 26 November 2024. pp 377–394.

11. Kuzmin E., Rakhimova G., Nurmanov U., Nasurova K. Transitioning from Industry 4.0 to Industry 5.0: An Overview of Co-Evolution. // The Future of Industry. Chapter of the book. 26 November 2024. pp 21–37.