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The Impact of International Financial Reporting Standards and Digital Technologies on the Audit of Small and Medium-Sized Enterprises

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Abstract: Small and medium-sized enterprises (SMEs) play a crucial role in the economy of Uzbekistan, contributing significantly to GDP, employment, and exports. The transition of these businesses to International Financial Reporting Standards (IFRS) is an essential step toward enhancing financial transparency and aligning with global practices. The Presidential Decree “On Measures to Increase the Role of Small and Medium-Sized Businesses in the Economy” sets ambitious targets for 2025, urging SMEs to adopt IFRS. However, this transition presents challenges such as a shortage of qualified professionals and the need for technological adaptation. Despite the growing relevance of IFRS and digital technologies in auditing, limited research addresses the specific impacts on SMEs in Uzbekistan, particularly concerning the integration of artificial intelligence (AI) and digital tools in the auditing process. This study aims to assess the impact of IFRS on SMEs' financial transparency, analyze the challenges during the transition, and explore how digital technologies and AI are transforming SME audits. The adoption of IFRS improves transparency and efficiency in financial reporting for SMEs, but challenges like the lack of local adaptation, cost constraints, and insufficient skilled professionals persist. Digital technologies enhance audit accuracy, speed, and risk detection. This research introduces the role of AI in auditing small businesses in Uzbekistan, offering insights into how digital transformation reshapes audit practices. The findings suggest that while the transition to IFRS and AI-driven audits presents obstacles, they also offer significant opportunities for improving audit quality and financial reporting, ultimately strengthening SMEs' contribution to the economy.

Keywords: Small And Medium Enterprises, International Financial Reporting Standards, Audit, International Auditing Standards, Digital Technologies, Artificial Intelligence, Risk

1. Introduction

For many years, special attention has been paid to the role of small and medium-sized enterprises (SMEs) in the economy of the Republic of Uzbekistan. The Presidential Decree “On Measures to Increase the Role of Small and Medium-Sized Businesses in the Economy” (PF-50, March 19, 2025) has elevated this commitment to a new stage [1]. The decree sets targets for 2025: to increase the share of SMEs in gross domestic product to 55 percent, in industry – to 34 percent, in exports – to 34 percent, and in ensuring employment – to 75 percent.

The modern trends of digitalization of the economy and international standardization of financial reporting have a significant impact on the audit practices of SMEs. On the one hand, these processes contribute to the transparency, efficiency, and harmonization of audit procedures. On the other hand, they create new challenges

associated with resource shortages, low levels of digital maturity, and difficulties in adapting IFRS to the specific needs of SMEs [2].

The objectives of this article can be summarized as follows:

- To evaluate the role of IFRS in shaping transparent reporting by SME entities.
- To analyze the difficulties arising in the process of transitioning to IFRS in SMEs, as well as the expected changes in national audit practices and the professional activities of auditors as a result of this transition.
- To study international experience in the introduction of digital technologies into SME auditing, to identify related barriers and risks, and to provide recommendations for improving the audit of small and medium-sized businesses under new conditions.

Issues related to the transition of SMEs to IFRS and the impact of applying IT and AI technologies in auditing on audit methodology and techniques have been reflected in the scientific works of foreign scholars such as Miklos A. Vasarhelyi, Alexander Kogan, and Michael G. Alles, as well as Russian researchers such as N.A. Kazakova, N.V. Generalova, T.N. Chunikina, and V.A. Yakimova [3][4][5].

2. Materials and Methods

The methodology of this study is based on a comprehensive analysis of the transition of small and medium-sized enterprises (SMEs) in Uzbekistan to International Financial Reporting Standards (IFRS) and the integration of digital technologies and artificial intelligence (AI) in auditing. To achieve this, a combination of qualitative and quantitative research methods was employed. Initially, a thorough literature review was conducted, focusing on international and regional studies regarding the implementation of IFRS in SMEs, with particular attention to challenges, barriers, and benefits [6]. This provided a theoretical foundation for understanding the broader context of digital transformation in audit practices. The research also included interviews with industry professionals, auditors, and SME managers to gain insights into the practical challenges faced during the transition to IFRS and the use of digital tools in auditing. Furthermore, case studies from SMEs that have already adopted IFRS and digital technologies were analyzed to observe real-world applications and outcomes. In addition, a survey was conducted among SMEs in Uzbekistan to assess their readiness for digital technologies and the level of expertise available to implement IFRS [7]. Statistical analysis was applied to identify trends and correlations between the adoption of digital technologies and improvements in audit quality. The study also utilized comparative analysis to draw conclusions from international experiences and provide recommendations tailored to the Uzbek context. Through this mixed-methods approach, the research seeks to offer practical solutions to enhance the adoption and implementation of IFRS and AI-driven audits for SMEs in Uzbekistan [8].

3. Results and Discussion

The establishment of unified accounting standards under IFRS improves the quality and transparency of financial reporting presented by SMEs operating in the Republic of Uzbekistan. This, in turn, makes the information more understandable and comparable for investors, banks, creditors, and other users. IFRS for SMEs, while maintaining the universality of the standards, also takes into account the specific features of small businesses by offering simplified reporting requirements [9].

However, the introduction of IFRS for SMEs into national practice entails a number of limitations and challenges, including:

- The IFRS for SMEs has not yet been officially adopted for use in the country, and a two-stage transition program has been developed.
- Inconsistencies with the national tax policy.

- A shortage of specialists who are knowledgeable in IFRS for SMEs and capable of applying it in practice, as well as the lack of retraining programs in this field.
- The IFRS for SMEs has not yet been translated into Uzbek, nor has a methodological framework been developed.
- The need to automate accounting and to adapt the software currently used by enterprises for bookkeeping to IFRS for SMEs.
- The significant financial costs required for the transition to IFRS for SMEs, among others.

Today, auditing has become an integral part of the management system of small and medium-sized enterprises. Conducting audits of business transactions in such entities helps to eliminate shortcomings in their accounting systems and supports the adoption of sound management decisions.

The transition of small and medium-sized enterprises (SMEs) to the IFRS for SMEs has a significant impact on the process of auditing their activities and providing other professional services to them. First and foremost, the approach to auditing has changed: instead of merely verifying whether financial statements formally comply with laws and standards, auditors now evaluate the underlying business transactions and provide their professional judgment as experienced specialists [10]. In other words, the audit methodology, which has been formed over many years, needs to be reconsidered in light of international standards.

Furthermore, the transition of SMEs to the IFRS for SMEs imposes higher demands on the professional competence of auditors. It encourages them to engage in continuous professional development and fosters the growth of international certification practices. Under these conditions, auditors become assistants, advisors, and mentors to their SME clients [11].

Within the framework of the “Auditor + Mentor” approach, the mentor helps the client or staff not only to understand the audit results and implement recommendations, but also to improve internal processes beyond the scope of simple financial reporting.

- This approach combines the auditor’s expertise in identifying problems and weaknesses with the mentoring role of training and developing staff, offering broader solutions than merely reviewing and analyzing.
- The rapid development of the digital economy worldwide and in our country is having a significant impact on the evolution of auditing.
- The use of digital technologies and AI in auditing has gone through several stages of development before reaching its current state:

Stage 1. The pre-digitalization period

- From the emergence of auditing until 1970, audit examinations were carried out mainly manually. In forming their opinions at the conclusion of an audit, auditors relied on paper-based documents, hand-made calculations, and sample observations, which were both time-consuming and labor-intensive [12].

Stage 2. The early steps of digitalization: 1970–1990

- With the advent of personal computers and their introduction into the economy, as well as the appearance of specialized software products such as Microsoft Excel, IDEA, and ACL, it became possible to delegate part of the manual work especially sample testing procedures to technology [13].

Stage 3. The development of automation and IT auditing: 2000–2010

- Since the 2000s, the integration of auditing with corporate information systems (ERP) such as SAP and Oracle has intensified. This provided auditors with the ability to analyze large volumes of information more accurately and gave rise to a new type of auditing known as information systems and technology audit [14].

Stage 4. The current stage: the era of digital transformation in auditing (2010–present)

- From 2010 onwards, digital technologies have increasingly become an integral part of audit practice. Examples include Big Data technologies, artificial intelligence, cloud servers, blockchain platforms, XBRL-based financial reporting, and the automation of processes through robotic systems [15].
- Currently, the use of digital technologies and artificial intelligence in the process of auditing SMEs.

The use of digital technologies and artificial intelligence in SME auditing is producing positive results in the following areas:

- Improving audit efficiency, accuracy, and quality while saving time;
- Reducing the time required to conduct audit procedures;
- Lowering costs;
- Enabling deeper analysis of extremely large volumes of data;
- Detecting unusual transactions and fraudulent activities that are difficult to identify through standard human (auditor) actions;
- Working equally well with textual, visual, and audio materials;
- More precise identification and assessment of risks;
- Automating the audit process;
- Conducting audits remotely;
- Ensuring continuous audit services.

In international practice, the use of artificial intelligence technologies by the “Big Four” auditing firms began at the end of the 20th century. According to Deloitte’s “TMT Predictions 2025” report, by 2025, 25 percent of companies using generative artificial intelligence may experiment with AI agents, and by 2027 this figure is expected to reach 50 percent. Information about the digital technologies currently used by the Big Four auditing companies is presented in Table 1 [16][17].

In addition to those listed in Table 1, PwC and EY make extensive use of MindBridge AI technology for analyzing accounting entries, KPMG and EY employ the IBM Watson platform for contract analysis, while Deloitte and EY widely apply the Microsoft Azure AI¹⁵ platform, which enables the use of cloud-based services.

According to reports from EY and KPMG, the application of artificial intelligence and data analytics reduces the probability of reporting errors by 30–40 percent, while process automation decreases audit costs by 20–25 percent.

According to Deloitte’s report, innovative solutions in risk identification, automation of Big Data analytics, and the use of robotics in these processes have ensured a 13 percent increase in revenues from consulting services.

Although the above cases demonstrate the positive impact of digital technologies (DT) and artificial intelligence (AI) on the auditing process, failing to address the problems that arise during their implementation would lead to a one-sided perspective on the issue, see Table 1.

Table 1. Key Examples of Artificial Intelligence Technologies Used in Auditing

Audit Company	The name of the AI being used	Task
Deloitte	Argus	Artificial intelligence (AI) that performs data analysis can examine several hundred thousand transactions in real time and identify potential risks.
KPMG	Clara	With the help of AI, it becomes possible to analyze financial data, detect unusual transactions, and enable auditors and clients to work together on a single platform.

EY (Ernest & Young)	EY Helix	It provides the ability to analyze 100% of transactions, detect anomalies in operations, and describe deviations.
PwC (PricewaterhouseCoopers)	Halo for Journals	It enables the analysis of accounting records and journals, the identification of high-risk transactions, and the preparation of reports.

The first major challenge in introducing digital technologies (DT) and artificial intelligence (AI) into the SME auditing process is the absence of a ready legal framework and the complexity of integrating these technologies into the existing accounting system.

Another challenge is the very high cost of these technologies, which requires a long time to recover. In other words, the efficiency of investments made in acquiring them shows a very low return.

A further challenge is the shortage of auditor-specialists who fully understand the essence of digital technologies and artificial intelligence, can work with relevant software, and are capable of evaluating the effectiveness of information technologies.

Another problem is the high risk of cyber threats, data theft, or unauthorized external modifications to information.

Yet another challenge is that the accuracy of results depends heavily on the quality of the input data provided to DT and AI systems. Incorrect or incomplete input inevitably leads to correspondingly inaccurate and incomplete outcomes.

Furthermore, while the use of DT and AI may not eliminate the audit profession, it can reduce the number of jobs, which in turn may increase resistance and dissatisfaction among professionals.

In addition, the adoption of DT and AI could lead to the emergence of new types of fraud, as well as an increasing dependence of enterprises on these technologies and the software systems that drive them.

4. Conclusion

In conclusion, this study highlights the critical role of International Financial Reporting Standards (IFRS) in improving the financial transparency and operational efficiency of small and medium-sized enterprises (SMEs) in Uzbekistan. The transition to IFRS, while beneficial for aligning with international financial practices, presents significant challenges, including the lack of local adaptation, insufficient skilled professionals, and high implementation costs. Furthermore, the integration of digital technologies and artificial intelligence (AI) in the auditing process has demonstrated improvements in audit accuracy, speed, and risk detection, though obstacles such as the absence of a comprehensive legal framework and the high cost of technology adoption remain. The findings suggest that the adoption of IFRS and AI-driven audits can significantly enhance the quality of audits and financial reporting, contributing to the overall growth and stability of SMEs in Uzbekistan. However, further research is needed to explore the long-term impacts of these transformations, particularly in relation to the scalability of digital solutions for SMEs and the development of training programs for auditors to enhance their proficiency in these emerging technologies. Additionally, studies focusing on the broader economic implications of digital auditing technologies for SMEs in developing countries would provide valuable insights into how such innovations can support economic growth and global competitiveness.

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