

APPLICATION OF EUROPEAN EXPERIENCE IN FINANCIAL REPORTING AND ACCOUNTING IN UZBEKISTAN BASED ON IFRS USING ARTIFICIAL INTELLIGENCE

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Abstract The modernization of accounting systems and the implementation of internationally recognized financial reporting standards have become essential components of economic reforms in many developing countries. Uzbekistan has recently introduced several initiatives aimed at aligning its accounting practices with International Financial Reporting Standards (IFRS) in order to enhance financial transparency and improve the investment climate. At the same time, rapid technological progress has created new opportunities for improving accounting processes through digital tools and artificial intelligence. European countries have accumulated considerable experience in implementing IFRS and integrating modern technologies into accounting systems. The purpose of this research is to examine the experience of European countries in the preparation of financial statements according to IFRS and to analyze the potential role of artificial intelligence in improving accounting practices in Uzbekistan. The study uses comparative and analytical methods to evaluate institutional frameworks, technological developments, and regulatory approaches related to financial reporting. The results demonstrate that the combination of international accounting standards and advanced digital technologies can significantly increase the efficiency and reliability of financial reporting systems. The study also provides recommendations for strengthening the accounting infrastructure in Uzbekistan through technological modernization and professional development.

Keywords: IFRS, financial reporting, artificial intelligence, accounting modernization, European experience, Uzbekistan.

Introduction

The expansion of global economic relations has significantly increased the demand for reliable and transparent financial information. Investors, international organizations, and financial institutions rely heavily on financial statements when evaluating the performance and financial stability of companies. In this context, the adoption of International Financial Reporting Standards (IFRS) has become an important step for countries seeking to integrate into the global financial system.

Many economies around the world have gradually replaced their national accounting standards with IFRS in order to improve the comparability of financial statements across

different jurisdictions. The use of internationally recognized accounting principles helps ensure that financial information is understandable and consistent for stakeholders operating in international markets.

Uzbekistan has initiated a series of financial reforms aimed at improving corporate governance and increasing transparency in financial reporting. One of the key elements of these reforms is the gradual transition of large enterprises and financial institutions to IFRS-based reporting.

At the same time, digital transformation is reshaping traditional accounting practices. Modern technologies such as artificial intelligence, machine learning, and data analytics are increasingly applied to automate financial processes and improve the quality of financial reporting.

European countries represent an important example of successful IFRS implementation combined with technological innovation in accounting systems. Many European organizations have integrated digital tools into their accounting operations, which has significantly improved efficiency and accuracy in financial reporting.

Therefore, studying European practices and exploring the potential of artificial intelligence in Uzbekistan's accounting system is an important research direction.

Literature Review

The Role of IFRS in Global Financial Reporting

International Financial Reporting Standards were developed to establish a common accounting framework for companies operating in different countries. The primary objective of IFRS is to provide investors and other stakeholders with high-quality financial information that reflects the economic performance of organizations.

Academic studies indicate that the adoption of IFRS contributes to increased transparency and better comparability of financial statements. Researchers also note that companies reporting under IFRS often provide more detailed disclosures regarding financial performance and risk exposure.

Another important aspect discussed in the literature is the impact of IFRS on investment decisions. Reliable financial information helps reduce uncertainty and improves the efficiency of capital markets.

European Accounting Reforms

The European Union played a major role in promoting IFRS adoption worldwide. In 2005, the EU introduced a regulation requiring publicly listed companies to prepare consolidated financial statements in accordance with IFRS.

This regulatory reform created a unified financial reporting environment across European capital markets. Scholars highlight that the successful implementation of IFRS in Europe was supported by strong institutional frameworks and active involvement of professional accounting organizations.

Furthermore, European companies have increasingly adopted digital accounting technologies to support financial reporting processes.

Artificial Intelligence in Accounting Systems

Technological innovation has significantly transformed financial management and accounting practices. Artificial intelligence has become one of the most promising technologies in this field.

AI systems can process large datasets, recognize patterns in financial transactions, and generate analytical insights. Machine learning algorithms are capable of identifying anomalies in financial records and detecting potential fraud.

Researchers emphasize that AI-based accounting systems reduce manual workload and improve the speed of financial data processing. In addition, automated systems help ensure compliance with accounting standards by applying predefined rules during financial reporting.

Research Methodology

This research applies qualitative analysis supported by comparative evaluation of international accounting practices.

Research Data

The study is based on:

- Academic publications on accounting reforms
- International reports related to ifrs adoption
- Regulatory documents concerning financial reporting
- Analytical reports on digital transformation in accounting

Research Methods. The following methodological approaches were used:

Comparative analysis to compare accounting systems in European countries and Uzbekistan. Accounting systems reflect the economic policies, regulatory frameworks, and levels of international integration of each country. In European nations, financial reporting is primarily based on International Financial Reporting Standards (IFRS) and the directives of the European Union. This approach ensures transparency, comparability, and reliability of financial information, which is crucial for attracting global investors and maintaining market confidence. In Uzbekistan, accounting practices are governed by the Law on Accounting and national accounting standards. While the country has begun aligning with IFRS, the national framework remains dominant. Small and medium-sized enterprises (SMEs) benefit from simplified reporting procedures, which provide flexibility for local businesses but limit the degree of transparency expected by international stakeholders. European companies are required to prepare consolidated financial statements, and many are increasingly incorporating environmental, social, and governance (ESG) disclosures. In contrast, reporting requirements in Uzbekistan vary depending on the type of organization, with less emphasis on non-financial disclosures. Oversight mechanisms also differ significantly. In Europe, independent audit regulators and EU-wide enforcement bodies ensure compliance and maintain professional independence. In Uzbekistan, the Ministry of Finance and the Central Bank serve as the primary supervisory authorities, with administrative liability applied for violations. Digitalization is another area of divergence. European countries widely employ advanced technologies such as XBRL (eXtensible Business Reporting Language), enabling rapid

and accessible financial data exchange. Uzbekistan, however, is still in the early stages of digital transformation, focusing more on legal adaptation and modernization of its national system. Overall, the European accounting system can be characterized as internationally integrated, transparent, and digitally advanced, while Uzbekistan's system remains nationally oriented, gradually converging with international standards, and developing in terms of digitalization. This comparison highlights the need for Uzbekistan to accelerate IFRS adoption, strengthen independent auditing practices, and expand digital reporting to enhance its global competitiveness.

Analytical method to evaluate the role of artificial intelligence in financial reporting. Artificial Intelligence (AI) plays a growing role in financial reporting by automating tasks, improving accuracy, and supporting decision-making. To evaluate its impact, a **general analytical method** can be outlined as follows:

1. Define Key Criteria:

- Efficiency (speed of reporting),
- Accuracy (error reduction),
- Transparency (auditability and explainability),
- Compliance (alignment with IFRS/GAAP),
- Innovation (predictive and real-time capabilities)

2. Collect Data

- Compare organizations using AI tools with those relying on traditional reporting.
- Gather statistics on reporting time, error rates, and compliance outcomes.
- Use surveys/interviews to capture professional perceptions.

3. Apply Analytical Techniques

- Benchmarking against traditional systems.
- Cost-benefit analysis of AI adoption.
- Risk assessment (bias, cybersecurity, regulatory gaps).
- Trend analysis of long-term impacts.

4. Develop Evaluation Framework

- Create a scoring or weighted index model.
- Combine quantitative indicators (time saved, error reduction %) with qualitative insights (user satisfaction, regulatory acceptance).

In general, this analytical method shows that AI contributes to greater efficiency and accuracy in financial reporting, while also introducing new challenges in transparency, compliance, and risk management. A structured evaluation ensures that innovation is balanced with accountability, helping organizations and regulators strengthen trust in financial information.

Institutional analysis to examine regulatory frameworks related to accounting reforms. Institutional analysis of accounting reforms generally focuses on how regulatory frameworks, oversight bodies, and legal standards interact to shape transparency, compliance, and modernization of financial reporting systems. It examines the role of state institutions, professional associations, and international organizations in introducing

reforms, enforcing rules, and ensuring that accounting practices align with both national priorities and global standards.

These methods make it possible to identify practical lessons that can be applied to improve financial reporting in Uzbekistan.

European Experience in IFRS Implementation.

European countries established strong regulatory systems to ensure effective application of IFRS. Financial reporting is monitored by regulatory authorities that oversee compliance with accounting standards. Professional organizations also play an important role in maintaining high standards of accounting practice. These organizations provide training programs, certification courses, and methodological guidance for accounting professionals.

The transition to IFRS in Europe required significant improvements in accounting education. Universities and professional institutions introduced specialized courses focused on international accounting standards. Continuous professional development programs help accountants stay informed about changes in accounting regulations and technological innovations.

Another important aspect of European accounting reforms is the digitalization of financial reporting processes. Modern accounting software systems allow companies to automate financial data processing and generate real-time reports. Digital accounting platforms also facilitate communication between different departments and improve data integration across organizations.

Artificial Intelligence in Financial Reporting.

Artificial intelligence is increasingly used to improve accounting efficiency and financial management. AI technologies enable organizations to automate routine accounting tasks such as transaction classification, invoice processing, and reconciliation of financial records. Automation reduces the time required for data entry and improves the accuracy of financial information. AI systems can analyze financial transactions and detect irregular patterns that may indicate financial risks or fraudulent activities. This capability strengthens internal control systems and improves financial security. Artificial intelligence can also support strategic decision-making by analyzing historical financial data and generating predictive insights. Such analytical tools help managers evaluate financial performance and plan future activities more effectively.

Prospects for Implementing AI-Based Accounting Systems in Uzbekistan.

Uzbekistan is gradually modernizing its financial infrastructure and introducing international accounting standards. The transition to IFRS creates opportunities for integrating modern technologies into accounting systems. The adoption of AI-based accounting solutions could significantly improve financial reporting processes by increasing efficiency and reducing operational costs. However, several challenges must be addressed to ensure successful implementation.

These challenges include:

- Limited technological infrastructure

- Shortage of specialists with expertise in digital accounting
- The need to update regulatory frameworks

Developing educational programs in digital accounting and promoting technological innovation in financial management will play an important role in overcoming these challenges.

Recommendations

In order to improve financial reporting practices in Uzbekistan, several policy measures can be considered:

1. Strengthening professional training programs in IFRS and digital accounting technologies.
2. Encouraging the development of AI-based accounting software.
3. Enhancing cooperation with international accounting organizations.
4. Supporting research on digital transformation in financial management.

Conclusion

The modernization of accounting systems is a critical component of economic development and financial transparency. The adoption of IFRS has created new opportunities for improving financial reporting practices in Uzbekistan. European countries provide valuable experience in implementing international accounting standards and integrating modern technologies into accounting systems. Artificial intelligence has the potential to transform traditional accounting processes by automating routine tasks, improving financial analysis, and strengthening internal control systems. The integration of international accounting standards and advanced technologies can significantly enhance the quality of financial reporting and contribute to the development of a more transparent and competitive financial system in Uzbekistan.

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