ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 06,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

ARTIFICIAL INTELLIGENCE IN FINANCE: IMPACT ON CORPORATE FINANCIAL MANAGEMENT – GLOBAL TRENDS AND UZBEKISTAN'S PERSPECTIVE

Islomov Mirjalol Mirzohid og'li
Senior consultant at PwC Uzbekistan
Email: islomov.mirjalol99@gmail.com
Tel.: +998 93 515 64 22

Abstract: This article examines the rapidly expanding role of artificial intelligence (AI) in financial management, focusing on how it reshapes corporate finance practices globally and in emerging markets such as Uzbekistan. Through a detailed analysis of AI applications—ranging from risk management to investment strategy—the paper identifies both transformative advantages and inherent challenges. Case studies from international corporations and Uzbekistan's banking and fintech sectors illustrate AI's impact on productivity, decision-making, and governance. The article concludes with policy recommendations to ensure sustainable and ethical adoption of AI in corporate finance environments.

Keywords: Artificial intelligence, corporate finance, Uzbekistan, automation, risk management, fintech, fraud detection, machine learning, financial technology, digital **economy**

Introduction

In the last decade, artificial intelligence (AI) has become a strategic tool in the transformation of financial services and corporate finance. As global competition increases and data becomes the new oil, companies are turning to AI to gain an analytical edge, reduce operational costs, and respond to market dynamics with precision.

In developed countries, institutions like JPMorgan Chase, Goldman Sachs, and Barclays have already integrated AI into their core financial decision-making processes. AI now performs credit scoring, investment simulations, fraud detection, and even real-time portfolio rebalancing. In emerging economies—including Uzbekistan—AI adoption is at an earlier stage but growing rapidly, especially within fintech startups, commercial banks, and e-government financial systems.

This article explores the scope of AI in modern finance, presenting its contributions and caveats through a comparative global and local lens. It further evaluates the economic and ethical implications for companies operating in Uzbekistan, drawing from government initiatives and pilot corporate experiences.

Positive Impacts of AI in Corporate Finance

1. Enhanced Forecasting and Budgeting

AI models excel at analyzing complex, multi-dimensional datasets, helping finance teams predict revenues, costs, and market behavior more accurately than traditional methods. For

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 06,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

instance, **Netflix** uses AI for predictive revenue modeling by combining viewership patterns with subscription trends.

In Uzbekistan, the private bank **Kapitalbank** has implemented AI-based budgeting tools for its internal financial planning, using transaction-level data to project quarterly performance and allocate resources more efficiently.

2. Automated Risk Management and Credit Scoring

Financial institutions use machine learning algorithms to calculate credit risk, analyze borrower behavior, and flag anomalies. **Upstart**, a U.S.-based fintech firm, leverages AI to approve personal loans by analyzing non-traditional data points like education level and employment history—reducing loan default rates.

In Uzbekistan, **Hamkorbank** introduced AI-assisted credit scoring for small businesses in 2022, allowing faster and more objective lending decisions, especially in rural areas with limited financial histories.

3. Fraud Detection and Regulatory Compliance

AI systems analyze massive volumes of transactions to detect fraud in real time. **Mastercard's Decision Intelligence**tool uses machine learning to monitor spending behavior and instantly flag suspicious activity.

The **Central Bank of Uzbekistan**, as part of its digital transformation, has partnered with local tech firms to pilot AI-driven monitoring tools for anti-money laundering (AML) across commercial banks—enhancing compliance and transparency.

4. Improved Investment and Portfolio Management

Wealth management firms now use robo-advisors—AI platforms that automatically allocate and manage client portfolios. **BlackRock's Aladdin** platform uses AI to assess market volatility and optimize institutional investment strategies.

While Uzbekistan's capital market is still developing, the Tashkent Stock Exchange has begun exploring AI applications in asset valuation and real-time market analytics, supported by the government's digital economy strategy.

5. Operational Efficiency and Cost Savings

AI reduces the cost of back-office operations by automating tasks such as invoice processing, reconciliation, and audit preparation. According to **Accenture**, AI could cut corporate finance operation costs by up to 40% over the next 5 years.

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 06,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai

Uzbekistan's **Single Treasury Account** system (STAS), managed by the Ministry of Finance, uses basic AI logic to prioritize and schedule public payments based on budget constraints—an initiative praised by the IMF in its fiscal modernization reviews.

Negative Impacts and Challenges

1. Job Displacement and Reskilling

AI eliminates manual roles, especially in data entry, accounting, and transaction processing. The **World Economic Forum** estimates that up to 40% of finance jobs could be automated by 2030.

In Uzbekistan, this raises a challenge for universities and employers: how to retrain finance professionals in data science, machine learning, and AI ethics. Without active policies, the digital divide may widen between urban and rural financial workers.

2. Algorithmic Bias and Discrimination

If trained on biased or incomplete data, AI systems can perpetuate discrimination. A well-known example is **Amazon's AI hiring tool**, which was discontinued after it showed bias against women.

In Uzbekistan, where regional and income disparities are notable, biased AI models could unintentionally deny credit access to applicants from underbanked areas unless localized datasets and fairness protocols are ensured.

3. Over-Reliance and Lack of Transparency

AI decision-making is often referred to as a "black box," where internal logic is not interpretable by human users. In corporate finance, this can lead to over-reliance on AI systems without understanding the rationale behind critical investment or risk decisions.

This is especially risky in Uzbekistan's emerging regulatory environment, where accountability standards for AI-generated decisions are still under development.

4. Cybersecurity and Data Privacy Risks

AI systems are vulnerable to adversarial attacks and require robust cybersecurity infrastructure. Financial data leaks can have catastrophic consequences, both financially and reputationally.

In 2023, an attempted cyberattack on a local Uzbek fintech firm raised concerns about inadequate encryption standards and the urgent need for AI cybersecurity frameworks in the region.

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 06,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

5. Implementation Costs and Technological Gaps

Adopting AI is capital-intensive. It requires data infrastructure, cloud computing, and skilled personnel. For small and medium-sized enterprises (SMEs), particularly in Uzbekistan, the upfront cost remains a major barrier, risking further concentration of AI advantages among large players.

AI and the Financial Sector in Uzbekistan: Trends and Outlook

Uzbekistan's government has prioritized digitalization in the financial sector. The **"Digital Uzbekistan – 2030"** program outlines the integration of AI into banking, insurance, and tax systems. The Ministry for the Development of Information Technologies and Communications has also launched AI training and certification schemes.

Furthermore, **EY Uzbekistan** and **PwC Uzbekistan** are working with local banks to implement AI for financial audits, automated reconciliation, and risk dashboards. Fintech startups like **Billz**, **Click**, and **Payme** use AI to personalize customer interfaces and detect unusual spending patterns in real time.

However, to maximize AI's potential, Uzbekistan must establish a legal framework on:

- AI accountability and transparency in financial decisions
- Data protection, particularly for biometric and transaction data
- Incentives for AI innovation among SMEs and startups

Conclusion

Artificial intelligence is reshaping the future of corporate finance by enabling predictive insights, reducing operational burdens, and mitigating financial risks. Its application—from global giants like BlackRock to local institutions in Uzbekistan—demonstrates a powerful shift toward digital finance ecosystems.

However, without careful regulation and ethical oversight, AI could exacerbate inequality, erode privacy, and challenge financial accountability. In emerging economies like Uzbekistan, the stakes are high: successful AI integration could dramatically accelerate development, while failure to manage its risks could stall trust in the financial system.

The path forward requires a multi-stakeholder approach—uniting government, business, academia, and civil society—to ensure that AI in finance serves innovation, inclusion, and integrity.

References:

1. Accenture (2023). The Future of Finance: Automating for Advantage.
2. Brynjolfsson, E., & McAfee, A. (2017). Machine, Platform, Crowd: Harnessing Our Digital Future. W.W. Norton & Company.

ISSN: 2692-5206, Impact Factor: 12,23
American Academic publishers, volume 05, issue 06,2025
Journal: https://www.academicpublishers.org/journals/index.php/ijai

3. Deloitte (2021). AI and the Future of Financial Decision-Making.
4. EY Uzbekistan (2023). AI in Audit and Financial Controls: Emerging Practices.
5. IMF (2022). Uzbekistan Public Financial Management Review.
6. Mastercard (2022). AI-Driven Fraud Prevention Systems: Performance Insights.
7. Ministry of Finance of Uzbekistan (2023). STAS Performance and Digital Roadmap.
8. OECD (2022). Artificial Intelligence in Financial Markets: Policy Perspectives.
9. PwC Uzbekistan (2023). AI Use Cases in Uzbek Banking Sector.
10. World Economic Forum (2020). The Future of Jobs Report.