



OPPORTUNITIES AND RISKS OF AI-ASSISTED DECISION-MAKING IN CORPORATE GOVERNANCE IN UZBEKISTAN

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Annotatsiya: Maqolada O'zbekiston korporativ boshqaruvida sun'iy intellekt (SI) yordamida qaror qabul qilishning imkoniyatlari va xavflari tadqiq etilgan. Tadqiqot maqsadi – kuzatuv kengashlari va ijroiya organlari faoliyatida Sldan foydalanish ta'sirini tizimlashtirish hamda milliy sharoitga mos institutsional tavsiyalar ishlab chiqish. Metodologik asos sifatida ilmiy adabiyotlarning tuzilmaviy tahlili, 2015–2026-yillardagi me'yoriy-huquqiy hujjatlarning qiyosiy-huquqiy tahlili, xalqaro indekslar va rasmiy statistik ma'lumotlarning ikkilamchi tahlili hamda imkoniyat–xavf matritsasi qo'llanildi. Natijalar SI monitoring, risklarni boshqarish, nomzodlarni tanlash, strategik rejalashtirish va aksiyadorlar bilan muloqot funksiyalarida axborot asimmetriyasini qisqartirishini ko'rsatdi. Mas'uliyatning noaniqligi, ma'lumotlar sifatining pastligi, avtomatlashtirishga ortiqcha ishonch va kengash a'zolarining raqamli kompetensiyasi yetishmasligi eng yuqori xavflar sifatida baholandi. Qaror qabul qilish huquqlarining besh bosqichli modeli va Korporativ boshqaruv kodeksiga SI bo'yicha yangi bob kiritish taklif etilgan.

Kalit so'zlar: sun'iy intellekt, korporativ boshqaruv, SI yordamida qaror qabul qilish, kuzatuv kengashi, davlat ishtirokidagi korxonalar, algoritmik javobgarlik, O'zbekiston.

Abstract: This article examines the opportunities and risks of AI-assisted decision-making in the corporate governance of Uzbekistan. The aim is to systematise how artificial intelligence (AI) affects the work of supervisory boards and executive bodies and to develop institutional recommendations suited to national conditions. The study combines a structured literature review, a comparative legal analysis of Uzbek normative acts adopted in 2015–2026, secondary analysis of international indices and official statistics, and an opportunity–risk matrix. The results show that AI can reduce information asymmetry in monitoring, risk management, director nomination, strategic planning and shareholder engagement. Accountability gaps, poor data quality, automation bias and the limited digital competence of board members are assessed as the most severe risks. The article proposes a five-level model of decision rights and a new chapter on AI for the national Corporate Governance Code.

Keywords: artificial intelligence, corporate governance, AI-assisted decision-making, supervisory board, state-owned enterprises, algorithmic accountability, Uzbekistan.

Абстрактный: В статье исследуются возможности и риски принятия решений с использованием искусственного интеллекта (ИИ) в корпоративном управлении Узбекистана. Цель исследования – систематизировать влияние ИИ на деятельность наблюдательных советов и исполнительных органов и разработать институциональные рекомендации с учётом национальной специфики. Методологическую основу составили структурированный обзор научной литературы, сравнительно-правовой анализ нормативных актов 2015–2026 гг., вторичный анализ международных индексов и официальной статистики, а также матрица «возможности–риски». Результаты показывают, что ИИ способен сократить информационную асимметрию в функциях мониторинга, управления рисками, подбора кандидатов, стратегического планирования и взаимодействия с акционерами. Наиболее высокими признаны риски размывания ответственности, низкого качества данных, чрезмерного доверия автоматизации и недостаточной цифровой компетентности членов советов. Предложены пятиуровневая модель распределения полномочий и новая глава Кодекса корпоративного управления, посвящённая ИИ.

Ключевые слова: искусственный интеллект, корпоративное управление, принятие решений с помощью ИИ, наблюдательный совет, государственные предприятия, алгоритмическая ответственность, Узбекистан.

Introduction (Kirish / Введение)

Corporate governance is, in essence, a system for making and controlling decisions under uncertainty, and every board task depends on the quality of the information that reaches the board. Artificial intelligence (AI) sharply reduces the cost of processing this information and is therefore becoming part of the governance architecture of the firm rather than only an operational technology.

Adoption, however, is moving faster than oversight. In 2024, 78% of organisations used AI in at least one business function, yet only 17% of respondents named the board of directors as responsible for overseeing AI governance [1]. AI was not on the agenda of 31% of boards, and 66% of board members described their boards as having limited or no knowledge of AI [2].

Uzbekistan has made AI a state priority. The Strategy for the Development of AI Technologies until 2030 targets an AI-based market of USD 1.5 billion and a place among the top 50 countries of the Government AI Readiness Index [3]. Decree No. PF-189 of 22 October 2025 requires at least 100 new AI initiatives by the end of 2026 and makes AI adoption a criterion for assessing state bodies and state-owned enterprises (SOEs) [4]. Law No. ZRU-1115 of 21 January 2026 established that legally significant decisions affecting the rights of persons cannot be based solely on the conclusions of AI [5], and the Ethics Rules for AI-based solutions entered into force on 17 June 2026 [6].

The corporate sector to which these policies apply is distinctive: 2,247 SOEs generate operating revenues equal to about 32% of GDP, and their supervisory boards are still largely dominated by civil servants,

while independent directors remain rare [7]. AI therefore enters corporate governance mainly through a state-driven agenda and through large SOEs and banks.

The aim of this study is to systematise the opportunities and risks of AI-assisted decision-making in Uzbek corporate governance and to propose institutional safeguards. The research questions are: (RQ1) how ready is the institutional and legal environment for AI-assisted corporate decisions; (RQ2) in which governance functions does AI create the greatest opportunities; (RQ3) which risks are most severe and how should they be governed?

Literature review (Mavzuga oid adabiyotlar tahlili /Обзор литературы)

The theoretical starting point is agency theory: the separation of ownership and control creates agency costs because managers hold more information than shareholders and the board [8]. AI lowers the cost of monitoring, but it also introduces a new information asymmetry between those who design a model and those who rely on its outputs.

Hilb distinguishes five scenarios of AI in governance – assisted, augmented, amplified, autonomous and autopoietic intelligence; in the first two the board keeps full decision rights, while in the later ones these rights shift to the machine [9]. Since corporate law requires directors to be persons, the practical question is not whether an algorithm can sit on a board but how directors may rely on AI. Enriques and Zetzsche warn against the “tech nirvana fallacy”: code embeds the preferences of those who commission it, and controlling shareholders can use technology to entrench their position [10].

Empirical studies confirm that AI can improve specific governance decisions. Machine learning models predicted the performance of newly appointed directors in US firms better than the actual selection process, which favoured candidates with larger networks [11]. Consultants using GPT-4 completed 12.2% more tasks, 25.1% faster and with over 40% higher quality on tasks inside the AI “frontier”, but were 19 percentage points less likely to answer correctly on a task outside it [12]. In automated environments, complacency and automation bias lead decision-makers to accept system outputs without sufficient verification [13].

Normative frameworks converge on human oversight. The EU AI Act classifies AI used for creditworthiness assessment and the management of workers as high-risk and requires effective human oversight (Article 14) [14]; the NIST AI Risk Management Framework and ISO/IEC 42001:2023 set out how accountability for AI risks should be organised. The literature, however, rarely examines how these principles fit an environment of concentrated state ownership, young capital markets and top-down AI policy, such as that of Uzbekistan.

Methods (Tadqiqot metodologiyasi/Методы)

The study follows a qualitative, interpretive design combining four methods: (1) a structured literature review in Scopus, Web of Science, Google Scholar and SSRN for 2014–2026, which yielded 24 academic and institutional sources; (2) a comparative legal analysis of Uzbek acts on AI, personal data and corporate governance published on lex.uz, coded by scope, applicability to companies, human-oversight requirements, allocation of liability and data requirements; (3) secondary analysis of the Government AI Readiness Index [15], World Bank SOE data and international board surveys; (4) an opportunity–risk matrix structured by five board functions. Likelihood (L) and impact (I) of each risk were assessed by the authors on a five-point scale, and the risk score was calculated as:

$$R_i = L_i \times I_i, \quad L_i, I_i \in \{1, \dots, 5\} \quad (1)$$

Scores of 15 and above were treated as high priority, 10–14 as medium and below 10 as low. The study relies on documentary data and expert assessment rather than a primary survey of boards, so the matrix should be regarded as an analytical framework to be tested empirically.

Analysis and results (Tahlil va natijalar/Анализ и результаты)

1. Institutional and legal readiness (RQ1)

The Uzbek AI framework has developed rapidly and almost entirely through acts of the President and the executive branch (Table 1).

Table 1.

Key normative acts relevant to AI-assisted corporate decisions

Act	Date	Relevance to corporate governance
Corporate Governance Code	31.12.2015	Independent directors and committees; no provisions on AI
Law ZRU-547 “On personal data”	02.07.2019	Consent, purpose limitation, localisation of citizens’ data
Resolution PQ-358 (AI Strategy)	14.10.2024	USD 1.5 bn AI market; top-50 in AI Readiness Index
Decree PF-189	22.10.2025	100 AI initiatives; AI adoption assessed in SOEs
Law ZRU-1115	21.01.2026	Legal definition of AI; decisions cannot rest solely on AI
Ethics Rules for AI solutions	17.06.2026	Final human decision, transparency, accountability

Source: compiled by the authors from lex.uz and [3–6].

Three features matter for corporate governance. First, the only binding rule on AI-based decisions is the human-in-the-loop principle of Law ZRU-1115 and the Ethics Rules [5, 6], which is consistent with Article 14 of the EU AI Act [14]. Second, the Law “On Joint-Stock Companies” and the Corporate Governance Code do not mention AI or automated decision-making at all, so directors have no guidance on how they may rely on AI outputs. Third, Decree PF-189 makes AI adoption a performance criterion for SOEs [4], which accelerates adoption but creates an incentive to report the number of AI projects rather than their contribution to decision quality.

In the Government AI Readiness Index, Uzbekistan rose from 87th place in 2023 to 70th in 2024 and 62nd in 2025 (Figure 1) [15]. In 2024, however, the country scored 64.71 in the Government pillar but only 33.5 in the Technology Sector pillar, which shows that state capacity is ahead of the capacity of companies to absorb AI.

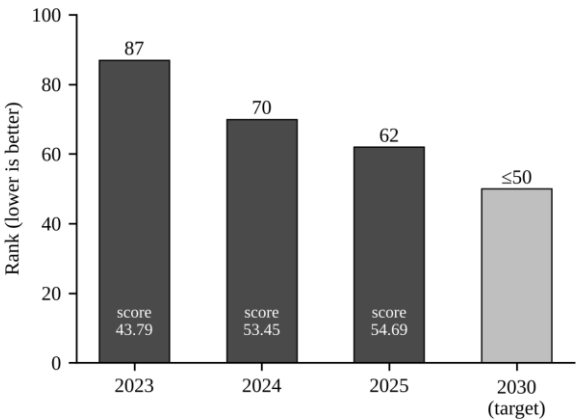


Figure 1. Uzbekistan in the Government AI Readiness Index, 2023–2025, and the 2030 target

Source: compiled by the authors from [3, 15].

Readiness at board level is lower still: SOE boards are dominated by civil servants and systematic financial information on SOEs is lacking [7] – the very elements AI-assisted governance requires.

2. Opportunities by governance function (RQ2)

The greatest opportunity lies in **monitoring and risk management**, where Uzbek corporate governance is weakest and AI performs best. Non-financial SOE debt amounted to about one third of GDP at the end of 2020, and in 2020 alone SOE loans of UZS 16.8 trillion were written off [7]. Early-warning models trained on financial statements, procurement and payment data could signal financial distress to boards and the State Assets Management Agency before losses materialise, and fraud-detection models could be applied to SOE procurement.

The second area is **board composition**: data-driven tools for director selection [11] cannot replace the shareholder’s decision, but they widen the pool of candidates beyond personal networks and make selection criteria explicit. The third is **AI-based lending in banks**, a typical high-

volume, measurable but high-risk use case [14] that requires board-approved limits and monitoring of model performance. Finally, generative AI lowers the cost of preparing board materials and **communicating with investors** in Uzbek, Russian and English, with the largest gains for less experienced staff [12].

3. Risks and their assessment (RQ3)

The analysis identified nine principal risks (Table 2).

Table 2.

Assessment of the risks of AI-assisted decision-making

№	Risk	Manifestation in Uzbekistan	L	I	R
1	Accountability gap	JSC Law and Code silent on AI; "the system recommended it"	4	5	20
2	Poor data quality	Incomplete SOE financial data; IFRS transition	5	4	20
3	Automation bias	Hierarchical culture; outputs accepted without challenge	4	4	16
4	Data protection	Data localisation; fines under ZRU-1115; foreign cloud AI	3	5	15
5	Board skills gap	Few directors with digital or AI expertise	5	3	15
6	Algorithmic bias	Credit and HR models trained on historical data	3	4	12
7	Vendor dependence	Foreign models that cannot be audited	4	3	12
8	Entrenchment	Controlling shareholder configures algorithms	3	4	12
9	Compliance-driven AI	Projects launched to meet PF-189 indicators	4	3	12

Note: L – likelihood, I – impact (1–5). Source: authors' assessment.

Two risks receive the highest score. The **accountability gap** arises because neither corporate law nor the Code defines who is responsible when a board decision based on an AI recommendation proves wrong; where boards consist of officials following the controlling shareholder, AI becomes a further layer that dilutes personal responsibility. **Poor data quality** is equally severe, as early-warning models would initially be trained on incomplete and inconsistent SOE data [7]. **Automation bias** (16) is reinforced by the hierarchical decision culture and the skills gap: a model's output is likely to be accepted as an objective "answer" [13], while strategic board decisions are exactly the ill-structured problems on which AI can be confidently wrong [12]. The **entrenchment** risk reflects the tech-nirvana argument [10]: a controlling shareholder that configures the algorithms can strengthen rather than constrain its own position.

4. A tiered model of decision rights

The key question is therefore not whether AI should be used, but which decision rights it may hold and under what controls. Building on Hilb's typology [9], the human-oversight principle of Uzbek law [5, 6] and the EU AI Act [14], a five-level model is proposed (Table 3).

Table 3.

Five-level model of decision rights for AI

Level	Role of AI	Governance requirement
0. Information	Search, summaries, translation	Permitted; confidentiality and data localisation
1. Assisted	Analytics and dashboards	Disclosure of data sources and model limits
2. Augmented	Recommendations on decisions	Human review; reasons recorded in minutes; AI register
3. Delegated operational	Automated decisions within approved limits	Board-approved limits; bias monitoring; appeal channel; annual validation
4. Autonomous strategic	Final decisions on strategy, appointments	Not permitted (ZRU-1115, JSC Law)

Source: developed by the authors based on [5, 9, 14].

The model turns the human-oversight principle of Law ZRU-1115 into board procedures, separates operational automation (Level 3) from strategic decisions (Level 4 is prohibited), and makes directors document their own judgement (Level 2).

Conclusion (Xulosa/Zaklyucheniye)

Uzbekistan has built a fast-developing, state-driven AI policy framework and has risen 25 places in the Government AI Readiness Index in two years, but core corporate legislation has not yet responded to AI-assisted decisions. AI offers the greatest benefits in monitoring, risk management, director nomination, bank lending and investor communication, while the most severe risks are the accountability gap, poor data quality, automation bias and the lack of AI competence on boards. Without institutional safeguards, AI may automate opacity rather than reduce it. The following measures are recommended:

First, to supplement the Corporate Governance Code with a chapter on AI governance providing for a board-approved AI policy, a board committee responsible for AI oversight and annual disclosure of material AI use;

Second, to clarify in the JSC Law or SOE regulations that AI outputs are advisory and that directors remain personally responsible, with documented review of AI recommendations;

Third, to require SOEs and banks to maintain a register of AI systems used in material decisions and to apply model risk management aligned with ISO/IEC 42001 and the NIST AI RMF;

Fourth, to introduce mandatory AI-literacy training for SOE board members and to accelerate the transition of SOEs to IFRS as a precondition for reliable AI-assisted monitoring;

Fifth, to measure AI under Decree PF-189 by outcomes (reduction of losses, quality of decisions) rather than by the number of projects launched.

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