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Kazakhstan's AI Ambitions: Building a Digital Future

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Artificial intelligence (AI) has become an integral part of Kazakhstan's national development strategy. This is especially evident in the country's policies on digitalization and innovation, which demonstrate a strong ambition to position Kazakhstan as Central Asia's digital hub. The government's commitment to modernization is regularly emphasized through annual State-of-the-Nation addresses and high-level forums. This paper analyzes Kazakhstan's approach to AI implementation through President Kassym-Jomart Tokayev's state-of-the-nation address of 8 September 2025, the Digital Bridge 2025 forum, and recent agreements and memorandums.

President Kassym-Jomart Tokayev's State-of-the-Nation Address



On 8 September 2025, President Tokayev delivered his annual State-of-the-Nation Address titled "Kazakhstan in the Era of Artificial Intelligence: Key Tasks and Their Solutions through Digital Transformation." From his speech, it became clear that AI and digital governance will remain among the country's top priorities in the coming years. The President proposed establishing a new Ministry of AI and Digital Development, which would oversee the

Source: Government of Kazakhstan

creation of a "Digital Code" and promote the integration of AI into governance while ensuring national data security (Government of Kazakhstan, 2025).

The proposed Digital Code aims to define key norms and rights related to personal data protection, digital rights, AI regulation, electronic platforms, and digital identity, thereby laying the legal foundations for a robust digital economy (Zhunissova, 2025). These initiatives are expected to be finalized within three years, building on existing government measures such as the creation of a State Digital Asset Fund (a reserve for crypto and other digital assets) and the introduction of a new Banking Law addressing fintech innovation (Government of Kazakhstan, 2025). Another planned initiative, the Regulatory Intelligence Center, will serve as a testing ground for regulatory policies within the emerging digital economy (Zhunissova, 2025).

President Tokayev also announced the creation of Kazakhstan’s first digital city, Alatau, envisioned as a flagship “smart city” with special regulatory and financial frameworks (Akorda, 2025). For a country where 92% of government services are already available online and cashless transactions account for 85% of payments, these goals appear achievable. The National Bank has already been using the digital tenge to finance national projects, paving the way for its broader adoption across public entities (Zhunissova, 2025).

Kazakhstan’s fintech ecosystem, led by the “Kaspi.kz” super app, has pioneered digital transformation in e-commerce, transport, and public services. This momentum has inspired other banks and companies to follow suit, rapidly advancing the development of the national digital economy.

Digital transformation in the Kazakh way



Source: 24KZ

Importantly, Kazakhstan’s digitalization strategy is not merely about importing technology but about creating homegrown solutions. This is evident in the annual Digital Bridge forums, the establishment of new AI institutions, and the development of a Kazakh-language AI model.

The country’s dedication to this digital path was underscored during the Digital Bridge 2025 forum, held in Astana in October under the theme “Generative Nation.” The event brought together more than 30,000 participants, including policymakers, researchers, and entrepreneurs, to explore AI, deep tech, and startups, with experts from over 30 countries sharing their insights (Omirgazy, 2025). Among the key announcements were the launch of a second supercomputer cluster (the largest in Central Asia) and the signing of several agreements with global AI leaders (Brkic, 2025). Another major development was the establishment of the Alem.AI International Centre for Artificial Intelligence, a new infrastructure and research hub aimed at fostering digital innovation and forecasting (Khassenkhanova, 2025).

Since 2024, a team of researchers and students from the Institute of Smart Systems and AI (ISSAI) at Nazarbayev University has been developing KazLLM, a Kazakh-language model designed to address limitations in existing digital tools and improve the accuracy of language processing in Kazakh (Zhunissova, 2025).

Recent agreements on digital development



Source: Kazakh Invest

The recent visit of President Tokayev to the United States for the C5+1 Summit on November 6, 2025, in Washington, D.C., USA, was particularly productive in advancing this agenda. Several agreements and memorandums were signed to further develop the AI and digital sectors. The newly established Ministry of Artificial Intelligence and Digital Development signed memorandums of cooperation with major stakeholders in the field, including Hewlett Packard Enterprise (HPE), Oracle East Central

Europe Limited, Starlink (for Direct-to-Cell technology), and Perplexity AI. These partnerships aim to provide access to advanced AI systems, expand connectivity in remote regions of Kazakhstan, and foster knowledge exchange between partners (Kazakh Invest, 2025). Additionally, the Ministry of Science and Higher Education, Kazakhtelecom, Freedom Holding, and OpenAI signed a memorandum enabling access to ChatGPTedu, a specialized version designed for teachers and scholars (Birbayeva, 2025).

Conclusion

Kazakhstan's ranking across various digital indexes has been steadily improving, reflecting the country's accelerating progress in digital transformation. For instance, the UN E-Government Development Index (EGDI) places Kazakhstan 24th among 193 countries, with the nation ranking in the top 10 for the Online Service Index (OSI). Similarly, the IMD World Digital Competitiveness Index, which measures a country's ability to adapt to new technologies, positions Kazakhstan 34th out of 69 countries, while the Global Innovation Index lists the country among the top three in Central and South Asia (Zhunissova, 2025).

These advancements are further supported by national statistics demonstrating tangible economic results. Since 2021, digital transformation reforms have returned 28 billion tenge from the shadow economy, saved more than 13 billion tenge in budget funds, and delivered a total economic effect of 51.3 billion tenge (Omirgazy, 2025b). Together, these indicators underscore the effectiveness of Kazakhstan's digital modernization efforts.

Overall, Kazakhstan is actively integrating into the global trend of artificial intelligence development while aligning its efforts with national interests and innovation capacity. The combination of strategic policymaking, technological infrastructure, and local expertise positions the country to become one of Eurasia's emerging leaders in digital transformation.

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