

3.1. Development of the artificial intelligence ecosystem and the creation of digital infrastructure

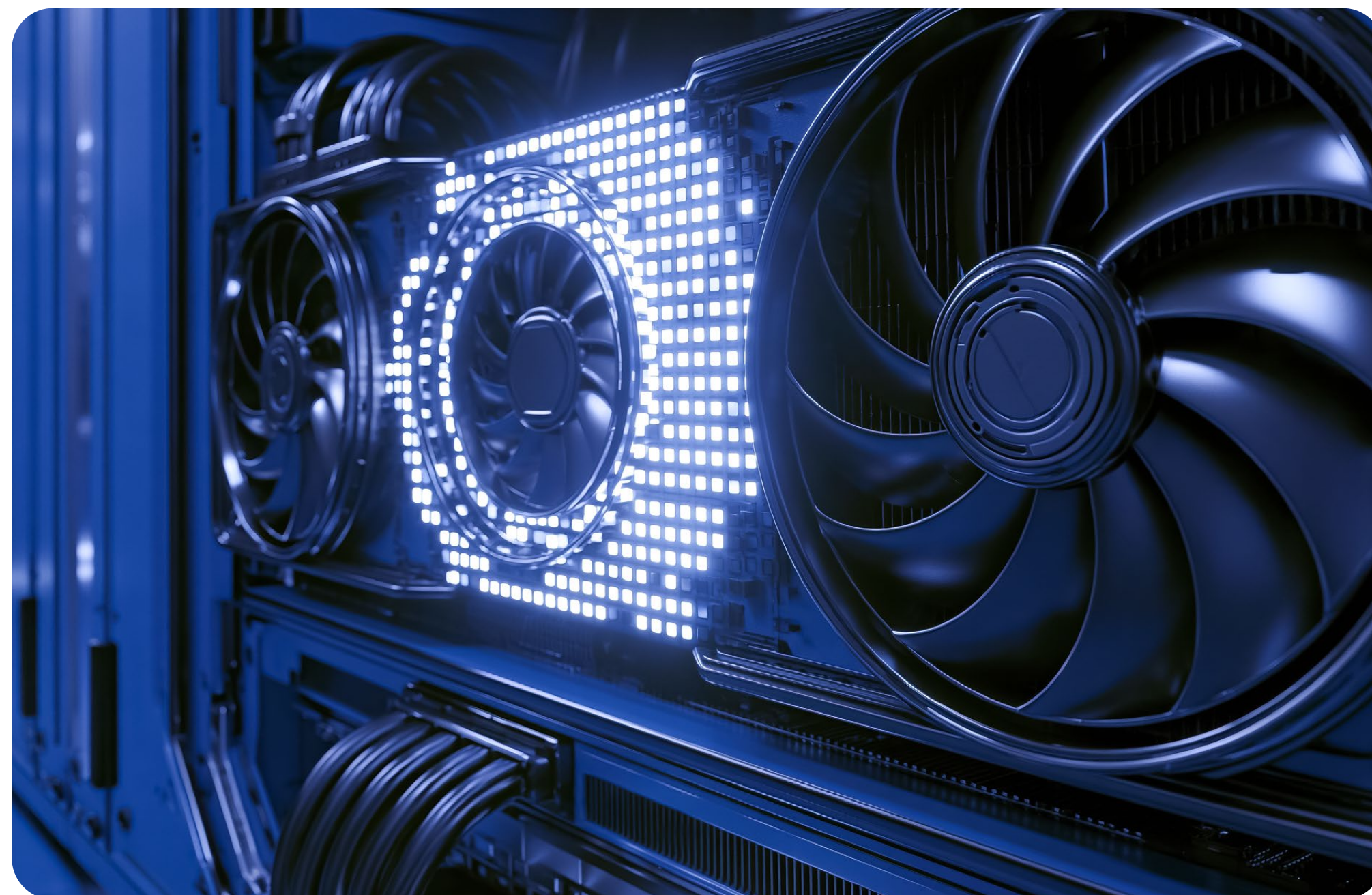
In 2025, Kazakhtelecom JSC continued the systemic development of artificial intelligence technologies (hereinafter — AI) as one of the key directions of the digital transformation of the Company and the formation of the national digital infrastructure.

The implementation of initiatives in the area of AI is aimed at the creation of a scalable technological platform, the development of new digital services and the enhancement of the efficiency of internal and external processes through intelligent automation. The Company is forming an ecosystem of artificial intelligence, which includes computing infrastructure, a corporate AI platform and applied solutions for the government sector, business and internal functions.

Within the framework of the systemic development of the direction of artificial intelligence in 2025, a new branch was created in the structure of the Company — the Digital Business Division, acting as a centralized centre for managing the development and implementation of AI solutions. The General

Director of the Digital Business Division is a member of the Management Board of Kazakhtelecom JSC.

The creation of the Division made it possible to consolidate the development and scaling of AI solutions, to integrate them into key business processes, to form internal expertise and to reduce the dependence on external suppliers. The subdivision performs the functions of a single centre of competencies in the directions of ML, NLP, Speech AI, Generative AI, MLOps and AI-Security, and also works on the achievement of a measurable business effect through the optimization of operational and capital costs, the personalisation of services, the enhancement of the quality of the client experience and the transparency of management processes.



3.1.1. Supercomputer for the development of AI technologies

Launch of the high-performance GPU cluster

In 2025, Kazakhtelecom JSC launched the AI-Farabium high-performance GPU cluster in the modular data centre in the city of Almaty. The project became a key stage of the formation of the national computing infrastructure for the development of artificial intelligence technologies.

The cluster is built on the basis of NVIDIA H200 graphics accelerators and implemented in accordance with the NVIDIA reference architecture recommended for the tasks of artificial intelligence, big data processing and scientific computing. The aggregate computing performance of the system amounts to 26.8 PFLOPS (FP64) for the training of models and more than 1.5 EFLOPS (FP8) for inference tasks.

The computing complex is integrated into the network infrastructure of Kazakhtelecom JSC with the use of high-speed data transmission interfaces, which ensures centralized access of users to computing resources and the possibility of scaling of artificial intelligence

services. According to the results of the international TOP-500 ranking of supercomputers, the cluster of Kazakhtelecom JSC was ranked 103rd place, confirming the high level of the technological implementation of the project.

The launch of the cluster was carried out within the framework of the project “Development of computing capacities for the introduction of AI solutions”, implemented for the purposes of the fulfilment of the Concept of development of artificial intelligence of the Republic of Kazakhstan for 2024-2029, approved by the resolution of the Government of the Republic of Kazakhstan No. 592 of 24 July 2024.

The project provides for the creation of a computing platform of artificial intelligence and the expansion of the infrastructure of the data centre. The capacities will be provided to B2B and B2G clients under the service model, and also used for the internal automation of business processes of the Company.

The creation of the AI-Farabium GPU cluster formed the technological basis for the further scaling of artificial intelligence projects and the development of high-performance computing in the Republic of Kazakhstan.

NVIDIA H200

26.8

PFLOPS (FP64)

aggregate computing performance of the system during model training

1.5

EFLOPS (FP8)

computing performance of the system for inference tasks

The technical architecture of the solution includes:

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| installation of 50 servers equipped with 400 NVIDIA H200 GPUs | deployment of data storage systems with a total capacity of 6 PB |
| introduction of an access management and billing system for computing resources | expansion of the data transmission network |
| modernization of the engineering infrastructure of the data centre | |

The main directions of use of the computing platform include:

- provision of artificial intelligence computing resources for lease to external clients
- introduction of AI solutions for the automation of internal processes and the enhancement of operational efficiency
- development of digital services and analytical platforms

The supplied equipment has been put into industrial operation.

3.1.2. Large-scale portfolio of AI projects for B2C/B2B/B2G sectors

The project portfolio covers the full cycle of the introduction of AI from computing infrastructure and platform solutions to application in the social, medical and service environment.

3.1.2.1. Creation of an infrastructure base for artificial intelligence

The formation of the infrastructure base of artificial intelligence is aimed at the development of internal technological and organizational capabilities of the Company necessary for the development and introduction of AI solutions. In the reporting period, key attention was paid to the creation of the practice of application of artificial intelligence in internal processes, the testing of applied use cases and the formation of competencies ensuring the further development of digital services on the basis of AI.

Within the framework of the direction, the following projects are being implemented:

- Pilot projects with the application of AI technologies at the Company — a complex of initiatives on the testing and adaptation of artificial intelligence technologies to applied tasks. Within the framework of the project, pilot solutions were implemented, including the “Zhardem 109” service aimed at the application of AI for the processing of requests and the enhancement of the efficiency of interaction with users, and also the development and approbation of digital assistants on the basis of AI, applied for the automation of analytical and operational tasks. Pilots make it possible to assess the applicability of technologies, to form practical scenarios of the use of AI and to prepare solutions for further roll-out;
- Introduction of AI into the internal processes of the Company — the project on the development of the application of artificial intelligence in corporate functions, providing for the use of digital assistants on the basis of AI for data analysis, the automation of individual operations and support of management decisions. The implementation of the project contributes to the formation of a data-driven approach to management, the enhancement of the efficiency of internal processes and the development of the culture of the use of AI among employees.

The implementation of these initiatives creates the basis for the subsequent introduction of applied AI solutions in city infrastructure, digital services and the platform ecosystem of the company.



In 2025, Kazakhtelecom JSC began the implementation of the “Unified Drone Infrastructure” project in fulfilment of the instruction of the Head of State of 11 December 2024. The project is oriented to government bodies and forms a single technological environment for the remote monitoring of territories and facilities without the necessity of procurement of own equipment and the creation of specialised subdivisions. The platform supports the planning of missions, the management of flights, the secure transmission of video and telemetry, and also the processing and storage of data. The drones used are capable of operating up to 50 minutes without recharging, performing thermal and wide-angle imaging, conducting observation at long distances, moving along a set route or being controlled manually. The solution also provides for the resistance of equipment to moisture, dust and precipitation, and the built-in video analytics makes it possible to recognise, classify and record objects during flight. The completion of the project is scheduled for 2030.

Educational AI solutions

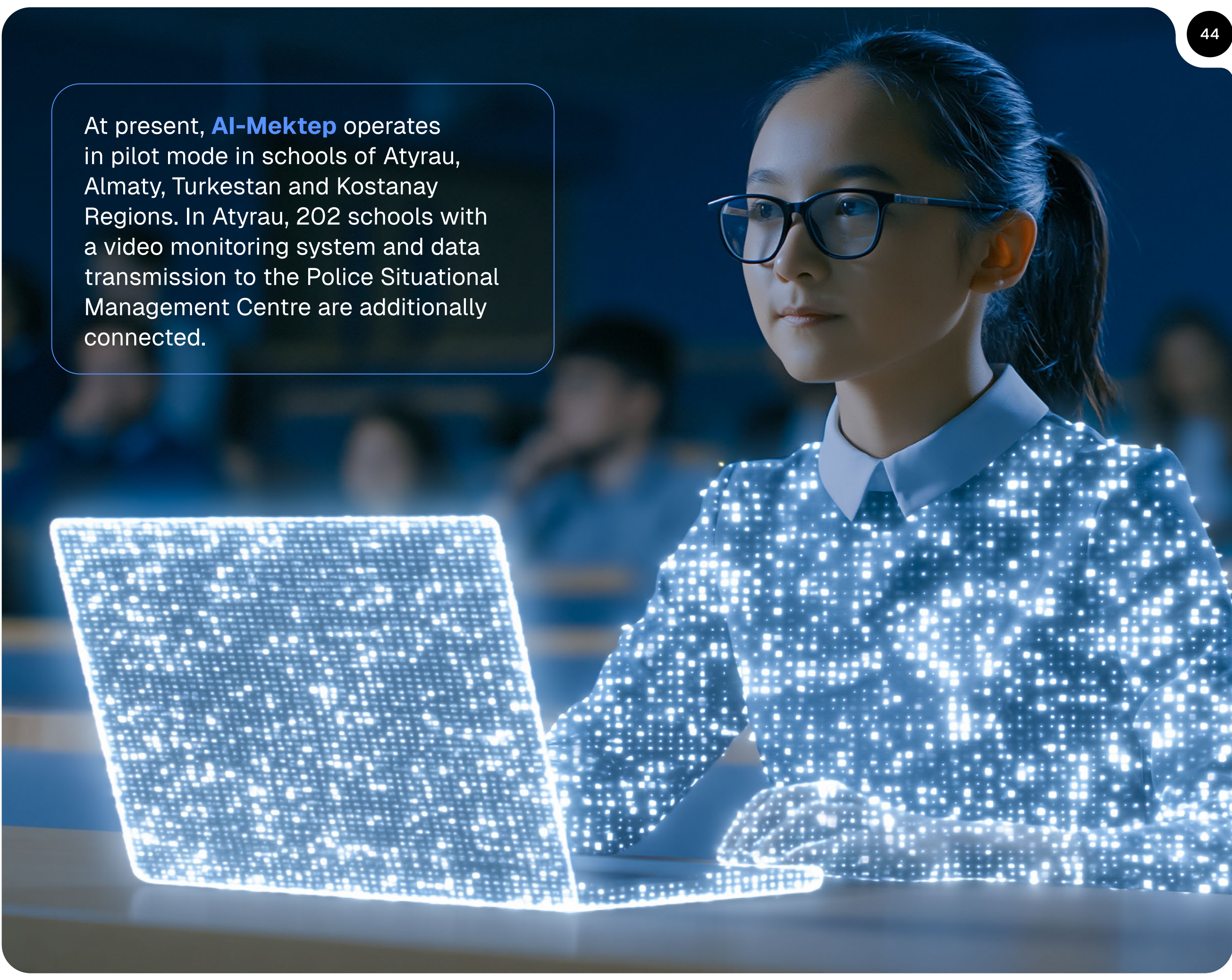
In 2025, Kazakhtelecom JSC continued the development of the **AI-Mektep** project, oriented to the digitalization of the educational environment and the creation of a single centralized platform of video monitoring and video analytics of schools of Kazakhstan on the basis of artificial intelligence. The project is aimed at enhancing the safety of students, the standardization of video monitoring infrastructure, the monitoring of the quality of teaching and more transparent management of educational institutions.

AI-Mektep covers training classrooms, where children spend up to 80% of the time, and also the common areas of schools. The solution makes it possible to control attendance, discipline and safety, to analyse the educational process and to respond promptly to incidents. The platform was improved in 2025 through the introduction of new types of analytics, including the recognition of aggressive behaviour, the detection of cases of bullying, the determination of the absence of a teacher in a classroom, and also the automatic counting of the number of children in training classrooms.

For this, the video monitoring and analytics infrastructure has been deployed, a single Monitoring Centre has been created, the attendance accounting module has been introduced and integration with state information systems has been carried out.

In the reporting year, the project was expanded through the increase of the number of pilot sites, the connection of new regions and the introduction of additional SMART solutions for enhancing safety and improving conditions for students and teachers.

At present, **AI-Mektep** operates in pilot mode in schools of Atyrau, Almaty, Turkestan and Kostanay Regions. In Atyrau, 202 schools with a video monitoring system and data transmission to the Police Situational Management Centre are additionally connected.



3.1.2.3. AI in digital services and industry solutions

The Company is actively introducing artificial intelligence into applied digital products, expanding the capabilities of existing services and creating new directions of digital business. The projects of this direction introduce AI into user and business scenarios, create new digital services and enhance the quality of services.

The projects support the transition to data-driven management, the reduction of operational costs and the creation of digital services with commercial potential.

Key projects:

AI doctor's assistant
(AI therapist)

the project is aimed at the creation of an AI platform for the automation of the initial questioning of patients, the formation of medical reports and the reduction of the load on doctors, with the aim of enhancing the quality of diagnostics and the accessibility of medical services. It provides for the introduction of the solution in medical organizations, the development of data processing functionality, integration with medical information systems and further improvement of the model.

Digital telemedicine service

enhancing the accessibility of medical services in remote and rural population centres through the introduction of diagnostic complexes and remote video communication with doctors, implemented through the phased introduction of the project in regions with the provision of the connected facilities with access to the Internet network.

CerebraAI

a service on the basis of artificial intelligence aimed at expanding digital services and medical solutions through the automated analysis of medical images. The project is oriented to enhancing the quality of diagnostics, ensuring the stable operation of the service in medical organizations and the subsequent scaling of commercial application of AI solutions in the sphere of healthcare.

Warehouse stock monitoring

an intelligent system of management of warehouse infrastructure, combining video analytics and IoT sensors for the automatic accounting of stocks, control of storage conditions and enhancement of data transparency. The solution is aimed at the reduction of the risks of losses, the enhancement of the efficiency of stock management and the introduction of analytics for the forecasting and monitoring of warehouse operations.

Smart Lift

a solution on the basis of video monitoring and AI analytics for enhancing the safety and reliability of operation of lift equipment. The system ensures the identification of incidents and abnormal situations, the transmission of data to monitoring centres and the support of operational response and management of infrastructure.

Introduction of AI into the internal processes of the Company

the development of corporate digital assistants on the basis of AI for the automation of marketing analytics and legal expert review of documents, aimed at the reduction of manual labour, the enhancement of the transparency of processes and the integration of intelligent tools into the operational activities of the Company.

3.1.2.4. Technological independence and the platform ecosystem

A strategic direction of AI development is the in-house platform ecosystem for the unified development, introduction and scaling of AI solutions at the level of the group of companies. The implementation of this direction is aimed at the creation of a stable technological architecture, allowing the integration of applied solutions into a single digital environment and ensuring their roll-out in various industries and regions.

Within the framework of the direction, the “Project with the application of AI technologies for Sovereign Wealth Fund Samruk-Kazyna JSC is being implemented, providing for the creation of a corporate platform of artificial intelligence and the development of a single environment of work with digital assistants on the basis of AI and intelligent services.

The project is aimed at:

- the formation of a single platform of development and operation of AI solutions;
- the standardization of approaches to the creation and introduction of AI services;
- the integration of applied artificial intelligence projects into the common digital architecture;
- the ensuring of the scalability of solutions at the level of the group of companies.

The platform ecosystem being created makes it possible to reduce technological dependence, to accelerate the introduction of new digital products and to ensure the reuse of developed AI components in various projects. The development of the platform approach forms the basis for the further expansion of the application of artificial intelligence in corporate and government services.

3.1.3. International cooperation in the area of AI

In 2025, Kazakhstan stepped up cooperation with leading international technology companies in the area of artificial intelligence, including OpenAI and Perplexity AI, with the aim of expanding access to modern AI tools and accelerating digital transformation.

Within the framework of interaction with OpenAI, a memorandum aimed at the development of the application of artificial intelligence technologies in the system of education, including the provision of access to ChatGPT Edu class solutions for educational organizations and teachers, was signed. The initiative is oriented to the development of digital competencies, the introduction of modern AI tools into the educational process and the formation of the practice of the use of artificial intelligence in training.

In parallel, the Ministry of Artificial Intelligence and Digital Development of the Republic of Kazakhstan, Kazakhtelecom JSC and Perplexity AI concluded a memorandum of understanding, providing for the expansion of user access to modern generative and search AI tools. Within the framework of the agreements reached, the parties also coordinated the development of artificial intelligence technologies in Kazakhstan, the support of educational projects on the basis of the Alem.ai AI hub and the consideration of the possibility of the creation of a local research and development centre. In addition, the provision to citizens of Kazakhstan of annual free access to the Perplexity Pro service is envisaged, as well as the elaboration of the introduction of corporate licences in state institutions.

The initiatives enhance the accessibility of artificial intelligence technologies, develop human capital and form the national AI ecosystem with the participation of global technology partners.

3.1.4. Plans for 2026

- Transfer of pilot AI solutions into industrial operation and their integration into existing digital systems;
- Scaling of AI solutions of video monitoring and safety in the regions of the Republic of Kazakhstan through interaction with akimats and the development of the service model of introduction;
- Development of the single monitoring platform and the build-up of video monitoring infrastructure with centralized management;
- Expansion of the functionality of existing AI services and digital assistants, and also the roll-out of solutions to new regions and facilities.

