

Translation



The following Beijing Municipal industrial policy describes how the city government plans to integrate AI into a wide variety of industries in 2024 and 2025. These industries and sectors include robotics, education, healthcare, scientific research, spatial computing, digital marketing, Party propaganda, the power grid, surveillance, and censorship, among others.

Title

Beijing Municipal Action Plan to Promote "AI+" (2024-2025)
北京市推动“人工智能+”行动计划(2024-2025年)

Authors

Beijing Municipal Commission of Development and Reform (北京市发展和改革委员会), Beijing Municipal Bureau of Economy and Information Technology (北京市经济和信息化局), Beijing Municipal Science & Technology Commission (北京市科学技术委员会), Administration Commission of Zhongguancun Science Park (中关村科技园区管理委员会)

Source

Beijing Municipal Commission of Development and Reform website. The action plan was finalized on July 18, 2024 and was released to the public on July 26, 2024.

The Chinese source text is available online at:

https://fgw.beijing.gov.cn/fgwzwwgk/2024zcyj/bwqtwj/202407/t20240726_3760264.htm

An archived version of the Chinese source text is available online at: <https://perma.cc/79PX-RCY3>
U.S. \$1 ≈ 7.1 Chinese Yuan Renminbi (RMB), as of September 13, 2024.

Translation Date

September 13, 2024

Translator

Etcetera Language Group, Inc.

Editor

Ben Murphy, CSET Translation Manager

Beijing Municipal Action Plan to Promote “AI+” (2024-2025)

The Beijing Municipal Commission of Development and Reform, the Beijing Municipal Bureau of Economy and Information Technology, and the Beijing Municipal Science & Technology Commission, and the Administrative Commission of Zhongguancun Science Park, in accordance with relevant national and municipal policies, have jointly formulated the *Beijing Municipal Action Plan to Promote “AI+” (2024-2025)* in order to deeply implement the national “AI+” strategic action plans, fully implement the spirit of documents including the *Beijing Implementation Plan for Accelerating Construction of Sources of Artificial Intelligence Innovation with Global Influence (2023-2025)* and *Certain Measures to Promote the Innovative Development of General Purpose Artificial Intelligence in Beijing Municipality*, seize the technological

innovation opportunities in artificial intelligence (AI) based on large models, use applications to feed back into large model technology iteration, drive the industry's development, accelerate the incubation of new productive forces (新质生产力), and make every effort to build Beijing into a benchmark city for the global digital economy.

I. Development goals

Giving full play to Beijing's comprehensive advantages, including strong innovation momentum, diversified and assured computing power ("compute"), massive data supply, and abundant application scenarios, and adhering to the principles of being guided by the government, being innovation-driven and application-led, and open cooperation, by organizing major project research, matching the supply and demand of resources, and piloting characteristic scenarios, we will significantly enhance independent innovation (自主创新) capability in large models, promote the formation of standardized, large-scale, and cross-cutting collaborative application implementation paths, and thereby accelerate the intelligentization (智能化) of thousands of industries. By the end of 2025, through the implementation of five benchmark application projects that are on a par with the world's leading level, the organization of ten nationally leading demonstrative application projects, and the promotion of a number of commercialized application achievements with broad application prospects, we will strive to form 3-5 advanced, usable, and independently controllable (自主可控) foundation model products, 100 excellent industry large model products, and 1,000 industry success stories. We will take the lead in building an AI-native city and push Beijing to become a global source of AI innovation and an AI application center.

II. Benchmark application projects

Relying on the capital's superior industry resources and S&T research and development capabilities, a number of major projects of a comprehensive and benchmark nature will be organized and implemented in fields such as robotics, education, healthcare, culture, and transportation to promote breakthroughs in core large model theory and technology, and strengthen AI engineering ability, so as to raise the technological level and service quality of key industries, and build a cross-industry and interdisciplinary collaborative innovation organizational model, thereby forming a new ecosystem for large model industry applications.

(i) AI+ robotics

Integrating innovation resources and taking into consideration real-world requirements, robots that incorporate embodied AI (具身智能) will be launched, with

applications driving the iterative evolution of embodied AI. An application testing ground for embodied AI applications will be built for verifying the performance of embodied AI robots in scenarios such as logistics and warehousing, manufacturing, home services, healthcare, and scientific exploration, so as to continuously improve the intelligence level of embodied AI. The data collection standards for embodied AI training will be standardized, and high-quality databases for real-world scenarios in various industry segments will be built, so as to continuously promote the self-evolution of embodied AI. (Responsible work unit [单位]: Beijing Municipal Bureau of Economy and Information Technology)

(ii) AI+ education

Making full use of educational resource advantages, we will strengthen collaboration and coordination between large model enterprises, educational institutions, and administrative departments, with the focus on gathering teaching knowledge in Beijing, including examples of high-quality teaching, lecture materials, and teaching methods, as well common-sense teaching knowledge regarding students' mental health, public order, and good morals. We will incubate interdisciplinary and cross-level educational large model platforms, so as to provide auxiliary tools such as intelligent lesson preparation, courseware generation, course analysis, learning tracking, and home-school linkage, thereby balancing classroom teaching and personalized learning, and reducing the burden on teachers while improving their efficiency. We will strengthen the AI literacy of teachers and students, and explore intelligent agents (智能体) for thinking skill development, and the design of interdisciplinary problem-based learning (PBL) courses. (Responsible work unit: Municipal Education Commission)

(iii) AI+ healthcare

Focusing on high-quality healthcare resources, the city will: Build a 3-in-1 “Beijing Doctor” healthcare large model platform that integrates the innovation of healthcare supervision mechanisms, the balanced sharing of research achievement benefits between hospitals and doctors, and the intelligentization-based upgrading of hospital information systems, unleashing the potential for collaborative innovation among hospitals, doctors, and large model enterprises; promote the linkage of “three medicals” (medical care, medical insurance, and medical drugs); and establish a high-quality medical data labeling library and a trusted space for healthcare large model training. Mechanisms for collaboration between doctors and intelligent healthcare agents will be explored, ancillary healthcare services such as guided diagnosis services, online consultation, prescription generation, medication consultation, chronic illness management, and smart doctors for the home (家庭智能医

生) will be optimized, and the upgrading of internet hospitals (互联网医院) to AI hospitals (人工智能医院) will be promoted. (Responsible work units: Municipal Health Commission, Municipal Medical Insurance Bureau)

(iv) AI+ culture

Based on Beijing's wealth of historical, cultural, and tourism resources, the city will gather together high-quality cultural and tourism data on literary works, historical buildings, and cultural relics, as well as scenic attraction information, and collaborate with tourist attraction, cultural, and creative work units and management departments to promote the deep integration of AI and cultural tourism, and will support big data-based cultural service platforms, so as to provide personalized, efficient, and convenient cultural and tourism services for citizens and tourists, thereby promoting the dissemination of excellent traditional culture and advocating core socialist values. (Responsible work units: Propaganda Department of the Municipal Party Committee, Municipal Bureau of Culture and Tourism)

(v) AI+ transportation

Based on large model-generated simulation data for roads, vehicles, pedestrian flows, weather, etc., the city will accelerate simulation-based training for autonomous driving, optimize the technical route for vehicle-road-cloud-network integration, explore single-vehicle intelligence technologies such as full self-driving (FSD) and assisted self-driving (ASD), and build an intelligent, efficient, and safe urban transportation network. A transportation large model platform will be built relying on the construction of high-level autonomous driving demonstration zones, and integrating data from multiple sources such as vehicle-mounted sensors, roadside video equipment, high-precision maps, traffic control information, and weather and environmental data, so as to accurately predict traffic flows and congestion, optimize traffic signal control mechanisms, and successfully do traffic guidance and dynamic planning of vehicle travel routes. (Responsible work units: Municipal Autonomous Driving Office, Municipal Bureau of Economy and Information Technology, Municipal Transportation Commission, and Municipal Public Security Bureau and Traffic Management Bureau)

III. Pilot applications

Centered around typical industry segments, we will support dynamic pairing between the municipal main oversight departments (主管部门) in charge of industries, relevant districts, industry application-oriented enterprises, and large model enterprises, with the focus on incubating a batch of pilot industry applications,

overcoming common implementation difficulties in different scenarios, and exploring standardized, replicable, and scalable implementation paths for large model industry applications, so as to improve infrastructure and public platform construction, and develop industry models with the capital city's characteristics.

(i) Scientific research exploration

Based on the construction of the International Center for Science & Technology Innovation (国际科技创新中心), we will support cooperation among Beijing research institutes in exploring new models for assisting scientific research with “AI for Science” large models. In fundamental discipline fields such as new drug R&D, genetic sequencing, new material analysis, and meteorological analysis, the city will explore the development of a number of databases and intelligent agents in sub-disciplines, so as to help research institutions improve their research abilities. (Responsible work unit: Beijing Municipal Science & Technology Commission and Administrative Commission of Zhongguancun Science Park)

(ii) Government services

For scenarios such as government consultation and business handling, the city will promote the pilot application of large model technology in intelligent acceptance of complaints for prompt handling, so as to respond to public service demands accurately, promptly, and conveniently. To do a good job on government affairs assistants, the Jingzhi (京智), Jingban (京办), and Jingtong (京通) [mobile terminal] platforms will be relied on to access large model tools in areas such as policy Q&A and process management. An open urban large model service platform will be built, grounded in vast quantities of basic data on public services, so as to create a smart city brain (智慧城市大脑), and improve the efficiency of public services. (Responsible work unit: Municipal Bureau of Government Services and Data Management)

(iii) Industrial intelligence

Making good use of industrial enterprise scenarios, and giving full play to the advantages of Beijing's concentration of industrial research institutes, we will build large model intelligence platforms oriented toward industry sectors—basic software, industrial software, R&D and design, piloting and testing, production and manufacturing, etc. Through large model capabilities such as natural language processing, data analysis and processing, and deep learning, potential underlying principles will be looked for in depth based on vast quantities of industrial data, so as to reshape industrial product R&D and production processes and methods, and explore

new industrial development paradigms. (Responsible work unit: Beijing Municipal Bureau of Economy and Information Technology)

(iv) Financial management

To do a good job of financial risk control, construction of large model-based risk assessment and early warning systems for banks, insurance companies, securities companies, and other financial institutions will be promoted, thereby strengthening internal control and compliance management, customer financial status assessment, prediction of the likelihood of default, hidden association discovery, and fraud detection. To optimize credit tools, large model-based financial compliance assistants will be developed, and the use of large models to assist in generating credit investigation reports and credit review reports will be explored. (Responsible work units: Beijing office of the National Financial Regulatory Administration, and the Office of the Financial Commission of the Beijing Municipal Party Committee)

(v) Spatial computing

For Beijing's megacity governance scenario, a forward-looking urban spatial computing system will be deployed and intelligentized urban management mechanisms will be explored. A framework for urban spatio-temporal operation data will be built that integrates multiple sources of data, such as internet map data, Internet of Things sensing data, and location-based service data, so as to open up "people-things-places" computing links and build a regional-level large model. Using the reasoning capabilities of the regional large model, we will carry out initial pilots and trials in industrial parks, business districts, expos, and a series of public areas in the city, and form a complete set of intelligent systems for continuous perception, information mining, situational analysis, and decision support, thereby helping to refine urban governance and planning. (Responsible work unit: Beijing Municipal Science & Technology Commission and Administrative Commission of Zhongguancun Science Park)

(vi) Digital marketing

For new scenarios such as digital influencer live stream marketing (数字人直播带货), customer service, and training management, R&D will be carried out on a large model-based digital human interaction knowledge base and tools, so as to cultivate more natural marketing experiences. Personalized recommendation systems will be upgraded to improve marketing effectiveness and enhance customer loyalty. Large model-based creation tools will be built for marketing advertisements and copywriting. The training process for marketing staff will be optimized, and virtual simulation

training scenarios will be built based on AI-generated content (AIGC). (Responsible work unit: Municipal Bureau of Economy and Information Technology)

(vii) Judicial services

A judicial large model will be constructed, integrating intelligentized tools for legal and regulatory searches, legal consulting services, legal risk assessment, legal knowledge management, and judicial data analysis, thereby promoting the modernization and intelligentization process for judicial arbitration and legal services. (Responsible work units: Beijing High People's Court)

(viii) Broadcasting and media

We will promote the construction of the China Central Television (CCTV) Digital Audiovisual Industrial Park (央视数字视听产业园) and the Beijing Radio & Television Network Artificial Intelligence Media Convergence Innovation Laboratory (北京广播电视台人工智能融媒创新实验室) will be promoted, and we will push the use of large models to empower "Beijing audiovisual" ("北京大视听") boutique innovation work. Using large model-based creation abilities, and integrating text creation, video generation, film and television special effects processing, and other functions, the creation of rich content using AIGC will be accelerated, and a number of new tools and innovative achievements in the film and television field will be produced, enriching the creativity of film and television content, and improving creation efficiency and quality. (Responsible work unit: Municipal Radio and Television Bureau)

(ix) Electric power assurance

A large model-based power management and planning platform will be constructed to achieve the application of large models in scenarios such as intelligent power inspection, optimized power scheduling, and fault diagnosis and maintenance, as well as functions such as summer peak power analysis and shortfall warning, green power use assessment, and electric grid and equipment planning. (Responsible work units: Municipal Commission of Urban Management, and Municipal State-owned Assets Supervision and Administration Commission)

(x) Content security

A content security large model platform will be built to strengthen our capability to manage the internet with technology, using large models to enhance identification accuracy with multimodal content such as text, images, audio, and video, and to handle ultra-large-scale content review work automatically and efficiently, thereby significantly reducing labor costs, helping platform companies improve their security

compliance capabilities, and building a strong cybersecurity barrier. (Responsible work units: Office of the Cyberspace Affairs Commission of the Beijing Municipal Party Committee, and Municipal Public Security Bureau)

IV. Commercialized applications

Large model technology innovation's role in empowering industry applications will be given full play, starting with small openings and real-world scenarios, and centered around industry hotspots and social concerns. For educational, medical, cultural, transportation, government affairs, industrial, financial, marketing, judicial, media, energy, film and television, gaming, and green space (园林绿化) application scenarios, support will be given to large model enterprises, system integration service providers, and industry users in carrying out application programming interface (API) calls and cloud model tuning, large model privatization deployment, and the development of intelligent agents and smart assistants. Large model enterprises and equipment manufacturers will be encouraged to pair up to develop embedded large model components and intelligent systems for new hardware terminals such as computers, mobile phones, home appliances, and automobiles. (Responsible work unit: Municipal Bureau of Economy and Information Technology)

V. Joint R&D platform construction

A number of platforms for joint R&D of AI application scenarios in Beijing will be deployed and constructed, and by integrating industry resources and high-quality data, opening up industry scenario requirements, and constructing a joint R&D environment, well-positioned (优势) innovation teams will be attracted and gathered together, so as to jointly promote industry applications and industry-level implementation of AI. The joint R&D platforms will mainly be aimed at the scenario providers and appliers of industry-related large model technology products, who will carry out joint R&D with large model innovation enterprises, share scenario resources, business logic, and industry knowledge with them, and jointly develop industry-related large model products that are deeply adapted to the characteristics and requirements of industry scenarios, thereby promoting the successful implementation of new large model applications and products. (Responsible work unit: Beijing Municipal Science & Technology Commission and Administrative Commission of Zhongguancun Science Park)

VI. Assurance measures

(i) Organizing implementation

Under the leadership of the citywide artificial intelligence coordination mechanism, the relevant work units (the Municipal Commission of Development and Reform, the Municipal Bureau of Economy and Information Technology, and the Municipal Science & Technology Commission and Administrative Commission of Zhongguancun Science Park, together with the Municipal Education Commission, the Municipal Health Commission, Propaganda Department of the Municipal Party Committee, etc.), will accelerate the organization and implementation of the “AI+” *Action Plan*, coordinate the resolution of large model implementation issues, explore inclusive supervision and dispute resolution mechanisms for large model data training and industry applications, and promote the application of large models in various fields. (Responsible work units: Municipal Commission of Development and Reform, Municipal Bureau of Economy and Information Technology, Municipal Science & Technology Commission, Administrative Commission of Zhongguancun Science Park, relevant districts, and Administrative Committee of Beijing Economic-Technological Development Area)

(ii) Resource assurance

A Beijing Computing Power Interconnectivity and Operations Service Platform (北京算力互联互通和运行服务平台) will be built and operated to provide convenient and ubiquitous compute support for enterprise large model training and for large model deployment by user work units. Relying on the Beijing Data Foundation Pilot Zone (北京数据基础制度先行区), a secure and trustworthy data space will be created, and enterprises and institutions will be guided to open up and aggregate high-value industry data. A data training base will be constructed to provide resources for large model training, such as compute, data, development tools, and open-source communities. Categorized and graded (分类分级) data management and the “regulatory sandbox” mechanism will be promoted. We will support the promotion and application of large foundation models in various industries, encourage the use of independently controllable large foundation models as the basis for accelerating the training of vertical large models in industry segments, and improve the large model application tool chain. We will encourage the development of open source, high-parameter count, independently controllable large foundation models, support the establishment of cloud service platforms for hosting models and datasets, and promote developer sharing and collaboration. (Responsible work units: Municipal Bureau of Economy and Information Technology, Municipal Commission of Development and Reform, Municipal Communications Administration, relevant districts, and Administrative Committee of Beijing Economic-Technological Development Area)

(iii) Funding support

For benchmark application projects and demonstrative applications, the city will adopt a winner-takes-all open competition¹ approach, and will organize large model enterprises, software enterprises, and industry users to work together to solve problems. One research team will be selected for benchmark application projects and no more than three research teams will be selected for pilot applications. For major benchmark application projects and pilot applications, the municipal government will provide support as a certain percentage of project investment, up to a maximum of 50 million Chinese yuan Renminbi (RMB). For commercial applications, the city will issue model vouchers for API interface calls, cloud-end model optimization, and large model privatization deployments carried out based on benchmark application projects and pilot application projects, as well as large model implementation projects under individual scenarios such as embedded small models, agents, intelligent operating systems, and smart assistants. Model vouchers will be redeemed on a regular basis, and caps will be placed on the amount of model vouchers that can be redeemed by each individual benchmark application project, demonstrative application project, and enterprise. The total amount of model vouchers that can be redeemed in Beijing in a given year shall not exceed RMB 100 million. For joint R&D platforms for AI application scenarios, select projects will be supported at a certain percentage of the joint R&D investment, up to a maximum of RMB 50 million. (Responsible units: Municipal Commission of Development and Reform, Municipal Bureau of Economy and Information Technology, Municipal Science & Technology Commission, and Administrative Commission of Zhongguancun Science Park)

(iv) Scenario promotion

The municipal General Purpose Artificial Intelligence Industry Innovation Partner Program (通用人工智能产业创新伙伴计划) will be deepened, and enterprises and institutions participating in benchmark application projects and pilot applications, as well as commercialized application enterprises, will be supported to be included in the Partner Program. Leveraging the role of intermediary organizations such as associations and federations, data exchanges, and consulting agencies, we will build platforms for exchanges and cooperation in areas such as model supply, scenario construction, social investment,² and data circulation, so as to accelerate ecosystem

¹ Translator's note: The idea behind "winner-takes-all open competition" (揭榜挂帅), in the context of Chinese science and technology projects, is that the government openly lists the technological breakthrough(s) it desires. Any individual or group in society, not just a select few, are then eligible to win a cash award if they succeed in making the breakthrough.

² Translator's note: The Chinese term 社会投资, translated literally as "social investment," refers to any source of funding outside of government budget outlays. This term encompasses investment by private

construction and the application of large models in industry. The Municipal Bureau of Economy and Information Technology will issue industry scenario application guides, regularly collect typical application cases in key industries, and increase propaganda, promotion, and awards for the model products, application cases, developers, and users selected for the guides, thereby creating scale effects. (Responsible units: Municipal Commission of Development and Reform, Municipal Bureau of Economy and Information Technology, and Municipal Science & Technology Commission, and Administrative Commission of Zhongguancun Science Park)

(v) Talent recruitment and training

The exchange and recruitment of high-end talent in the AI field will be strengthened, and talent service assurance mechanisms will be refined. The city's universities and large model enterprises will be encouraged to cooperate in building a large model industry-education integration innovation platform and explore the formation of a large model application internship training mechanism. In order to a good job in large model talent training, and to address the situation in which large model enterprises do not understand industry and user work units are unclear about their path to large model empowerment, large model application ability training and case teaching will be organized and carried out in an all-round and multi-level manner, and the "last mile" problem will be solved effectively. (Responsible work units: Municipal Human Resources and Social Security Bureau, Municipal Education Commission, Municipal Commission of Development and Reform, Municipal Commission of Economy and Information Technology, Municipal Science & Technology Commission, and Administrative Commission of Zhongguancun Science Park)

(vi) Safety and security³ assurance

We will coordinate high-quality development and high-level safety and security, supervise and guide large model enterprises implementing national legal requirements for generative AI services, adhere to the principle of inclusive and prudential regulation, accelerate pushing the city's large models online as required, compile graded and categorized large model management and safety and security evaluation standards, and carry out large model application quality assessments and ethical alignment evaluations in real-world scenarios, so as to promote the safe, secure and compliant

individuals and private institutions. However, investment from state-funded entities such as state-owned enterprises (SOEs), including state-run banks, also falls under the umbrella of "social investment."

³ Translator's note: The Chinese word 安全 encompasses the meanings of both "safety" (protection from accidental harm) and "security" (protection from deliberate harm). In this translation, it is variously translated as "safety," "security," or "safety and security" at the translator's discretion.

development of large model applications. We will strengthen data security and personal privacy protection capabilities, improve the risk monitoring system for data vulnerabilities and privacy leaks in the large model industry, and support development by authoritative institutions of a large model risk monitoring platform, thereby forming an operational mechanism of “safety and security situational awareness plus risk assessment and early warning.” Emphasizing that large model service developers and users bear the main responsibility, all parties will be guided to use generative AI technology in accordance with the law, and pay attention to protecting personal privacy, intellectual property rights, and classified (秘密) information, so as to promote the AI industry’s upward and virtuous development.