

Guideline Released for Trustworthy AI

Policy Express

By YAO Yian

A recently released pilot guideline on the ethics review and service of AI technology, by the Ministry of Industry and Information Technology and nine other government departments, is set to provide a framework for trustworthy AI.

Central to the guideline are efforts to support technological innovation in AI ethics review and to strengthen the use of technical measures to prevent AI-related ethical risks.

"The guideline represents an important extension, refinement and improvement of the country's sci-tech ethics institutional framework," said Wei Yiming, an expert in the field of industry and information technology.

He noted that the guideline is grounded in the inherent features of AI technologies, including rapid iteration and deep cross-sector integration. It has realized domain-specific and refined adaptation on the basis of general review rules, filling institutional gaps in the sci-



Visitors at the 2025 World Internet Conference Wuzhen Summit in Zhejiang province in east China. (PHOTO: XINHUA)

tech ethics review of AI, Wei added.

The guideline recommends a review centered on six aspects, including human well-being, fairness and justice, controllability and trustworthiness, and privacy protection. It also outlines key

issues that should be addressed in the review, such as the rationality of algorithm design, information disclosure rules, and private data protection.

The guideline also outlines targeted initiatives across five key areas: standard

system development, service promotion, innovation encouragement, publicity and education, and talent cultivation. It specifically addresses prominent pain points in the ethics governance of AI enterprises, including inadequate technical means, incomplete standard specifications, and a shortage of professional governance tools.

In addition, an inclusion of specific rules for the full workflow of AI sci-tech ethics reviews, including their application scope, implementation rules, working procedures and supervision requirements is mentioned, to standardize the ethics governance of AI-related activities.

"Ethics governance needs both institutional rules and technical support," said Wei. He noted that tech-focused enterprises, universities and research institutions should take the lead in developing "hard tech" for AI ethics governance, advance R&D of key technologies including explainable AI and deepfake detection, and translate ethical principles into practical technical solutions to drive the engineering application of ethical governance.



Case Study

Tech-industry Synergy Powers Guangdong's Growth

By YAO Yian & LONG Yuemei

A breakthrough in integrated development of sci-tech and industrial innovation in China's Guangdong province has seen the number of the region's high-tech enterprises reach 74,000, driving the province's rise as a global tech and manufacturing hub.

Since March, Guangdong has rolled out a batch of policy packages to boost this innovation. The moves, focused on four-chain integration, new quality productive forces cultivation and building a globally influential industrial sci-tech innovation hub, will deliver strong impetus to the province's high-quality development.

Breakthroughs in core technologies

In the exhibition hall of Chaozhou Three-Circle (Group) Co., Ltd. in east Guangdong, a multilayer ceramic chip capacitor (MLCC), widely dubbed "the rice of the electronics industry," takes a prominent position.

It is built on local independent innovation achievements, and has successfully reduced the thickness of its dielectric layers from five microns to less than one micron, while also managing high-precision stacking of up to 1,000 layers.

In recent years, the company has triumphed over several technical hurdles and enhanced its core competitiveness. It has secured major breakthroughs in both high-end electronic components and ceramic fuel cells for new energy products.

Under the "Strong Chip" initiative, Kirin high-end chips have achieved full end-to-end integration from design to manufacturing, with multiple automotive chips producing domestic substitution. In addition, the native HarmonyOS operating system has now also entered full commercial operation.

Leadership of innovation entities

Guangzhou MINO Equipment Co., Ltd., founded in 2008, began its journey as a technical service business with just two employees.

After a decade of technology development, the company built China's first non-standard, intelligent, flexible manufacturing production line. It also

developed an intelligent industrial big data analysis and diagnosis platform for automotive production lines.

At MINO, engineers keep a close eye on screens, remotely debugging production lines at overseas factories. Today, one in every 10 new energy vehicles worldwide benefits from the solutions developed by the company.

This is just the tip of the iceberg among Guangdong's vast pool of outstanding tech enterprises. Shenzhen, a leading tech hub in southern China, is home to global industry leaders including Huawei, BYD, Tencent and DJI. It has also developed many promising cutting-edge enterprises, with 26,000 national high-tech enterprises.

Across the entire province, the number of technology-based small and medium-sized enterprises stands at 56,000. Roughly 90 percent of Guangdong's scientific research institutions, 90 percent of its R&D personnel and funding, and 90 percent of its invention patent applications come from enterprises.

Transformation of R&D achievements

In 2002, a leading seed base of aquatic products under a national high-tech development plan was built on Donghai Island, Zhanjiang city in western Guangdong.

The base partnered with Sun Yat-sen University for a decade of dedicated research. In 2011, it succeeded in breeding "Zhongxing No. 1," China's first disease-resistant strain of Pacific white shrimp (*Litopenaeus vannamei*).

It has since become a landmark brand in China's Pacific white shrimp farming sector. In 2025, the annual sales of this shrimp fry doubled year-on-year. Its national breeding success rate has since reached as high as 85 percent.

Guangdong has long prioritized transforming lab samples into production-line products and translating researchers' academic findings into tangible business outcomes. The province continues to conduct in-depth research, and has taken targeted measures to develop this critical job of commercializing scientific and technological achievements.

'AI+Drug Regulation' Roadmap Unveiled

By LI Linxu

As part of efforts to modernize drug oversight and build a high-level unified intelligent regulation system, China's National Medical Products Administration has released implementation guidelines on "AI+drug regulation".

The document outlines a roadmap to accelerate AI's innovative application throughout the entire life cycle of drug regulation.

By 2030, an integrated innovation system for drug regulation and AI will be initially established.

The operational management mechanism for "AI+drug regulation" will basi-

cally take shape, and the computing power infrastructure will become more intensive and efficient.

High-quality datasets, vertical large models, and intelligent agents that meet the requirements of intelligent regulation will be developed.

AI will be effectively applied in scenarios such as review and approval, supervision and inspection, testing and monitoring, and government services.

The efficiency of human-machine collaboration will be significantly improved, and the capability of digital-intelligent regulation will reach a new level.

By 2035, a new landscape of intelligent drug safety governance will be basically formed, characterized by being

data-intelligence driven, agile, autonomous and controllable, and ecologically collaborative.

To achieve such goals, the document details key directions for digital-intelligent drug regulation, including developing an intelligent review and approval system based on human-machine collaboration, boosting full-chain smart supervision capabilities, advancing digital and intelligent upgrade of the risk supervision system, and pushing forward smart and standardized regulatory inspection and enforcement.

Collaborative regulatory synergy and effectiveness will be strengthened, smart capabilities of government services elevated, and collaborative digital and

intelligent development between regulation and industry fostered.

To solidify the foundational support for "AI+drug regulation", the policy urges constructing high-quality drug regulatory datasets, strengthening AI application support system, and computing infrastructure.

It also highlights establishing a robust security and governance framework to ensure that AI applications are compliant, transparent, and trustworthy.

A dedicated governance mechanism will oversee AI application approvals, safety reviews, and operational management.



Fuzhou's Tech Evolution Enables New Quality Productive Forces

Hi-tech Zones

By TANG Zhexiao & XIE Kaifei

Fuzhou has recently issued a range of policies to stimulate scientific and technological innovation, including encouraging all business sectors to increase R&D investment, and support the transfer and transformation of scientific and technological achievements from universities to practical application.

With the construction of a full-chain support system ranging from original innovation to industrial transformation, the city is forging a "Fuzhou Track" for new quality productive forces, injecting new momentum into building a high-level innovative provincial capital.

Strengthening technological supply

In the past, the global LED industry was monopolized by foreign "phosphor

glue technology." In the Fuzhou Hi-tech Industrial Development Zone, a research team led by Hong Maochun, an academician of the Chinese Academy of Sciences and the director of the Mindu Innovation Laboratory, successfully developed ultra-high-power LED phosphor ceramic engineering and LED packaging technologies with complete independent intellectual property rights, after more than two years of research. This led to the launch of the world's first kilowatt-level KCOB light source module, overcoming technical barriers set by the international community in the high-power LED lighting sector.

This new product boasts an extremely long service life — exceeding 50,000 hours without light decay — and costs half that of traditional products. Consequently, it has not only been deployed at Fuzhou's Mawei Port but also successfully entered international markets including Japan, South Korea and the U.S., enabling Chinese light sources to go global.

Established in 2019, the Mindu Innovation Laboratory is one of the first four provincial-level innovation laboratories in Fujian province, jointly built by the Haixi Institute of the Chinese Academy of Sciences

and Fuzhou University.

Zheng Fakun, deputy director of the laboratory, said that the lab has set up 18 joint R&D centers with leading enterprises, universities and research institutes, made breakthroughs in more than 80 key technologies, incubated over 30 tech enterprises, and generated an added value of more than 30 billion RMB in the industrial chain.

To promote the development of national-level platforms such as the Mindu Innovation Laboratory, Fuzhou has introduced a series of measures to support the upgrading of high-level scientific research platforms, through a combination of recognition rewards and performance subsidies.

For leading enterprises newly approved to establish national-level scientific research platforms, a municipal incentive of five million RMB will be provided in addition to the provincial incentive of 10 million RMB. For newly recognized municipal-level proof-of-concept centers and public industrial technology R&D service platforms, a one-time incentive of up to 500,000 RMB will be granted.

Building innovation clusters

Currently, Fuzhou is accelerating the growth of strategic emerging industries, proactively planning for future industries, and improving the overall efficiency of its regional sci-tech innovation system.

Meanwhile, to boost its universities' high-quality research outputs to the market, Fuzhou plans to establish a one-billion-RMB sci-tech achievement transformation fund. The fund will offer

a maximum subsidy of two million RMB for enterprises who buy sci-tech achievements from universities.

According to the city's measures for increasing R&D investment, for technology-based enterprises that meet annual R&D funding requirements and achieve growth, Fuzhou will provide municipal matching funds of up to three million RMB, on top of provincial incentives (up to six million RMB). Subsidies equivalent to 30 percent of R&D equipment investment will be offered to newly recognized municipal-level innovation consortia, with a ceiling of five million RMB.

This year's Fuzhou Government Work Report calls for all-out efforts to develop the "358X" industrial clusters: "3" refers to three pillar industries, including the modern chemical industry, intelligent vehicles and optoelectronic information; "5" represents five supporting sectors such as textiles and chemical fiber, and machinery manufacturing; "8" stands for eight strategic emerging industries including artificial intelligence and biomedicine.

Central to the city's "358X" industrial clusters, including next-generation information technology, high-end equipment and new materials, the Sci-Tech Innovation Corridor has established 197 distinctive innovation and entrepreneurship carriers such as Boshi Entrepreneurship Park, which accelerates the clustering of emerging industries across various districts, according to Wang Bobin, director of the Fuzhou Municipal Bureau of Science and Technology.



An electric vertical takeoff and landing aircraft carries out a demo flight in Shenzhen, south China's Guangdong province. (PHOTO: XINHUA)

To Accelerate High-quality Sci-tech Services

From page 1

High-end service capabilities also need improvement, "chain leader" enterprises in the SSI with ecological dominance require cultivation, and a growth pole for the SSI should be created.

In addition, promoting the transformation and upgrading of the industry, and strengthening the professional talent pool are indispensable. Also essential is strengthening digital and intelligent empowerment, along with

driving the "intelligent and digital transformation, and network connection" of the SSI, utilizing technologies such as AI to upgrade products and processes.

Finally, transformation and industrialization of sci-tech achievements require development, in order to cultivate interdisciplinary talent with "technology + market + law" in the industry field, and build a "technology manager +" ecosystem.



The Fuzhou Hi-tech Industrial Development Zone in southeast China's Fujian province. (PHOTO: XINHUA)