

## **TRENDS IN INFORMATION TECHNOLOGY DEVELOPMENT IN CHINA**

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The information industry is a major one in China and has become the second largest industry in the world in terms of its scale. By analyzing technological innovation, policy support, industry application, and market dynamics, the current status and future direction of information systems development in China is assessed. The focus is on the application of technologies such as cloud computing, big data, artificial intelligence (AI) and the Internet of Things (IoT) in information systems, and how these technologies contribute to the digital transformation of the Chinese economy.

Cloud computing widely used in China, especially in public and enterprise services. With the government investing heavily in data centers and cloud services, China's cloud computing market is expected to expand further by 2025. Major cloud service providers, such as Alibaba Cloud, Tencent Cloud and Huawei Cloud, are expanding their service capabilities and driving the development of industry and government clouds. The development of big data technology in China is in a stage of rapid growth. Government departments and enterprises are using big data to optimize operational efficiency, improve service quality and enhance decision support systems. In addition, with the advancement of the digital economy, data governance and security have become hot issues, prompting the further improvement of relevant regulations and technologies. Artificial intelligence technologies are used in China in manufacturing, healthcare, financial services and urban government. The Chinese government supports the innovation and application of AI, and promotes national AI development plans and projects. Moreover, the convergence of artificial intelligence with other technologies such as big data and cloud computing is ushering in a new paradigm for information systems. The Internet of Things is developing rapidly in the areas of smart manufacturing and smart cities. By deploying large numbers of sensors and devices, IoT technology helps businesses and city managers collect and analyze large-scale data to more effectively manage resources and deliver services.

The Chinese government plays a key role in promoting information technology. The "Made in China 2025" plan and the "China Digital Construction Development Report" have clarified the strategic position of information technology in the country's development. The government encourages technological innovation and its application by providing financial support, tax incentives and establishing research and development centers. Information systems are used in all areas of life. In retail, e-commerce platforms use AI and big data to analyze consumer behavior, optimize inventory management, and personalize recommendations. In the financial industry, blockchain and AI technologies are used in risk management and anti-fraud systems. Intelligent medical systems and remote diagnostic and treatment systems improve the efficiency and quality of healthcare services. The interplay of technological innovation, policy support and industry applications is propelling China towards a digital and intelligent future.