PART V

ACCELERATING DIGITALIZATION AND BUILDING A DIGITAL CHINA

In a digital era, we will fully tap the potential of data as a production factor. We will boost China's strength in cyberspace, accelerate the development of a digital economy, society, and government, and drive shifts in production modes, lifestyles, and governance methods by means of digital transformation.

Chapter
15
Creating New Strengths in the Digital Economy

We will harness the vast troves of data and the wealth of application scenarios, embed digital technologies in the real economy, enable the upgrading and transformation of traditional industries, foster new industries, new forms of business, and new business models, and forge new engines for economic growth.

Section 1
Enhancing the Innovative Application of Key Digital Technologies

We will focus on key technological areas such as high-end chips, operating systems, AI algorithms, and sensors, and accelerate the R&D and iterative application of basic theories, basic algorithms, and equipment and materials. We will promote integrated R&D of general purpose processors, cloud computing systems, and core software technologies. We will accelerate the development of cutting-edge technologies such as quantum computing and communication, neurochips, and DNA digital data storage, and strengthen cross-innovation between the information sciences and basic disciplines such as life sciences and materials science. We will support the development of innovation consortia such as open source communities underpinned by digital technologies, improve the IP protection and legal systems for open source activities, and encourage enterprises to release software source code, hardware designs, and application services.

Section 2
Developing Digital Industries at a Higher Speed

We will encourage the growth of emerging digital industries such as AI, big data, blockchain, cloud computing, and cybersecurity and the improvement of other industries such as telecom equipment, core electronic components, and key software. We will develop application scenarios and an industrial ecology based on 5G technology, and carry out pilots and demonstrations in key areas such as smart transportation, intelligent logistics, intelligent energy, and smart medical care. We will encourage enterprises to make more search, e-commerce, and social interaction data available, and develop the third-party big data services industry. We will promote the healthy development of both the sharing economy and the platform economy.

Section 3
Promoting Digital Transformation
in Traditional Industries

We will implement initiatives for migrating to the cloud, using digital tools and enabling intelligence, and apply digital technologies to empower whole industrial chains in a coordinated way. We will build Industrial Internet platforms and digital transformation centers that meet international standards in key industries and regions, and deepen the application of digital technologies at key links such as R&D and design, manufacturing and production, operation and management, and market and services. We will encourage new business models such as customization and flexible production and work faster to transform business parks with digital technologies. We will deepen digitalization in the service sector and foster new drivers of economic growth including crowdsourcing design, smart

logistics, and new retail. We will boost smart agriculture at a higher speed and promote the digitalization of agricultural production, operation, management, and services.

Box 8 Key Industries of the Digital Economy
01 Cloud computing ▪ Work faster to upgrade the cloud operating system; ▪ Promote technological innovation in areas such as massive distributed storage, elastic computing, and virtual isolation of data; ▪ Improve cloud security; ▪ Develop industry solutions, system integration, operation management, and other aspects of the cloud service industry with a focus on hybrid clouds.
02 Big data ▪ Promote technological innovation in areas such as big data collection, cleaning, storage, mining, analysis, and visualization algorithms; ▪ Build a full life cycle system for big data, including data collection, annotation, storage, transmission, management, and application; ▪ Improve the standards system for big data.
03 Internet of Things (IoT) ▪ Promote technological innovation in areas such as censors, network slicing, and high-precision positioning; ▪ Advance the coordinated development of cloud services and edge computing; ▪ Foster industries concerning the Internet of Vehicles (IoV), medical IoT, and IoT homes.
04 Industrial Internet (II) ▪ Develop identification analysis, standards, and safety management systems that are self-supporting; ▪ Strengthen the R&D and application of industrial software; ▪ Foster II platforms with global influence; ▪ Promote the construction of industrial ecology based on the "II plus intelligent manufacturing" model.
05 Blockchain ▪ Promote blockchain technology innovations such as smart contracts, consensus algorithms, encryption algorithms, and distributed systems; ▪ Develop blockchain service platforms with a focus on alliance chains; ▪ Create application solutions in areas such as financial technologies, supply chain management, and government services; ▪ Improve regulation mechanisms.
06 Artificial intelligence (AI) ▪ Build AI datasets in key industries; ▪ Develop settings for algorithm training and inference; ▪ Promote the design and manufacturing of intelligent products such as intelligent medical equipment, intelligent carriers, and intelligent recognition systems; ▪ Promote the construction of generalized and industry-based AI open platforms.

Box 8 Key Industries of the Digital Economy
07 Virtual reality (VR) and augmented reality (AR)   - Promote technological innovation in areas such as the generation of real-time 3D graphics, dynamic environment modeling, real-time motion capture, and fast render;   - Develop complete VR machine equipment, sensory interaction equipment, and content collection and production equipment;   - Develop tool software and industry solutions.