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THE CROSS-BORDER MIGRATION OF CHINA'S DIGITAL GOVERNANCE EXPERIENCE UNDER THE CHINA-ASEAN DIGITAL ECONOMY COOPERATION FRAMEWORK

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Abstract: With the rapid development of digital technology, digital governance has become an important path to modernizing national governance and a key issue in global economic cooperation. Within the framework of China-ASEAN digital economy cooperation, regional cooperation practices centered on the "Digital Silk Road" have provided fertile ground for the cross-border transfer of China's digital governance experience. This paper, from the dialectical perspective of "development empowerment and sovereignty balance," systematically examines the core elements, current status, and pathways of the cross-border transfer of China's digital governance experience. The study finds that China's digital governance model, characterized by state-capacity leadership, infrastructure exports as a precursor, the promotion of technical standards as a link, and multi-party collaborative governance as a mechanism, has generated significant spillover effects in ASEAN's digital transformation process. This cooperation not only provides ASEAN countries with a development path different from the West and innovates the South-South digital cooperation paradigm, but also injects new momentum into the equitable and diversified transformation of the global digital governance system, highlighting the global governance significance of the "Chinese solution."
Keywords: Digital economy; Digital governance; ASEAN; Southeast Asia

1 INTRODUCTION

The world is rapidly entering the digital age, and the digital economy is playing an increasingly important role in the global economic landscape. However, the digital divide still exists between developed and developing countries, making the digital governance dilemma faced by many developing countries increasingly prominent. Southeast Asia is one of the fastest-growing regions in the global digital economy. According to the "2025 Southeast Asia Digital Economy" report jointly released by Google, Temasek and Bain, the total value of goods traded in Southeast Asia's digital economy (GMV) is expected to exceed US$300 billion in 2025, which is 1.5 times the initial forecast ten years ago [1]. However, with rapid growth, the structural dilemmas that ASEAN countries still face in terms of digital infrastructure construction, data governance rules, cybersecurity capabilities, and digital sovereignty protection need to be addressed. Against this backdrop, digital economic cooperation between China and ASEAN has gained a historic opportunity. At the end of 2024, the China-ASEAN Free Trade Area 3.0 upgrade protocol was completed in substantive negotiations and was formally signed in 2025. It includes a special chapter on the digital economy, further deepening the cooperation foundation between the two sides in areas such as digital trade rules and cross-border data flow. The digital economy is deeply embedded in bilateral cooperation and has become a new engine for promoting regional integration. This article, approaching the issue from the dialectical framework of "development empowerment and sovereignty balance," systematically examines the cross-border migration of China's digital governance experience within the framework of China-ASEAN cooperation, focusing on addressing three core questions:
First, what are the core elements of China's digital governance experience?
Second, what are the advantages and disadvantages of ASEAN countries in developing their digital economies?
Third, through which paths has China's digital governance experience migrated to ASEAN countries?
By clarifying these questions, this article aims to provide theoretical reference for deepening China-ASEAN digital governance cooperation and contribute a "Chinese insights" to helping Global South countries explore suitable digital governance paths.

2 CLARIFYING THE CONCEPT OF DIGITAL GOVERNANCE AND THE CORE ELEMENTS OF CHINA'S DIGITAL GOVERNANCE EXPERIENCE

2.1 Defining the Concepts of Digital Economy and Digital Governance

To understand the cross-border migration of China's digital governance experience, it is first necessary to clarify the connotations and boundaries of the two core concepts of "digital economy" and "digital governance." The concept of "digital economy" was first proposed by American economist Don Tapscott in his book "Digital Economy:

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Opportunities and Challenges in the Age of Network Intelligence" in 1996, emphasizing the reconstruction of the economic system by digital information knowledge as a driving force [2]. In 2016, the G20 Summit led by China released the "G20 Digital Economy Development and Cooperation Initiative," defining the digital economy as "a series of economic activities that use digital knowledge and information as key production factors, modern information networks as important carriers, and the effective use of information and communication technologies as an important driving force for efficiency improvement and economic structure optimization" [3]. This definition is more extensive than the earlier concept and has a considerable degree of global consensus.

Compared to the digital economy, the concept of "digital governance" is more complex. This article argues that digital governance is not simply an aggregation of "digitalization" and "governance," but a comprehensive concept encompassing two dimensions. First, it involves governance through digital technology, commonly referred to as "digital government" or "digital transformation," using digital technology as a tool to empower traditional government, market, and social governance. Second, it involves the governance of digital space and related technologies, treating digital technologies and the new spaces they create as governance objects, regulating their development and mitigating their risks through rule design, institutional arrangements, and power dynamics. These two dimensions intertwine in practice, jointly forming a panoramic view of a country's digital governance capabilities. This article focuses primarily on how China has accumulated unique governance experience in these two dimensions and how it has transferred it to the ASEAN region.

2.2 Core Elements of China's Digital Governance Experience: Development, Security, and Inclusivity

Unlike the Western digital governance model, which is centered on "privacy protection" and "regulation first," China's digital governance has formed a functional system with development as its main axis, while also considering security and inclusiveness. According to the "Research Report on the Development of China's Digital Economy (2025)" by the China Academy of Information and Communications Technology, China's digital economy scale steadily increased to RMB 59.2 trillion in 2024, with a nominal growth of 9.69% year-on-year, which was 5.5 percentage points higher than the nominal GDP growth rate during the same period. The digital economy accounted for 43.8% of GDP, ranking second among major economies in the world [4]. This achievement is closely related to the inherent logic of China's digital governance system. In short, China's digital governance system can be analyzed from three dimensions: first, the development function, which relies on the strategic layout of the digital economy to activate the momentum of industrial digital transformation and promote high-quality economic growth; second, the security function, which builds a digital sovereignty defense line through the legal system for data security, the protection of critical information infrastructure and the network security review system; and third, the inclusive function, which narrows the urban-rural and regional digital divide through the construction of digital villages, rural e-commerce and the inclusive development of digital finance. Development, security and inclusiveness make China's digital governance model have the inherent rationality to expand to developing countries, and also lay the functional foundation for its cross-border migration in the ASEAN region.

3 CURRENT STATUS AND GOVERNANCE CHALLENGES OF ASEAN'S DIGITAL ECONOMY DEVELOPMENT

3.1 Overall Advantages of ASEAN's Digital Economy

Southeast Asia has a population of about 700 million, and its internet penetration rate has exceeded 70%. It is one of the regions with the highest mobile payment penetration rate and the largest proportion of digital natives in the world. The "2025 Southeast Asia Digital Economy" report shows that the continuous expansion of five major tracks in Southeast Asia, namely e-commerce, digital finance, online media, transportation and online food delivery, drives the region's digital economy to maintain a compound annual growth rate of about 15% [1]. For ASEAN, the rapid development of its digital economy has multiple favorable conditions:

First, the huge user market provides a solid demand foundation for the digital economy. Southeast Asia has a large population base, and after the epidemic, residents' willingness to consume digital products has increased significantly. Strong purchasing power and a large population size have jointly created a market space with great potential. Second, the young population structure constitutes a key internal driver for the development of the digital economy. The median age of the population in ASEAN is generally low. The younger generation has a high acceptance of internet technology, strong adaptability, and a strong willingness to consume digital products and services, which continuously activates the vitality of the digital market from the demand side. Secondly, the rapid increase in mobile internet penetration has injected strong momentum into the large-scale growth of the digital economy. The widespread adoption of mobile devices has spawned numerous innovative applications and new business models, effectively attracting continuous attention and investment from domestic and foreign capital, and promoting a sustainable ecosystem.

3.2 Disadvantages of ASEAN in Developing the Digital Economy

While ASEAN is experiencing rapid digital development, it faces multiple structural challenges in digital governance. First, digital infrastructure construction lags behind the growth needs of the digital economy. Although ASEAN has a high mobile penetration rate, the distribution of fixed broadband penetration, data center capacity, and computing

resources within the region is extremely uneven, restricting the overall depth of digital transformation. Second, cybersecurity vulnerabilities are prominent. Many ASEAN countries lack mature cybersecurity legal frameworks and emergency response capabilities, face serious transnational data security challenges, and have insufficient national-level cyber sovereignty protection capabilities. Third, the risk of erosion of digital sovereignty continues to rise. Market monopolies and data control by large transnational technology platforms, as well as the "long-arm jurisdiction" exercised by Western countries through rules such as the GDPR, put small and medium-sized developing countries in a weak position in the international rules-based game of digital governance, resulting in exorbitant compliance costs. Fourth, regional digital governance rules are fragmented. Significant differences exist among countries in their data localization policies, privacy protection standards, and electronic signature regulations. Cross-border digital trade faces overlapping and conflicting regulatory barriers, hindering the progress of regional digital integration.

Faced with these challenges, ASEAN lacks the capacity to independently build a region-wide digital governance system, nor can it fully rely on Western-led digital governance norms-which often come with political conditions and have limited adaptability to ASEAN's national circumstances. Therefore, the China-ASEAN Digital Economy Cooperation Framework has become a crucial external pillar for ASEAN to overcome its digital governance dilemma and accelerate its digital transformation.

4 PATH AND MECHANISM OF CROSS-BORDER TRANSFER OF CHINA'S DIGITAL GOVERNANCE EXPERIENCE

4.1 Digital Infrastructure Construction as the Guide

Infrastructure construction is the primary path for the cross-border transfer of China's digital governance experience and is also the most tangible aspect in China-ASEAN digital cooperation. China has laid the material foundation for ASEAN's digital transformation through large-scale digital infrastructure exports, and has also formed a natural diffusion channel for China's technical standards and governance practices.

In terms of network interconnection, China has built multiple cross-border land optical cable systems with Vietnam, Laos, and Myanmar, and has achieved network interconnection with more than ten ASEAN operators, building a comprehensive regional digital channel. In terms of computing power infrastructure, the Nanning Wuxiang Cloud Valley AI Intelligent Computing Industrial Park plans to build the "China-ASEAN 10,000-card computing power cluster", aiming to provide inclusive and cost-effective computing power services for enterprises in the region and break down the computing power barriers faced by developing countries in intelligent transformation. In terms of smart ports and digital logistics, the China-Vietnam Friendship Pass Smart Port has introduced a blockchain evidence storage system and intelligent inspection equipment, improving customs clearance efficiency by 60% [5], providing a successful example for the implementation of China's smart port governance model in ASEAN.

4.2 Underpinned by State Capacity

Complementing infrastructure cooperation, the alignment of systems and policies provides a legitimate basis and institutional guarantee for the transfer of China's digital governance experience. China has always emphasized basing bilateral and multilateral cooperation on ASEAN's own strategic plans, reflecting respect for "ASEAN Centrality" (Table 1).

Table 1 Institutional Framework for China-ASEAN Cooperation in the Digital Economy

Timeline	Cooperation Mechanisms
2018	China-ASEAN Strategic Partnership Vision 2030
2019	The 16th China-ASEAN Expo
2019	ASEAN-China Joint Statement on Synergising the Master Plan on ASEAN Connectivity (MPAC) 2025 and the Belt and Road Initiative (BRI)
2020	Initiative on Establishing a Digital Economy Partnership between China and ASEAN
2021	2021 ASEAN-China Digital Economy Development and Cooperation Forum
2022	Plan of Action to Implement the ASEAN-China Comprehensive Strategic Partnership (2022-2025)
2022	The 5th China-ASEAN Information Harbor Forum
2024	2024 China-ASEAN Digital Cooperation Work Plan
2024	ASEAN-China Joint Statement on Promoting Cooperation on a Sustainable and Inclusive Digital Ecosystem
2025	2025 China-ASEAN Digital Cooperation Work Plan
2025	Protocol Upgrading the ASEAN-China Free Trade Agreement (ACFTA 3.0)
2026	The 6th ASEAN Digital Ministers' Meeting (ADGMIN)

Source: Compiled by the author based on online materials.

At the institutional level, both sides have continuously promoted the consultation and alignment of digital governance rules through multi-level dialogue platforms such as the China-ASEAN Leaders' Summit, the China-ASEAN Digital Ministers' Meeting, and the ASEAN Regional Forum (ARF). China and ASEAN countries have signed several bilateral digital cooperation agreements. The upgraded Protocol to the China-ASEAN Free Trade Area 3.0, signed in 2025, includes a dedicated chapter on the digital economy and clarifies the "tiered management mechanism for cross-border data flows," laying a legal foundation for the integration of cross-border digital governance rules.

4.3 Using Technical Standards Promotion as a Link

The deeper value of the cross-border transfer of China's digital governance experience lies beyond simple technology export; it strengthens the endogenous driving force of digital governance in ASEAN countries through capacity building. Unlike the political conditions attached and the solidification of technological dependence commonly found in Western aid models, China-ASEAN digital cooperation is centered on long-term talent cultivation and localized capacity building, essentially fostering self-reliance through capacity building.

In terms of talent cultivation, China continuously supplies digital technology talent to ASEAN countries through scholarship programs, intergovernmental technical training projects, and joint enterprise training models, and supports the cultivation of local digital talent in ASEAN. The China-ASEAN Artificial Intelligence Innovation Cooperation Center attracted 16 companies from six countries, including Vietnam, Thailand, and Singapore, to sign agreements and settle in, promoting cross-border technology cooperation and talent mobility. Regarding the migration of application scenarios, China's rich governance application scenarios formed in domestic practice-including cross-border e-commerce platform operations, mobile payment ecosystem, smart city construction, digital rural governance, and internet government services-provide ASEAN countries with referable and implementable digital governance models. For example, the cooperation between PayNet in Malaysia and WeChat Pay has supported more than 2 million shops to conduct cross-border payments. The China-Malaysia "Digital Identity Mutual Recognition" pilot project was first implemented in Guangxi, demonstrating the cross-border applicability of China's mobile payment governance experience [5].

4.4 Multi-Party Collaborative Governance as a Mechanism

One of the characteristics of China's digital governance model is the construction of a collaborative governance mechanism framework involving multiple stakeholders-government, enterprises, and society-under the leadership of the government [6]. This characteristic is also reflected in the way China-ASEAN digital governance cooperation is promoted. The government plays the role of a guide in top-level design and rule-making, while enterprises are the main force in technological innovation, market application, and cross-border cooperation (Table 2).

Table 2 Some Chinese Enterprises' Cooperation Projects with Southeast Asian Countries

Country	Partner Company	Content
Thailand	Huawei	Collaborating with AIS and True to build a nationwide 5G network, providing end-to-end solutions
Indonesia	Alibaba Cloud	Establishing a local data center to support the QRIS payment platform
Philippines	China Telecom and DITO	China Telecom provides funding, experience, and equipment support
Malaysia	Huawei	Establishing local nodes and data centers to build a cloud computing platform
Singapore	Tencent Cloud	The Singapore data center serves as a core node in the Asia-Pacific region, supporting business in multiple Southeast Asian countries

Source: Compiled by the author based on online materials

5 CONCLUSION

This study systematically examines the key features, current practices, and pathways of the cross-border transfer of China’s digital governance experience within the framework of China-ASEAN digital economy cooperation. It argues that the transferability of China’s digital governance model is rooted in an integrated governance approach that combines development, security, and inclusiveness. This approach demonstrates considerable relevance to the digital transformation needs of many developing countries, particularly those seeking to balance technological advancement, governance capacity building, and digital security [7]. The study further identifies four interconnected pathways through which China’s digital governance experience contributes to regional digital development: infrastructure development, policy coordination, capacity building, and multi-stakeholder collaboration. Through these mechanisms, China-ASEAN digital cooperation has generated knowledge exchange, technological cooperation, and institutional learning opportunities, forming a cooperation approach that differs in emphasis from traditional development assistance models [8].

However, the cross-border adaptation of China’s digital governance experience also faces a number of challenges. Uneven levels of digital development among ASEAN member states, fragmented regulatory frameworks, geopolitical uncertainties, and differences in approaches to data governance may constrain deeper cooperation. Addressing these challenges requires a more flexible and inclusive governance framework that respects the digital sovereignty and institutional contexts of individual countries. Looking ahead, further advancement of China-ASEAN digital governance cooperation requires continued efforts to improve mechanisms for cross-border data governance, promote regulatory coordination in areas such as electronic authentication and digital identity recognition, and strengthen regional digital security cooperation. By balancing technological collaboration with institutional diversity and mutual trust, China-ASEAN digital cooperation can contribute to a more resilient and inclusive regional digital ecosystem and support the broader vision of a shared digital future.

COMPETING INTERESTS

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