

Research on the Cultivation of the Digital Economy Ecosystem in China and Indonesia Under the Background of the Belt and Road Initiative

| Xiong Yuning^{1,*} | Fu Zehao² | Yang Xin³ | Xu Siyuan⁴ | Tang Shiqin⁵ |

^{1,2,3,4,5}School of Economics,
Xihua University, Chengdu,
China

*18535627@qq.com

409291038@qq.com

1533450200@qq.com

1611730335@qq.com

1423746283@qq.com

ABSTRACT

The development of the digital economy in Indonesia China cannot be separated from the construction of the ecosystem. The current design of the digital economy ecosystem mainly revolves around policy guidance, production collaboration and infrastructure, but the focus of digital economy development in Indonesia and China is different. Through policy features and comparative analysis, interviews with Indonesian enterprises and consumers, this paper identifies the problems in the development of China's digital economy ecosystem in Indonesia and proposes countermeasures based on market guidance, policy support, new economy, infrastructure development and public governance, with a view to providing useful references for the development of the digital economy ecosystem in China and Indonesia.

KEYWORDS

digital economy ecosystem; belt and road; indonesia; china

INTRODUCTION

The digital economy has brought new growth opportunities for economic recovery in the face of the global epidemic and has become a new driving force for the country's economic growth. As China's "One Belt, One Road" initiative continues to advance and be implemented, Indonesia has become a strategic pivot point along the "Maritime Silk Road" due to its large population base, vast market prospects, unique geographical conditions, and abundant natural resources. Indonesia is a highly active market in the digital economy, and the contribution of the digital economy to the global economy continues to increase. According to the Global Digital Economy Development Report 2021, Indonesia's digital economy is the largest in Southeast Asia, accounting for 40% of the entire Southeast Asian market. Indonesia is supporting the development of its digital economy as an important part of the country's "Maritime Axis City". In terms of the growth rate of the digital economy, China's digital economy grew by 9.6% year-on-year, ranking first in the world.

China's digital economy's complete industrial system and rich application scenarios promote the application of digital technology in the field of production; On the other hand, in the development of Indonesia's existing digital economy, the main areas of Indonesia's

digital economy market are e-commerce, online tourism, online media, financial technology and so on. there are still digital infrastructure, industrial ecology, public services, scientific and technological innovation, and other problems that need to be solved.

At present, the issues of digital facilities, industrial ecology, public services, and technological innovation presented by the Indonesian digital economy market are all within the research scope of the digital economy ecosystem. The research on the digital economy is mostly conducted from the perspective of the hierarchical design and construction elements of the digital economy ecosystem construction and practice. The current research on the digital economy ecosystem mainly focuses on six dimensions including market collaboration, science, and technology innovation, human resources, infrastructure, supporting services, and public governance (Han, 2021), both digitalization and industrialization (Jin, 2020), and should pay attention to the application of digital economy in social governance and public services, etc. (Chen, 2022).

How to effectively design a digital economy ecosystem in line with the reality of China and Indonesia needs to be systematically researched. This paper intends to analyze the problems in the development of Indonesia's digital economy from the analysis of China-Indonesia policy and the analysis of the current situation of Indonesia's digital economy, and explore the feasible solutions for the cultivation of China-Indonesia digital economy ecosystem, in order to enrich the research extension of the digital economy sphere of both countries, which is of great theoretical significance and can also bring a good market for Chinese enterprises seeking outward investment and help the development of Indonesia's digital economy, which is of great practical significance.

RESEARCH METHODS

In this paper, we analyze and compare the digital economy-related policies of China and Indonesia, starting from the general background of international cooperation, national macro policies, local specific policies, etc. We use feature analysis and comparative analysis for the comparative analysis study of digital economy policies between Indonesia and other countries. On the other hand, we mainly used documentary analysis and interview research according to the current situation of the developing digital economy in Indonesia.

Policy Analysis

In the policy analysis, this paper mainly adopts feature analysis and comparative analysis. We collected not only national-level policy information but also digital economy policy information from some local governments in the process of policy sample collection in China and Indonesia. In the analysis process, we analyzed more than 30 representative major policy documents and measures issued by the Chinese and Indonesia governments in digital economy-related fields, which are shown in Figure 1, spanning the years from 2015 to 2022, with a total text volume of more than 286,000 words.

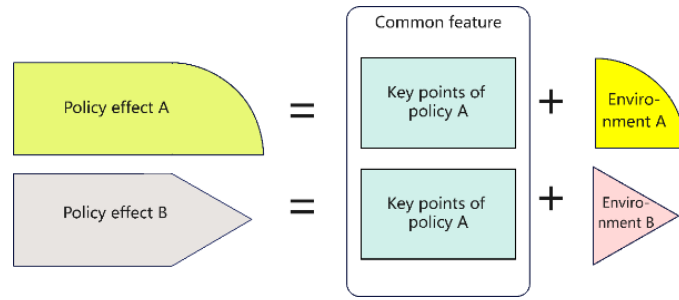


Figure 1. Feature analysis method

The comparative analysis in Figure 2 uses the research theoretical framework to compare the similarities and differences between different types of policy instruments under the research theoretical framework. According to the screening of research samples, we compare and analyze the effect of the corresponding plate policies of the digital economy of China and Indonesia, and get the high-quality policy experience.

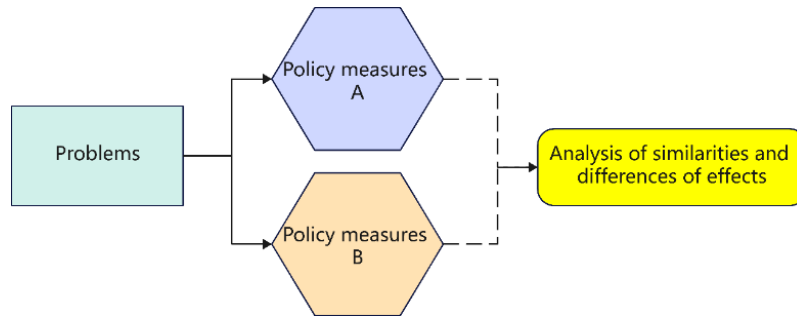


Figure 2. Comparative analysis method

Interview Research

The purpose of this interview study is to fully understand the current situation and problems of Chinese and Indonesian consumers and operators regarding the current development of the digital economy in their countries. In order to ensure the effectiveness and efficiency of data collection, the data collection of this study was conducted through interviews. The interview questions covered basic information, infrastructure, national policies, collaborative development of industry, and market cultivation research under the segmentation of people; the interviewees were mainly Chinese and Indonesian digital economy consumers and practitioners; the interviews were mainly conducted through hello talk software, Shopee sellers, and Indonesian Chinese community.

RESULTS AND DISCUSSION

The Basic Framework of Indonesia China Digital Economy Ecosystem

The design of digital economy ecosystem elements mainly considers segmented industries and contents. The digital economy ecosystem generally includes six dimensions, such as policy support, market collaboration, new economy, infrastructure, supporting services, and public governance. Combining the realistic basis of digital economy development in China and Indonesia, this paper systematically carries out the logical framework design of China-

Indonesia digital economy sphere from a three-dimensional and circle perspective, as shown in Figure 3.

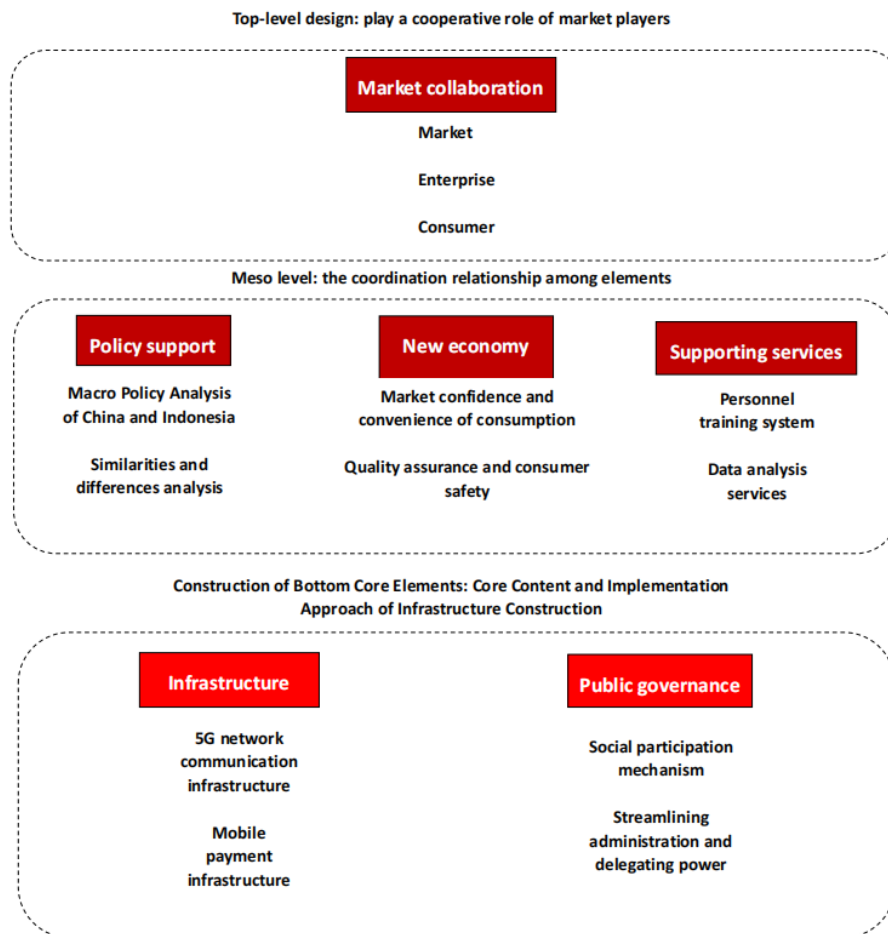


Figure 3. Framework of Indonesia-China digital economy ecosystem

Top-Level Design of Indonesia-China Digital Economy Ecosystem

Market Collaboration

Market collaboration is a relatively stable eco-economic chain established between markets, enterprises and consumers. The deepening of the degree of production linkages and the expansion of the range of production linkages are both manifestations of the development of market collaboration(Khan and Ximei, 2022).

In the construction of Indonesia's Chinese digital economy ecosystem, market collaboration connects markets, businesses, and consumers closely, in order to make markets better collaborated, businesses better developed, and consumers more convenient.

Digital Economy Market

a. Indonesia Digital Economy Market:According to the Southeast Asia Digital Economy Report 2021 released by Google and Temasek, Indonesia's digital economy reached US\$70 billion in 2021 (US\$47 billion in 2020), accounting for 40.82% of Southeast Asia's digital

economy market size, with total digital economy online transactions accounting for 4% of Indonesia's GDP, higher than the average for Southeast Asian countries.

b. China Digital Economy Market: In 2021, China's digital economy development made a new breakthrough, the digital economy scale reached 45.5 trillion yuan, accounting for 39.8% of GDP, the scale of industrial digitalization reached 37.18 trillion yuan, the digital transformation of industry continued to deepen and accelerate development.

c. Overview of some investment and cooperation projects in the digital economy between China and Indonesia.

Table 1. Chinese companies' investments in Indonesia

Chinese enterprises	Collaborative projects
Alibaba	1. In 2015, Alibaba signed a cooperation agreement with the Indonesian DOKU to track the payment status of Indonesian customers and simplify the payment process.
	2. In 2016, Alibaba released the Indonesian version of AliExpress: holding Lazada, the largest e-commerce platform in Southeast Asia, and increasing its capital by \$1 billion, the main market of the e-commerce is Indonesia.
	3. Alibaba Cloud established the first cloud computing center in Indonesia in 2018, the second cloud computing center in 2019, and plans to build a third cloud computing center in 2021.
Ant Financial	In 2018, Ant Financial and Indonesian media group Emtek jointly funded the establishment of the Indonesian version of Alipay. In 2019, Ant Financial participated in the Series D financing of Indonesian consumer staging company Akulaku.
Tencent Group	1. In 2013, a joint venture was established with PT GlobalMediacom Group in Indonesia to promote WeChat to the Indonesian social media market.
	2. In July 2017, Tencent Group invested US\$1.5 billion in Indonesian delivery and ride-hailing service provider Go-jck, with the aim of opening up the Southeast Asian mobile terminal service market.
Baidu	1. Strategic cooperation with Indonesia Tourism Board in February 2017. Helping Indonesian online travel settle in China
	2. Developed the Indonesian Mobile App Store and cooperated with 70% of app developers in Indonesia.
	3. Reached commercial cooperation with 70% of local e-commerce platforms in Indonesia to provide traffic services for them
JD.com	JD.com launched JD.com's Indonesia station, set up warehouses in Pontianak, Surabaya and Jakarta, and established Java Ekspres Transindo Logistics Company. As of 2019, JD.com's Indonesia station has covered more than 20 sub-categories of more than 130 sub-categories, and has provided services for more than 20 million users.

As shown in Table 1, through the cooperation opportunity of the 21st Century Maritime Silk Road, China can strengthen its investment in Indonesia's infrastructure, talents and education, especially in high-end digital manufacturing fields such as artificial intelligence, Internet of Things and VR.

Consumers

Following the outbreak of the new coronavirus epidemic, 21 million new digital consumers were added to Indonesia between 2020 and the first half of 2021, and 72% of these new digital consumers came from non-urban areas - a very positive sign that the penetration of

the digital economy in Indonesia is increasing and small and medium-sized cities, and even remote villages are being reached with services.

Based on the consumer data we interviewed, it can be seen that Indonesia's domestic e-commerce trading platforms are relatively well developed and local brands have a high share of the domestic market. However, in cross-border e-commerce compared to international cross-border e-commerce platforms in the country consumer usage rate is not high.

Mid-Level Design of China's Digital Economy Ecosystem in Indonesia

Policy Support

According to the selected policy section, the text is screened and collected in the policies of China and Indonesia, through machine analysis and manual processing, a total of more than 30 representative major policy documents in related fields of digital economy issued by the Chinese and Indonesia governments have been sorted out, and the total text volume has reached more than 286000 words.

Table 2. Comparative analysis of similarities and differences between Chinese and Indonesia digital economy policies

Differences and similarities □□□□ Policy Board	Same point		Differences	
Market Collaboration	1	Both focus on digital transformation	1	Degree in industry chain coordination
	2	All attach importance to the construction of digital centers	2	The specific degree of implementation measures
	3	Unified command of digital economy development with a leadership group	3	Industrial park construction subject
	4	Focus on developing foreign trade activities in the digital economy	4	Degree of local adaptation of the policy
New Economy	1	Digital economy to help improve urban governance	1	The degree of attention to the development of intelligent technology
	2	Both encourage the promotion of electronic payments-	2	Developing attitudes toward digital payment methods
			3	Development-level planning of urban digital governance policy
Infrastructure	1	Emphasis on telecommunications network communication infrastructure development	1	Telecom network communication infrastructure development levels and directions

	2	Focus on digital economy transportation and logistics facilities construction	2	Transportation and logistics infrastructure development levels and directions
			3	The degree of attention to the digital transformation of infrastructure
Supporting Services	1	Continuously improve the ecological construction of the digital economy	1	Digital economy ecological construction focus point
	2	Encourage the development of digital services	2	Level of government regulation
	3	Hope to improve people's digital literacy	3	Digital Economy Talent Education System
	4	Aware of the importance of bridging the digital divide	4	Attach importance to the degree of theoretical system for solving the digital divide
	5	Access to more digital economy talent	5	Local adaptation of relevant policies
	6	Emphasis on the protection of data security	6	The soundness of relevant laws
	7	Hope for better regulation of the digital economy industry		
Public Governance	1	Understanding the importance of public governance	1	Conditions of participation in public governance

Indonesia China Digital Economy Policy Analysis Similarities

a. Market Collaboration element: Both China and Indonesia attach importance to the digital transformation of traditional business sectors to help improve efficiency and service quality with digital technology.

b. Infrastructure element: Both countries are aware of the importance of infrastructure such as telecommunication networks, transportation, and logistics to the development of digital economy and have proposed development plans accordingly; both countries have also actively launched new electronic payment schemes to encourage electronic forms of payment and provide payment tools for the development of the digital economy.

c. Supporting Service element: Both countries use digital technology to provide information and intelligence support for urban development, enhance the intelligence level of the city, and provide better urban services for the people.

d. Public Governance element: Both the Chinese and Indonesian governments understand the importance of public governance at levels relevant to the development of the digital economy.

Indonesia China Digital Economy Policy Analysis Differences

a. Market Collaboration element: China is more focused on the coordinated development of the industrial chain and the comprehensive development environment

The Indonesian side follows the general development framework of ASEAN and is more lacking in specific development work plans.

b. New Economic element: China already has a more mature big data computing and analysis storage capacity, and China's intelligent technology development surface is more extensive. Indonesia's current big data computing and analysis capabilities are still in the process of building and developing a cultivated environment that is not yet sound.

c. Infrastructure element: China's infrastructure network facilities conditions and transportation logistics conditions are more complete, more future-oriented new generation of transportation logistics relationship network architecture. In contrast, the infrastructure construction policy currently proposed by the Indonesian government is still at the level of popularization, and the construction of transportation and logistics is still being vigorously improved.

d. Supporting Service element: China's supporting service elements policy focuses on finance, real estate, and business coaching; Indonesia's supporting service elements focus on ASEAN and more on digital economy talents.

e. Public Governance element: China is interested in inviting all parties in society to participate in governance, deep participation in the construction and operation of smart cities, and the development of a new ecology; Indonesia is just starting to build in this area.

In summary, it can be seen that Indonesia's digital economy policy orientation is more oriented towards transforming and optimizing the basic environment for digital economy development; China's digital economy policy orientation is more oriented towards continuously further optimizing the existing digital economy infrastructure and improving as much as possible the digital economy supporting services demanded by the market, both countries attach great importance to the creative role of new digital economy elements such as data in digital economy industry collaboration, technological innovation, and other related fields.

New Economy

The new economy includes new industry and new scenario, which refers to the new production, new transportation, new manufacturing, new consumption, new payment, new service and other new aspects of the economic development innovation in the context of the current environment, and the formation of "new forms of business, new business processes, new industrial organizations, new value chains, new scenarios of foreign trade" after the upgrading and adjustment of industrial elements. "It is one of the driving forces for the development of the digital economy, and is a tangible expression of the rapid development of the digital economy. It has a relatively broad market prospect.

New Economy Development in Indonesia

This time, the subject group conducted an interview survey with Indonesian respondents in the form of interviews, through which the subject group learned about Indonesia in the new economy sector, business forms, platforms, innovation and other related situations. The main manifestations are.

a. E-commerce: E-commerce development leads the digital economy in Indonesia in 2021. Currently, the major sectors of Indonesia's digital economy market are e-commerce (online retail), online travel, online media, internet finance, application and game market, online advertising, etc. E-commerce is currently the most attractive area for investors in the Indonesian market.

b. Internet Finance: In recent years, Indonesia's Internet finance has grown exceptionally rapidly. In terms of the types of fintech companies, online payments and online lending account for a relatively large share of the Indonesian fintech ecosystem. The number of fintech companies registered with the Indonesian Financial Supervisory Authority (OJK) increased to 249 in May 2019, including 108 P2P lenders (43%) and 65 online payment companies (26%).

c. Online media consumption: In 2019, Indonesian consumers' digital consumption behavior became more prevalent, with massive growth in active users in social media, online music, and streaming video.

The development of China's new economy

Under the influence of policy, technology, epidemic and other environment, China's digital economy has emerged many new business models and new scenarios, mainly focusing on "new forms of business, new value chains, new progress in foreign trade" in a total of 3 areas.

a. New forms of business: China's new forms of business are mainly reflected in the fields of online education, Internet healthcare, and unmanned economy. Online education has complemented the imbalance between regions of education resources because of its online nature, and has also promoted the transformation of old education industry brands. China's Internet Data Center (IDC) business revenue has maintained high growth.

b. New chain of value: In the new chain of value, the increase of data circulation and sharing attributes not only fits the national concept of "sharing", but also brings extraordinary economic benefits in terms of added value, which makes data a new chain of value for the new scenario and new business of e-commerce.

c. New scenes of foreign trade: 90% of the number of overseas warehouses in China spread across Asia and Europe, North America, etc.; the emergence of foreign trade comprehensive service enterprises, the establishment of a standardized service system; cross-border e-commerce makes foreign trade a new trade model: bonded maintenance and offshore trade.

Supporting services

Supporting services refers to the integration of service capabilities by service providers to meet the diversified and diverse service needs of customers, so that customers can get as much service value as possible from the same service provider. Through the group's preliminary understanding and the current interview, Indonesia does have the problem of uneven development of supporting services in the process of new economic development. The main focus is on the cultivation of professional talents, the construction of free trade zones, and the development of data analysis services; in terms of talent cultivation, the

interview also shows that the scarcity of economic and management talents and infrastructure construction talents is relatively high. In terms of data analysis services, through data analysis, enterprises can adapt to the market faster, and individual sellers can further understand the consumer habits. Further improvement of data analysis services is one of the keys to improve the current supporting services.

Bottom-Level Design of Indonesia-China Digital Economy Ecosystem

Infrastructure

Network communication infrastructure

The Indonesian government attaches great importance to the infrastructure development of the country's network communication industry, and has made it a key strategic area for national connectivity in the 15-year Medium Term Construction Plan for the National Economy (2011-2025), and is committed to promoting universal fiber optic network coverage, broadband network connectivity within Indonesia, and accelerating the Internet with other key areas convergence and development(Simionescu& Hu, 2022). Currently, 4G services are well developed in Indonesia, and the main networks used by Indonesian consumers are 4G and WIFI, and the impact of 5G will be prominent in Indonesia's Internet development, remote technology expeditions, smart homes, and smart cars in the future, taking into account the current trend of digital economy (Wang et al., 2022).

Mobile payment infrastructure

With the strong development of digital payments and the penetration of Internet penetration in Indonesia, the mobile payment market in Indonesia is active and has great potential for development. According to the survey data of Indonesian market research institute jakpat in 2018, there are more than ten digital wallets in the Indonesian digital payment market (Lin and Zhou , 2020), and it is concluded from the data that Go-pay, OVO, and Tcash are the most commonly used digital wallets by Indonesian consumers, with usage indices as high as 68.2%, 47.9%, and 47.6%, respectively. Consumers' choice of using mobile payment tools is diverse and personalized, and convenience and practicality become the main reasons for Indonesians to choose electronic payment transactions (Putra et al., 2022).

Logistics and transportation infrastructure

Logistics transportation infrastructure status

Indonesia is the largest archipelagic country in the world with highly dispersed territories and vast territorial waters, and as the main body of economic activity in Indonesia, the railroad transport infrastructure is distributed on the islands of Sumatra and Java (Yu, Jenyan, 2017). According to the data, the total volume of railroad cargo transported in Java and Sumatra is up to about 50,000 kilotons per year. Logistics using land transport services in Indonesia remains the backbone of the transport service industry. Road transport accounts for 70-80% of the total annual freight handled within Indonesia. The share of the road freight market has remained between 40-50% of the total logistics market size in terms of value/currency. Also due to Indonesia's special geography with large distances between islands and provinces, 90% of Indonesia's export goods are transported by waterways. In

addition to this, the shipping industry has a vital role in Indonesia's export trade for the development of the digital economy, and shipping assumes a larger share of Indonesia's logistics.

China-Indonesia Cooperation Railway Project

In 2015, China won the bid for the Yawan high-speed railway project and signed a contract with Indonesia for the construction of the Jakarta to Bandung high-speed railway. The 142-kilometer Yawan Express Rail Link, which connects Jakarta, the capital of Indonesia, to Bandung, is a landmark project of the Belt and Road Initiative and practical cooperation between China and Indonesia, and will significantly shorten the travel time between the two places when it is opened to traffic. The completion of the Yawan Express Railway will not only mark the booming development of Indonesia's modern public transportation infrastructure, but will also promote the economic development of the areas along its route and boost the economic benefits of tourism. It will also further deepen the economic and trade relations between the two countries and strengthen cooperation in the areas of infrastructure and production capacity.

Public Governance

Public governance in the digital economy is mainly reflected in the strengthening of collaborative governance and improving the new pattern of multi-governance. A new digital economy governance pattern with multiple participation and effective collaboration among government, platforms, enterprises, industry organizations, and the public has been established to form a governance synergy, encourage healthy competition, and maintain a fair and efficient market. Currently, Indonesia carries out public governance mainly through relevant associations or markets so that the government can mobilize all available resources in an integrated, efficient, and effective manner.

Problem Identification

Indonesia's domestic digital economy environment can still be optimized, and the cross-border e-commerce market is worthy of attention

Indonesia's domestic digital economy environment still suffers from problems such as more serious homogenization of market products and small differences. In the cross-border e-commerce market, respondents are concerned about the difficulties in approving cross-border business and the restrictions of rules for policy approval in conducting cross-border business. Therefore continuous optimization of Indonesia's digital economy environment with a focus on the development of cross-border e-commerce is an important direction to cultivate the digital economy market.

The services of the new economy and public governance elements still need to be improved

At present, Indonesia's policy chain services are more focused on the three elements of production collaboration, infrastructure, and supporting services segment, concentrating on supporting the construction of the basic development environment of the digital economy,

and in the systemic design, more attention can be paid to the new economy, public governance elements, and other aspects to form a full range of efficient development.

Professional personnel training needs to be strengthened, and data analysis services need to be improved

On the issue of professional talent training and guidance, Indonesia needs to build an effective talent training and guidance system as soon as possible to meet the demand for professional talent for the development of the new economy. For enterprises, individual sellers, and consumers, data analysis has a certain effective role in the development of the new economy, so guiding the construction of data analysis services and further improving supporting services will also further promote the construction of the new economy.

Infrastructure development still needs focus

From the interviews, consumers still have doubts about 5G usage scenarios, traffic tariffs, technical implementation and other issues. At the same time, in the face of the existing level of mobile payment technology, there are still some technical barriers in terms of information protection, account anti-theft brush and other issues. In addition, Indonesia's logistics costs account for a high proportion of the annual GDP, and logistics should pay attention to logistics transportation infrastructure issues, logistics market issues, etc.

Optimising information feedback mechanisms and credit-based participation systems to be improved

When the Indonesian government conducts policy formulation, the communication targets chosen to obtain market information are mainly focused on associations, academics, and representative enterprises, and there are fewer channels to obtain information about a large number of bottom-end consumers and SMEs that actually participate in the digital economy. In addition, the rapid growth of Indonesia's digital economy, the deepening participation of various actors, and the credit issues among co-regulation actors all require continuous attention.

CONCLUSION

Cultivate Indonesia's digital economy environment, focusing on the development of a cross-border e-commerce market

China Indonesia can further strengthen investment cooperation, focusing on co-business and market cultivation at the level of cultivation of Indonesia's digital economy environment and the development of cross-border e-commerce. Cooperate with the market-oriented, multi-angle role of the government, pay attention to the activation of market vitality, establish complete market trust, enhance product reliability, and other aspects of efforts to improve. Encourage the construction of data analysis service platforms, and suggest setting up official and reliable third-party quality inspection agencies to jointly establish relevant quality inspection organizations to further improve the authority and credibility of quality certification; through the combination of both government and enterprises to protect the rights and interests of consumers and improve consumer trust.

Implementation of a strong chain plan in terms of the new economy and public governance elements

The Indonesian government can continue to optimize all aspects of the supply chain, carry out continuous optimization in production collaboration, infrastructure, and supporting service elements, encourage market innovation, and promote the establishment of a sound and sustainable development of a multifaceted and collaborative public governance pattern for Indonesia's digital economy.

Build a professional talent training system

With the huge demand for talent in Sino-Indonesian cooperation, it is suggested to establish a mechanism for cultivating talents based on university alliances, establish binational cooperation in translation, business, and digital economy, establish cultivation and guidance of professional talents, explore the flow and introduction mechanism of talents from both countries, improve support services in terms of talents, and promote the construction of a talent cultivation system.

Investing in infrastructure development

First of all, the focus of cooperation between China and Indonesia can be actively implemented to build base stations, fiber optic cables, and other infrastructure in order to create a strong digital infrastructure(He, 2021). At the same time, it will accelerate the settlement of 5G technology, realize more 5G application scenarios on the ground, and use 5G to accelerate the digital transformation of various industries; for mobile payment, the technology sector needs to improve the level of technical security to effectively protect the property of users. In addition, increase publicity to improve mobile payment penetration and create a universal mobile payment consumption scene (Song and Yang, 2021); for logistics, continuous optimization can be done in digital logistics infrastructure, technical innovation in the logistics market, and development of digital logistics operation model.

Sound and effective social participation mechanism and digital social credit credential system system

The two governments can expand and improve the scope and quality of the public opinion feedback window service, and improve the effective social participation mechanism, especially the development of third-party service agencies to realize the advanced economic model of promoting progress together. In addition, the Indonesian government can consider guiding the establishment of a sound system of big data enterprise information management and social credit credentialing system to promote the establishment of reliable government-enterprise linkage and industry linkage for information sharing and common governance.

ACKNOWLEDGMENT

The article was supported by research on the cultivation of the digital economy ecosystem in China and Indonesia under the background of the Belt and Road Initiative by the Confucius Institute at the Universitas Sebelas Maret, Indonesia, and Xihua University, China.

REFERENCES

- [1] Chen Wanyi, Zhu Jiayi, Cen Shiyun.(2021) Research on the development path of Shanghai's digital economy ecosystem in the context of regional synergy[J]. *Shanghai Urban Management*,30(05):65-72.
- [2] FENG, Lang. (2022). The Innovation of Consumption Code Innovation Set Off by The Sharing Economy: Xianyu Platform as An Example: 共享经济掀起的消费符码革新——以闲鱼为例. *MANDARINABLE : Journal of Chinese Studies*, 1(1), 37–41. <https://doi.org/10.20961/mandarinable.v1i1.330>
- [3] Han Yapin.(2021) The connotation, characteristics and development path of the digital economy ecosystem[J]. *International Economic Cooperation*,(06):43-51.
- [4] He, Y. . (2021). A research on development strategy of china's digital economy in the post-covid-19 era. *Modern Economics & Management Forum*, 2(5).
- [5] Jin Aihua.(2020) Research on high-quality development of digital economy from the perspective of ecosphere - taking Wuxi City, Jiangsu Province as an example[J]. *China Price*,(12):18-20.
- [6] Khan, A., & Ximei, W. (2022). Digital Economy and Environmental Sustainability: Do Information Communication and Technology (ICT) and Economic Complexity Matter?. *International journal of environmental research and public health*, 19(19), 12301. <https://doi.org/10.3390/ijerph191912301>.
- [7] Lu, Y., & Zhu, S. (2022). Digital economy, scientific and technological innovation, and high-quality economic development: A mediating effect model based on the spatial perspective. *PloS one*, 17(11), e0277245. <https://doi.org/10.1371/journal.pone.0277245>.
- [8] Lin Mei, Zhou Suyu. (2020) Digital economy development in Indonesia and digital economy investment cooperation between China and Indonesia[J]. *Asia-pacific Economic Review*,(03):53-64-150.
- [9] Putra, R. L., Setiawan, M., Hussein, A. S., & Yuniarinto, A. (2022). Perceived Digital Value Toward Continuous Intention to Use Among Mobile Payment Users During Pandemic Outbreak. *Frontiers in psychology*, 13, 892821. <https://doi.org/10.3389/fpsyg.2022.892821>.
- [10] Qian, Yujie. (2022). The Collision of New Media Era and Chinese Culture: 新媒体时代与中华文化的碰撞. *MANDARINABLE : Journal of Chinese Studies*, 1(2), 69–74. <https://doi.org/10.20961/mandarinable.v1i2.446>
- [11] Simionescu, M. & Hu, M. P. (2022). The Insertion of Economic Cybernetics Students on the Romanian Labor Market in the Context of Digital Economy and COVID-19 Pandemic.
- [12] Song Xi, Yang Ming. (2021) Study on the current situation and countermeasures of rural mobile payment development [J]. *Economic Research Guide*,(33):86-88.
- [13] TEMASEK, BAIN&COMPANY. (2021). e-Economy SEA 2021——Roaring 20s: The SEA Digital Decade.
- [14] Wang, C., Liu, T., Zhu, Y., Lin, M., Chang, W., Wang, X., Li, D., Wang, H., & Yoo, J. (2022). Digital Economy, Environmental Regulation and Corporate Green Technology Innovation: Evidence from China. *International journal of environmental*

- research and public health, 19(21), 14084. <https://doi.org/10.3390/ijerph192114084>.
- [15] Yuan F. (2022). Research on the Impact Evaluation of Digital Finance on the Synergy between Economic Development and Ecological Environment. *Journal of environmental and public health*, 2022, 1714609. <https://doi.org/10.1155/2022/1714609>.
- [16] Yu Zhenyan. (2017) Current situation of infrastructure construction in Indonesia and the path of cooperation between China and Indonesia under the "Belt and Road" initiative[J].
- [17] Zhang, L., Pan, A., Feng, S., & Qin, Y. (2022). Digital economy, technological progress, and city export trade. *PloS one*, 17(6), e0269314. <https://doi.org/10.1371/journal.pone.0269314>