

The Digital Economy Supports the Policy Recommendations of the “Belt and Road” Construction

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Abstract—With the advent of the digital age of the Internet, the development of the digital economy has become an important engine for the development of the new economy, making new contributions to the construction of the “One Belt and One Road” initiative, but the challenge of the digital economy supporting the “One Belt and One Road” construction cannot be ignored. This article is divided into four parts. First of all, the research background and significance of this paper are introduced. Secondly, it expounds the connotation of the digital economy of the thesis. Thirdly, it puts forward the challenges that the digital economy will help to build the “One Belt and One Road”. Finally, it summarizes the policy recommendations for the digital economy to help build the “One Belt and One Road”. The latter two chapters are the key research sections and provide theoretical basis for the construction of the “One Belt and One Road”.

Keywords: digital economy, “One Belt and One Road”, challenges and opportunities

I. INTRODUCTION

President Xi Jinping pointed out at the 2nd “One Belt and One Road” International Cooperation Summit that we should conform to the development trend of the fourth industrial revolution, jointly grasp the opportunities of digitalization, networking and intelligent development, and jointly explore new technologies, new formats and new models. Explore new growth kinetics and development paths, build the Digital Silk Road, and innovate the Silk Road[1]. Nowadays, the construction of the “Digital Silk Road” promotes the integration of the digital economy and the “One Belt and One Road” and has become a new bright spot and driving force for cooperation between China and the countries along the “One Belt and One Road”. The digital economy has been the focus of attention in all countries in recent years. More and more countries are paying attention to the “One Belt and One Road” through digital economic construction, vigorously promoting the construction of the digital silk road, sharing the transformational dividend of digital transformation, and “taking the Belt and Road”. Infused with new elements, the digital economy involves a wide range of fields, high

penetration rate, strong availability, and a strong “inclusive” concept, which can help countries along the “Belt and Road” to break through the status quo of traditional economic development and establish a new economic system facing digitalization. The digital economy has helped the construction of the “Belt and Road” to promote the deep integration of the Internet and traditional manufacturing industries along the route, enhance the productivity of local enterprises and drive economic growth. The flow of data and information has narrowed the “digital divide” of countries along the “Belt and Road”, and the development of the digital economy will have a positive impact on the production and life of countries along the route.

Developing countries along the “Belt and Road” account for the main body, and the backward digital economic service system and social and economic environment seriously restrict economic development. China has already possessed the world's advanced technological strength and application level in the digital economy. Huawei's research results in the field of 5G mobile communications are leading the world; China's e-commerce is developing at a high speed, China became the most developed e-commerce country in the world in 2018, and online retail sales accounted for 17.5% of the total retail sales of consumer goods, ranking first in the world. As of June 2019, the number of Internet users in China reached 854 million, an increase of 25.08 million compared with the end of 2018. The Internet penetration rate reached 61.2%, an increase of 1.6 percentage points from the end of 2018. The number of mobile Internet users in China reached 847 million, an increase of 29.84 million from the end of 2018. Netizens use mobile phones to access the Internet at a rate of 99.1%, an increase of 0.5 percentage points from the end of 2018[2]. China's development experience has a strong demonstration role and reference for countries along the route. The development of the digital economy is conducive to reducing the digital gap between countries along the line while promoting the construction of the “Belt and Road” and promoting economic and social digital transformation. In the process of building the “Belt and Road”, through the development of the digital economy, the economic exchanges and cooperation

between the countries along the “Belt and Road” will be promoted, and the construction of the “Belt and Road” will be effectively promoted, and the countries along the “Belt and Road” will be fully interconnected and jointly developed and developed. The community of destiny is of great significance.

Entering the digital age, the development of the digital economy has promoted political and economic prosperity. At the same time, the Internet has increasingly become an important platform for human activities. Ayres RU (2004) proposed in the paper that the institutional and social frameworks of many rich countries are very supportive of sustainable innovation and the adoption of ICTs, making information technology a possible product and service, and playing an important role in the modern economy. The concept of “digital economy” [3]. It can be seen that the state's institutions and policies play a vital role in the development of the economy. Therefore, the study of the digital economy's policy recommendations to support the “Belt and Road” construction is not only conducive to improving the level and quality of China's economic development, but also promoting mutual benefit. The construction of the digital silk road for healthy and sustainable development.

II. THE CONNOTATION OF THE DIGITAL ECONOMY

First, the core of the digital economy. The digital economy was first introduced in the 1990s by the Economic Cooperation Organization (OECD). Bowman, J. P (1996) pointed out that the rapid development of the Internet has brought us into the digital economy, which has changed the way we conduct business and daily life [4]. Carlsson B (2004) argues that the new economy or the digital economy is dynamic, not static. It's more about new activities and products than about higher productivity [5]. British scholars Miller and Wilsdon (2001) argue that the digital economy should not be limited to technology integration and e-commerce, and it is understood as a technological revolution, a new economic form [6]. Since the beginning of the digital economy, the digital economy has gradually matured, but there is currently no unified explanation for the concept of the digital economy. Tian Li (2017) analyzed the concept of digital economy in various countries and concluded that with the vigorous development of the digital economy, the differences in understanding of the digital economy will be more prominent. Under the different understanding, seek common ground while reserving differences and understand each other's differences. It will undoubtedly contribute to the cooperation and development of countries in the digital economy [7]. The definition of the digital economy in this paper is based on the Digital Economy Development and Cooperation Initiative released by the G20 Hangzhou Summit in 2016. The digital economy refers to the use of digital knowledge and information as key production factors, modern information networks as an important carrier, and information. The effective use of communication technology as a series of economic activities that are important drivers of efficiency improvement and economic structure optimization [8]. Huang Maoxing (2017) believes that this definition clarifies three aspects of the concept of digital economy: First, the fundamental difference between the digital economy and the previous economic form - digital knowledge

and information become vital production factors; second, the digital economy The foundation and carrier of development is the modern information network; Third, the driving force for the development of the digital economy is the ever-changing information technology such as the Internet, the Internet of Things, and cloud computing [9].

Second, the scope of the digital economy. The components of the digital economy mainly include: digital industrialization, industrial digitalization and digital governance. The related industries of digital industrialization mainly include the information and communication industry, including the electronic information manufacturing industry, the Internet industry, the telecommunications industry, and the software and information technology service industries. The industrial digitalization is mainly reflected in the fact that the production quantity and production efficiency of traditional industries have been improved to some extent due to the application of digital technology, and its new output is an important part of the digital economy. Digital governance mainly includes innovation of governance model, using digital technology and information technology to improve the governance system and enhance comprehensive governance capabilities. Developing the digital economy is the future direction that leads the global economic development and quality change.

III. THE DIGITAL ECONOMY HELPS THE CHALLENGES OF THE “BELT AND ROAD” CONSTRUCTION

A. Weak digital awareness

Liu W (2015) pointed out that the “Belt and Road” is a new model of international regional economic cooperation proposed by China to promote the deepening of economic globalization. It will not only have a profound historical impact on China's social and economic development and comprehensive opening up, but also The economic development of countries along the line has a positive effect and has contributed to the changes in the international economic landscape [10]. However, the traditional thinking and system management of countries along the “Belt and Road” are difficult to change in the short term. The awareness of national governance and serving the country's digitization has not been recognized by the public, which seriously affects the digital economy to promote the development of the “Belt and Road” .

B. Digital talent shortage

Chen Yubo (2018) pointed out that under the background of the global digital economy entering accelerated innovation and deep integration, the digital transformation of China's economy has entered a new stage of expansion from the demand side to the supply side. The development focus of the digital economy has shifted from the consumption field to the production field. Compared with the “demographic dividend” of mass Internet users, the digital transformation of the consumer sector will rely more on “talent dividends” [11]. At present, China's top-notch digital skills are in short supply, cross-border talents with digital technology and industry experience are in short supply, and the cultivation of junior digital skills talents cannot keep up with the growth of demand.

These problems bring digital transformation and international development of enterprises. Great challenge. It can be seen that the number of digital talents in the countries along the "Belt and Road" is even more insufficient. The shortage of digital talents has become one of the major problems in the development of the "One Belt, One Road" for the digital economy.

C. *different levels of Internet infrastructure*

Nowadays, data has become a new production factor. Mastering and collecting data information resources has become the most important part of development and innovation. The Internet is the main platform for obtaining data. Based on empirical data, Cheng Hao (2016) studied the development pattern of "One Belt, One Road" informatization, and found that there is a large "digital divide" in the construction of information infrastructure in the countries along the "Belt and Road", and the development of information industry in various countries is extremely Equilibrium[12]. Chen Liang (2011) pointed out that in countries with poor information infrastructure, the cost of collecting information and searching services by market participants is relatively high, and the transaction range between vendors is also controlled within a certain range by the transaction cost [13]. The construction of information infrastructure has become a new fulcrum for stimulating the economy. However, the level of information infrastructure is very inconsistent along the "Belt and Road" countries. The Internet infrastructure in Singapore, Malaysia and other countries is relatively good, and the digital economy is growing faster than the global average, but most other countries along the line are relatively Behind the gap, there are big gaps in Internet infrastructure, emerging technology development, and Internet security.

D. *Constant threats to Information security*

In the digital economy environment, information exchange has become particularly important, but information security has not been guaranteed, and information security in various countries faces complex and serious problems. Problems such as misuse of data, invasion of privacy, cyber fraud, theft of trade secrets, monitoring of other countries' data, and jeopardizing information security in other countries often occur, making countries pay more attention to security issues in the digital age. In February 2014, General Secretary Xi Jinping further emphasized at the first meeting of the Central Cyber Security and Informatization Leading Group chaired: "Network security and informatization are related to national security and national development, and to the working lives of the broad masses of the people. The major strategic issue is that without cybersecurity, there is no national security. Cybersecurity and informatization are all about the whole world in a country [14]. With the advancement of the "Belt and Road" initiative, Information exchange and cooperation have been continuously strengthened. These cooperations are closely related to the economic, political, cultural and security of various countries. Network information may contain not only trade secrets, but also some state secrets. Therefore, a high standard of information security systems is needed more.

E. *The national conditions of each country are complex, and there are many factors that interfere with economic development.*

Lingliang, Zeng (2016) pointed out that the international and regional situations faced by countries along the "Belt and Road" are becoming more and more complicated. The degree of social and economic development, political system, national culture and religious beliefs of the countries along the "Belt and Road" vary widely, and conflicts sometimes occur. The war is constantly changing and it poses a huge challenge to economic construction [15]. For example, the "Ukrainian crisis" in 2014, the fierce internal struggles of Islamic countries, and so on. In addition, political instability in developing countries is also a significant uncertainty that hinders economic development. Whether or not the new party's commitment to the predecessor's commitment can be guaranteed cannot be guaranteed, and the use of foreign investment projects for political purposes has occurred. Chen Kai (2018) pointed out that in the turbulent period of the international economic environment, developing countries have deficiencies in economic development and the economic risk prevention mechanism is not perfect, and there may be risks such as economic recession, currency depreciation, exchange rate turmoil and exchange restrictions [16]. For example, Venezuela is the country with the largest proven oil reserves in the world. Its currency was once one of the strongest currencies in the world, but it has become the most economically dangerous place. All of the above factors have greatly hindered the digital economy from promoting the "Belt and Road" construction.

IV. THE DIGITAL ECONOMY TO HELP THE "ONE BELT, ONE ROAD" CONSTRUCTION POLICY RECOMMENDATIONS

A. *Strengthen digital thinking and improve national digital literacy*

Digital thinking is a huge change in consciousness and behavior habits. It is a brand-new thinking mode, which is the process of thinking about enterprise development, product innovation, and creating value in the context of cloud computing, big data, and mobile internet. Countries should fully realize the importance of digital thinking. The premise of digital thinking is that it must understand what the digital economy is. Therefore, governments can formulate relevant policies according to their national conditions, and publicize the meaning and role of the digital economy to the public or with universities. Cooperation, training in lectures related to the digital economy, etc. Under the premise of respecting the history, culture and religious beliefs of countries along the "Belt and Road", we will promote the stable and orderly development of digitalization along the line.

B. *Cultivate digital talent at the international level to ensure the original power of the digital economy*

Digital talents are urgently needed to solve the "Belt and Road" construction. The single talent cultivation structure, low level of internationalization, and insufficient interaction with talents along the route are the main problems. In order to better develop the "One Belt, One Road" strategy, we must solve

the shortage of digital talents. First of all, we should increase the training of digital talents and expand investment in innovation, so as to avoid the problem of the shortage of digital talents. Secondly, it should rely on major national projects, encourage school-enterprise cooperation, and support higher education institutions to cooperate with enterprises to cultivate high-skilled digital talents. In the end, we should not only introduce national talents, but also encourage Chinese digital talents to go out and learn advanced foreign technology. Especially in the “Belt and Road” countries, appropriate special policies for international digital talents should be given to encourage them. Establish a research project related to the digital economy and the “Belt and Road” cooperation, and jointly cultivate digital talents along the countries along the “Belt and Road” to achieve balanced development of talents, thereby narrowing the digital divide between countries. Establish a research project related to the digital economy and the “Belt and Road” cooperation, and jointly cultivate digital talents along the countries along the “Belt and Road” to achieve balanced development of talents, thereby narrowing the digital divide between countries.

C. Increase investment and improve next-generation information infrastructure

Information infrastructure is the premise of the development of the digital economy, and the digital economy is a new kinetic energy for the development of the “Belt and Road”. The development level of national communication along the “Belt and Road” is very different, especially the lack of information infrastructure and the relatively backward development level of the telecommunications industry. Some countries even have difficulties in making calls and watching TV, and so on. The level of information infrastructure of the countries along the “Belt and Road” countries is different, and different cooperation should be carried out according to the different national conditions of each country. In some countries with poor network infrastructure, countries with better business innovation environment are the priority areas for information construction and cooperation in the “Belt and Road” construction. Improve the digital economy's development potential in these countries and regions by making full use of the superior business and innovation environment in these countries and improving their information infrastructure. Countries with relatively poor information infrastructure and unsatisfactory business and innovation environments need to first improve the design of top-level cooperation systems by strengthening consultation and cooperation at the national government level, and laying the institutional foundation for cross-border exchanges and cooperation in the digital economy.

D. Improve network security awareness and build an information security system

Some countries along the “Belt and Road” have insufficient awareness of network security, and urgently need to popularize network security awareness and build an information security system. Teece D J pointed out that after the information is digitized, it can be easily moved between networks and between long distances with reliable

reproducibility [17]. Therefore, we should speed up the safe environment of the “Belt and Road” construction, combat international cybercrime, and jointly build a good network security system that is conducive to the digital economy to promote the “Belt and Road” development. From the perspective of international cooperation, data security threats are a common problem faced by human beings in the era of globalization. Countries should thoroughly study and closely guard against the risks that cybersecurity may pose to the digital economy to promote the “Belt and Road” construction, restrict the global spread of networks and digital crimes, increase international multi-bilateral coordination and multinational law enforcement cooperation, and actively participate in building a digital economy. The international rules framework coordinates the conflicts and contradictions among stakeholders in the Internet field and strives to create a new pattern of international governance of cyberspace security.

E. Accelerate the development of the digital economy and promote economic integration and development

The development of the digital economy will play a crucial role in the reconstruction of the world economic map triggered by the information revolution. The digital economy of most countries along the “Belt and Road” has started to develop slowly late, which has hindered the development of the national economy to a certain extent. The countries along the “Belt and Road” countries have different national conditions and should try their best to reduce the impact of dynamic factors on economic development. First, under the premise of respecting the culture and laws of each country, increase direct investment in countries along the route. Second, build a good ecological development of the industry. In the context of the digital age, technologies such as cloud computing, big data, and artificial intelligence determine the level of development and application of major industries. It is necessary to strengthen core technology research and enhance technological innovation capabilities. Cultivate a group of first-class enterprises with international competitiveness and build a team of high-quality digital talents. Finally, under the “One Belt, One Road” strategy, we will increase international exchanges and cooperation, so as to achieve the integration of the “Belt and Road” and the inclusive development of ethnic areas. When the government uses the digital economy to develop the “Belt and Road”, it must pay attention to its timeliness and stage, and adopt different policies at different times.

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