

China Ambition Through Digital Silk Road and Its Impact to Indonesia

Hizra Mariss

Universitas Paramadina, Jakarta, Indonesia

*Correspondence Author: hizra.marisa@paramadina.ac.id

Abstract

Focusing on the Digital Silk Road (DSR) initiative, this study analyzes the China's ambition through DSR and its impact to Indonesia, particularly in developing digital connectivity in Indonesia. DSR is often viewed as China's strategy to expand geopolitical influence and strengthen its authoritarian governance model through collaboration in the digital field. This study uses the theory of cooperation and cyber diplomacy as an analytical framework to understand the dynamics of this bilateral relationship. Through this theoretical lens, it will examine how China, with its ambition to become a "cyber superpower", manifests its aggressiveness in digital cooperation with Indonesia. This study will identify emerging patterns of cooperation, including digital infrastructure investment, technology transfer, and cyber capacity building. In addition, it will analyze various challenges in developing digital connectivity in Indonesia, such as issues of cybersecurity, data privacy, technological dependency, and potential impacts on digital sovereignty. Thus, this research offers an initial insight into the complexities and implications of China-Indonesia cooperation in the context of DSR, and how it shapes Indonesia's digital landscape.

Keywords: Digital Silk Road; Digital Connectivity; Cyber Security; Bilateral Relationships

1. Introduction

China's Digital Silk Road (DSR) is closely related to the glory of the Silk Road of the People's Republic of China (PRC) in the past. This inspired Chinese President Xi Jinping to reopen the route. China's ambition, which is called a mega project, was announced in 2013. Chinese President Xi Jinping called it "The Silk Road Economic Belt and the 21st-century Maritime Silk Road", which aims to produce several economic routes connecting more than 60 countries around the world.

The Silk Road project is divided into two, namely land and sea routes. The land trade route is called the Economic Belt Route which crosses from the European continent to Central Asia and East Asia. While the sea route is called the Maritime Silk Road which connects Chinese ports with various ports along the route from the South China Sea, Indian Ocean, Persian Gulf, Red Sea to the Gulf of Aden (Armandhanu, 2017).

Therefore, this study aims to examine the China's ambition through DSR and cooperation between China and Indonesia,

seen from the aspect of its challenges in developing digital connectivity in Indonesia. In addition, this chapter attempts to identify various forms of China-Indonesia cooperation in the digital sector and analyze the obstacles faced in strengthening national digital connectivity in Indonesia.

The discussion will begin with an explanation of the conceptualization of DSR, what forms of China-Indonesia Cooperation in DSR and an analysis of the challenges in developing Digital Connectivity in Indonesia. In this study, the DSR project is often seen as China's attempt to expand its influence and strengthen its authoritarian model, which is manifested through various cooperation, in this case it will use the theory of cooperation and cyber diplomacy as a theoretical approach. It is hoped that with this theoretical knife it will be seen more clearly how China with its aggressiveness has consecrated itself as a "cyber Superpower" (CINIC, 2018).

2. Method

This study uses a descriptive qualitative approach to explore in depth how the Chinese digital silk road program in Indonesia through cooperation in the Digital field. This study will also elaborate the Cyber Diplomacy as th main theory. Data Collection on this study were collected through various library sources such as journals, news, statements by the Heads of State in both countries and so on.

3. Result and Discussion

Conceptualization of the Digital Silk Road: China's strategy in spreading digital influence

The PRC has emerged as a new great power in recent decades, after several years of being quite closed off from the international world, precisely in 1878 the PRC opened up and reformed its economy. In the same year, the PRC's GDP growth averaged more than 9% per year, and more than 800 million people have been lifted out of poverty.

Its fierce competition with the United States (US) has made China a country known for its aggressiveness in the international world. Even in his book entitled "Is China a Status Quo Power? International Security", Johnston completely questions whether China really wants to change or damage the liberal international order that benefits them, or will China be satisfied with just the status quo? (A. Johnston, 2003).

To answer that question, of course, we need to examine the background of foreign policy, especially President Xi Jinping's, regarding his goal of getting a place for China, namely One Belt, One Road (OBOR), which then along the way turned into the Belt and Road Initiative (BRI). This project is a mega project that covers 62.3% of the world's population or 6.6 billion people as the starting point of the project in 2015 (Bruni, 2019).

In 2015, China's National Development and Reform Commission issued the first official blueprint on the BRI Initiative. The

blueprint contains the creation of an 'Information Silk Road', which will include the construction of bilateral and transcontinental cable networks, as well as increasing satellite lines (Shen, 2018). In President Xi Jinping's speech at the opening of the BRI Initiative Cooperation Summit Forum in Beijing in May 2017, he stressed the need for cooperation in innovation-driven areas such as the digital economy, AI, nanotechnology, quantum computing, big data, cloud computing and smart cities. These activities are part of what he called the 21st century 'Digital Silk Road'.

From the speech, it can be seen that the DSR program is part of the BRI. Therefore, the term digital connectivity is often used to describe the same thing, because what President Xi Jinping said is still in its early stages. It is implied that DSR was created to bring a new form, namely data.

Several countries are part of the BRI and DSR as recipient countries, including Indonesia. With the interpretation of Indonesia's digital economy in 2024 which is estimated to reach a Gross Merchandise Value (GMV) of US\$ 90 billion or around Rp. 1,420 trillion, up 13% compared to 2023, making Indonesia a potential country in increasing and developing digital connectivity. This is what makes China invest heavily in Indonesia's digital services, which not only focus on government to government (G2G), government to business (G2B), but also on business to business (B2B).

The DSR project consists of four projects: (1) China's investment in overseas digital infrastructure, (2) Emphasis on creating advanced technologies that are essential for world economic power and military services, (3) DSR encouraging e-commerce through virtual free trade zones, this is based on the idea that China understands how important economic interdependence is to exert global influence, and (4) The importance of creating an ideal international digital environment,

diplomacy and digital governance, especially through multilateral organizations.

The four Chinese DSR projects sufficiently illustrate that China is very ambitious to dominate international digital, but what are the challenges of digital connectivity, especially for Indonesia, as one of the recipients of BRI and DSR?

To answer this question, of course we must examine how the integration of digital elements in China's foreign policy. As stated by Yang Guobin (2008) in "A Chinese Internet? History, Practice, and Globalization?", that the use of the internet in China, although a form of democratization, internet censorship in China is an effort to "watch out" the Chinese government for the open flow of information. For this reason, the Chinese government, in protecting digital freedom, issued three technological security policies, namely: 1) maintaining and strengthening competitive advantages; 2) handling lagging sectors and resources; and 3) gaining a pioneering advantage in emerging technologies. As far as President Xi Jinping's statement states:

"The world is currently undergoing profound changes that have not been seen in a century, and technological innovation is one of the key variables (President Xi Jinping, Beijing, October 17, 2020)

To achieve such technological innovation, China not only needs to become a strong and innovative technological power, but also must effectively block and counterbalance strategic competitors, especially those that currently have a technological advantage over China, namely the United States. China is also pushing for mastery of innovation in the fields of technology and science.

Cooperation between Indonesia and China through DSR is part of an effort to strengthen China's influence through digital connectivity in Indonesia, as well as improving Information and Communication

Technology (ICT) infrastructure. The expansion of China's influence in the digital and global economic fields must of course involve the development of internet infrastructure and technology investment in various countries, including Indonesia. It is hoped that this cooperation can also be utilized by Indonesia to modernize a more efficient and integrated digital communication and network system.

In an effort to turn technological superiority into economic growth, China has adopted a tailored approach to its technological development. Policies such as Dual Circulation, Made in China 2025, and Document 79 2022, set a clear deadline of 2027 to reduce dependence on Western technology in the ICT sector, driving specific strategies in various technological areas (Kennedy, 2024).

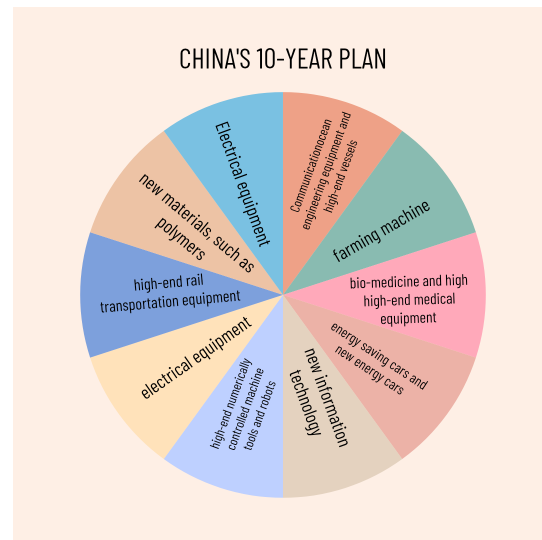


Figure 1. China's 10-year plan

Source: The State Council of the PRC (2015)

Based on Figure 1 above, China is trying to realize the 10-year plan and to improve the competitiveness and resilience of high-tech industries, several countries have adopted an "industrial policy" plan where China through the Micro Influencer Marketing (MIC) 2025

strategy has a digital infrastructure plan, even reaching USD 1.4 trillion. The Institute for Security and Development (2018) reported that China will build 40 national innovation bases and 48 provincial innovation bases by 2025 to provide partnerships and innovation.

One of China's obsessions in DSR is the improvement and utilization of Artificial Intelligence (AI) technology. To accelerate the development of AI, China has taken several significant steps by establishing the AI Innovation Center. Aiming to be a leader in the new era of AI technology development at the global level. This reflects China's commitment to optimizing the potential of AI in various aspects of life.

China's most significant AI development is head to head with the US. China created DeepSeek, a generative AI that is predicted to surpass some of its Western counterparts. In addition to its much cheaper development costs, technically, DeepSeek is claimed to be easier to use and provides much more accurate and complete answers.

In addition, several local media reported that China in July 2017 launched the "New Generation Artificial Intelligence Development Plan" (AIDP), there are three stages that China is carrying out to achieve full supremacy in the field of AI by 2030, namely (1) In 2020 the Chinese government targets to match Western countries in AI development such as the US and Europe, especially in deep learning AI, (2) In 2025, the Chinese government has the ambition to become a global leader in AI theory, hardware, and other industrial applications. In this phase, China will emphasize the importance of integrating AI into key sectors such as health, finance, and manufacturing around the world through its cooperation programs, (3) In 2030, the Chinese government targets to be the world leader in AI. China will set global standards in AI, own the majority of AI-related patents, and take the lead in developing the most advanced AI

applications worldwide.

China's ambition has slowly but surely been realized in various countries, especially in the Southeast Asian region. Where China is pouring out funds of 300 billion yuan in 2025 to encourage the development of AI, with an industrial scale target (Sari, 2024). In addition to expanding its influence in the western world, China also sees the Southeast Asian market as a potential target in the utilization of AI, one of the potential Southeast Asian countries is Indonesia.

China's DSR in Indonesia: Challenges in Developing Digital Connectivity in Indonesia

Wang Yong, a Vice Chairman of the 14th Chinese People's Political Consultative Assembly (CPPCC) in the Digital Silk Road Development Forum at the World Internet Conference held on April 15-16, 2024 in Xi'an stated:

"This year, for the first time, the Digital Silk Road discussion was held in Xi'an, a city that was once the capital of the ancient Silk Road. This shows that technology brings many new opportunities and as the world's largest developing country, China is also pushing for digital integration of technology." (Wang Yong, Xi'an April 15, 2024).

DSR is expected to be a forum for exchanging information in the field of technology so that digital technology can benefit more countries and more people. Including in Southeast Asian countries. DSR consists of four main types of programs that focus on technology: physical infrastructure in the digital field, digital trade, development of advanced technology and international norms in cyberspace (Cheney, 2019).

There are several collaborations that China has carried out in Indonesia, as a long road to realizing DSR. However, the

discussion in this chapter focuses on digital cooperation between China and Indonesia in 2015 to 2025. To encourage further economic growth in China, China needs to increase its investment in sectors that can meet the growing demand in the future, including in the digital field, both in terms of infrastructure and technology (Febrian & Marisa, 2024). The DSR project in Indonesia focuses on various aspects, such as promoting and developing 5G technology and investing in the e-commerce and financial technology (fintech) sectors in the country. A report from Google revealed that Indonesia, along with Singapore, is one of the main destinations for private investment, especially in the e-commerce sector.

Investment opportunities are also seen in the growth of Indonesia's digital economy, which is estimated to reach \$77 billion in 2022. Indonesia, together with Vietnam, has reaffirmed its commitment to becoming a major investment destination in the development of the digital economy. As the country with the largest population in the region, Indonesia is at the center of attention in the development of infrastructure and the digital economy, especially for China through the DSR project.

In the DSR project, China seeks to accelerate its cyber vision through Indonesia's increasing demand. The increasing need of the Indonesian people for reliable digital infrastructure and the e-commerce sector has encouraged China to invest heavily in Indonesia's digital services. China's investment in Indonesia is not only focused on government to government (G2G), government to business (G2B), and also business to business (B2B). Under the auspices of the CAC (Cyber Administration of China) and BSSN (National Cyber and Crypto Agency), Indonesia and China are cooperating in the cyber sector. During the visit of the Chinese Ministry of Foreign Affairs to Indonesia, Wang Yi emphasized the

importance of collaboration between the two countries to protect digital security and build a community committed to cybersecurity (GT Staff Reporter, 2021).

The Chinese and Indonesian governments have even agreed to sign a Memorandum of Understanding aimed at enhancing cyber cooperation in Indonesia. This cooperation covers four main issues that are the focus of attention. First, the information and communication technology strategy sector, which focuses on the development of national infrastructure and increasing awareness of cybersecurity in the decision-making process. Second, capacity building that includes relevant operations and methods for cyber risk management, comprehensive data analysis, information security, network security, digital forensics, and emerging challenges in the cyber realm. Third, joint research on cyber defense and security, especially those related to cryptographic operating systems, cyber law, cyber terrorism, and cyber counterintelligence. Finally, there are plans to carry out joint operations in cybersecurity. This Memorandum of Understanding is the first step in expanding cyber cooperation, by involving various domestic actors from both countries in the DSR project. Although investment and cooperation in the cyber sector have grown rapidly in both countries, this Memorandum of Understanding further strengthens China's commitment to enhancing its cyber strength in Indonesia, with the support of the local private sector.

The interaction between domestic and international aspects is very diverse, covering G2G, G2B, and B2B relationships. This dynamic makes cooperation in the DSR project between Indonesia and China, which is greatly influenced by conditions at the domestic level of each country. The DSR project in turn creates significant interaction in the foreign policy-making process, especially in Indonesia. Because domestic factors play an important role in the

formulation of foreign policy, the parliament and business sector in Indonesia have a great influence on the results of this DSR project.

At the Zhongguancun Forum 2025 Annual Conference recently held in Beijing, 01.AI CEO and chairman of Sinovation Ventures China, Kai-Fu Lee stated that 2025 will be the first year of large-scale AI implementation by China. China has signed more than 30 digital cooperation agreements with ASEAN countries over the past two years with digital technologies such as Beidou and AI. One of them is with Indonesia. AI cooperation and innovation between China and ASEAN is planned to be implemented in Indonesia, and has even been fully supported by the Indonesian Ministry of Communication and Digital Ministry.

There are several challenges faced by both countries in implementing the DSR program, namely how to synchronize the private sector or business world. If these challenges can be faced, it will be a determining factor that influences the development of DSR in Indonesia. Huawei, as a leading business entity, is involved specifically in the field of digital infrastructure and plays a role as one of the important partners for the Indonesian government to encourage the acceleration of digital transformation in this country. Together with the Indonesian government, Huawei collaborated in establishing an innovation training center in Jakarta with the aim of accelerating the development of human resources in the Indonesian ICT sector (Kominfo, 2015). Huawei, which is one of the main players in China in building digital infrastructure, initiated a three-party collaboration between Huawei, BSSN, and IT Del, which shows Huawei's dedication to building digital infrastructure in Indonesia, as well as developing digital human resource skills and transferring cutting-edge technology (Huawei, 2021).

The industrial sectors in Indonesia and

China also collaborate in developing DSR projects in Indonesia. E-commerce, as one of the leading sectors in Indonesia's digital economy, has become a major area that has received a lot of investment from the Chinese private sector. Alibaba, one of the largest digital companies in China, has made various investments in Indonesia, including Lazada, Tokopedia, and Bukalapak. The company took over Lazada in 2016 with an investment of \$1 million, and funded Tokopedia with an investment of \$1.1 million in 2017, where Bukalapak also received a 17.4% stake from Ant Group. Another giant in the digital economy from China, Tencent, has also made significant investments in the virtual and digital sectors in Indonesia. Tencent has injected funds into various sectors in Indonesia's digital economy, including Gojek (ride-hailing and food delivery services) with an investment of \$1.2 million; Traveloka (tourism sector) which received funds of \$500 million; and JD.ID (e-commerce). (Anggit, 2018).

The DSR project can be considered more advanced or more successful than the BRI. This assumption arises because the DSR can be in line with government policies and the needs of the private sector and has little public attention, so it gets support from the DPR and ministries. With full support from the private sector and legislators, the Indonesian government can implement the DSR project originating from China more efficiently. On the other hand, the BRI project faces many serious challenges, including issues related to foreign workers, technology transfer, budget burdens, and problems for small and medium enterprises. The Chinese private sector has invested heavily in digital businesses in Indonesia. This condition creates positive opportunities for both countries, where China's interest in DSR encourages better development and accelerates the demands of the Indonesian government and domestic sector to carry out digital transformation.

If we look at China's aggressiveness in implementing DSR, the relationship between domestic factors in the two countries and its impact on the effectiveness of digital policies in Indonesia, then the analytical tool that can be used is the English School diplomacy theory. This theory describes Cyber Diplomacy, and will also analyze the concept of Cooperation related to China and Indonesia. The literature presented aims to understand how China positions itself and integrates its cyber strategy in order to establish itself as a "cyber Superpower".

China has significantly expanded and deepened its cyber diplomatic activities with many countries, including Indonesia. Annual dialogues have been held and have resulted in closer technical and practical exchanges and joint capacity building through cyber diplomacy. Overall, China has become one of the most active cyber diplomatic actors in the world. China has also carried out many bilateral cooperations with countries in the Southeast Asian region. This aims to further strengthen the security of its information and communications infrastructure and national cyber defense capabilities through close cooperation with other advanced country cyber powers. Other objectives of this cooperation are to protect a free, open and secure cyberspace, to maintain and strengthen international law and Internet governance, and to strengthen trust-building measures for data privacy.

Diplomacy theory originating from the English School views diplomacy as the core of international relations; it is an important institution in the definition and maintenance of global society (Hall, 2006; Neumann, 2002, 2003; Watson, 1982 in Barrinha & Renard, 2017). The choice of Diplomacy theory was made because this theory can provide a basis for explaining the phenomenon of diplomacy that occurs in the cyber environment. In addition, diversity, foreign things, or simply the presence of others, when combined with

the need to live side by side in peace, will require the practice of diplomacy (Hodzic, 2017).

Today, diplomacy has evolved into more than just interactions between states. Jonsson & Langhorne (2004) argue that diplomacy must now encompass "a broader range of relationships and conversations, involving entities such as international and regional organizations—both governmental (IGOs) and non-governmental (NGOs)—multinational corporations, sub-national actors, advocacy networks, and individuals with influence. Moreover, every year, diplomacy continues to expand, even entering unexplored political areas such as climate negotiations or cyber issues (Barrinha & Renard, 2017). This is what China is doing through DSR. China's aggressiveness in pouring trillions of funds into this program is China's way of carrying out its cyber diplomacy, the influence of which is being activated in various regions.

In line with the goal of cyber diplomacy to create peace in the international world, diplomacy must work as a means of international communication. This aims to build common norms and manage international politics in order to reduce conflict in relations between countries. If we relate this to diplomacy in the cyber world, then cyber diplomacy must act as a means of international communication. This is important to create common cyber norms and manage cyberspace in order to reduce tensions in the area. Cyber diplomacy is also increasingly being carried out, the term cyber diplomacy is starting to be used by leaders in international politics to describe changes in the way diplomacy is carried out in the digital age (Hodzic, 2017). The basic idea behind the development of cyber diplomacy norms is that if applied consistently, then over time, a binding international legal system will emerge. These norms require countries to collaborate, so that they can produce stability

in the cyber world (Roche, 2019).

Cyber diplomacy carried out by the state is at two levels, namely the Ministry of Foreign Affairs and embassies spread throughout the world (Manor & Segev, 2015). By operating at these two levels, countries can adapt their foreign policy messages and national images according to the characteristics of local audiences, such as history, culture, values, and traditions to achieve their foreign policy goals and the image they want to project. China, through the National Development and Reform Commission of China, is actively cooperating with Indonesia. This is based on the history of the route between Indonesia and China via the Silk Road. Since the beginning of the first century AD, in addition to trade routes crossing land, there have also been trade routes that took place in the waters. The route commonly crossed by traders connects China with India through the territory of Indonesia. The sea route connecting China and Indonesia is the Strait of Malacca which leads to India. From that point, some traders continue their journey directly to the Persian Gulf, passing through Syria to the Mediterranean Sea. Indonesia, through the Strait of Malacca, has historically been heavily involved in the spice trade, where this position is considered strategic because it has abundant natural resources.

Cyber diplomacy in the context of international relations means the use of digital technology and cyber networks by states and non-state entities to achieve diplomatic goals, protect national security, and address global issues related to the internet and cyberspace. With advances in technology, conventional diplomatic practices have transformed into the cyber realm, where interactions between states now take place not only through physical channels, such as embassies and face-to-face meetings, but also via digital platforms and online communications. Cyber diplomacy encompasses various components,

including cybersecurity arrangements, internet governance, digital rights, international law enforcement related to illegal cyber activities, and the use of information technology as a means to influence public perception and build international reputation. States employ cyber diplomacy to establish international norms regarding behavior in cyberspace, including security standards and regulations on the use of digital data.

DSR seeks to digitally connect China with countries that join the BRI through the construction of digital infrastructure between China and these countries using technology originating from China. However, some researchers refer to DSR as a transnational digital infrastructure network that focuses on China. China has two main goals, namely reducing dependence on foreign technology and strengthening its domestic technological capabilities. First, China wants to use BRI, especially DSR, to gain the advantage of being a pioneer in the digital field, while also encouraging China to become a leader in global digital technology development. In other words, DSR is China's effort to achieve technological dominance. China has invited large technology companies, both public and private, to get involved in the DSR project to achieve this goal. Second, China realizes the economic and military value of achieving technological dominance. Its technological superiority will strengthen both its economic and military strength.

The DSR, which is essentially a physical infrastructure project in the digital world, seeks to play a significant role in shaping the digital order worldwide by creating as many digital-related patents as possible and setting standards for digital technologies (such as, for example, 5G standards) and cyber governance at the global level. To achieve this goal, China aims to be at the forefront of digital technology innovation, especially in terms of more advanced digital development. This

includes a strong position in the construction of basic digital infrastructure such as onshore and offshore data cables, 5G (and even 6G) mobile networks, data centers, and a global satellite navigation system operating worldwide.

From Indonesia's side, China's presence through the DSR program will certainly provide new challenges, especially in digital connectivity. Since the Joko Widodo administration, precisely in 2020, the Indonesian government has urged the implementation of Digital Transformation. Given that the cooperation between China and Indonesia in DSR is full of technology, digital economy, AI, and nanotech. Therefore, President Joko Widodo regarding the challenges of Digital Transformation provided several directions, such as (1) Increasing access and improving digital infrastructure, (2) Digital transformation plans in important sectors: government, public services, social assistance, education, health, trade, industry, and broadcasting, (3) Merging national data centers, (4) Preparing the needs of a digital workforce and, (5) Preparing regulations and funds to support digital transformation (Kominfo, 2020).

Of course, for the success of any collaboration, infrastructure development is needed, especially in the readiness of human resources that need to be considered. In this case, the government through the Indonesian Ministry of Communication and Information has designed three steps to improve the capabilities of digital human resources (also known as Digital Talent) in this country. The first step is Basic Digital Skill-Digital Literacy which is intended for the general public. Second, there is Intermediate Digital Skill which is intended for technician and professional level workers. Finally, Advanced Digital Skill is present for leaders in both the public and private sectors.

Although the demand for digital talent is increasing, it does not seem comparable to the

number of digital talents available. Many countries, including Indonesia, still face a significant gap between the need and the number of available digital talents. If we compare Indonesia with seven other Asian countries such as Kazakhstan, Saudi Arabia, Thailand, India, Turkey, and Mongolia, data shows that Indonesia is still ranked sixth with the lowest level of digital competitiveness in Asia. In fact, currently Indonesia is still experiencing a shortage of digital talent, with a difference of 600,000 per year between the number of existing digital talents and demand from the technology sector (Marisa, 2023).

One of the key players in the development and implementation of China's 5G technology is Huawei. This company has become a global leader with 30 percent of the world's market share and more than 35 percent of patents related to 5G technology. This company is also involved in providing 5G infrastructure in various countries, including in Asia, Africa, and Europe. However, Huawei's strength in 5G technology raises concerns about data security and potential digital colonialism. Several countries, especially the US and its allies, accuse Huawei of being a threat to their national security, arguing that Huawei's 5G infrastructure has the potential to be used by the Chinese government for espionage activities (CRS, 2020).

In 2019, the US government officially banned Huawei from operating in the country and restricted the company's access to technology developed by US companies. The situation was made worse by the trade war between the US and China. This decision led to pressure on US allies such as the UK, Australia, and Japan to follow suit in limiting Huawei's role in building their 5G infrastructure (Zhang & Wang, 2021). Unlike US allies, Southeast Asian countries have responded differently. The adoption of Huawei's 5G technology in Southeast Asia has varied significantly, influenced by aspects such as economic, political, and security

factors. Several countries in Southeast Asia have shown a more accommodating attitude towards collaborating with Huawei. In 2020, a leading telecommunications company in Singapore decided not to choose Huawei in building its national 5G network, and instead chose Ericsson and Nokia. On the other hand, Vietnam decided to develop 5G technology independently.

Indonesia generally maintains a neutral stance in the geopolitical rivalry between the US and China, emphasizing a policy of non-alignment and multilateralism. While Indonesia has strong economic ties with China, it also values its relationship with the US and seeks to balance its interactions with both powers. The country prioritizes its own national interests and regional stability, often acting as a mediator and promoting cooperation within ASEAN.

The reception of Huawei technology in Indonesia, especially in terms of 5G, is generally positive. This can be seen from the collaboration between Huawei, the Indonesian Telematics Society (MASTEL), and Telkomsel to build a 5G network in Solo Technopark (Kominfo, 2022). In addition, Huawei technology is also applied in strategic government projects such as the Whoosh high-speed train, which relies on a 5G network for its operations. In addition, Huawei has inaugurated the first 5G innovation center in Indonesia and a 5G-based smart warehouse, a collaboration with the Ministry of Communication and Information, Telkomsel, and the Indonesian Logistics Association (Huawei Indonesia, 2023). All of these steps show that despite the controversy at the global level, Huawei is still considered an important technology partner for a number of countries in Southeast Asia. Although the trade war between the US and China is still ongoing, the US is trying to limit the influence of Chinese technology company Huawei to maintain its dominance in the technology industry and prevent China from becoming a

leader in 5G development. This is a broader geopolitical strategy in global technology competition. Some countries choose to follow US policy, other countries such as Indonesia continue to cooperate with Huawei due to economic factors and technological efficiency.

5. Conclusions

The digital cooperation between China and Indonesia that has been established since 2015 to 2025 is increasingly showing harmony. This can be seen from several Chinese companies such as Huawei and ZTE which are heavily involved in several ICT projects in Indonesia. The involvement of Chinese companies in the development of digital infrastructure in Indonesia, either through DSR or other initiatives, will certainly provide benefits to the IT sector for both countries. Even in the midst of the dynamics of the trade war between the US and China, Indonesia continues to establish digital cooperation with China. The participation of Huawei, a large Chinese company in the Palapa Ring Project in Indonesia, plays an important role in reducing the digital divide that occurs in Indonesia. In addition, the demand for broad digital connectivity has increasingly become a priority in recent years, especially during the COVID-19 pandemic when many businesses have switched to online platforms to continue serving customers. Likewise, the education system as a whole has shifted to online learning. All of this is thanks to the digital infrastructure that supports connectivity.

With a population of 270 million and consistent growth of the digital economy, the development of Jakarta's digital environment will enhance China's digital strength. Through the digital silk road initiative, China is trying to shape and influence its power in cyberspace to achieve its goals. Indonesia's great potential in the digital economy and the high demand for digital transformation in the government

sector accelerate China's DSR project with the Indonesian government.

Several challenges are being and will be faced by Indonesia in implementing this DSR program. The Indonesian government needs to strengthen collaboration in Human Resources training. With the increasingly rapid progress in digital transformation, the need for digital talent is also increasing rapidly. China can help developing countries build their own professional, technical, and management teams in skills training. In recent years, China and the countries concerned have explored joint training in the field of digital skills. In addition, it is necessary to increase collaboration in creating digital infrastructure. Because it is one of the important parts of DSR. The Indonesian government needs to actively promote the progress of digital infrastructure, especially in the internet and telecommunications, and strive for infrastructure connectivity between all countries. High-tech companies from China can use their technological strength and investment to help jointly build national facility projects.

6. References

- Acronis. *What is Cyber Security?*
https://www.acronis.com/en-us/articles/what-is-cyber-security/?gclid=Cj0KCQjw4eaJBhDMARIsANhrQABHFNJLUfkJLv-yJBLoX3Y-d9pPkSWr4P83U0MxdUIETomE-RDqhsaAopTEALw_wcB. Diakses pada 09 Februari 2025.
- Ananda, Putra. (2021). Serangan Siber di RI Terus Meningkat, Capai 448 Juta Kasus. Media Indonesia.
<https://mediaindonesia.com/politik-dan-hukum/414225/serangan-siber-di-ri-terus-meningkat-capai-448-juta-kasus>. Diakses pada 25 Januari 2025.
- Anggit, I. (2018). *Dari WeChat Hingga Go-Jek, Ini Gurita Bisnis Tencent di RI*.
<https://www.cnbcindonesia.com/tech/20181114110210-37-42065/dari-wechat-hingga-go-jek-ini-gurita-bisnis-tencent-di-ri>. Diakses pada 24 Januari 2025.
- Alibaba Cloud Press. (2018). *Alibaba Cloud's Indonesian Data Center Commences Operation* | Alibaba Cloud Press Room. Alibaba Cloud. dalam
<https://www.alibabacloud.com/press-room/alibaba-clouds-indonesian-data-center-commences-operation>. Diakses pada 10 Februari 2025.
- Armandhanu, Denny. 'Ambisi Tiongkok Menggarap Jalur Sutra'.
<https://www.cnnindonesia.com/internasional/20141120041914-113-12636/ambisi-tiongkok-menggarap-jalur-sutra>. Diakses pada 17 Februari 2025.
- Bruni, M. (2019). *The Belt and Road Initiative. Demographic trends, labour markets and welfare systems of member countries*. 1–21.
<http://hdl.handle.net/10419/191048%0Astandard-Nutzungsbedingungen>. Diakses pada 15 Maret 2025.
- Cheney, C. (2019). *China's Digital Silk Road: Strategic Technological Competition and Exporting Political Illiberalism* (Vol. 19, Issue July).
- China Internet Network Information Center. (2018). *Statistical Report on Internet Development in China*.
<https://cnnic.com.cn/IDR/ReportDownloads/201807/P020180711391069195909.pdf>
 Diakses pada 10 Februari 2025.
- China Internet Network Information Center. (2018). *Statistical Report on Internet Development in China*.
<https://cnnic.com.cn/IDR/ReportDownloads/201807/P020180711391069195909.pdf>
 Diakses pada 10 Februari 2025.
- CSIS (2018). *Exploring The Potential of Digitalization for Inclusive Socio-*

- Economic Development in Eastern Indonesia*. Jakarta: Centre for Strategic and International Studies.
- Congressional Research Service (CRS). (2020). Assessing the national security risks of Huawei's 5G technology in the United States. Washington, D.C.: U.S. Congress.
- DOI: 10.2139/ssrn.3571938.oud Press. Diakses pada 23 Mei 2025.
- Damuri, Y. R., Perkasa, V. P., Atje, R., & Hirawan, F. (2019). *Perceptions and Readiness of Indonesia Towards the Belt and Road Initiative*.
- Febriawan, Dimas & Marisa, Hizra. (2024). Understanding Indonesia's Cyber Security Policies: Opportunities and Challenges In The Digitalization Transformation Era. *JOELS: Journal of Election and Leadership*, 5(1), 13–21. <https://doi.org/10.31849/joels.v5i1.15908>
- GT staff reporters. (2021). *China, Indonesia sign MoU on internet security amid Washington pressure on Beijing's 5G technology*. Global Times.
- Gupta, Deepak. (2021). "Data localization is now a big part of doing business globally," *Brinknews*. Dalam <https://www.brinknews.com/data-localization-is-now-a-big-part-of-doing-business-globally/>. Diakses pada 20 April 2025.
- Hall, 2006; Neumann, 2002, 2003; Watson, 1982 dalam Barrinha, A., & Renard, T. (2017). *Cyber-diplomacy: the making of an international society in the digital age*. *Global Affairs*, 3(4-5), 353-364. doi:10.1080/23340460.2017.1414924
- Huawei. (2021). *Huawei Strengthens Contribution and Cooperation in Indonesia Cyber Security*. <https://www.huawei.com/en/news/2021/9/tripartite-cooperation-agreement-indonesia-cyber-security>. Diakses pada 15 April 2025.
- Hodzic, N. (2017). *Cyber-Diplomacy: Framing the Transformation*. Thesis, Central European University, Department of International Relations, Budapest, Hungary.
- Jonsson, Christer, Richard T. B. Langhorne. (2004). *Diplomacy*. SAGE Publications Ltd.
- Johnston, A. I. (2003). *Is China a Status Quo Power? International Security*, 27(4), 5–56. <http://www.jstor.org/stable/4137603>. Diakses pada 21 April 2025.
- Keith, R. C. (2018). *Deng Xiaoping and China's foreign policy*. Dalam *Deng Xiaoping and China's Foreign Policy*. <https://doi.org/10.4324/9781315409696>. Diakses pada 10 Februari 2025.
- Kennedy, Scott. 'Made in China 2025' (Centre for Strategic & International Studies, 1 June 2015) <https://www.csis.org/analysis/made-china-2025>. Diakses pada 10 Maret 2025.
- Kominfo. (2015). *Huawei Bangun Pusat Inovasi Untuk Kembangkan SDM di Bidang ICT*. Kementrian Komunikasi Dan Informasi. Diakses pada 10 Maret 2025.
- Kominfo. (2022). *Kolaborasi pengembangan 5G di Solo Technopark*. Retrieved from <https://www.kominfo.go.id>. Diakses pada 22 Mei 2025.
- Konferensi Tahunan Forum Zhongguancun 2025 dalam <https://www.zgcforum.com/en/>. Diakses pada 11 Maret 2025.
- Lewis, James A. (2018). "How 5G will Shape Innovation and Security: A Primer," Center for Strategic and International Studies, 2018.
- Lobell, Steven E., Ripsman, Norrin M., & Taliaferro, Jeffrey W. (2009). *Neoclassical Realism, the State, and Foreign Policy*. Cambridge University Press.
- Marisa, Hizra. (2023). *Memahami Literasi Digital (Digital Literacy) dan Keterampilan Digital (Digital Talent)*

- Masyarakat Indonesia Dalam Era Transformasi Digital*. Dalam buku *Refleksi Politik Internasional Kontemporer Gatot Subroto Kav. 97*. <https://penerbitlitnus.co.id/portfolio/refleksi-politik-internasional-kontemporer-gatot-subroto-kav-97/>. Diakses pada 25 April 2025.
- Morgenthau, H. J. (1978). *Politics Among Nations: The Struggle for Power and Peace (5th ed.)*. Alfred A Knopf Inc. National Development and Reform Commission (NDRC), Ministry of Foreign Affairs (MOFA), & Ministry of Commerce (PRC). (2015). *Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road*. In *White Paper (Issue March)*. https://en.ndrc.gov.cn/newsrelease_8232/201503/t20150330_1193900.html. Diakses pada 25 April 2025.
- Nye, J. (2004). *Soft Power: The Means to Success in World Politics*. United States: Public Affairs.
- Patrick, S. M. (2018). *Belt and Router: China Aims for Tighter Internet Controls with Digital Silk Road | Council on Foreign Relations*. Council on Foreign Relations. <https://www.cfr.org/blog/belt-and-router-china-aims-tighter-internet-controls-digital-silk-road>, Diakses pada 11 Maret 2025.
- PCR The State Council of the People's Republic of China (2015). *Made in China 2025*. http://m.mof.gov.cn/zcfb/201505/t20150519_1233751.htm. Diakses pada 20 April 2025.
- Roche. (2019). <https://www.roche.com/investors/annualreport19.htm#diagnostics>. Diakses pada 20 April 2025.
- Roy, S. L. (1995). *Diplomasi*. Raja Grafindo Persada.
- Sari, Puspita Rita. (2024). *China Bangun Pusat Inovasi AI untuk Meningkatkan Pengembangan AI*. <https://www.cloudcomputing.id/berita/china-pusat-inovasi-ai>. Diakses pada 21 April 2025.
- SCMP. "Is Indonesia becoming too reliant on Huawei?". *Dalam South China Morning Post*. <https://www.scmp.com/week-asia/economics/article/3112634/indonesia-becoming-too-reliant-huawei>. Diakses pada 10 April 2025.
- Shen, H. (2018). Building a Digital Silk Road? Situating the Internet in China's Belt and Road Initiative. *International Journal of Communication, 12*, 2683–2701.
- Sotiriu, S. (2015). *Digital Diplomacy: Between promises and reality*. Dalam C. Bjola, & M. Holmes (Penyunt.), *Digital diplomacy: theory and practice*. New York: Routledge.
- The Jakarta Post*. "Alibaba steps up cloud game in Indonesia," <https://www.thejakartapost.com/news/2019/01/16/alibaba-steps-up-cloud-game-in-indonesia.html>. Diakses pada 20 April 2025.
- Wübbeke, J., Meissner, M., Zenglein, M. J., Ives, J., & Conrad, B. (2016). *Made In China 2025: The making of a high-tech superpower and consequences for industrial countries*. *MERICs Papers on China, 2*, 76. https://www.merics.org/sites/default/files/2018-07/MPOC_No.2_MadeinChina2025_web_0.pdf. Diakses pada 10 Maret 2025.
- Wibisono, A. A. (2018). *Kebijakan Kawasan Siber Asean – Polarisasi UNGGE. National Think Tank on Cyber Diplomacy*.
- World Economic Forum. 2014. *Delivering Digital Infrastructure, Advancing the Internet Economy*. World Economic Forum.

- Wirajuda, M. H. (2014). *The Impact of Democratisation on Indonesia's Foreign Policy: Regional Cooperation, Promotion of Political Values, and Conflict Management*. August, 1–205. http://etheses.lse.ac.uk/992/1/Wirajuda_Impact_of_Democratisation_on_Indonesias_Foreign_Policy.pdf. Diakses pada 10 April 2025.
- Yang, Guobin (2008). "A Chinese Internet? History, Practice, and Globalization?". https://www.researchgate.net/publication/254251223_A_Chinese_Internet_History_Practice_and_Globalization. Diakses pada 10 Maret 2025.
- Zhang, S., & Wang, Y. (2021). Technological influence and competitive advantage in the age of 5G: A cross-national study. *Asian Economic Review*, 12(4), 154-167. Diakses pada 20 Mei 2025.