

# Indonesia's Efforts in Supporting ASEAN Digital Economy by Expanding the Use of QRIS in Southeast Asia

Rifdahita Maitsa Azhar<sup>1</sup>, Dian Azmawati<sup>2,\*</sup>

<sup>1</sup>Departement of International Relations, Universitas Muhammadiyah Yogyakarta, Indonesia

<sup>2</sup>Departement of International Relations, Universitas Muhammadiyah Yogyakarta, Indonesia

**Abstract.** Through the G20 forum, Indonesia raised the issue of digital transformation and collaborated with four ASEAN countries. Indonesia is also taking advantage of ASEAN Digital Economy Framework Agreement (DEFA) formation by advocating the interoperability of digital payment systems in ASEAN. This research aims to find out what efforts Indonesia has undertaken to support the realization of ASEAN's digital economy, focusing from the initial approval of the Local Currency Settlement (LCS) which was approved by Indonesia, Malaysia, Thailand, and Philippines in 2016 until Singapore's joining the Local Currency Transaction (LTC) framework in 2022. The study used a qualitative research method. The data used is secondary data originating from journals, documents, books, and official websites that are able to support research. The findings reveal that Indonesia's efforts in supporting ASEAN's digital economy are carried out by advocating the realization of interoperability in the payment system conducted by Indonesia through cooperation in using QRIS digital payments through the Local Currency Transaction (LCT) framework. *Keywords: digital economy, ASEAN, local currency transaction (LCT), QRIS*

## 1 Introduction

In the current 4.0 era, Indonesia has the potential for digital development in several sectors that can boost the country's economy. One of these sectors is the financial sector, which has adapted greatly to current technological and information developments. Currently, people are more interested in using non-cash payments or digital payments. This form of payment is more effective and efficient for some people already familiar with digitalization. Bank Indonesia recorded that the volume of use of non-cash payments increased from 2012 – 2021 [4]. Therefore, the Indonesian government is now trying to provide facilities that support non-cash payments. In 2021, following the COVID-19 outbreak, ASEAN began to prepare the ASEAN Digital Masterplan (ADM) 2025 to accelerate digital integration and transformation. In 2022, the leaders of ASEAN member countries agreed to sign the Bandar Seri Begawan Roadmap, also known as the BSBR,

---

\* Corresponding author: [dianazmawati@umy.ac.id](mailto:dianazmawati@umy.ac.id)

which obligates them to begin negotiations on the ASEAN Digital Economy Framework Agreement (DEFA) [9].

In 2022, Indonesia holds the presidency of the G20 economic forum. As the host country, Indonesia took advantage of the G20 momentum to raise the topic of digital transformation. During the G20 presidency, Indonesia carried the theme "Recover Together, Recover Stronger," which focuses on economic recovery after the COVID-19 pandemic. Through this theme, digital transformation is becoming a priority sector key to recovering the financial situation after the COVID-19 pandemic. Indonesia focuses on increasing digital skills and literacy to ensure the inclusiveness of digital transformation that can be enjoyed globally [12].

Through a series of G20 Bali Summit, Indonesia through Bank Indonesia (BI) collaborated with 4 ASEAN countries regarding digital payment connectivity or Regional Payment Digital Connectivity. Bank Indonesia, as the central bank of Indonesia, initiated collaboration with the four central banks of other countries to realize payment system connectivity in Southeast Asia. These collaboration initiatives related to Regional Payment Digital Connectivity are expected to have a big impact on the economic sector, especially in the tourism trade sector, because amenities in the payment system will attract tourists to spend more money in the destination country. The collaboration between five ASEAN countries was also carried out to support economic recovery in each country after the COVID-19 pandemic.

On 1st January 2023, Indonesia officially assumes the chairmanship of ASEAN. In the same year, the 43rd ASEAN Summit was held in Bali. At the summit, issues related to digital transformation that Indonesia had previously raised in the G20 forum were followed up, especially on digital payment connectivity development. Moreover, the ASEAN Digital Economy Framework Agreement (DEFA) that had been prepared in the previous year was approved at this summit. Indonesia's involvement in leading digital transformation is supported by Indonesia's digital potential, which has 2,400 startups and internet penetration reaching 76.6 percent. Apart from that, Indonesia also has a digital economic value, projected to reach US\$ 130 billion in 2025 and continue to grow until it reaches US\$ 315 billion in 2030 [17].

Indonesia has a memorandum of understanding regarding the payment framework using local currency, namely the Local Currency Settlement, signed in 2016. Indonesia formed Local Currency Settlement with a commitment to use the country's local money as a medium of exchange for export and import transactions within the jurisdiction of each country. The Local Currency Settlement Framework that Indonesia owned was then developed into a Local Currency Transaction focused on the use of local money and the application of digital payments. Through a Local Currency Transaction memorandum of understanding, Indonesia is collaborating with ASEAN member countries, Malaysia, Thailand, Philippines, and Singapore, to seek digital payment connectivity in ASEAN. Therefore, the author wants to research Indonesia's efforts to realize digital payment connectivity in the Southeast Asia region through Indonesia's chairmanship of ASEAN.

## **2 Literature Review**

### **2.1 Regional Organizations**

[10] AA states that regionalism is divided into two types. The first type is understood as cooperation in various fields by geographically close countries. In contrast, the second type is cooperation in the form of non-government and non-geographical activities, so cooperation carried out in the regional scope has various forms and objectives

(Multipurpose Regional Organizations). [2] stated that ASEAN is a regional organization included in the Multipurpose Regional Organizations. Bennet explained that international organizations in this category have broad and varied goals and activities.

ASEAN was formed because of efforts to create a regional organization with limited scope in selecting members. ASEAN consists of 10 countries: Brunei, Darussalam, Indonesia, Cambodia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam. ASEAN exists to maintain peace and stability in relations between countries in Southeast Asia. ASEAN's goals are increasingly developing in the political and economic fields as time passes.

The application of regional organization theory in the case study that the author studied can be seen in Indonesia's efforts to make ASEAN a forum to help maximize Indonesia's digital economic potential and realize economic digitalization in the Southeast Asia region. Indonesia is targeting ASEAN member countries, namely Malaysia, Thailand, Singapore, and Philippines, to collaborate in facilitating the use of non-cash payments by people in these countries to strengthen the digitalization of the ASEAN economy.

## **2.2 Digital Economy**

The term "digital" comes from the word digitus, which in Greek means fingers and refers to the ten fingers and toes. This concept then developed and is closely related to the binary number system, which consists of the numbers 1 and 0, which have numerical values. Physicists then use this concept to indicate the presence or absence of electric current in transmission and create a "digital signal" that acts like a wave [21]. Referring to this concept, the term digital is then used to refer to waves or networks connected via computers. People use the phrase "digital age" to refer to changes in internet-based technology.

Digitalization is the impact of current technological advances. The digital economy is an economic aspect that is based on the use of digital technology and information. [23] explains that economic digitalization changes business transactions carried out manually using the Internet.

In terms of digitalization, Indonesia has the potential to develop a digital economy because the number of internet users in Indonesia continues to increase yearly. The digital economy is also growing rapidly in the Southeast Asia region. Therefore, Southeast Asian countries then decided to cooperate to strengthen their economic growth.

### **2.1.1 Local Currency Settlement**

Through Bank Indonesia, the Indonesian government is collaborating with Malaysia and Thailand to discuss an economic agreement regarding the use of local currency as a medium of exchange in trade transactions between the three countries, which is then called the Local Currency Settlement (LCS) framework. LCS was formed with commitments to use local money from the countries involved for export and import transactions. Bank Indonesia (BI), Bank Negara Malaysia (BNM), and Bank of Thailand (BoT) agreed to use local money as a medium of exchange in trade transactions between the three countries.

The LCS memorandum of understanding was signed on 23rd December 2016 in Bangkok by each bank governor [22]. In April 2019, the four ASEAN countries, Indonesia, Malaysia, Thailand, and Philippines, signed an agreement on the use of local currency (Local Currency Settlement) as the currency for bilateral trade transactions [20]. The implementation of the LCS is characterized by using local currency in the economic transactions that occur. The use of local currency will also be increasingly encouraged by

the collaboration between Indonesia, Malaysia, Thailand, Philippines, and Singapore in digital payment connectivity via QRIS.

### *2.1.2 Quick Response Code Indonesia Standard (QRIS)*

QR (Quick Response) codes are a form of barcode development that is usually found on product packaging. A QR code contains information that can contain text, images, or URL addresses that can be scanned via smartphone. Meanwhile, the Quick Response Code Indonesia Standard (QRIS) is a combination of various QRs from various Payment System Service Providers (PSJP) using QR Codes. The payment system industry, together with Bank Indonesia, developed QRIS to facilitate transactions with more secure QR Codes.

With the changes that have occurred, payment system service providers that use QR Codes are required to implement QRIS. Therefore, QRIS can now be used in all payment applications from any provider, both bank and non-bank. Transactions through the QRIS system use funding sources that come from deposits or payment instruments, such as debit cards, credit cards, or electronic money, which use server-based storage media (Bank Indonesia, 2019). Sources of funds or payment instruments used in QRIS are implemented based on proposals provided by the Standards Institution, which are approved by Bank Indonesia.

## **3 Methods**

In this research, the author uses a literature study method related to Indonesia's initial motivation and efforts to realize economic digitalization through ASEAN. The author also attributes efforts to digitizing the Indonesian economy with the Local Currency Settlement and Local Currency Transaction schemes to facilitate economic transactions through digital payments. The author uses a qualitative approach to research this event. Data comes from official publications sourced from research publications and literature obtained through journals, books, and social media. This is relevant and can support the authenticity of the data in this research. The data obtained is then collected, selected, categorized, interpreted, explained, and described. The data collection technique used is library technique research or library research.

## **4 Discussion**

### **4.1 Digital Economy ASEAN**

The Digital Economy experienced rapid development when social distancing and mobility restrictions were implemented during the pandemic, which resulted in the disruption of macro-economic activities. During the pandemic, online-based services are the right choice to reduce mobility so that the risk of spreading COVID-19 also decreases but still contributes to the country's economic growth. The use of digital technology to interact with sellers and buyers will continue to be used, even in the future. According to CNBC Indonesia, 69% of sellers plan to continue using digital platforms in their sales strategy in the next five years.

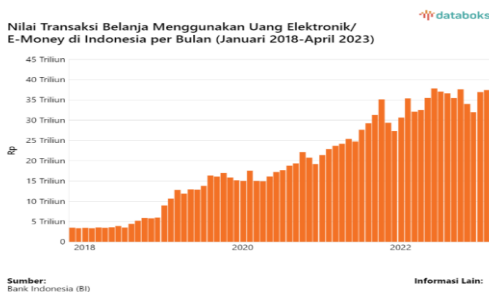
Basically, what has changed in economic activities is the business process, which is now assisted by technological advances so that business actors and consumers do not experience too significant changes. One example of a change in business processes is the change in the process of ordering, paying, and receiving goods, which is done online.

Changes in people's shopping lifestyles are not only limited to platforms for buying and selling activities but also means of payment.

During the Covid-19 pandemic, the use of digital payment methods began increasing. This digital payment can be in the form of electronic money (e-money), electronic wallet (e-wallet), or mobile banking. These three payment instruments are all digital-based financial services:

#### 4.1.1 Electronic Money (e-money)

E-money is a digital payment tool that is chip or card-based and is usually used as a means of paying for transportation, toll rates, and entertainment venues. The following is a graph of the use of digital payments during the pandemic.

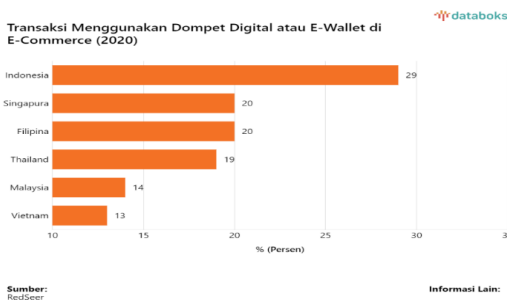


**Fig 1.** Indonesia E-money Transaction Value

According to data from Bank Indonesia (BI), the value of shopping transactions using electronic money or e-money in the country reached IDR 37.46 trillion in April 2023—an increase of 1.4% from the previous month and up 5.8% from the prior year. Over the past five years, the value of transactions using e-money also grew 1,017%, or almost 11 times compared to August 2019.

#### 4.1.2 Digital Wallet (e-wallet)

E-wallet is a digital financial service that is server or application based. E-wallets are usually used to make payments in online transactions.

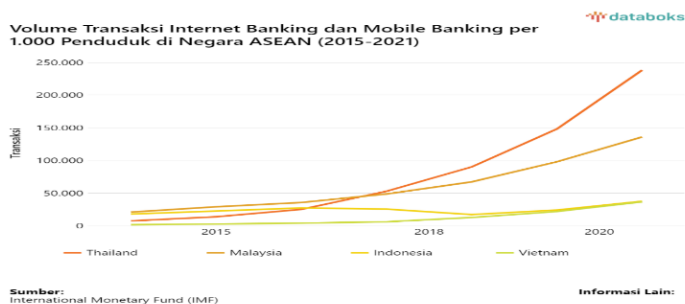


**Fig 2.** Southeast Asia E-wallet Usage

Among Southeast Asian countries, Indonesia has the highest rate of digital wallet usage. Singapore and Philippines are the second countries that use digital wallets the most, with 20% of e-commerce transactions. In Thailand, e-wallets are used for 19% of e-commerce transactions, higher than Malaysia (14%) and Vietnam (13%).

### 4.1.3 Mobile Banking

Different from e-money and e-wallet, mobile banking is a financial service in the form of an application offered by banks to customers to carry out banking transactions via smartphone.



**Fig 3.** ASEAN Mobile Banking Transaction Volume

Overall, Thailand's internet/mobile banking transactions grew the fastest during the 2015-2021 period. The same growth trend is also seen in Malaysia and Vietnam. Meanwhile, it only rose 106% in Indonesia during the same period. For this reason, the Indonesian government must make more efforts to encourage access to digital financial services as the number of online and mobile banking transactions increases in the country.

## 4.2 ASEAN Digital Payments Integration

In the context of the global economy, the role of the digital economy has the potential to become the economy's main driver in the future. Through the 2019 ASEAN Media Forum, the ASEAN Secretary-General said that all payment systems must be connected and be similar to realize payment system integration. Apart from functioning as a forum for Southeast Asian countries to work together, ASEAN's scale as a region can be utilized through digital integration. Indonesia has become a pioneer in the initiative to realize digital payment connectivity in ASEAN. It was conveyed by the company providing solutions for fintech, Unafinancial, that starting from September 2018, the number of QR Code users in Indonesia grew by 11% every month.

Indonesia first discussed Digital Payment issues at the G20 economic forum and again at the 42nd ASEAN Summit held in Labuan Bajo [13]. This issue focuses on realizing regional payment connectivity and local ASEAN currencies. One of the focuses of Indonesia's chairmanship for ASEAN 2023 in the economic and financial pathway initiative is "ASEAN-led Cross Border Payment Connectivity, from ASEAN to Global," namely to realize cross-border payment connectivity. Two schemes can be used to realize regional payment connectivity. This scheme uses local currency (local currency transaction/ LCT) in the region and a regional payment connectivity scheme (Regional Payment Connectivity/ RPC).

ASEAN payments connectivity through the LCT framework refers to digital payment connectivity. Payment interconnection via QR (Quick Respond Code) codes will encourage payments between countries to be faster, cheaper, transparent, and inclusive. The QR code works by simply scanning the available barcode. In addition, using local currency in payments between ASEAN countries makes transactions cheaper because they no longer depend on the value of the US Dollar. Therefore, to create a more practical and effective payment system for society, ASEAN member countries are committed to implementing the 2023 Indonesia Blueprint System in the Regional Payment Connectivity (RPC) scheme and

encourage the use of local currency in regional payments through the Local Currency Transaction (LCT) framework. In the Local Currency Transaction framework, there is no need for US dollars to be the main currency in payments between countries. Transactions that are conducted will only use local currency from each country. Users can directly open payment applications, such as e-wallets or m-banking, and scan the QR code. After entering the nominal local currency to be paid, the nominal currency will be automatically converted into rupiah. Apart from being cheaper and more efficient, using the Local Currency Transaction Framework in payments between countries can also be seen as a de-dollarization effort by reducing the use of the Dollar and dependence on the Dollar as the main currency.

As a member and chairman of ASEAN, Indonesia initiated cooperation in using digital payment QRIS through the Local Currency Transaction framework with the four ASEAN member countries, Malaysia, Thailand, Philippines, and Singapore, to pursue ASEAN Regional Payment Connectivity. The following is Indonesia's collaboration with four ASEAN countries to realize ASEAN payment inclusivity.

#### *4.2.1 Indonesia – Thailand*

On 23rd December 2016, Indonesia, through Bank Indonesia (BI), together with Thailand through the Bank of Thailand (BoT), signed a memorandum of understanding regarding the Local Currency Settlement (LCS) framework. This collaboration discusses using local currency as a medium of exchange in trade transactions between countries. After the memorandum of understanding was signed in 2016, the new LCS framework was implemented on 2nd January 2018. The LCS framework in Rupiah-Bath also effectively occurred on 21st December 2020 [5].

Collaboration related to the Local Currency Settlement framework was then developed into a Local Currency Transaction, which targets ASEAN payment connectivity, one of which is related to digital payments using QR codes. Cooperation between Indonesia and Thailand regarding digital payments via QR Codes has started since a trial was conducted in 2021 [6]. With this collaboration plan, people from the two countries, namely Indonesia and Thailand, can use payment applications such as e-wallet or m-banking on cellphones to scan QRIS and Thai QR Codes to carry out payment transactions in both regions. The trials that had been carried out were then followed by the full implementation of the Quick Response Code Indonesian Standard (QRIS) by Bank Indonesia and the Bank of Thailand starting from 29th August 2022. The implementation has made using QR codes easier to carry out tourism transactions and business trade between Indonesia and Thailand.

Bank Indonesia has recorded data that the number of tourists from Indonesia who made payment transactions in Thailand using Thai QR Codes reached 14,555 transactions with a value of up to IDR 8.54 billion. Meanwhile, Thai tourists who made payment transactions in Indonesia using QRIS reached 492 transactions with a value of up to IDR 144 million [14].

#### *4.2.2 Indonesia – Malaysia*

Malaysia is one of the countries, along with Thailand, that participated in the signing of the Local Currency Settlement memorandum of understanding. Implementation of the use of LCS started on 2nd January 2018. Indonesia through Bank Indonesia (BI) together with Malaysia through Bank Negara Malaysia (BNM) agreed to strengthen the LCS framework to become a Local Currency Transaction for the settlement of transactions using Rupiah-Ringgit, which has been effective since 2nd August 2021 [5].



The effective implementation of the LCT indicates that people in Indonesia and Malaysia can make payments via mobile phone by scanning the Indonesian national payment QR Code, namely QRIS, or the Malaysian national payment QR Code, namely DuitNow, at offline and online merchants. The implementation of QR Codes in both countries began with system trials and officially became a cross-border payment method on 8th May 2023. Cooperation regarding digital payment connectivity between Indonesia and Malaysia is a new milestone in facilitating payment transactions for people in both countries, especially for Indonesian and Malaysian tourists. Ease of payment is an important factor in traveling, especially as Indonesia and Malaysia record large tourist arrivals from each other's countries. This is proven by the number of tourists from Malaysia reaching 138.60 thousand visits to Indonesia in October 2023 [18]

#### *4.2.3 Indonesia – Philippines*

Indonesia and four other ASEAN member countries, namely Thailand, Malaysia, Philippines and Singapore, have signed cooperation regarding cross-border payment transactions. Bank Indonesia (BI), Bank of Thailand (BoT), Bank Negara Malaysia (BNM), Bangko Sentral ng Pilipinas (BSP), and the Monetary Authority of Singapore (MAS) signed the memorandum of understanding at the G20 Summit on 14th November 2022 in Bali. Therefore, it can be said that Bank Indonesia and the Bangko Sentral ng Pilipinas have a commitment and agreement to realize payment connectivity between the two countries by connecting payment systems via QR Codes. However, the implementation of a payment system via QR Code between Indonesia and Philippines is still waiting for Philippines to be ready.

Filianingsih Hendarta as Deputy of Bank Indonesia said that the implementation of the payment system in Philippines still faces risks and challenges. This challenge is in the form of differences in regulations that need to be adjusted between the two countries. Apart from that, the challenges of implementing a digital payment system between the two countries are also hampered by business models and processes including payment specifications as well as domestic industry membership and high investment costs [15].

#### *4.2.4 Indonesia – Singapore*

On 17th November 2023, Indonesia through Bank Indonesia (BI) and Singapore through the Monetary Authority of Singapore (MAS) officially implemented the interconnection of payment transactions via QR Codes in the territory of Indonesia and Singapore. People from both countries can scan the QR Code available at places providing services and goods in each country. Singapore tourists can scan the Quick Response Code Indonesian Standard (QRIS), while tourists from Indonesia can scan the QR Network for Electronic Transfers Singapore (NETS).

This collaboration will benefit tourists from both countries in making payment transactions, especially post-pandemic tourism, which will increase in early 2023. The increase in tourism is proven by the number of tourists reaching 600,000 arrivals from Singapore to Indonesia and 1.1 million Indonesian tourists leaving for Singapore [7]. Apart from implementing payments via QR Code, Bank Indonesia and the Monetary Authority of Singapore also signed a Letter of Intent (LOI) regarding the framework for settling transactions in local currency, which is a follow-up to the Memorandum of Understanding (MoU) which the two central banks signed in August 2022.

After implementing the QRIS, Deputy Governor of Bank Indonesia (BI), Filianingsih Hendarta, in a press conference announcing the RDG Results, said implementing the Quick Response Code Indonesian Standard (QRIS) had taken place smoothly in various countries.



In the press conference, he said that on a month-to-month basis, Singapore recorded growth of up to 216 percent, while the nominal QRIS growth from Singapore was recorded as having reached a growth rate of 342 percent [16]. This is evidence that many tourists from Singapore have used QRIS during their visits to Indonesia.

## 5 Conclusion

Indonesia's ambitions in terms of digital transformation started when Indonesia held the G20 presidency. Indonesia's desire to maximize its digital potential continued at the 43rd ASEAN Summit under Indonesia's leadership. As one of the countries with a high level of digitalization, Indonesia is taking advantage of the momentum of establishing the ASEAN Digital Economy Framework Agreement (DEFA). Indonesia realizes payment system interoperability by collaborating on digital payment QRIS through the Local Currency Transaction framework with the four ASEAN member countries, Malaysia, Thailand, Philippines, and Singapore, in seeking ASEAN digital payment connectivity. This collaboration between ASEAN5 countries can result in payment connectivity in ASEAN. Digital QR-code payments have been implemented effectively in Thailand, Malaysia, Singapore, and several ASEAN member countries. Meanwhile, the implementation of digital payments via QR Codes in Indonesia-Philippines is still waiting for Philippines to be ready.

Through Local Currency Transactions, which also focus on local money, digitalization to realize ASEAN payment connectivity in payments between ASEAN countries will make transactions carried out cheaper. In addition, using local currency in transactions between countries can be a de-dollarization movement due to the reduced use of the United States Dollar in payment transactions. It provides convenience and expands payment options for people in both countries. It aims to increase transaction efficiency, support the digitalization of trade and investment, and strengthen macroeconomic stability by promoting wider use of transaction settlements in local currencies.

Indonesia's efforts to realize digital payments in ASEAN must also be accompanied by the government's ability to protect its digital payments system. Indonesia needs to provide a sense of security for digital service users since there are many cases of burglary of digital wallets (e-wallets) and m-banking, which indicates the security quality of the tools. Indonesia still has no safe digital payment transactions and needs more attention. Therefore, the government needs to improve security on tools for digital payments to gain the trust of society so that people do not need to feel afraid in transactions using digital systems.

## References

1. ASEAN, "ASEAN Economic Community Council endorses roadmap to accelerate economic recovery, digital economy integration," asean.org: <https://asean.org/asean-economic-community-council-endorses-roadmap-to-accelerate-economic-recovery-digital-economy-integration/> (2021)
2. A. Leroy, Bennet, *International Organizations: Principles and Issues*, (1996)
3. Bain & Company, *e-Conomy SEA 2023*, (2023)
4. Bank Indonesia, *The Red Book Statistics*, (2021)
5. Bank Indonesia, *Indonesia dan Thailand Meresmikan Implementasi Pembayaran Kode QR Lintas Negara*, (2021)
6. Bank Indonesia, *Presidensi G20 Indonesia 2022*, bi.go.id: <https://www.bi.go.id/id/g20/default.aspx> (2022)

7. Bank Indonesia, *Implementasi Interkoneksi Pembayaran Qr Antarnegara Antara Indonesia dan Singapura*, bi.go.id: [https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/sp\\_2531023.aspx](https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/sp_2531023.aspx) (2023)
8. Google, TAMASEK, BAIN & COMPANY., *e-Conomy SEA 2020*, <https://www.temasek.com.sg/content/dam/temasek-corporate/news-and-views/resources/reports/e-conomy-sea-2020-report.pdf> (2020)
9. Hasran, & Taushia, K., *Strategi Indonesia untuk Bergabung dalam Perjanjian Kerangka Kerja Ekonomi Digital ASEAN*, CIPS: Center for Indonesian Policy Studies, (2024)
10. Helen V. Milner & Edward D. Mansfield, *The New Wave of Regionalism*, (1999)
11. Hopkins, R. F., & Mansbaach, R. W., *Structure and Process in International Politics*, (1973)
12. Kementerian Luar Negeri, *Indonesia Usung Semangat Pulih Bersama dalam Presidensi G20 Tahun 2022*, kemlu.go.id: <https://kemlu.go.id/portal/id/read/3288/berita/presidensi-g20-indonesia> (2022)
13. Kominfo, *Konektivitas Pembayaran Regional dan Mata Uang Lokal di ASEAN*, asean2023.id: <https://asean2023.id/id/news/regional-payment-connectivity-and-local-currency-in-asean> (2023)
14. Laras, A, *Indonesia Bakal Jadi Negara dengan Pengguna QR Terbanyak di Asia Tenggara pada 2025*, finansial.bisnis.com: <https://finansial.bisnis.com/read/20231029/90/1708961/indonesia-bakal-jadi-negara-dengan-pengguna-qr-terbanyak-di-asia-tenggara-pada-2025> (2023)
15. McKinsey., *Digital India: Technology to transform a connected nation*, McKinsey Global: <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/digital-india-technology-to-transform-a-connected-nation> (2019)
16. Mubarak, F., *Ramai Turis Singapura Pakai QRIS, BI: Transaksi Naik 261 Persen*, tirto.id: <https://tirto.id/ramai-turis-singapura-pakai-qr-is-bi-transaksi-naik-261-persen-gUzZ> (2024)
17. Putri, R. S., *KTT ASEAN, Jokowi Dorong Pengembangan QRIS di Seluruh Kawasan*, tempo.co: [https://nasional.tempo.co/read/1785919/kilas-balik-penetapan-hari-santrinasional-setiap-22-oktober?tracking\\_page\\_direct](https://nasional.tempo.co/read/1785919/kilas-balik-penetapan-hari-santrinasional-setiap-22-oktober?tracking_page_direct) (2023)
18. Rachman, A., *Jumlah Wisatawan Mancanegara ke RI Susut, Ini Sebabnya* cncindonesia: <https://www.cncindonesia.com/news/20231201114004-4-493728/jumlah-wisatawan-mancanegara-ke-ri-susut-ini-sebabnya> (2023)
19. Rahayu, N., Supriyono, I. A., Mulyawan, E., Nurfadhillah, F., Yulianto, D. R., & Ramadhan, A. Z., *Pembangunan Ekonomi Indonesia Dengan Tantangan Transformasi Digital*, ADI BISNIS DIGITAL INTERDISIPLIN (ABDI JURNAL), 2-3 (2023)
20. Rasdiyanti, A.D. & Suyeno., *Analisis SWOT Kebijakan Local Currency Settlement Indonesia-China*. Aplikasi Administrasi: Media Analisa Masalah Administrasi (2022)
21. Sulchan, M., Maslihatin, M. Z., & Yulikah, A., *Peran Digitalisasi Bisnis Terhadap Pemulihan Ekonomi dalam Meminimalisir Pengangguran di Indonesia*, SENMEA: Seminar Nasional Manajemen, Ekonomi, dan Akuntansi, 942-943 (2021)
22. Supadi, H., & Jamaan, A., *The Use of Local Currency Settlement In Trade Among Indonesia, Malaysia, and Thailand*, 4 (2021)
23. Tapscott, Don., *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (1996)
24. Wibowo, E. W., *Analisis Ekonomi Digital Dan Keterbukaan Terhadap Pertumbuhan Gdp Negara Asean*. JURNAL LENTERA BISNIS, 68 (2018)