

# Policies and Strategies of Indonesia in Implementing Regulate to Facilitate to Boost National Digital Economy

# Noor Iza<sup>1</sup>, Marwan<sup>2</sup>, Kusumogambriyanto<sup>3</sup>

<sup>1</sup> Sekolah Tinggi Multimedia Yogyakarta, Indonesia, <u>nooriza@mmtc.ac.id</u>
<sup>2</sup> Sekolah Tinggi Multimedia Yogyakarta, Indonesia, <u>marwan@mmtc.ac.id</u>
<sup>3</sup> Sekolah Tinggi Multimedia Yogyakarta, Indonesia, <u>kusumogambriyanto@mmtc.ac.id</u>

### Corresponding Author: marwan@mmtc.ac.id

Abstract: Digital developments must of course be utilized well so that digital economic improvement can be achieved. However, this achievement is certainly not accompanied by the proverbial applause and requires various strategies to achieve it. So, from a national perspective, this research was carried out with the aim of analyzing and expanding Indonesia's strategy in implementing regulations to facilitate the development of the digital economy. The method used in this research is descriptive qualitative with a type of library study so that the data collection technique is carried out by collecting various documents that are related to the research focus. National data that is known to have been collected is then analyzed in depth so that the results of research regarding Indonesia's policies and strategies to facilitate the development of the digital economy are introducing Indonesia's confidence in achieving high targets for e-commerce, developing various strategies that can be used to develop important policies that are in line with dynamic nature of the digital economy, providing education to facilitate the achievement of digital economic strength, providing education and bringing MSMEs to digital platforms, maturing the use of digital payments at every level, building national digital talent, and utilizing community telecommunications network connectivity throughout Indonesia. With this, the national digital economy can improve as envisioned by the Indonesian state.

**Keyword:** Digital Economy, Digital Energy of Asia, Indonesia Ecommerce, Electronic Commerce, Digital Talent, Startup, Unicorn, Decacorn.

# **INTRODUCTION**

Advances in technology and information have an influence on changes in human life in various aspects (Brenky Jie, et al 2023) (Martinus Tekege, 2017) (Prastyaningtyas et al., 2018) (Nurdin, 2018), including economic aspects. Economy is a vital aspect that every individual must pay attention to in order to continue living well (Jasri, et al 2022). Without a good economy, it can have a bad influence on the pace of life of individuals which in turn can also have a bad influence on social life. For this reason, economic aspects cannot be considered trivial, especially in the midst of rapid advances in technology and information, requiring every individual to be creative in utilizing existing digital media to improve their standard of living through economic aspects (Wibowo, 2018).

One of the businesses that many Indonesian people are involved in is MSMEs (Sam'un Jaja Raharja dan Sari Usih Natari, 2021). MSMEs are micro, small and medium enterprises that can be run by every party because every individual has the right to try and continue their life, one of which is by doing business (Suyadi, et al 2018).. MSMEs can also be interpreted as productive businesses owned by individuals or business entities where the efforts carried out fall within the established MSME criteria (Amaranggana Hang Arna Prianto, Hani Ulima Asri, 2021). MSMEs in Indonesia are protected in Law No. 20 of 2008 concerning MSMEs, where this regulation contains various regulations relating to MSMEs.

Whether an MSME progresses or not is influenced by whether or not MSME managers are willing to develop and adapt to the world, one of which is adapting to technology. Currently, quite a few MSMEs do their business through social networks or using internet media so that interactions that occur between sellers and buyers are not limited to one location but can spread throughout Indonesia and even the world (Prastyaningtyas et al., 2018) (Y.L.R. Reatalamit, 2021).

This certainly provides advantages for MSME players to continue to develop their businesses so that they can encourage their lives to be better. Unfortunately, not all MSMEs have succeeded in making good use of digitalization in the economic sector so that their businesses do not develop or even fail. The digital economy is defined as business carried out by utilizing technological developments, one of which is the internet, so that transactions are carried out regardless of distance and time. There are several e-commerce platforms that accommodate MSMEs to sell their wares, for example tokopedia, shopee, blibli.com and so on. Apart from that, there are also many other business actors who use the internet to build bigger businesses through websites and so on (Idat et al., 2019) (Alwendi, 2020).

For this reason, this technological development can provide great benefits for business actors who can utilize and manage it (Wildan Mahendra Ardiansyah, 2023) (Agystia Premana, et al 2020),, but it can have a negative impact on business actors who have difficulty adapting to technological developments. There are several studies that examine the digital economy, for example research conducted by Nila Dwi Aprilia, Saryanto Djoko Waluyo, and Herlina JR. Saragih in 2021 regarding the development of Indonesia's digital economy (Prastyaningtyas et al., 2018), research conducted by Hesya Nungki Nabila, Taufik Chaidir, and Ida Ayu Putri Suprapti in 2022 regarding analysis of the influence of the digital economy on economic growth in Indonesia in 2017 until 2021 (Nabila et al., 2021), and various other studies. Unfortunately, a study of Indonesian policies and strategies in implementing regulations to facilitate the development of the digital economy nationally has not been carried out so that quite a few MSMEs are having difficulty developing their businesses in the midst of increasingly widespread digitalization, especially since Indonesia is one of the countries with the largest population which also has an impact. on the increase in the number of people using the internet. If this is not utilized properly then the business undertaken could be threatened with failure. In this case, the state has an important role to play in developing the country's economy through the various policies and strategies it carries out so that improving the Indonesian economy in the digital era can be implemented.

Based on the explanation above, researchers are encouraged to conduct research on Indonesian policies and strategies in implementing regulations to facilitate the improvement of the national economy. The aim of this research is to analyze and evaluate Indonesia's strategy in implementing regulations to facilitate the development of Indonesia's national digital economy, so that MSMEs can rise and the Indonesian economy improves, which has an impact on improving people's welfare.

### **METHOD**

This research was conducted using a descriptive qualitative approach so that the research results will be conveyed through various sentences that can be understood. The type of research used is library research. Data collection techniques are carried out by collecting various documents related to the research focus. The data that has been collected is then studied in depth to determine reliable research results.

### **RESULTS AND DISCUSSION**

#### Introducing Indonesia's Confidence on Achieving High Targets on e-commerce

In 2015, the discussion and idea about the framework of e-commerce nationally was still early. Indonesian President Joko Widodo was very optimistic that e-commerce in Indonesia would progress rapidly, so the Government of Indonesia (GOI) at that time translated how to advance e-commerce in Indonesia quickly and massively. GOI together with the younger generation of national eCommerce founders and practitioners are intensively discussing eCommerce development policies and strategies in Indonesia. MCI (2015) mentioned Indonesia reflects on the implementation of eCommerce in the USA, where eCommerce began to operate in 2000 where the US Government implemented a free market policy, safe harbor and pro innovation so that US eCommerce in 2000 had eCommerce sales of around USD 27.6 billion to USD 141, 2 billion in 2008 and about USD 300 billions in 2014, Statistica (2022). Meanwhile, China has also massively developed eCommerce starting in 2008 with the government national collaborative program and government protection with huge captive market to make fast evolution. UNCTAD (2017) and MCI (2015), how eCommerce of China made fast evolution, the eCommerce retail penetration in year 2008 is about USD 19 billion and USD 426.3 billions in year 2014. The speed of China's eCommerce capabilities has been so amazing, even though its presence has been behind the US, the progress of e-commerce is far more than doubled. Considering those situations, GOI has its confidence to make its national eCommerce become very big within the same short period.

# Strategies on Evolving Policy Imperatives Aligned to the Dynamic Nature of Digital Economy

OECD (2020) mentioned that the Digital Economy incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data. It refers to all producers and consumers, including government, that are utilising these digital inputs in their economic activities. However, studies on Indonesia's digital economy were not in wider scopes in which OECD (2020) means. The digital economy related to this study has very close means to what Google, Temasek, Bain & Company (2021) in which the digital economy is the e-Conomy which is related to electronic commerce (marketplaces, online mall), tranport and food (ride hailing, buying food from online selling), online travel (buying tickets, hotel, and any vacation rentals using online selling), online media, and financial services (buying financial goods using online selling).

During the 2015 and 2016, GOI set a new spirit on making a digital economy leapfrog in the country. Considering huge potential population and its level of economy and growth, Indonesia was believed to have great opportunities on the great digital economy. The sprit was "Indonesia, the Digital Energy of Asia", and using a movement of "an Accelerated & Empowered SME-driven Digital Economy". Through those spirits, Indonesia made welldefined and objectives-driven short-medium-longer term plans, to achieve rapid digitization of the SME market participants. To carry out those spirits, Indonesia has carried out policies and strategies as a series of steps and programs, namely: first, a game-changing strategic plan focused on SMEs, at inducing greater participation of SMEs in national economic building. Second, accommodate the spirit and goals as well as steps into the roadmap on eCommerce to ensure impactful growth of the technopreneur. Third, implement FDI friendly policies to attract tech investing & the founding of stronger domestic base of venture investing. Fourth, facilitate greater access to funding enabling digitization of the SMEs and rapid growth of quality start ups establishments with subsidized soft loans for SMEs to digitize, venture capital regulations to incentivize greater capital seeding. Fifth, provide an attractive and easier exit strategy by deepening of capital market liquidity for technology listing. Sixth, adoption of pro innovation policies by national program to create 1,000 national digital technopreneurs and "Safe Harbor" regulations to safeguard and boost innovation of e-Commerce players. GOI is also committed to support the growth of E-Commerce and Digital Economy in Indonesia, expectedly producing 1,000 digital technopreneurs by 2020, with projected over USD 10 billion valuation of business.

Mastel (2017) and MCI in 2015, in developing eCommerce with an accelerated empowered SME driven digital economy, GOI considered on some driving opportunities :

- 1. In 2020, Indonesia would be the Largest Digital Economy in the Region with an estimated USD 130 Billion value of Indonesia e-Commerce transaction.
- 2. Indonesian 56 millions MSMEs had also been the backbone on the economy contributing almost 60% of the country GDP, despite it's conventional settings and business model, without much digital connectivity. Indonesia focused on MSMEs for its potential future digital economy was just like the US whose SMEs contribution almost 50% to the US economy [Kobe, 2018].
- 3. Any SME go online or go digital would have a double growth rate of those are not digitally connected which represents mostly the MSMEs in Indonesia. It meant, with current contribution rate to National GDP, any 10% migration of Indonesia MSMEs to become online or digital connected, they could contribute to additional minimum 5% of National GDP per year.
- 4. Thus, as the logical imperative action, Indonesia would drive more of its MSMEs go online or digital than any country to increase its' already significant contribution to the National GDP as it's rapid economic growth motor.
- 5. Indonesia had more than 56 million MSME business, compare to around 8 million defined as SME in other ASEAN countries. Consequently focusing on driving it's more than 56million MSMEs to go online or go digital and getting double growth rate, Indonesia would become "The Digital Energy Of ASIA".

Therefore within the end of 2015 and the early beginning of 2016, GOI made accelerated national program "Embarking the vision to be the largest digital economy in South-East Asia" and "Indonesia, the Digital Energy of Asia".

Through those framework, GoI has developed National E-Commerce Roadmap collaborating more than 8 ministries and related government institutions which aim to reach above US\$ 130 Billion value of e-commerce transaction by 2020, more than 30 key initiatives & recommendations duly considered the segmentation , scaling and growth cycle of local E-Commerce players, and practical implementation plan based on strategic priorities.

MCI (2016) and Setkab (2016) mentioned on November 10, 2016, GoI issued a special economic package called a proposal for eCommerce roadmap which included 8 aspects of regulations for facilitating eCommerce boost in Indonesia. Those 8 aspects of regulations were:

- 1. Funding, in which GOI provided SMEs funding, incentives for incubator business to elevate startup and for startups on eCommerce platform, angel capital, seed capital, crowd funding, and opening foreign investment.
- 2. Tax relief, including tax relief for startup investors, simplifying tax procedures for particular startups, and non-discriminatory on tax treatment amongst ecommerce owners.
- 3. Consumer protection, introducing government regulation on facilitating eCommerce transactions.

- 4. Education, including educating concumers, SME owners, and also much more importance digital talent.
- 5. Logistics, including strengthening local and national delivery services especially to support MSMEs going online.
- 6. Infrastructure of communication, through the development of broadband access.
- 7. Cyber security, including data protection and people awareness on security.

# Implementations on regulating to facilitate to reach digital economy strength in Indonesia

Even though Indonesia has made a strategy to strengthen the digital economy by encouraging innovation and startups, its implementation faces various turbulence in attitudes towards disruption both in the government and in society. For instance, the operation of car ride hailing and motor-bike ride hailing has brought tremendous opposition in government and society. In the case of car ride hailing, there has been great opposition from conventional taxi operators, resulting in chaos that has emerged in many provinces in Indonesia over the influence of car ride hailing which has resulted in a sharp decline in revenue from conventional taxis.

Indonesia was the first country to have a startup in the form of motor-bike ridehailing. Motor-bike ride-hailing. In the Indonesian Law on public transportation, the use of motor-bikes is not included in public transportation, so the operation of motor-bike ridehailing from startups has become a hot topic of discussion. Within the Government there are also differences of opinion, but the Ministry of Communication and Information has carried out eCommerce facilitation including car ride hailing and motor-bike ridehailing. GoI's consistency in implementing "regulate to facilitate" has unexpectedly pushed the ride-hailing startup company Go-Jek to become a unicorn at the end of 2016. Also, during the COVID-19 pandemic, motor-bike ride-hailing had a big role in supports e-Commerce and delivery and has become a fast-growing SME platform since March 2020.

World Bank Indonesia Flagship Report (2021) mentioned ride hailing has significant roles on making connectivities amongst digital user for digital transaction services especially in urban dwellers. As a transportation, almost 2 in 5 people has been using them. Moreover, more than 21 % of people in urban cities using ride hailing for food delivery services. Beyond that, ride hailing has been undertaking many digital transaction delivery services especially for buying goods online.

Consistencies of GOI on implementing light-touch regulation and better facilitation to startup and innovation then produce more and faster unicorns of some startups. In the end of 2016, Gojek as a ride-hailing startup has become the first unicorn, then in 2017 there were 3 new unicorns namely Tokopedia, Bukalapak, and Traveloka. In 2018, one startup namely OVO became a unicorn. Then, Gojek, prevous unicorns, become decacorn in year 2019. The speed of Indonesian unicorn growth has become a global investment attraction so that in the following years new startups have grown and some have become unicorns in 2021, namely J&T Express, Xendit, Magic and Online Tax. In year 2021 also, Gojek and Tokopedia made merging becoming GoTo as super decacorn. Tabel 1 shows Indonesia unicorns from years to years to draw the speed of unicorn grow in Indonesia.

	Startup	Year of establish- ment	Year of Unicorn	2021's Valuation	Current status
1	Gojek	2010	2016, Decacorn year 2019	USD 11 billion	Merged with Tokopedia become Goto
2	Tokopedia	2009	2017	USD 7 billion	Merged with Gojek

Tabel 1. Indonesia Uni	icorns	
------------------------	--------	--

					become GoTo
3	Bukalapak		2017	USD 3.5 billion	
4	Traveloka	2012	2017	USD 3 billion	
5	OVO	2017	2018	USD 2.9 billion	
6	J&T Express	2015	2021	USD 7,8 billion	
7	Xendit	2015	2021	USD 1 billion	
8	Ajaib	2018	2021	USD 1 billion	
9	OnlinePajak	2021	2021	USD 1,7 billion	
10	GoTo	Super		USD 18 billion	A merger of Gojek and
		decacorn			Tokopedia
		2021			

Sources: the author collaborated from many sources.

# Educating and bringing SMEs into the digital platform

Indonesia has made very fast movement on transformaing SMEs into e-SMEs since to massively and as early as possible educate and enter SMEs into digital e-commerce platforms was very urgent, if it was not, then probably SMEs and other traders from overseas would overcome into Indonesia marketplace. MCI (2017) mentioned some movements on transformating SME into eSMEs. There have been movements amongst government agencies, ecommerce platform providers, banks and some particular communities to do those approches . Those overarching establishment of SMEs into digital and delivery services has made Indonesia having strong in national eCommerce activities.

# Maturing the uses of digital payment in any level of societies

There were massives movements on using electronic payment for toll road and train tickets in Indonesia in which people were familiarized. Damardono H., Maryoto A. (2012), In 2012, Indonesia's train services suddently transformed its ticket orders and payment by online in which impacted big experiences for people to use online payments. Apriliananda D. (2017) and Cermati (2017) also in 2017, payment system in many toll gates started using electronic payment card. The use of electronic payment has then become familiar. Then today people become familiar to use digital payments which are like digital currency.

# **Building national digital talent**

Digital transformation requires readiness on human capital in digital talent which drive national digital economy in all sectors. GoI understoods the gap of national talent and then . built digital talent through digital talents scholarship program by MCI which were started in 2018. According to Bodrogini P. W. (2018), World Bank and Wulandari C.R. (2019), MCI assesses the gap in the need for digital talent in Indonesia is 600 thousand per year. Massive digital training are provided for various types of competencies needed from multimedia to coding as well as machine learning and artificial intelligence packaged with a digital talent scholarship program. As a kick off, this program has reached the target of 1000 participants in 2018, MCI (2018). MCI (2019), then in 2019, the program had a terget of 20.000 participants. Then Meodia (2020), this digital talent scholarship program has reached the target of 50,000 trainees by 2020. Then Mci (2021) in 2021, the Ministry of Communication and Information Technology has reached the target of 100,000 participants. Suyudi (2022) for 2022, the Ministry of Communication and Information has a target of 200,000 training participants spread throughout Indonesia.

# Leveraging telecommunication network connectivity throughout Indonesia

Indonesia is a large country with a large and separate area with scattered islands. Telecommunication network, especially high speed, is a challenge for Indonesia. Antara, & Marzuki B. (2016) mentioned since 2016 Indonesia has pursued the acceleration of 4G networks to all regions in Indonesia, but to achieve a massive 4G network, it really requires a

backbone network to all cities in Indonesia. In order to fully cover Indonesia with total telecommunication networks either backbone and access, the construction of a fiber optic backbone by sea and land in the western, central and eastern regions, Kure E. (2021). Also, Indonesia has plan to have a large-capacity satellite that can reach all parts of Indonesia. During pandemi Covid-19, Indonesia has been trying to strengthen telecommunication networks and continue until 2021 and 2022 and in the following years. Then, the massive construction on digital connectivity as strengthening the digital transformation was launched by the President of Indonesia in 2020, expected to accelerate Indonesia's current and future digital transformation.

# CONCLUSION

The ever-growing advances in technology and information must of course be utilized as best as possible to improve and develop the business being pursued either individually or as a business entity. However, advancing or developing your business certainly requires a variety of strategies and taking advantage of existing policies in Indonesia. Research results show that there are several policies and strategies carried out by the Indonesian state to improve the economy through the digital economy, including: introducing Indonesia's confidence in achieving high targets for e-commerce, developing various strategies that can be used to develop policy imperatives that are in line with the nature of dynamic in the digital economy, implementing education to facilitate the achievement of digital economic strength, providing education and bringing MSMEs to digital platforms, maturing the use of digital payments at every level of society, building national digital talent, and utilizing telecommunication network connectivity throughout Indonesia. By implementing these policies and strategies well and wisely, it is not impossible that the Indonesian economy can develop rapidly through digital technology because digital technology is being exploited rapidly.

The researcher hopes that the results of this research can be used as a basis for the government to make policies regarding the development of the digital economy, it can also add insight to readers and become a reference for conducting research in the next period.

### REFERENCE

- Agyztia Premana, Gian Fitrialisma, Andi Yulianto, M. Badruz Zaman, M.A Woro. (2020). Pemanfaatan Teknologi Informasi Pada Pertumbuhan Ekonomi Dalam Era Disrupsi 4.0. Jurnal Economic Management, 1(1), 1-6.
- Alwendi. (2020). Penerapan E-commerce Dalam Meningkatkan Daya Saing Usaha. Jurnal Manajemen Bisnis, 17(3), 317-325.
- Amaranggana Hang Arna Prianto, Hani Ulima Asri, F. A. S. (2021). Merdeka Digitalisasi: Optimalisasi Umkm Dengan Metode Self Approach Guna Mengentaskan Keterpurukan Ekonomi Sebagai Resultan Pandemi Covid-19. *Inspire Journal Economics and Development Analysis*, 1(2), 157–172.
- Antara, & Marzuki B. (2016). Menyelimuti Indonesia Dengan Sinyal 4G. Republika. <u>https://www.republika.co.id/berita/koran/inovasi/16/12/27/oity0619-menyelimuti-</u> indonesia-dengan-sinyal-4g
- Apriliananda D. (2017). Simak Masa Berlaku Wajib e-Money Untuk Tol. Kompas. https://otomotif.kompas.com/read/2017/09/04/115741715/simak-masa-berlaku-wajib-emoney-untuk-tol
- Aprilia, Nila Dwi, Suryanto Djoko Waluyo, dan Herlina JR Saragih. (2021). Perkembangan Ekonomi Digital Indonesia. *Jurnal Ekonomi Pertahanan*, 7(2), 245-259.
- Ardiansyah, Wildan Mahendra. (2023). Peran Teknologi dalam Transformasi Ekonomi dan Bisnis di Era Digital. *Jurnal Manajemen Ekonomi dan Bisnis 1(1)*, 1-11

- Bodrogini P. W. (2018). Preparing ICT Skills for Digital Economy: Indonesia within the ASEAN context. World Bank Group. Retireved from <u>https://blogs.worldbank.org/sites/default/files/preparing\_ict\_skills\_for\_digital\_econom\_y-revised\_7mar2018.pdf</u>
- Cermati (2017). Bayar Tol Wajib Gunakan E-Money Berlaku Oktober 2017. Cermati.com. Retireved from https://www.cermati.com/artikel/bayar-tol-wajib-gunakan-e-moneyberlaku-oktober-2017
- Damardono H., Maryoto A. (2012). Jonan Mengubah Indonesia Lewat Kereta Api. Kompas. Retireved from <u>https://money.kompas.com/read/2012/08/31/15443791/Jonan.Mengubah.Indonesia.Lew</u><u>at.Kereta.Api</u>
- Idat, D. G. (2019). Memanfaatkan Era Ekonomi Digital Untuk Memperkuat Ketahanan Nasional. *Jurnal\_Edisi* 38, 5-11.
- Google, Temasek, Bain & Company (2021). E-Conomy Southeast Asia 2021, Roaring 20s : the SEA Digital Decade. Retireved from https://services.google.com/fh/files/misc/e\_conomy\_sea\_2021\_report.pdf
- Jasri, Nadia Arfan, Hasanuddin, Hurriah Ali Hasan. (2022). Penerapan Digital Marketing dalam Upaya Peningkatan Pendapatan Usaha Mirko Kecil dan Menengah. *Iltizam Journal of Shariah Economic Research*, 6(2), 212-224.
- Jie, Brenky, Eric, Dean Mervyn, Vicky Anggrianto, Kelvin, Christine Gabriella. (2023). Pemanfaatan dan Dampak Penggunaan Teknologi Informasi Pada Bidang Sosial. Journal of Information System and Technology, 4(2), 392-397.
- Kure E. (2021). Ini Capaian Utilisasi Palapa Ring. Berita Satu. Retireved from https://www.beritasatu.com/digital/740025/ini-capaian-utilisasi-palapa-ring
- Mastel (2016). Pemerintah Suarakan "Indonesia : The Digital Energy of Asia". Retrieved from https://mastel.id/indonesia-the-digital-energy-of-asia/
- MCI (2021). Lampaui Target, Kominfo Apresiasi Mitra Kolaborasi Cetak Talenta Digital. Ministry of Communication and Informations, The Republic of Indonesia. Retireved from https://www.kominfo.go.id/content/detail/38772/siaran-pers-no-449hmkominfo122021-tentang-lampaui-target-kominfo-apresiasi-mitra-kolaborasicetak-talenta-digital/0/siaran\_pers
- MCI (2019). Digital Talent Schoolarsip Guna Hadapi Era Revolusi Industri 4.0. Ministry of Communication and Informations, The Republic of Indonesia. Retireved from https://pik.dev.kominfo.go.id/blog/detail/5/digital-talent-schoolarsip-guna-hadapi-era-revolusi-industri-40
- MCI (2018). Hasil Seleksi Pelatihan Intensif Program 1000 Digital Talent Scholarship Tahun 2018. The Ministry of Communication and Informatics (MCI), The Republic of Indonesia. Retireved from https://www.kominfo.go.id/content/detail/14967/hasil-seleksi-pelatihan-intensif-program-1000-digital-talent-scholarship-tahun-2018/0/pengumuman
- MCI (2017). UMKM Go Online Upaya Wujudkan Visi Digital Energy of Asia. Ministry of Communication and Informations, The Republic of Indonesia. Retireved from https://www.kominfo.go.id/content/detail/9514/umkm-go-online-upaya-wujudkan-visi-digital-energy-of-asia/0/berita\_satker
- MCI (2016). Paket Kebijakan Ekonomi XIV: Peta Jalan E-Commerce. The Ministry of Communication and Informatics (MCI), The Republic of Indonesia. Retireved from https://www.kominfo.go.id/content/detail/8353/paket-kebijakan-ekonomi-xiv-peta-jalan-e-commerce/0/berita
- MCI (2015). Indonesia Akan Jadi Pemain Ekonomi Digital Terbesar di Asia tenggara. Ministry of Communication and Informations (MCI), The Republic of Indonesia. Retireved from

https://kominfo.go.id/index.php/content/detail/6441/Indonesia+Akan+Jadi+Pemain+Ek onomi+Digital+Terbesar+di+Asia+Tenggara/0/berita\_satker

- Meodia A. (2020). Kominfo buka program "Digital Talent Scholarship" 2020. Antaranews. Retireved from <u>https://www.antaranews.com/berita/1554856/kominfo-buka-program-digital-talent-scholarship-2020</u>
- Nabila, H. N., Chaidir, T., Ayu, I., & Suprapti, P. (2021). Analisis Pengaruh Ekonomi Digital Terhadap Pertumbuhan Ekonomi di Indonesia Tahun 2017-2021. *KONSTANTA\_V1No2\_2022\_5*. 50–63.
- Nurdin, A. H. M. (2018). Menuju Pemerintahan Terbuka (Open Government) Melalui Penerapan E Government. *Jurnal MP (Manajemen Pemerintahan)*, 5, 1–17.
- OECG (2020). A roadmap toward a common framework for measuring the Digital Economy. Report for the G20 Digital Economy Task Force. Retireved from <u>https://www.oecd.org/sti/roadmap-toward-a-common-framework-for-measuring-the-digital-economy.pdf</u>
- Prastyaningtyas, E. W., Aprilia, N. D., Waluyo, S. D., Saragih, H. J. R., Pertahanan, E., Pertahanan, F. M., Adha, L. H., Asyhadie, Z., Kusuma, R., Wibowo, E. W., Kumala, S. L., & Suryaningtyas, C. D. (2018). Perkembangan Ekonomi Digital Indonesia the Development of Indonesia 'S Digital Economy. *Jurnal Lentera Bisnis*, 1(2), 245–259. <u>http://repository.unpar.ac.id/handle/123456789/8375</u>
- Raharja, Sam'un Jaja & Sari Usih Natari. (2021). Pengembangan Usaha Umkm Di Masa Pandemi Melalui Optimalisasi Penggunaan Dan Pengelolaan Media Digital. *Jurna; Pengabdian Kepada Masyarakat, 4(1),* 108-123.
- Rehatalanit, Y.L.R. (2021). Peran E-Commerce Dalam Pengembangan Bisnis. Jurnal Teknologi Industri 5(1), 62-69.
- Setkab (2016). Pemerintah Luncurkan Paket Kebijakan XIV Tentang Roadmap E-Commerce. Cabinet Secretariat of the Republic of Indonesia (Setkab). Retireved from https://setkab.go.id/pemerintah-luncurkan-paket-kebijakan-xiv-tentang-roadmap-ecommerce/
- Statistica (2022). Total and e-Commerce US Retail Trade Sales Since 2000. Retireved from <a href="https://www.statista.com/statistics/185283/total-and-e-commerce-us-retail-trade-sales-since-2000/">https://www.statista.com/statistics/185283/total-and-e-commerce-us-retail-trade-sales-since-2000/</a>
- Suyadi, Syahdanur, Susie Suryani. (2018). Analisis Pengembangan Usaha Mikro Kecil dan Menengah (UMKM) di Kabupaten Bengkalis-Riau. *Jurnal Ekonomi KIAT*, 29(1), 1-9.
- Suyudi T. (2021). Kecakapan Digital Indonesia di Tahun 2022 terus Diperkuat. ITWorks.id. Retireved from <u>https://www.itworks.id/47064/kecakapan-digital-indonesia-di-tahun-2022-terus-diperkuat.html</u>
- Tekege, Martinus. (2017). Pemanfaatan Teknologi Informasi dan Komunikasi dalam Pembelajaran SMA YPPGI Nabire. *Jurnal Fateksa* 2(1), 40-52.
- UNCTAD (2017). Inclusive Growth and e-Commerce : China's Experience. Retrieved from https://unctad.org/system/files/non-official-document/dtl\_eWeek2017c11-aliresearch\_en.pdf
- Wibowo, E. W. (2018). Analisis Ekonomi Digital Dan Keterbukaan. Jurnal Lentera Bisnis, Vol. 7(2), 66-80.
- World Bank (2021). Beyond Unicorns: Harnessing Digital Technologies for Inclusion in Indonesia. World Bank Indonesia Flagship Report. Retireved from https://www.worldbank.org/en/country/indonesia/publication/beyond-unicornsharnessing-digital-technologies-for-inclusion-in-indonesia
- Wulandari C.R. (2019). Indonesia Butuh 9 Juta Digital Talent. Pikiran Rakyat. Retireved from <u>https://www.pikiran-rakyat.com/bandung-raya/pr-01307332/indonesia-butuh-9-juta-digital-talent</u>