

The Government's Policy in Encouraging the Global Competitiveness of Indonesian MSMEs through the Digital Ecosystem

ABSTRACT

Digital platforms or marketplaces are part of digital economy which is very developed in Indonesia. This digital economy can be an advantage for Indonesian MSMEs, as one of the potential economic driving actors. But in its development there are still many limitations. There are several problems that require political policy intervention, while these problems are rarely researched.

Aims: This research is conducted to analyze how the government's policy in encouraging the global competitiveness of Indonesian MSMEs through the digital ecosystem.

Methodology: This is a descriptive qualitative research, using library research methods. Data collected then described the situation or the phenomena in detail using descriptive analysis methods.

Results: To encouraging the global competitiveness of Indonesian MSMEs, the government launched MSMEs go global and go digital through synergies between various main players to provide financing, coaching and markets. The government establishes policies that lead to increased technological progress, socioeconomic adjustments by utilizing geopolitics, and supports environmental changes that encourage MSMEs to adapt to the digital ecosystem.

Conclusion: The government as regulatory institutions need to ensure those providing digital ecosystem apply sufficient protection to the MSMEs growth. As the digital economy spreads around the world, it will be interesting to see how businesses adjust, adapt and adopt available digital tools to their daily activities. It is important about how the government policy of a nation respond this phenomena, while the whole economy becomes more digitally inter-connected going forward.

Keywords: competitiveness, digitalization, Indonesia, MSMEs, government policy.

1. INTRODUCTION

The main issues of the Fourth Industrial Revolution are the digitization of economic transactions and markets. The Fourth Industrial Revolution is fundamentally changing the way we live, work and create value around the world. New technologies and applications are connecting individuals, organizations and machines at unprecedented scale and speed. This revolution is transforming the service sector with widespread applications in retail markets, finance, manufacturing, agricultural production and value chains (ADB, 2021). Digital platforms or marketplaces are part of this new digital economy which is very developed in various countries, including in Indonesia.

Indonesia, Southeast Asia's largest economy, saw a significant increase in the value of its digital industry from US\$41 billion in 2019 to US\$77 billion in 2022. This value is expected to increase to US\$130 billion by 2025. National economic is gaining, mostly due to the e-commerce industry. Such forecasts put a strong spotlight on the potential of the country's

21 digital economy especially by the huge number of micro, small and medium enterprises
22 (MSMEs) (Negara & Sugiana, 2022).

23 To gauge Indonesia's digital progress, McKinsey conducted research and analysis in 20
24 selected markets around the world. Its results show that Indonesia is in the early stages of
25 digitization. But this country presents a strange contradiction. Digital residents are one of the
26 most active nations in the world, and while the country boasts a vibrant startup ecosystem, it
27 lags behind in terms of reaping the benefits of modern technology. ICT infrastructure is low,
28 and digital penetration is uneven within and across different economic sectors. Indonesia's
29 connected population is tech-savvy, but internet penetration is weak. In short, Indonesia still
30 has a long way to go in the digital age (Das et al., 2016).

31 The digital economy plays an important role in promoting sustainable economic
32 development. There are reasons why Indonesia is a soft market for economic players. First,
33 Indonesia's e-commerce market is growing well. Second, the population continues to grow,
34 with 70% of her 213 million people under her 40s. Third is the rapid increase in social media
35 users in Indonesia. Fourth is the rapid population growth of middle and upper class people
36 (Aniqoh, 2020).

37 In addition, COVID-19 pandemic, is impacting the production of many companies and raising
38 concerns about the resilience of their supply chains. Much of the discussion on this topic in
39 developed countries focuses on reshoring and relocation. 16% to 26% of exports worth \$2.9
40 trillion to \$4.6 trillion in 2018 could go to new countries, according to MGI research.
41 Economic arguments are generally the most rational for changing labor-intensive value
42 chains (Tonby et al., 2020). This condition indicates that there is an opportunity to achieve
43 global competitiveness by utilizing the existing digital ecosystem. For Indonesia, which
44 already has a very large number of MSMEs, this opportunity is increasingly open to
45 encourage MSMEs to compete and increase their competitiveness in the global market.

46 According to the ASEAN Investment Report released in September 2022, Indonesia has the
47 most MSMEs in the ASEAN region. The report notes that the number of MSMEs in
48 Indonesia in 2021 will reach around 65.46 million units. This number is much higher than
49 Indonesia's neighboring countries. In fact, in 2021 Indonesian MSMEs are recorded to be
50 able to contribute 14.4% to national exports (Ahdia, 2022). Moreover, cumulatively, in 2021
51 there will already be 21 million or around 32% of the total 64 million MSMEs in Indonesia
52 who are utilizing digital technology (Yusuf, 2022). This provides a great opportunity for
53 Indonesia to increase the competitiveness of MSMEs to compete at the global level,
54 especially by utilizing the existing digital ecosystem.

55 In line with this rapid growth and opportunity, the government has ambitions to promote the
56 country as a digital hub in Southeast Asia. To achieve this objective, it is planned to increase
57 investment in digital infrastructure, data center construction and digital talent. In addition, the
58 government aims to attract more MSMEs into the digital market, reaching 30 million MSMEs
59 by 2030 (Negara & Sugiana, 2022). The value chain is subject to maximum scrutiny and
60 possibly state intervention due to the perceived importance of high quality cutting edge
61 technology and national competitiveness.

62 The unequal sharing of the benefits of digital transformation is widening the digital divide
63 between companies and industries at the national level, exacerbating global development
64 gaps and imbalances. Therefore, to understand the current state of digital transformation,
65 there is an urgent need to create a country-level analytical model that goes beyond
66 company-level analysis. It is also important to diagnose existing government's role in
67 encouraging the global competitiveness of MSMEs through the encouraging digital
68 ecosystem in Indonesia.

69 Therefore, although the situation remains difficult, Indonesia, including all its components, is
70 committed to achieving a sustainable economy, both at the administrative (central and local)
71 level and at the community level, both as a producer and as a consumer. It is hoped that the
72 government will continue to strongly commit to the realization of development. Not just from
73 an industrial player perspective, but also from a digital ecosystem. This background is the

74 basis of this research to analyze how the government's policy in encouraging the global
75 competitiveness of Indonesian MSMEs through the digital ecosystem.

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78 **2. MATERIAL AND METHODS**

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80 Considering the characteristics of the research and the appropriate way of obtaining
81 research data in this study, this research was conducted using a qualitative descriptive
82 method. In regard to this method, the researchers wished to observe and describe the how
83 the government's policy in encouraging the global competitiveness of Indonesian MSMEs
84 through the digital ecosystem specifically. The researchers also wanted to discover and
85 interpret the Indonesian policy in responding the issues about this digital ecosystem, which
86 in turn can influence the policies taken by the government.

87 This research is based on Literature Research and data collection is done by collecting
88 secondary data that discusses the Indonesian government's role, strategy and policy in
89 conducting efforts to create a digital ecosystem to encourage MSME capacity building. This
90 research is limited to looking at the role of Indonesian government on MSMEs by building a
91 digital ecosystem.

92 Besides, the data analysis was completed through a process of systematically in finding and
93 organizing the literature review or the library research Then, the data were sorted and
94 grouped to establish the research focus and theory to find the conclusion. In data analysis,
95 the researcher described the situation or the phenomena that form the character in detail.

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98 **3. RESULTS AND DISCUSSION**

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100 In recent decades, the world's industries have faced many change due to the digitalization.
101 This has not only created opportunities for increased flexibility, responsiveness and product
102 customization, but also rapid technological change, increased complexity and customer.
103 They also face diverse challenges such as the changing of economic ecosystem and
104 regulatory requirements. This creates a digital economy that may held difficult situation
105 within the economic players, both in local and global environment.

106 The digital economy, made possible by rapid advances in information and communication
107 technologies such as the Internet. Internet is creating a new digital ecosystem in which all
108 companies, from digital economy leaders to digitally cautious companies, must compete. In
109 the scientific literature, the changing business environment influenced by the digital economy
110 is called Industry 4.0, or the Fourth Industrial Revolution, and is considered a symbiosis
111 between the traditional physical world and the virtual world (Alexandrova et al., 2020).

112 In Indonesia, this digital economy owns the high popularity of its activity, especially by small
113 medium enterprises that have no official offline store. They have also contributed to the
114 rising popularity of the growing number of digital economy. Even more, the COVID-19
115 pandemic shows an increase in online shopping activities by 320% (Aristi & Pratama, 2021).
116 The surge of Internet users has given a broad opportunity to many Indonesians to be part of
117 that digital economy. Indonesia is a very dynamic market in the digital economy and the
118 digital economy's contribution to the global economy continues to grow. According to the
119 Global Digital Economy Development Report 2021, Indonesia's digital economy is the
120 largest in Southeast Asia, accounting for 40% of the entire Southeast Asian market (Yuning
121 et al., 2023).

122 The Indonesian government realizes the huge potential that Indonesian MSMEs have to go
123 global. Therefore, various policies continue to be strengthened for the development of
124 MSMEs which have a strategic role in the economy through the pillars of corporatization,
125 capacity and financing so as to support strong and inclusive economic growth. Efforts to
126 transform MSMEs are pursued through the use of digitalization to increase resilience and

127 capacity to be more productive and innovative. MSME development policies are also
128 supported by synergies that continue to be strengthened between various main actors (Bank
129 Indonesia, 2020).

130 MSMEs are the most important pillar in the Indonesian economy. The contribution of MSMEs
131 to the Indonesian economy is that they have the ability to absorb 97% of the total workforce
132 and can collect up to 60.42% of the total investment. However, the export capability of
133 MSMEs is still limited to around 14.37% of total exports and the utilization of e-commerce is
134 also still low at around 21%. Based on exporter data for 2020, there were 12,234 SME
135 exporters or 83.3% of the total exporters with an export value of USD 5.3 billion. In general,
136 MSME export potential is still dominated by products such as accessories, batik, crafts,
137 fashion, and processed food and beverages (Limanseto, 2021).

138 Even though MSMEs are ready to export, they still experience various obstacles such as a
139 lack of knowledge of foreign markets, consistency of product quality and capacity,
140 certification, and logistical problems. The government continues to strive to help MSMEs in
141 order to overcome these obstacles. Ministries, Institutions and other related parties have
142 launched the Program to Create 500 thousand New Exporters by 2030 (Kominfo, 2021).

143 Within this framework, the Indonesia Ministry of Cooperatives and SMEs launch four main
144 program pillars align with the strategic planning document (2020-2024), namely Go Digital,
145 Go Formal, Go Modern, and Go Global (Soepardjo, 2023). Through these pillars, MSMEs
146 are encouraged to have increased capacity, especially to achieve global competitiveness
147 through digital media. The two main pillars that are emphasized in this research, and which
148 are most often echoed in various government programs and policies are UMKM Go Digital
149 and UMKM Go Global. These two pillars are an important synergy to support the
150 competitiveness of Indonesian MSMEs towards the export market. This means that the
151 Indonesian government requires a series of policies to support the establishment of a digital
152 ecosystem for MSMEs or digitization.

153 The definition of digitization itself can be interpreted as "Digitalization is the process of
154 converting analogue data into digital data sets which exploits digital opportunities like digital
155 transformation. Used for restructure economies, institutions and society at system level"
156 (Rachinger et al., 2019). In order to encourage digitalization, a supportive digital ecosystem
157 is needed. Inspired by Rust, research by Wichmann et al. (2022) identify three fundamental
158 shifts that have important role in the digital ecosystem: (i) advances in technology, (ii)
159 socioeconomic and geopolitical shifts, and (iii) environmental changes. These three things
160 are also the basis for this research to identify government policies in creating a digital
161 ecosystem to support the global competitiveness of Indonesian MSMEs.

162 **3.1. Policy for Advances in Technology**

164 A company's competitiveness is determined by its competitive advantage. The more
165 competitive advantages an economy operator can achieve, the more likely it is to be
166 competitive. At the current stage of digital economy development, there is no doubt about
167 the importance and necessity of digital economy technology. Digital economy technology is
168 important matter to encourage businesses to take a more responsible approach to gaining
169 competitive advantage.

170 Indonesia has an increasing acceptance of all advanced technologies such as: mobile
171 internet, cloud technology, internet of things, and advanced big data analytics. These four
172 technologies effectively provide a solid foundation for future investment and productivity
173 gains. Although this is still in its early stages, the digital revolution has already arrived in
174 Indonesia since 2015 (Das et al., 2016). Despite Indonesia making progress in each of her
175 four disruptive technologies, the country still has a long way to go.

176 A key area that Indonesia needs to focus on to sustain the growth of the digital economy is
177 improving the country's digital infrastructure in both software and hardware. Digital services
178 need to becoming "infrastructural", by means of cheaper, smaller, more powerful, networked

179 technology (Heidlund & Sundberg, 2023). These include more effective regulation and
180 enforcement to combat illegal and fraudulent websites that provide financial services online,
181 increased public awareness of the downsides of going online, and digital literacy, especially
182 outside of Java, including the promotion of the latter through free or discounted online digital
183 literacy courses and workshops. Additionally, regulators must ensure that companies that
184 provide online services provide adequate protection against cyberattacks, cybercrime, and
185 the loss of personal data. Infrastructure technology has great potential to further extend
186 online services to remote and sparsely populated areas (Negara & Sugiana, 2022).

187 E-commerce in Indonesia is growing rapidly but is constrained by limited access to
188 technology, a lack of technological savviness (Das et al., 2016). This makes policies to build
189 an adequate digital ecosystem in Indonesia an important matter. As a result of the
190 embedded use of this emerging digital technology, companies can optimize resource
191 utilization, reduce costs, increase employee productivity and labor efficiency, optimize supply
192 chains, improve customer retention and satisfaction, and more (Rachinger et al., 2019).

193 To advance technology, Indonesia is also trying to improve existing digital infrastructure
194 facilities. The Indonesian government attaches great importance to the development of the
195 country's network communications industry infrastructure and has made it an important
196 strategic area for national connectivity in its 15-year medium-term construction plan for the
197 national economy (2011-2025), and is committed to promoting global fiber optic network
198 coverage, broadband network connectivity in Indonesia, and promoting the convergence and
199 development of the Internet with other regions. Other key areas, currently, 4G service is
200 developing well in Indonesia and the main networks used by Indonesian consumers are 4G
201 and WIFI, and the impact of 5G will be huge on the development of the Internet in Indonesia,
202 the explorations remote technology, smart home and smart car in Indonesia in the future,
203 taking into account the current trend of the digital economy (Yuning et al., 2023).

204 Various steps taken by Indonesia have shown efforts to encourage technological
205 improvements to support MSMEs Go Global and Go Digital. Nevertheless, the infrastructure
206 construction policy currently proposed by the Indonesian government is still at a popular
207 stage, and the construction of transportation and logistics continues to improve strongly.
208 Indonesia's current big data computing and analytics capabilities are still building and
209 developing a weak cultural environment. On the World Bank's Digital Adoption Index,
210 Indonesia is ranked poorly. However, as money pours into their economies and
211 governments set up significant programs to support digitization, their adoption rates are
212 among the highest. From less than 5 percent in 2011 to 80 percent in 2018, mobile e-
213 commerce penetration in Indonesia increased significantly—a significant shift in a short
214 period of time (Tonby et al., 2020).

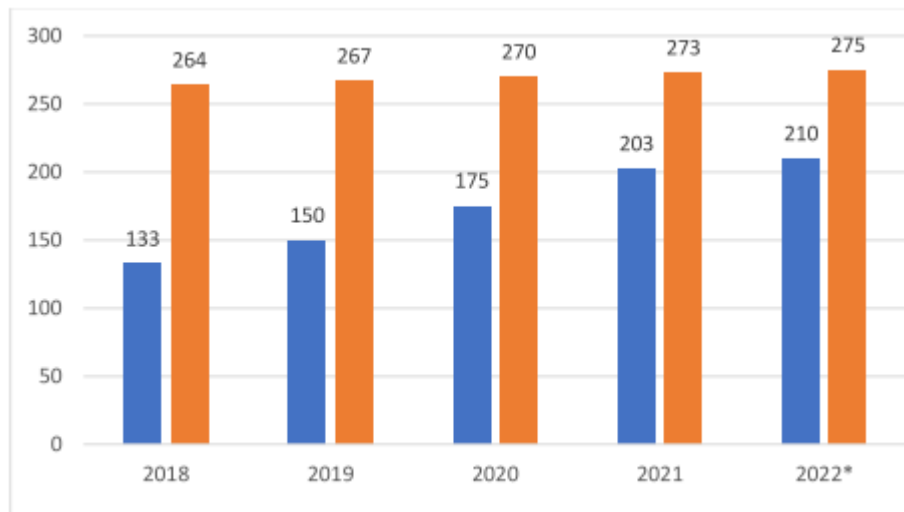
215 A key area that Indonesia needs to focus on to sustain the growth of the digital economy is
216 improving the country's digital infrastructure in both software and hardware. These include
217 more effective regulation and enforcement to combat illegal and fraudulent websites that
218 provide financial services online, increased public awareness of the downsides of going
219 online, and digital literacy, especially outside of Java(Negara & Sugiana, 2022).

220 This condition resulted in a significant increase in Indonesian internet users. This increase is
221 a positive signal of a thriving Indonesian digital ecosystem. The following is data on the
222 development of Indonesian internet users from 2018-2022:

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Fig 1. Indonesian internet users 2018-2022



Source: BPS, 2022

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Indonesia has just started construction in this area. It can be seen that the policy direction of Indonesia's digital economy is more geared towards transforming and optimizing the underlying environment for the development of the digital economy. Indonesian economies are at a relatively early stage in their technology development. With everything that has been achieved, efforts are still needed to further increase synergy in achieving the target of Go Digital and Go Global for its MSMEs.

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In political power analysis, there is an emphasis on power positions and state-society relationships. This refers to the current context for governance and the role of the main actors and stakeholders in driving recent political dynamics. The government as the main actor who has the power has the role of Implications for Change in supporting or creating economic conditions (McCloughlin, 2014). It is also evident from some of the data that has been shown, that the government's agenda in developing digital infrastructure has an influence on changes in the existing economic situation. A strong digital infrastructure produces a strong digital ecosystem. In the end, this condition can lead to a driver of competitiveness from MSMEs.

252 **3.2. Policy for Socioeconomic and Geopolitical Shifts**

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In the policy for Socioeconomic and Geopolitical Shifts, Indonesia seeks to create an ecosystem that is able to encourage competitiveness, interest and efforts for MSMEs to enter the global market. The government has a Program to Create 500 thousand New Exporters until 2030. In an effort to achieve this target, the Proud Made in Indonesia National Movement (Gernas BBI) program has been launched which aims to encourage digitalization (onboarding) for offline MSMEs and encourage national branding of superior MSME products in various marketplace. This movement is expected to increase exports of MSME products to the global market (Bank Indonesia, 2020).

In this case, social and environment interests must be put on par with economic interests. The social interests of communities need to align more closely with individual interests. Market failures need to be fixed and social and environmental costs need to be internalized in the form of economic costs. Government policy must be overcome through a triangular relationship of equals between government, business and civil society (Aniqoh, 2020). Government policy is important in efforts to build a digital ecosystem as expected.

267 In socioeconomics and geopolitics, good synergy is needed between the main actors in this
268 activity, including government agencies, ministries, MSME actors and related private
269 institutions. The government in this case provides funding support which is distributed
270 through Bank Indonesia and other financial institutions. Realization of support is also carried
271 out by providing funding support for MSMEs. In 2020, the realization of funding support for
272 MSMEs has reached IDR 112.26 trillion. Taking into account fluctuations in economic growth
273 and in order to support MSMEs to continue to grow, the budget allocation for MSMEs and
274 corporations in 2021 increases by IDR 171.77 trillion (Limanseto, 2021).

275 In order to open up greater opportunities in the global market, especially in the regions of
276 neighboring countries, Indonesia is making use of geopolitics as a step towards opening up
277 the Indonesian MSME market. The government welcomes all efforts to increase the ability of
278 MSMEs to penetrate global markets such as: Among other things, the government held an
279 agenda: (1) "Kreasi Nusantara, From Local to Global" which facilitated the sale of local
280 products to Malaysia and Singapore; (2) "BukaGlobal" which facilitated the purchase of local
281 products by customers from Malaysia, Singapore, Brunei, Hong Kong, and Taiwan; (3)
282 "ASEAN Online Sale Day" which aims to increase e-commerce cross-border transactions in
283 the Southeast Asian region.

284 In program "Kreasi Nusantara", Indonesian MSME products are invited to dominate the
285 Southeast Asian market, by exploring markets such as the Philippines, Vietnam and
286 Thailand, to Taiwan. In line with these activities, the government also received support from
287 the global marketplace Shopee. Through the support of collaboration with the Shopee e-
288 commerce platform, Indonesian MSMEs have successfully exported more than 5,000
289 curated Kreasi Nusantara products in 2019 to Singapore and Malaysia. Since the launch of
290 the Kreasi Nusantara program for the first time with an 8-fold increase in MSME daily
291 transactions through the "From Local to Global" channel. This platform also supports
292 government policies through the Shopee Campus Program which has succeeded in
293 fostering more than 40,000 MSMEs in Indonesia as a platform to be able to apply a digital
294 literacy approach to businesses run on the Kreasi Nusantara channel (SetnasAsean, 2020).

295 Indonesia also encourages MSMEs to be involved in Expansion of Indonesian Export
296 Products ViaAsean Online Sale Day (AOSD). ASEAN Budget Spending Day or ASEAN
297 Online Sale Day is a simultaneous budget spending activity held from an e-commerce forum
298 with ten ASEAN members. The event coincides with the date of birth of the Association of
299 Southeast Asian Nations on August 8 2020. Representatives from each country are
300 commercial executors in the ASEAN region who offer products and services in the form of
301 electronic transactions or e-commerce. This event is an opportunity for Indonesia to market
302 and introduce the uniqueness of the archipelago's national goods in international arenas
303 while promoting and developing the Indonesian goods export movement (Rahmadhani et al.,
304 2023).

305 This activity is a way that can encourage the opening of new markets for Indonesian
306 MSMEs. Products from Indonesian MSMEs are introduced overseas. This opening of new
307 market opportunities is quite effective as evidenced by increasing the number of export
308 shipments from MSMEs. The number of Indonesian MSMEs continues to increase (Yusuf,
309 2022). MSME export shipments do have differences from large company exports, because
310 they have to partner with expedition companies that are capable of providing permits and
311 shipping efficiency. The Indonesian government is also pushing for increased facilitation
312 from freight forwarding service companies that focus on serving exports, continuing to strive
313 to improve their services to customers, especially micro, small and medium enterprises
314 (MSMEs) in all corners of Indonesia. One of them is by cooperating with the Abang Express
315 export expedition. The government together with the expedition socialized the ease of
316 sending exports to MSMEs. Through his business, export shipments via Abang Express
317 from 2021 to 2022 will experience an increase of 30 to 40 percent (Media Indonesia, 2022).

318 These various government policies are important to encourage the MSME sector to grow
319 and compete globally. This is because MSMEs with all their limitations will certainly find it

320 difficult to go global without support. In a global world dominated by large exporters,
321 managing these issues involves complex interactions between powerful private and public
322 sector actors, value chain enterprises, civil society, national and international regulations.
323 Here, Indonesia can built a strong position in the regional market for larger digital economic
324 for MSMEs with the backing of government policy.

325 **3.3. Policy for Environmental Changes**

326 The digital economy is indeed a thing that is developing rapidly. However, the digital
327 environment is also not familiar to the whole community, including MSMEs in Indonesia.
328 Therefore, government efforts are needed to create environmental changes that support the
329 digital ecosystem. Within the digital infrastructure framework, the development of the
330 nation's network communications industry infrastructure is highly valued by the Indonesian
331 government, who has designated it as a crucial strategic area for national connection in its
332 15-year medium-term construction plan for the national economy (Yuning et al., 2023).
333 Furthermore, various supporting policies were launched to support overall environmental
334 changes for the competitiveness of MSMEs in the digital market globally. 2021 will be an
335 important year for Indonesia's business environment. The enactment of Decree No. 5 of
336 2021 lays the groundwork for the transition of the business licensing system to a risk-based
337 approach that greatly simplifies the registration and licensing of SMEs. This decree is one of
338 the derivative regulations of the Omnibus Law or Job Creation Law (Law No. 11/2020)
339 enacted in 2020. The effectiveness of various micro and small business empowerment
340 programs needs to be optimized to sustain and increase this momentum. These programs
341 have traditionally been managed in an intermittent, asynchronous and unstructured manner
342 by multiple ministries and agencies at both national and regional levels (Soepardjo, 2023).
343 The government through Customs and Excise also has the slogan "Export is Easy" which is
344 intended to support the performance of the domestic industry. Customs and Excise offers
345 convenience in various customs facilities, such as fiscal facilities and procedural facilities,
346 which can encourage MSMEs to enter the global market. Customs and Excise also opened
347 international markets for Indonesian MSMEs, including bridging the activities of visits by
348 Japanese businessmen with the Indonesian Embassy (KBRI) in Tokyo to Trangsan Rattan
349 Tourism Village, Sukaharjo Regency, by cooperating with Surakarta Customs; carry out the
350 signing of a joint contract with the KriyaGiri Sejahtera Cooperative fostered by the
351 collaboration of Gresik Customs and Gresik Regency Government; development of potential
352 MSME entrepreneurs in Probolinggo Regency, Batam and others (Bea Cukai, 2022).
353 This policy is a concrete step to support the success of the export program for MSMEs. By
354 showing that shipping abroad is easy and inexpensive, MSMEs will have an idea to
355 determine their attitude. MSMEs also have greater opportunities because they do not have
356 to export on a large scale. This is because, like most MSMEs, the production capacity and
357 capital owned by Indonesian MSMEs are often still limited.
358 The government also encourages increasing the competitiveness of MSMEs through various
359 capacity building programs. The forms of programs most frequently implemented by
360 agencies/institutions are digital marketing training, financial training, vocational training,
361 entrepreneurship training, marketing training, Standard Operating Procedure (SOP) training,
362 branding training, production training, and working with educational institutions to initiate
363 programs entrepreneurial studies. In the marketing access program, the programs that are
364 most often implemented are creating a special marketplace for MSME products, featured
365 product galleries, MSME exhibitions/ bazaars, and bringing together MSMEs with
366 marketplaces (Soepardjo, 2023).
367 MSMEs need to have a broader understanding of the government's targets in the go global
368 MSME or go digital MSME programs. Therefore, counseling or socialization is one important
369 aspect that is often carried out by the government. A digital ecosystem is an interconnected
370 whole that satisfies consumer needs with an integrated experience, and includes companies

371 from different sectors that collectively offer a wide range of products and services. Startups
372 and digitally native companies are growing rapidly, some offering ride-hailing, grocery
373 delivery, groceries, logistics, healthcare, lifestyle, financial services and more through
374 integrated experiences. Governments recognize the opportunities of digital ecosystems and
375 are using partnerships and strategic alliances to share resources, data and skills to build
376 digital ecosystems that can compete with other nations.

377 As the world becomes more digital, the need for a national cybersecurity strategy has never
378 been greater. The world is seeing more and more cyberattacks against both businesses and
379 governments. For Indonesia's digital ecosystem, cyberattacks are also a matter of
380 concern. Indonesia's current National Cyber Agency reported that there were 88,414,296
381 cyberattacks from January 1 to April 21, 2020. The most common attack was Trojan horse
382 activity at 56%, followed by information gathering at 43%, and his web application attack at
383 1%. By the end of 2020, the number of attacks will grow to 42,324,053, and is expected to
384 increase further in 2021. According to his Frost and Sullivan study, which Microsoft launched
385 in 2018, cybercrime in Indonesia has caused nearly 100,000 attacks, resulting in a deficit of
386 IDR 478.8 trillion, or up to US\$34.2 billion (Yulianto, 2021). The National Cyber and Crypto
387 Agency (BSSN) also stated that Indonesia was included in the top 10 countries with the most
388 sources and targets of cybersecurity anomalies with 190 million attacks originating from and
389 1 billion attacks targeting Indonesia (Loviana, 2022). These facts are a stark reminder that
390 Indonesia urgently needs a national cybersecurity strategy.

391 Currently, legally speaking, regulations that can be used to strengthen cybersecurity include:
392 (1) Law No. 19/2016 on the amendment of Law No. 11/2008 on Information and Electronic
393 Transactions (ITE); (2) Telecommunication Law No. 36/1999; (3) Ministry of Communication
394 and Informatics' Ministerial Regulations No. 5 Year 2017 on fourth amendment of Ministry of
395 Communication and Informatics' Ministerial Regulations No. 26 Year 2007 on Securing
396 Internet Protocol-based Telecommunication Network (PERMENKOMINFO No. 5, 2017).

397 Regulations point one and two are actually not direct rules for cybersecurity. This makes the
398 regulation less strong because there are many limitations related to the digital world that
399 continues to grow. BSSN's functions have also been criticized as overlapping with other
400 bodies such as the Ministry of Communication and Informatics, Cybercrime Unit of Indonesia
401 Police Force, and the Ministry of Defense's Cyber Operation Center. Going forward,
402 Indonesia needs to accelerate cybersecurity law enforcement to build a legal foundation.
403 The existence of this law will also promote a comprehensive national cybersecurity strategy
404 and better redefine the functions of the BSSN.

405 Indonesia has taken many policies to support the global competitiveness of its
406 MSMEs. Through the creation of the right digital ecosystem, many changes have been
407 achieved by Indonesia. Indonesia has experienced an increase in exports by MSMEs.
408 Moreover, Indonesia are identified as the fastest digital adopter among major digital
409 economies in Asia (Tonby et al., 2020). The various policies taken by the Indonesian
410 government show the strong existing political and economic relations. This condition
411 illustrates what is in the political economy analysis.

412 Political Economy Analysis is not necessarily about politicians, manifestos, or endorsements
413 or proposals of any particular political deal. Rather, PEA deals with the interactions and
414 relationships between political and economic processes in society (Oxfam, 2014). The
415 distribution of power and wealth among various groups and individuals and the processes
416 that create, maintain and change those relationships over time. Analytical frameworks such
417 as: Power analysis, however, is more holistic and is placed in the context of interactions
418 between political and economic processes, agents and institutions.

419 Political economy analysis includes analysis of state legitimacy. It provides a way to analyze
420 governance and state-building, especially in fragile situations. Here, power analysis aims to
421 identify where real power in a society lies, how it is distributed and possible conflicts of
422 interests (McCloughlin, 2014). As described in the phenomenon of digital ecosystem
423 development in Indonesia. The development of a digital ecosystem requires the role of

424 various actors, from the government and the private sector to the economic actors
425 themselves, including MSMEs. Synergy from various parties will create the right digital
426 ecosystem. However, the government's position as the holder of political power seems to be
427 the most important.
428 However, there are still some limitations and challenges facing Indonesia. The development
429 of digital ecosystems in Indonesia is still limited due to suboptimal infrastructure. With less
430 investment in technology, less IP being created, and fewer tech firms represented, these
431 economies are still in the early stages of technological growth. While, the digital economy
432 continues to grow and innovate as national regulatory frameworks catch up. One key area for
433 Indonesia to focus on to sustain the growth of the digital economy is the improvement of the
434 country's digital infrastructure according to the needs of SMEs.

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437 **4. CONCLUSION**

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439 The Indonesian digital economy continues to grow. This is an important target for the
440 government and innovate as national regulatory frameworks to catch up. The government is
441 trying to raise the number of digital platforms offering a variety of integrated services to wider
442 or consumers globally. This important agenda is supported by the existence of MSMEs
443 which are considered as important economic driving actors in Indonesia. MSMEs are the
444 spearhead of the national macro economy, so the government is trying to increase the
445 competitiveness of MSMEs to go global and go digital through synergies between various
446 main players to provide financing, coaching and markets.

447 The government launched an economic pillar by prioritizing MSMEs to go global and
448 MSMEs to go digital. This is aimed at increasing the global competitiveness of Indonesian
449 MSMEs. Various policies are carried out to build an adequate digital ecosystem. Among
450 these policies include: (1) efforts to advance technology by creating digital infrastructure and
451 related investments, (2) building a socio-economy that supports MSME performance and
452 opens global markets through the Kreasi Nusantara, Buka Global, and Asean Online Day
453 Sale programs; (3) Creating changes in the environment that are conducive to developing
454 the competitiveness and thinking of MSME actors so that they are better trained and
455 facilitated in penetrating the global market through digital access.

456 With the efforts made by SME business actors, coupled with support from the government,
457 SME businesses can develop quickly and can expand market share. The government has
458 an important role to play in supporting the competitiveness of MSMEs, due to the limitations
459 of MSMEs, which generally exist in terms of capital and capabilities. The evolution of the
460 digital age can be considered one of the major reasons for the growth of the opportunity of
461 MSMEs to enter the global economy. However, it is very important for a country to be able to
462 provide adequate policy support for economic actors in the country, through the creation of a
463 supportive digital ecosystem. Furthermore, the government as regulatory institutions need to
464 ensure those providing digital ecosystem apply sufficient protection to the MSMEs growth.

465 The novelty of this research can be seen from the point of view of political economic
466 analysis, which emphasizes government relations in building digital ecosystems in economic
467 development. The government is an important actor that has legal rights and legitimacy in
468 supporting economic development in the digital era, regardless of the various strengths of
469 emerging economic actors. For further research, in this digitalization era, none of economic
470 actor is immune to the digital phenomena, including the traditional industries. As the digital
471 economy spreads around the world, it will be interesting to see how businesses adjust, adapt
472 and adopt available digital tools to their daily activities. Moreover, it is important about how
473 the government policy of a nation respond this phenomena, while the whole economy
474 becomes more digitally inter-connected going forward.

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COMPETING INTERESTS

Authors have declared that no competing interests exist in the preparation of this research. This research is analyzed neutrally from various angles, through sources that have been validated through research standards that are understood by researchers.

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