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Policy Brief

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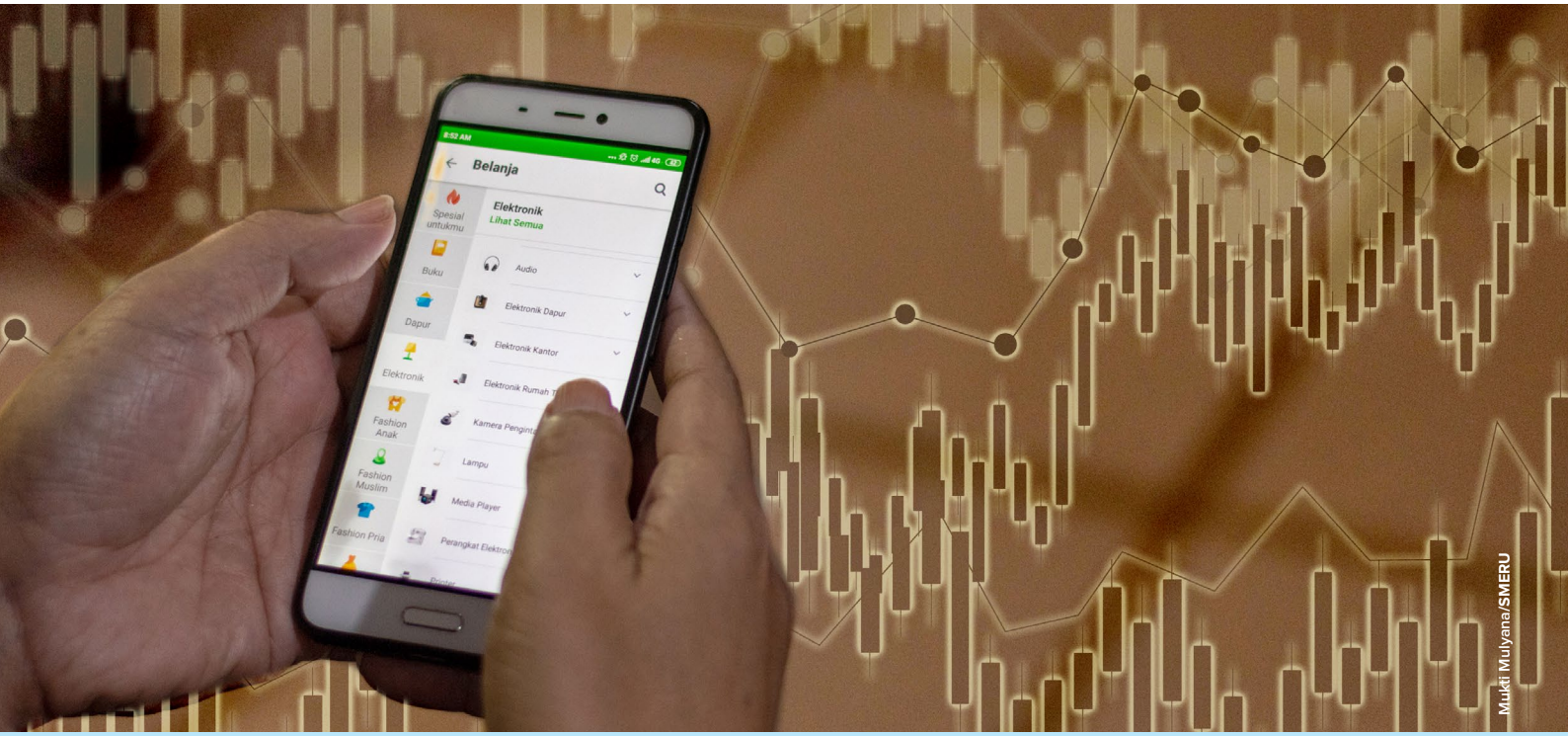
TOWARDS AN INCLUSIVE DIGITAL ECONOMY



Mukti Mulyana/SMERU

EXECUTIVE SUMMARY

Indonesia's current digital economy is not inclusive due to many issues. Firstly, the internet and its supporting infrastructure have not been evenly distributed in rural areas, particularly the disadvantaged, frontier, and outermost (3T) regions. Secondly, even when internet infrastructure is available, it does not necessarily ensure that the access to the internet and its utilization are equal, particularly for women, the poor, the elderly, people with low educational attainment, and people with disability. Thirdly, the digital transformation in business expansion has not been fully achieved. Finally, awareness of the importance of social protection among businesspeople and workers involved in the digital economy ecosystem is still low.

To achieve an inclusive digital economy, it is important to take the following four measures.

- The government, in this case the Ministry of Communication and Information Technology (Kemenkominfo), needs to ensure that internet infrastructure is available in rural areas, particularly in the 3T regions, as well as for the agricultural sector.
- In addition to providing internet infrastructure, Kemenkominfo needs to improve digital literacy to ensure that the internet can be accessed by women, the poor, the elderly, people with low educational attainment, and people with disability. This digital literacy improvement needs to be followed by increasing awareness of the importance of owning administrative documents to be able to get involved in the digital economy system.
- BPJS Kesehatan and BP Jamsostek need to cooperate with online application-based companies to disseminate the importance of social security for businesspeople and workers in the digital economy ecosystem.
- Especially in the midst of the COVID-19 pandemic, it is important for the Ministry of Trade to postpone the implementation of business legalization. When the pandemic impacts subside, this business legalization should be applied gradually, starting from middle to small to micro enterprises.

THE POTENTIAL OF DIGITAL ECONOMY IN INDONESIA

Numerous studies show that Indonesia has relatively great digital economy potential and it is expected to be the country with the largest digital economy in Southeast Asia in 2025 (Google, Temasek, and Brain & Company, 2019). The National Socioeconomic Survey (Susenas) data indicates that the internet users in Indonesia in 2019 were 43.5% of its population or around 116 million people. However, this increase in the number of internet users does not seem to have a significant impact on the country's gross domestic product (GDP) growth (Figure 1). One of the causes is the small proportion of internet use for economic activity purposes (Figure 2).

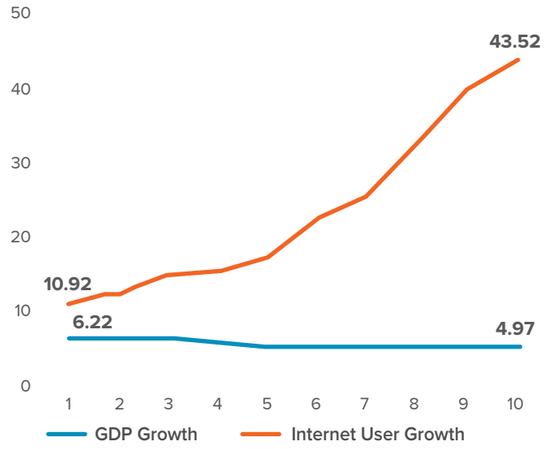


Figure 1. GDP and internet user growths in Indonesia in the 2010–2019 period (%)

Source: BPS, 2019; World Bank, 2019.

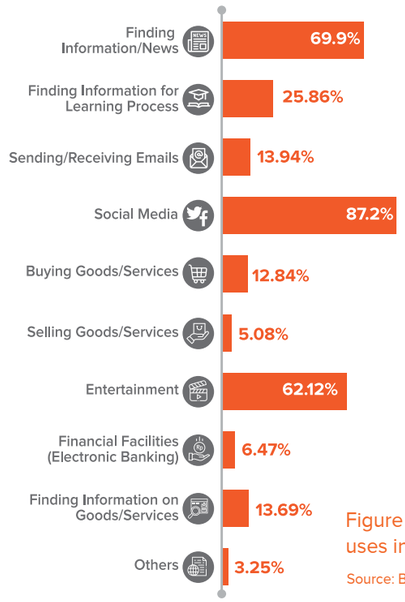


Figure 2. Internet uses in Indonesia

Source: BPS, 2019.

The contribution of digital economy to Indonesia's GDP is currently 2.9%, slightly higher than the average GDP of ASEAN countries (2.8%) (Katadata, 2019). Furthermore, the 2020 Inclusive Internet Index notes that Indonesia is still ranked below several ASEAN countries, namely Singapore, Malaysia, and Thailand, in terms of infrastructure, internet quality, digital literacy, and government regulations (The Economist Intelligence Unit, 2020).

STEEP ROAD TO INCLUSIVE DIGITAL ECONOMY

Despite its great digital economy potential, Indonesia has to deal with a number of issues in realizing an inclusive digital economy ecosystem. These issues are analyzed and presented using the digital economy analysis framework developed through SMERU's diagnostic study[1] (Figure 3).

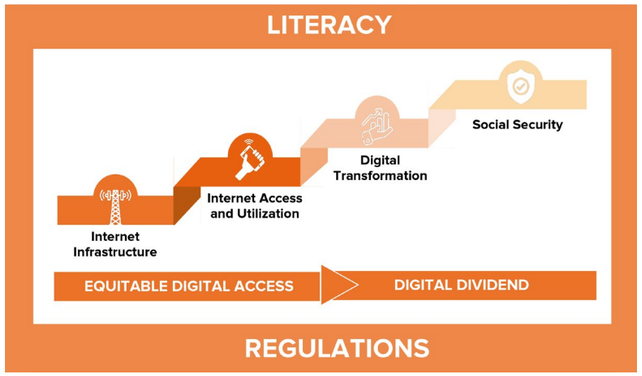


Figure 3. Inclusive digital economy analysis framework

a) Inequitable Internet Infrastructure

The fact that equitable internet infrastructure is not available up to the rural areas, particularly the 3T regions, has led to disproportionate numbers of internet users; internet users in rural areas are much fewer than those in urban areas. The number of internet users in the agricultural sector is also far too small compared with the other sectors (Figure 3). Various challenges are in the way of the government's attempt to provide an equitable internet infrastructure. Providing internet infrastructure to include 3T regions incur huge costs due to geographic obstacles and population distribution. The cellular telecommunication network migration from 2G and 3G to 4G and 5G also takes some time since the 700 MHz frequency has not been shifted from analogous to digital signals. This is due to conflict of interests regarding the authority over broadcasting frequency management when the frequency will have been digitalized later.

b) Unequal Access to the Internet and Less than Optimum Utilization

The gap in access to the internet between socioeconomic classes and education levels also hinders the attainment of an inclusive digital economy. In Jakarta, for example, the available internet cannot be accessed equally by women, the poor, the elderly, and people with low education attainment (Figure 3). Aside from the low digital literacy, they face financial constraints to purchase both smartphone and/or internet package.

[1] The inclusive digital economy analysis framework consists of equitable digital access and digital dividend. The equitable digital access, which includes equitable internet infrastructure and equitable internet access and utilization, needs to be achieved first to allow an individual to reach digital transformation as the main prerequisite of digital dividend attainment. To make the digital dividend sustainable, it is imperative to own social security particularly for businesspeople and workers involved in a digital economy ecosystem (Bachtiar, Diningrat, Kusuma, dan Diandra, forthcoming).

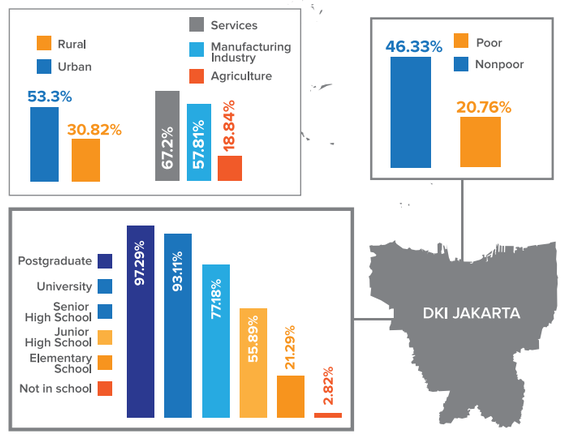


Figure 4. Proportions of internet users among regions and sectors (national level) and among socioeconomic classes and education levels (in DKI Jakarta Province)

Source: BPS, 2019.

In today's digital era, access to the internet is a bridge to a digital economy ecosystem. However, even when access to the internet is available, it does not necessarily ensure that businesspeople and workers would be involved in this ecosystem.

For conventional businesspeople, their decision not to get involved in the digital economy ecosystem is influenced by their "resistance" to technology. Some of them are reluctant to enter the e-commerce platform because of concerns about tax payment obligation.

Not owning administrative documents, such as identity card (KTP) and family card (KK), also prevents businesspeople and workers from being involved in the digital economy ecosystem. An example of this is how some farmers and motorcycle taxi drivers failed to join online application-based companies for not having these documents.

Even when people with disability can be involved in the digital economy ecosystem, they are generally having difficulties in making use of the opportunities available in this ecosystem. "Deaf buddy" online application-based motorcycle taxi drivers, for example, frequently got their orders cancelled due to being wrongly blamed for ignoring their potential passengers' calls.

c) Digital Transformation Has Not Been Achieved

Digital transformation is characterized by digital data utilization for the purposes of expanding businesses or increasing incomes. This is possible only when government policies support innovation, particularly one that is made by online application-based companies.

However, not all businesspeople can digitally transform their businesses without difficulty. Only large-scale online application-based companies with a general business model, such as Gojek and Bukalapak, can easily expand their market by recruiting businesspeople and/or partner workers in various cities (Table 1).

Meanwhile, online application-based companies with specific business models require data to expand their businesses.

Table 1. Number of Partners of Several Online Application-Based Companies in 2020

Online Application-Based Companies	Number of Partners
Gojek	2,500,000 motorcycle and car taxi drivers; 400,000 SMEs*; 600,000 service providers
Bukalapak	5,000,000 seller accounts
Mekar.id	11 cooperatives 57,300 SMEs
Kopituli	6 "deaf buddy" workers
TaniHub	30,000 farmers
TaniFund	1,500 farmers
8Villages	5,000 farmers
Minapoli	60 companies/institutions 7,500 farmers and fishers

Source: FGD with online application-based companies.
* Small and micro enterprises.

However, the data they need is frequently unavailable. TaniHub, for example, finds it hard to reach those regions whose farmer data is unavailable.

Also, it is quite frequent that some businesspeople in the digital economy ecosystem have no expenditure and revenue records, while these records will allow them to make their businesses more efficient or to develop their businesses. Quite a few businesspeople are actually reluctant to "upgrade" themselves because they are content with their current business scale.

Another problem is Government Regulation No. 80/2019 on Commerce via Electronic System, which governs business legalization. Despite its importance as a framework to protect both businesspeople and customers, it is possible that business legalization makes businesspeople less interested in partnering with online application-based companies and it can even encourage business migration to social media. Particularly in the midst of the COVID-19 pandemic, the necessity for business legalization might increase the burden for those businesspeople affected by the low purchasing power of society.

d) Low Awareness of Owning Social Security

Being vulnerable to risks resulting from economic shocks, businesspeople and workers, especially those in the digital economy ecosystem, should have social security. However, most of them lack the awareness of such issue even when in fact they are obligated by Law No. 24/2011 on Social Security Implementing Agency to participate in BPJS Kesehatan (health insurance) and BP Jamsostek (social security). Even online application-based companies can only recommend their partners to voluntarily participate in BPJS Kesehatan and BP Jamsostek upon recruitment.

So far, regulations concerning social security for businesspeople and workers in the digital economy ecosystem have not been clearly formulated. For example, Regulation of Minister for Transportation No. 12/2019 Article 16 sets forth a protection for online motorcycle taxi drivers, yet it does not specify who shall give such protection.

RECOMMENDATIONS

An inclusive digital economy system can only be achieved when equal digital access is attained and everyone obtains digital dividend equally and sustainably. For this reason, this policy brief offers four recommendations as follows.

1. Developing an Improved and Equitable Internet Infrastructure

- Kemenkominfo needs to accelerate the revision to Law No. 32/2002 on Broadcasting to allow immediate shift of 700 MHz frequency from analogous to digital signal. This will eventually lead to a faster migration of cellular telecommunication network from 2G and 3G to 4G and 5G. In turn, this migration will enable wider internet connection coverage and better internet quality.
- Kemenkominfo also needs to accelerate the utilization of the Palapa Ring and immediately negotiates with a number of relevant telecommunication operators to allow the construction of internet infrastructure in rural areas, particularly in 3T regions. With affordable and high-quality internet access, producers in 3T regions are expected to get connected to customers in other regions.
- Local governments need to provide wireless internet (Wi-Fi) facilities for free in public spaces and service centers at *kabupaten* (district)/*kota* (city), *kecamatan* (subdistrict), and village/*kelurahan* (urban village) levels. Providing free internet access for the public in local libraries, city parks, and *puskesmas* (community health centers), for example, will be helpful in improving equitable digital access.

2. Improving Internet Access and Utilization, and Attaining Digital Transformation

- Kemenkominfo needs to design a program for improving digital literacy affirmatively targeting women, the poor, the elderly, people with low educational attainment, and people with disability. This digital literacy improvement needs to be followed by improving people's awareness of the importance of administrative documents to allow them to get involved in the digital economy ecosystem.
- Kemenkominfo needs to support online application-based companies' innovations, encourage them to create special features for people with disability, and improve customers' awareness of this group's needs.
- Local governments need to collaborate with online application-based companies in developing production centers in rural areas, particularly in 3T regions, and organizing training on production and online marketing for businesspeople.
- Online application-based companies need to improve the literacy of their partners, especially those who do not wish to "upgrade" themselves, on production input efficiency in order to enable them to increase their income. They also need to encourage their business partners to do a complete bookkeeping and make use of the data they own in making decisions.

3. Increasing Awareness of the Importance of Social Security

BPJS Kesehatan and BP Jamsostek need to be proactive in improving the awareness of businesspeople and workers in the digital economy ecosystem of the importance of social security. They need to collaborate with online application-based companies to disseminate the importance of social security and to design a more flexible and affordable premium payment scheme.

4. Postponing and Staging Business Legalization

In the midst of the COVID-19 pandemic, it is important for the Ministry of Trade to postpone the implementation of business legalization as referred to in Government Regulation No. 80/2019. When the pandemic impacts subside, this business legalization should be applied gradually, starting from middle to small to eventually micro enterprises. This is necessary to prevent businesspeople from migrating from online application-based companies to social media. ■

LIST OF REFERENCES

Bachtiar, Palmira Permata, Rendy Adrian Diningrat, Ahmad Zuhdi Dwi Kusuma, and Abella Diandra (forthcoming) 'Towards a More Inclusive Digital Economy: A Policy Review.' Research Report. Jakarta: The SMERU Research Institute.

Google, Temasek, and Brain & Company (2019) 'E-Conomy SEA 2019.' Research Report [online] <http://think.storage.googleapis.com/docs/e-Conomy_SEA_2019_report.pdf> [2 March 2020].

Katadata (2019) *Ekonomi Digital Menyumbang 2,9% PDB Indonesia* [Digital Economy Contributes 2.9% of Indonesia's GDP] [online] <https://databoks.katadata.co.id/datapublish/2019/09/05/ekonomi-digital-menyumbang-29-pdb-indonesia> [2 March 2020].

The Economist Intelligence Unit (2020) *The Inclusive Internet Index 2020* [online] <https://theinclusiveinternet.eiu.com/> [29 February 2020].

World Bank (2019) *World Bank Open Data: Indonesia Data 2019* [online] <https://data.worldbank.org/country/indonesia> [29 February 2020].

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