Realising the potential of Indonesia’s digital economy

With predictions suggesting that Indonesia’s digital economy is poised to grow to size of about USD133 million within the next five years\(^{11}\), realising its full potential has become a priority for both the government and businesses in recent months, especially as the COVID-19 pandemic continues to drive digitalisation across all sectors.

Given its digitally savvy consumers, accelerating e-commerce market, and vibrant technology start-up scene, Indonesia’s digital economy appears to be poised for take-off. To enable this, however, Indonesia must make a concerted effort to support micro, small, and medium enterprises (MSMEs) in their digital transformation efforts.

Specifically, while MSMEs are the backbone of Indonesia’s economy, they continue to face challenges in migrating their operations online, including but not limited to connectivity and infrastructure issues, data privacy and cybersecurity issues, as well as a lack of adequate digital talent.

In this report, we will take a brief look at Indonesia’s e-commerce market; discuss how digital transformation can help businesses, and MSMEs in particular, become more resilient; and finally, suggest a few priorities that businesses and government alike should consider in their efforts to realise the full potential of Indonesia’s digital economy.

**Figure 1: Daily usage of the Internet in Indonesia**

![Figure 1: Daily usage of the Internet in Indonesia](image)

Source: Indonesia’s Internet Service Provider Association (APJII), 2020.

**Poised for take-off**

Home to 268 million people, Indonesia has the world’s fourth largest number of Internet users of around 185 million\(^1\). Notably, Millennials and Generation Z consumers – the young, digital natives who came of age or are coming of age in today’s technological era – account for a significant proportion of Indonesia’s population, and are increasingly becoming the main drivers of growth for its digital economy. According to the National Socioeconomic Survey (SUSENAS), Millennials and Generation Z individuals are estimated to account for about 34 percent and 29 percent of the total population respectively\(^2\).

At the same time, Indonesian consumers also appear to be avid Internet users. One study, for instance, revealed that some 58 percent of users spend between two to eight hours, and nearly one-fifth or about 20 percent of them spend eight hours or more on the Internet on a daily basis (see Figure 1)\(^3\).

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\(^1\) "Internet Usage in Indonesia – Statistics and Facts" Statista. 15 June 2020.

\(^2\) "Generasi Milenial dalam Industri 4.0: Berkah bagi Sumber Daya Manusia Indonesia atau Ancaman?" Deloitte. September 2019.

\(^3\) "Laporan Survei Internet APJII 2019-2020 (Q2)" Asosiasi Penyelenggara Jasa Internet Indonesia. 2020.
Accelerating e-commerce market
Given Indonesia’s sheer market size and digitally savvy consumers, it is perhaps not surprising that its e-commerce market has emerged as the largest in Southeast Asia, accounting for nearly 50 percent of the region’s total market size\(^\text{15}\).

This shift towards e-commerce was further underscored during the COVID-19 pandemic, when Indonesia also emerged as one of the region’s highest adopters of e-commerce and mobile e-commerce: in the month of October, approximately 78% of Indonesia’s Internet users bought something online using a mobile device; when this is extended to any device, the figure goes up to 87%\(^\text{16,17}\) (see Figure 2 and 3).

**Figure 2: Mobile e-commerce adoption across selected Southeast Asian countries in July and October 2020**

\[\text{Source: We Are Social, 2020.}\]

**Figure 3: e-Commerce adoption across selected Southeast Asian countries in July and October 2020**

\[\text{Source: We Are Social, 2020.}\]

A resilient digital economy
In 2019, Indonesia’s digital economy contributed to about 2.9 percent of its Gross Domestic Product (GDP). This figure is higher than most Southeast Asian economies, with the exception of Singapore (3.2 percent) and Vietnam (4 percent)\(^\text{18}\).

Increasingly, Indonesia’s dynamic and innovative technology start-up sector is also becoming a hotbed of investments as its decacorns and unicorns continue to attract the attention of global technology giants and venture capitalists\(^\text{19}\). One of the largest e-commerce operators, Tokopedia, for example, has an estimated company valuation of about USD7.5 billion, and counts Google and Temasek amongst its shareholders\(^\text{20}\).

Even amidst the pandemic, these investment flows continue. For instance, homegrown agriculture technology start-up TaniHub Group, which operates an e-marketplace that enables consumers to buy fresh

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\(^\text{15}\) “e-Commerce connectivity in ASEAN”. Economic Research Institute for ASEAN and East Asia (ERIA). April 2020.


\(^\text{17}\) “More than half of the people on earth now use social media”. We Are Social. July 2020.

\(^\text{18}\) “Indonesia’s unicorns lure US tech giants from Google to Facebook”. Nikkei Asia. 4 December 2020.

Supporting the backbone of Indonesia’s economy

MSMEs have been the subject of a growing discourse within Indonesia’s digital economy. Given that they account for some 60 percent of Indonesia’s GDP, it should therefore be a priority that MSMEs are active participants in the digital economy, and embrace digital transformation to keep up with the evolving times.

Prior to the onset of the pandemic, only about 8 million or 13 percent of the nation’s 64 million MSMEs had digital operations in place, and this lack of a digital presence has resulted in especially trying times for many MSMEs: the Ministry of Cooperatives and Small and Medium Enterprises estimates that Indonesia’s MSMEs have experienced a 23.4 percent decrease in demand as a result of COVID-19.

While there have been some promising signs that MSMEs are increasingly going digital – estimates suggest that about 15 to 20 percent of them migrated online during the pandemic – there remain a number of barriers that continue to hinder their progress. Businesses in more rural areas, for example, may lack access to technology that is not only affordable, but also simple to understand and use.

In response, the government recently launched a series of initiatives to support MSMEs in building their digital presences. These include:

- **Pasar Digital (PaDi)**: Established by the Ministry of State Owned Enterprises (SoEs), PaDi aims to encourage four SoEs – PT Telkom Indonesia (Persero) Tbk, PT Pertamina (Persero), PT Waskita Karya (Persero) Tbk, and PT Wijaya Karya (Persero) Tbk – to utilise their budgets on expenditures with 540,000 MSMEs in Indonesia.

- **Belanja Pengadaan (BELA)**: Launched by the Government Goods and Service Procurement Agency (LKPP), this program aims to include MSMEs in the government’s procurement process.

- **Laman UMKM (MSMEs Page)**: Introduced by the Ministry of Cooperatives and Small and Medium Enterprises, this initiative consists of an e-catalogue portal that has been designed to support MSMEs operating digital businesses.

In an attempt to support MSMEs, many businesses have also shared that migrating their operations online even before the onset of the pandemic enabled them to remain resilient even during the crisis. For example, a Yogyakarta-based social agriculture was able to maintain its sales turnover through the use of social media campaigns, where its founders were able to engage potential customers by sharing their views on topics such as farmer empowerment, and organic-natural ingredients.

Indeed, for many businesses, participation in the digital economy is the key to greater resiliency: while 42 percent of MSMEs operating offline were forced to halt operations at some point in time during the pandemic, only 24 percent of online MSMEs had to cease operations.

Anecdotally, many businesses have also shared that while about 15 to 20 percent of them migrated online during the pandemic, there remain a number of barriers that continue to hinder their progress. Businesses in more rural areas, for example, may lack access to technology that is not only affordable, but also simple to understand and use.

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21 “TaniHub Group raises $17mn to expand services to 100,000 farmers by 2021”. The Jakarta Post. 2 April 2020.
22 “Online MSMEs can reduce economic burden: Report”. The Jakarta Post. 10 July 2020.
23 Interview with Asri Saraswati, Co-Founder of Agradaya, 6 December 2020.
26 “‘Accelerating MSMEs’ digital transformation supports RI economy”. The Jakarta Post. 10 October 2020.
Realising the potential

In order for Indonesia to realise the full potential of its digital economy, we believe that there are a few priorities that businesses and government alike should consider. Firstly, addressing connectivity issues should be at the top of Indonesia’s to-do list. Despite the nation’s rapidly increasing Internet penetration rates, Indonesia ranks only 57th out of 100 countries in the Economist Intelligence Unit’s Internet index based on its combined scores on Internet availability, affordability, relevance, and readiness31.

This issue is particular acute in many disadvantaged communities in the outermost frontier of the archipelago, where some 12,500 villages continue to lack reliable access to the Internet32. Estimates suggest that only around 43 percent of businesses in villages are able to market their products online, as compared to 57 percent in the cities33, as the low reliability of telecommunication networks, including cellular phone signal strengths and Internet connections, continue to present major stumbling blocks for MSMEs trying to taking full advantage of growing online platforms and the wider marketplaces that they offer.

It must be noted, however, that the government currently has plans to resolve some of these connectivity issues by building base transmission stations in 5,000 villages, while also expanding the 4G network and increasing Internet connection speeds nationwide.

Secondly, there is also the need to address the issue of logistics and high shipping costs in Indonesia. As an archipelago with a massive land mass, Indonesia has highly complex logistic networks, and the nation also faces some of the highest shipping costs in the region34. In the World Bank’s logistic performance index, for instance, Indonesia was ranked 46th place out of 163 countries, with a total score of 3.15 that was relatively far behind that of other Southeast Asia markets, such as Malaysia (3.22), Vietnam (3.27), Thailand (3.41), and Singapore (4.0)35.

Enabling digital players to more efficiently reach their end markets or suppliers will therefore require the support of a more streamlined logistics infrastructure, including reliable and affordable transport networks. Towards this end, the government is also targeting to reduce overall logistics costs from 24 percent of GDP in 2016 to 19 percent of GDP by 202436.

Thirdly, data privacy and cybersecurity issues continue to present roadblocks. As the increasing integration of MSMEs into the digital economy increases the probabilities of these risks, merchants and consumers alike must be better informed and protected. Currently, phishing issues are some of the most common e-commerce-related complaints received by the National Consumer Protection Agency (BPKN)37.

An upcoming, long-awaited bill addressing personal data protection issues is also expected to require the mandatory establishment of data protection officers in companies, amongst other measures38. Looking ahead, these steps should go some way towards strengthening the governance of data held by e-commerce players, and in building consumer trust in the sector.

Finally, we must not neglect the all-important issue of human capital. According to the Minister of Cooperatives and Small and Medium Enterprises, Teten Masduki, the technology gap is one of the main contributing reasons for MSMEs’ failures in the digital economy. After all, for MSMEs to embrace the digital potential, they must first possess the know-how of using digital platforms, be able to analyse market needs, and possess knowledge of how to run an online business. In fact, statistics show that only about 15 percent of MSMEs who ventured online have managed to successfully conduct their operations39.

To accelerate the digital economy, Indonesia needs some 9 million individuals to step up to the role of what is known ‘digital talent’40. While digital talent may comprise many specific roles, Indonesia is focusing on developing an adequate pool of talent in the fields of science, technology, engineering, and mathematics (STEM), with a target to produce about 3.7 percent of global STEM graduates by 203041.

Notes:
1. “The Inclusive Internet Index 2020”. The Economist Intelligence Unit.

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The new Mining Law No. 3/2020 has been enacted on 10 June to amend Mining Law No.4 /2009. The law paves the way for several changes including on matters related to mining areas determination, centralization of authority as well as licensing of mining businesses, among others. Given the changes along with potential impacts that follow, mining companies may soon need to revisit their licensing, business structures, and operational practices to ensure that they are in full compliance with the law. Please contact us if you are interested to receive a copy of this report.

The Indonesian food and beverage industry has shown its support to the economy growth during the COVID-19 pandemic. The sector is facing many challenges including food safety issues. In this article some of the key impacts of COVID-19 on the food and beverage sector in Indonesia, and the pivotal role of trust in future-proofing businesses will be discussed to make sure that they thrive in the new normal. Please contact us if you are interested to receive a copy of this report.

COVID-19 pandemic encourages Indonesia’s consumers to favor the use of digital payment. This opens more opportunities for micro, small, and medium enterprises (MSMEs) to adopt cashless payment systems through Quick Response Code Indonesia Standard (QRIS), which was introduced by Bank Indonesia earlier in 2019. This article discusses how QRIS is universalising digital payments in Indonesia by enabling interoperability amongst different digital payment system service providers while highlighting its other potential use cases. Please contact us if you are interested to receive a copy of this report.
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