



TECH FOR
GOOD
INSTITUTE

— Report

The Platform Economy: Southeast Asia's Digital Growth Catalyst



Research Partner

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Table of Contents

About Authors	1
Acknowledgments	3
Introducing the report	5
Executive summary	8

Chapter 1: Defining Online-to-Offline (O2O) platforms and the landscape	11
Introduction	12
Definition and characteristics	13
Digital platform typologies	14
Platform landscape	17
The focus on Southeast Asia's O2O platforms	19

Chapter 2: Southeast Asia's opportunity: Converging online and offline worlds	22
Opportunities in Southeast Asia's Platform Economy	23
Developmental challenges in Southeast Asia	24
Platforms supporting Southeast Asia's growth	27
The role of Platforms during COVID-19	29
The New Economy Progress Index (NPI)	31
Results from the 2021 Southeast Asia-6 NPI	33

Chapter 3: Going Digital with Platforms: Benefits of the Platform Economy	35
Overview and methodology	36
More options and improved experiences for consumers	37
New job and income opportunities	42
Increased MSME reach and productivity	46
Digital payment infrastructure and financial inclusion	52
Accelerated logistics infrastructure development	58
Technology ecosystem building and innovation	61
Closer Look: Benefits and opportunities of each Platform vertical	66
E-commerce Platforms	68
Food Delivery Platforms	72
Ride Hailing Platforms	76
Digital Financial Services	80

Table of Contents

Chapter 4: Navigating Platform Economy growth for all	85
New “rules of the game”	87
Emerging challenges observed in Southeast Asia’s Platform Economy	88
Countries are exploring various Platform Economy policies with consequences yet to fully play out	97
Southeast Asia to chart own path in its Platform Economy	98
Trade-offs: Balancing the issues and benefits of Platforms	100
Path forward for Southeast Asia	102

Concluding remarks	108
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Appendix	109
Taxonomy and Definitions	109
Report methodology	112
New Economy Progress Index methodology	113
Dimension selection	114
Metrics selection and rationale	115
Weighting	118
The New Economy Progress Index country-specific analysis	119
Survey methodology	126
References	127

About the Author



The Tech for Good Institute is a think tank committed to nurturing the positive impact of technology, to harness its full potential to uplift lives in Southeast Asia. It is a non-profit founded by Grab, Southeast Asia's leading superapp.

The Institute seeks to create dialogue to foster common ground on the impact of technology on society and policy. It supports action-based, insights-oriented research that demonstrates how technology addresses social concerns. It also serves as a platform to enhance capabilities that facilitate the understanding of technology's impact in Southeast Asia.

We believe this exchange of ideas and research is invaluable to the growth and development of technology in Southeast Asia, and the region itself.

About Research Partner



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Acknowledgments

This analytical study was prepared in collaboration with the World Economic Forum which provided access to its diverse executive community in the Southeast Asia region and its platform for consultations, as well as shared guidance on effecting system change and approaching public-private collaboration opportunities, helping further sharpen perspectives in the paper.

The authors of this report wish to thank the Advisor Group—Timothy Murphy (Chief Administrative Officer, MasterCard), Kai Fu Lee (Chairman, Sinovation Ventures), and Sati Rasuanto (CEO, VIDA)—for their guidance and feedback on this report.

The authors of this report are also grateful to the Contributor Group for providing their insights and feedback related to this report.

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Introducing the report

Digital platforms support so many of our daily activities that they are transforming how we work, play and create economic value. We use them for purchase of goods and services, transportation, payments, news and entertainment consumption, jobs and employees searches, and so much more.

With the rise of digital platforms, new business models have proliferated across the world, and Southeast Asia (SEA) is no exception. In the region, we have seen several home-grown digital platforms use technology in their main business models to remove transactional friction in the consumption of both digital and offline goods and services. Many of the largest home-grown Southeast Asia platforms are online-to-offline (O2O) in nature, facilitating transactions with both an online and offline component. They are very different from information platforms in that O2O platforms (“Platforms”) require both physical and digital infrastructure to function. These Platforms cut across several sectors, ranging from e-commerce and ride-hailing, to logistics and digital financial services.

The O2O Platform Economy (“Platform Economy”), which consists of economic and social activity between users that are facilitated by these Platforms, has become a frequent topic of discussion across many policy areas, including its role in the digitalization of the economy, labor and employment, competition, consumer protection and privacy, among other topics. Given the fast-evolving nature of Platforms, they can be more complex than they appear on the surface, and are not always well understood.

To support constructive and balanced policy discussions around Platforms and the Platform Economy in Southeast Asia, the Tech for Good Institute has commissioned this report as its first publication, with the intent to provide a broad introduction on this topic and set the stage for further work, such as diving deeper into the challenges and issues in supporting the Platform Economy in Southeast Asia.



In this report, we examine relevant evidence and offer insights to inform policymakers and the interested public to address a broad range of questions related to Platforms:

- What is the role of Platforms in Southeast Asia?
- What is the progress of Platform Economy development in Southeast Asia?
- What are the key benefits that Platforms bring in Southeast Asia?
- What are the key challenges that will need to be addressed as the Platform Economy grows in Southeast Asia?
- What does Southeast Asia need to prioritize to support the growth of the Platform Economy, while mitigating the risks and unintended negative consequences?

This study covers the six largest markets in the region: Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam; and four of the largest O2O platform sectors: e-Commerce, transport / ride-hailing, food delivery and digital financial services.



Southeast Asia O2O Platform Economy

The Platform Economy is defined as economic and social activity between two or more distinct and independent set of users that are facilitated by Platforms. Platforms are unique in that they require physical and digital infrastructure to function. Many of the largest home-grown Southeast Asian platforms are O2O in nature. The largest O2O verticals in Southeast Asia include e-commerce, food delivery, logistics, ride-hailing, travel, and digital financial services.

Southeast Asia has the foundations for a vibrant Platform Economy...



7 in 10

SEA-6 population aged 15+ had used ≥1 O2O service in past 12 months



1 in 5

MSMEs in SEA-6 are on O2O platforms

... with Platforms having a positive impact on both MSMEs¹ and consumers



78%

Consumers agree Platforms have had a positive influence on their quality of life

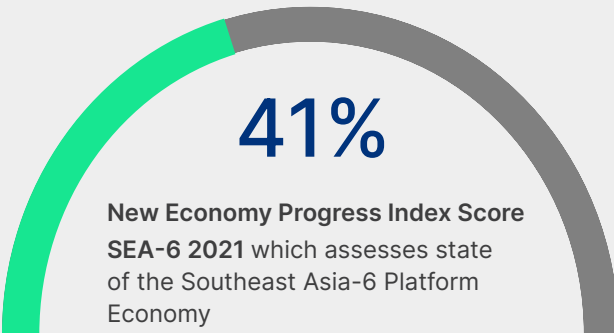


80%

MSMEs¹ agree that they need to use Platforms to succeed in the future

Opportunity exists to unlock further potential in Southeast Asia Platform Economy

Select statistics contributing to 2021 Southeast Asia-6 score



43%

Consumers are **mobile wallet users**

28%

Consumers have access to **same-day delivery**

25%

SEA-6 population **using three or more O2O services**

8%

SEA-6 **online food and e-commerce sales** as % of total food and retail

Southeast Asia will need to navigate the Platform Economy growth for all

Challenging balances to strike between

Mitigating issues	Maximizing benefits
Competition	Continued investment in infrastructure
Consumer protection	Reach the underserved
Future of work	Drive affordability and wider options
Digital divide	Improve livelihoods

How we can get it right

- ➔ **Collaborate** on policy development and execution for the Platform Economy
- ➔ **Iterate and adapt** approach to creating solutions that are suitable for stage of growth of SEA
- ➔ **Ensure responsible and sustainable** governance mechanisms and behavior to drive Platform Economy
- ➔ **Coordinate** on pan-ASEAN topics that would benefit from coherent ASEAN strategy and execution

Note: ¹ MSMEs refer to Micro, Small & Medium Enterprises

Executive summary

Platforms have transformed how we work, play and create economic value in Southeast Asia

Many of the leading home-grown technology platforms in Southeast Asia are O2O in nature — they are very different from information platforms in that they need both physical and digital infrastructure to function.

Platforms have actively contributed to socioeconomic development in Southeast Asia

Beyond Gross Merchandise Value (GMV) growth, Platforms have invested in and contributed to Southeast Asia's digital economy through infrastructure development (such as scale investments in digital payments and logistics networks), and the provision of access and convenience to consumers and MSMEs — its impact was most acutely observed during the COVID-19 pandemic.

The Platform Economy is developing rapidly in Southeast Asia as seen in our inaugural edition of the New Economy Progress Index (NPI)

This report introduces the NPI, which assesses the state of the Platform Economy for Southeast Asia countries across four key dimensions that are crucial for the development of the Platform Economy: digital infrastructure, physical infrastructure, consumer participation and MSME participation in the Platform Economy. Two priorities stand out for Southeast Asia: (1) continued improvement in connectivity and logistics infrastructure, especially in non-urban areas, and (2) strengthening the population's digital skills to drive further consumer and MSME participation.

Platforms offer a broad array of benefits at scale to consumers and MSMEs in Southeast Asia

Consumers are able to enjoy better access, affordability and financial inclusion when using Platforms. MSMEs leveraging Platforms have also benefited with an expansion of their customer reach while also bolstering their resilience during the COVID-19 pandemic. The rise of e-commerce has also contributed to the growth of logistics infrastructure in many countries.

Executive summary (continued)

As with any new technology or innovation, countries need to manage challenges and risks in the Platform Economy

These challenges and risks include increasing competition, consumer protection, changes in the labor market, and a growing digital divide, among others. It will be important for countries in Southeast Asia to evaluate the potential tradeoffs as the region creates its competition policy and initiatives that are suited for various development stages in the Southeast Asia Platform Economy.

Southeast Asia should chart its own course to maximize benefits while managing the challenges of the Platform Economy

It is not easy to find the right balance in regulations. Many, if not all, advanced nations are still exploring options to get it right, and Southeast Asia is no different. With a thriving Platform Economy and Southeast Asia's own unique set of circumstances and its stage of development, Southeast Asia should chart its own course to strike the balance between capturing the benefits of Platforms while managing potential challenges and risks.

The time is ripe for Southeast Asia to work more closely together to navigate the Platform Economy for all

The Platform Economy can be a powerful force for stronger and inclusive development in the next decade. While this report does not seek to provide any specific solutions to the challenges and issues that have been raised, it provides a starting point for discussing and aligning on a collective approach to the challenges that Southeast Asia will need to address in the coming years.



In this report, we propose a set of four key priorities for Southeast Asia to write a new playbook to steer the Platform Economy growth for all:

- 1 Close collaboration between regulators and market participants on policy development and execution
- 2 An iterative and adaptive approach to deal with the evolving challenges
- 3 Responsible and sustainable development of the Platform Economy
- 4 Regional ASEAN coordination to maximize positive impact



Chapter 1

Defining Online-to-Offline (O2O) platforms and the landscape

Introduction

The term “digital platform” has been used to describe a range of services available on the Internet including marketplaces, search engines, social media, app stores, payment services, job matching, and much more. The diverse nature of digital platforms has made it challenging for them to be singularly defined. In this chapter, we seek to explain the definition and present an overview of the Platform Economy.



Definition and characteristics

Many research organizations have tried to determine the definition of digital platforms, and there has not been a singular, widely-accepted definition of digital platforms. Instead of introducing new definitions for this report, we have adopted the Organization for Economic Co-operation and Development's (OECD) definition of an "online platform" for explaining digital platforms, even though this definition may evolve with time.

“

An online platform is a digital service that facilitates interactions between two or more distinct but interdependent sets of users (whether firms or individuals) who interact through the service via the Internet.

”

Source: OECD, 2019

This definition notes that the word "users" can be interpreted in a reasonably broad manner. Aside from individuals as consumers and/or workers, users can also include governments and businesses both large and small that may act as buyers, sellers, or employers.

Many digital platforms are disrupting established business practices and redefining the relationships between different groups of users, such as producers, consumers, and workers. By creating multi-sided marketplaces and ecosystems, they have changed the consumption and production of goods and services and have brought incremental benefits to users. There are a few common characteristics of digital platforms including the presence of network effects, whereby the digital platform creates more value to different groups of users as more users join the platform; and new technology that enables the creation of a better user experience and the innovation of business models, among others.

Digital platform typologies

To better understand the nature of digital platforms, it is helpful to discuss platform typologies that are available. While not exhaustive, we will cover functional, primary user, operating space, and business structure as common typologies.

1 Functional typologies

Digital platforms can be classified by their core function based on the categories that describe what the platforms do or how they do it:

- **Transaction platforms** which facilitate transactions between a large number of user types (e.g., buyers and sellers, riders and driver-partners) that otherwise would have more difficulty finding or transacting with each other (e.g., Spotify, Vrbo, OYO, Airbnb).
- **Innovation or development platforms** which serve as technological building blocks for innovators to develop complementary products or services that run on the platform (e.g., iOS, Android).
- **Information platforms** which facilitate the transfer of information between users (e.g., LinkedIn, AngelList).

2 Primary end user typologies

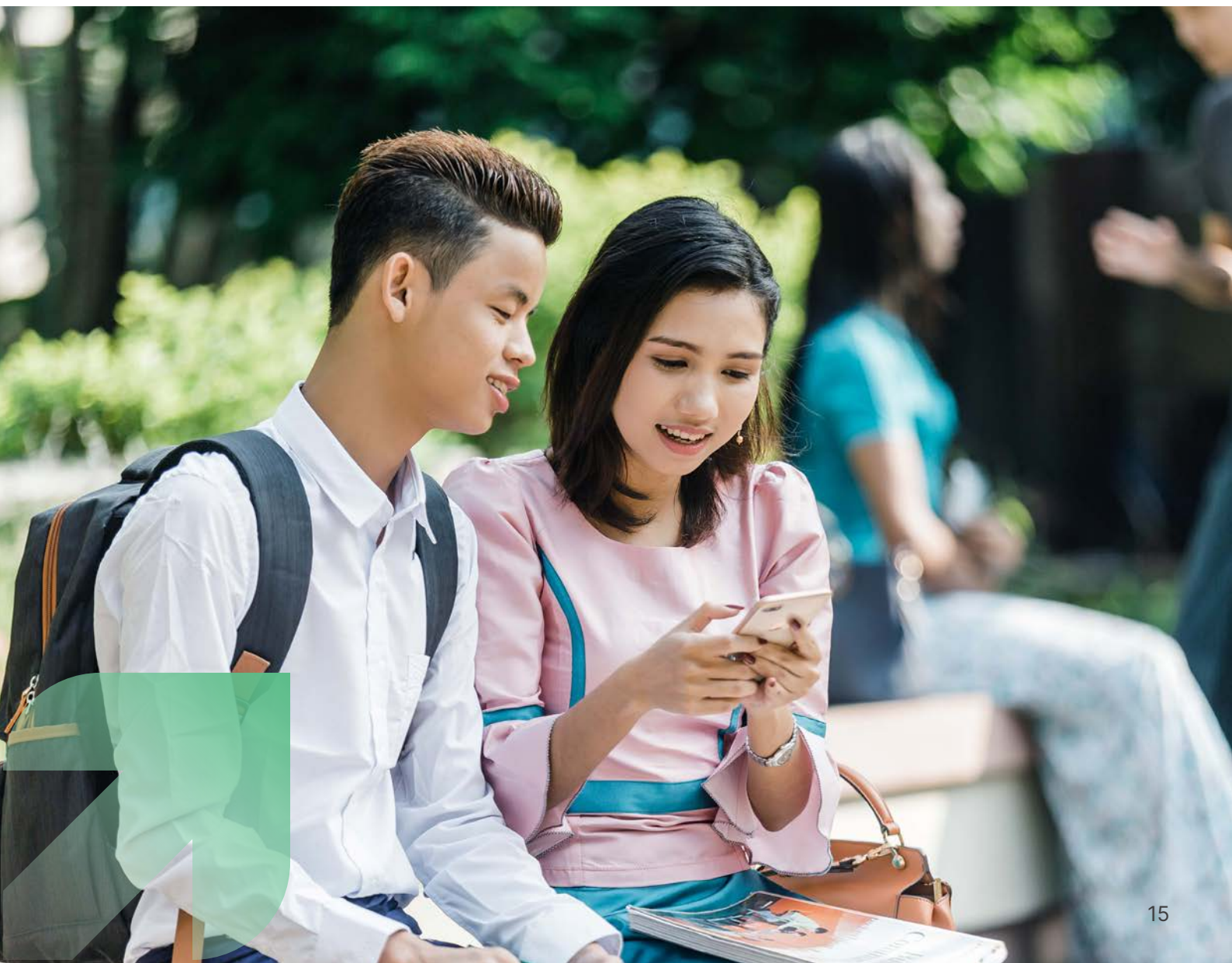
Another method to classify digital platforms is by the interaction they support among their primary end-users e.g., consumers, for-profit businesses, and non-profit entities.

- **Business-to-Consumer (B2C) platforms** which facilitate direct interaction with consumers of both physical and digital products and services.
- **Business-to-Business (B2B) platforms** which facilitate direct interaction between businesses.
- **Other platforms** include all other relationships not covered above, such as non-profit entities.

3 Operating space typologies

Digital platforms can also be differentiated by whether transactions are conducted only online or online-to-offline.

- **Online-only platforms** facilitate transactions of digital products between users solely in an online space. This typology includes digital platforms like Spotify and Netflix, which support the transaction and consumption of digital products between content creators and consumers solely in an online space.
- **Online-to-offline platforms** facilitate transactions among users with both online and offline components, e.g., online purchases of physical goods or services that are then delivered offline. In the example of food delivery supported by the Platform, food is ordered online and delivered offline to the consumer. This typology includes platforms such as Grab, Lazada and Gojek in Southeast Asia.



4 Business structure typologies

Another method to classify digital platforms is by the interaction they support among their primary end users e.g., consumers, for-profit businesses, and non-profit entities.

➤ **Vertically-focused platforms** operate on a single vertical within the same industry or sector to offer a differentiated value proposition and user experience. The value from such platforms typically comes from the depth of services within individual verticals, such as:



E-commerce



Travel



Transport /
ride-hailing



Education



Digital financial
services



Healthcare

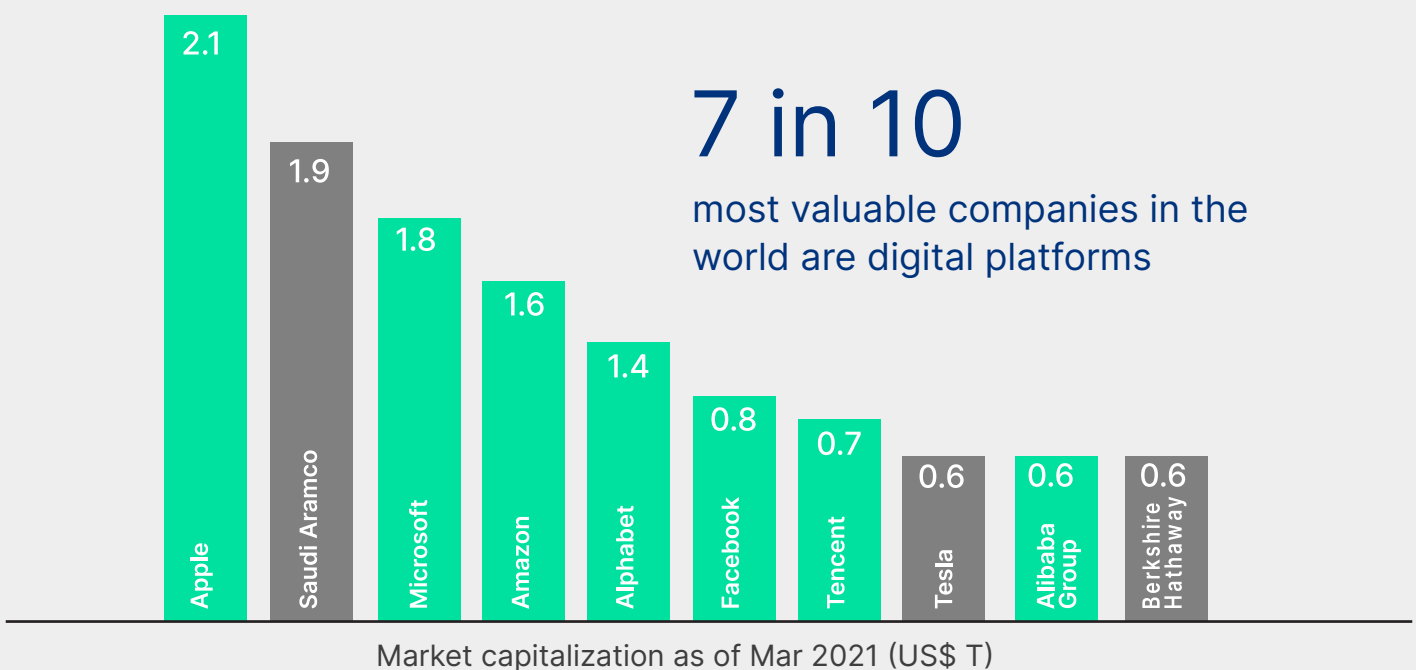
➤ **Horizontally-focused platforms** operate multiple types of services across many different industry verticals. The value of such platforms typically comes from the convenience and seamless integration of a wide range of digital services provided to a user.

With the description of some of the more common typologies for digital platforms, we can apply several typologies at once to arrive at finer segmentation that is relevant to Southeast Asia for a more focused discussion in this report.

Platform Landscape

With seven of the 10 largest companies by market capitalization (refer to Figure 1) in the world being digital platforms, it is no surprise that digital platforms are gaining plenty of market visibility.

Figure 1
Top 10 companies with the highest market capitalization, March 2021



Source: Capital IQ, Bain analysis

Digital platforms have transformed industries and interactions among different groups of users, such as the retail industry with e-commerce platforms, transportation industry with ride-hailing platforms, and hospitality industry with online travel agencies and peer-to-peer sharing platforms. Many of these platform innovations have also created benefits for their set of users, for example Airbnb has generated an additional income source for people by renting their homes; and Android and Apple iOS application marketplaces have allowed developers to publish their applications to a global audience.

However, the day-to-day ubiquity and stellar success of some platforms can be misleading — a platform business model does not guarantee profitability. Even if a platform is designed and operated well, there are other factors that may contribute to the platform's failure. To have continued success, platforms, like other business models, need to retain consumer trust and innovate to remain competitive within their sectors.

There is a misconception that smaller, new players are not able to challenge incumbent platform players. In the past 20 years, we have observed the continued evolution of industries with examples of disruption by smaller players, such as Spotify in the music industry or Airbnb in the temporary accommodation industry. Furthermore, there are many industries and companies that are only beginning to build or expand their platform business model with the ambition to create new businesses in sectors globally.



The focus on Southeast Asia's O2O platforms

Within Southeast Asia, the platform business model has taken off very rapidly over the past decade, with the growth of the technology startup ecosystem. Many of the largest home-grown platforms in Southeast Asia (refer to Figure 2) are O2O in nature, having invested and built physical and digital infrastructure across Southeast Asia.

Figure 2

SEA's home-grown technology unicorns

Home-grown technology unicorns in Southeast Asia

Select examples; non-exhaustive



Source: Crunchbase; PitchBook; Bain analysis

This report will focus on Southeast Asian platforms that are O2O in nature, given the high number of home-grown digital platforms following this business model. The Platform Economy includes O2O verticals in Southeast Asia (refer to Figure 3) such as e-commerce, digital financial services, food delivery, transport and ride-hailing, travel, as well as emerging verticals like education and healthcare.

Within Southeast Asia, Platforms are observed to have entered other verticals via internal innovation and partnerships. For example, Shopee under Sea Limited started out in 2015 as an e-commerce platform but has since partnered with regional logistics players like J&T Express and Ninja Van to provide Shopee Supported Logistics to merchants in the countries that they operate in. In 2018, Shopee launched its own e-wallet ShopeePay as an additional digital payment option for consumers.

There have been many examples of innovation in Southeast Asia that have contributed to the vibrancy of the Platform Economy. For example, e-commerce platforms are offering new services such as livestreaming for sellers to promote their products through Lazada's LazLive or Shopee Live. These platforms are also entering new verticals, such as launching digital wallet payments or logistics services. There is also an increasing number of start-ups with innovative platform business models entering the B2B space. For example, Zilingo Trade's B2B marketplace for wholesale supply chain solutions, and Fintechs such as Funding Societies that provide credit access to SMEs.

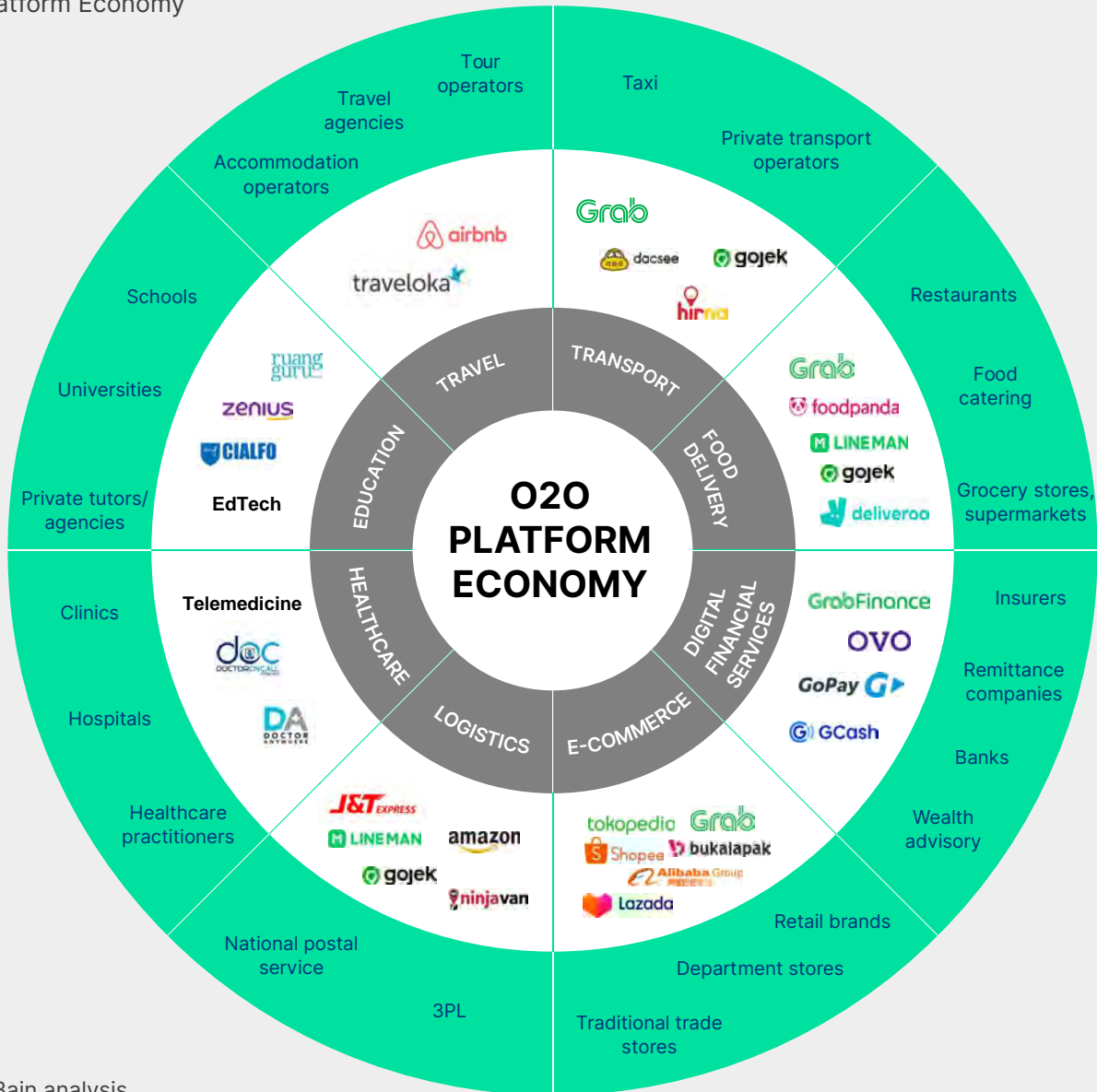
Within Southeast Asia, it is also observed that there are many global and home-grown platforms present across multiple markets. Many of these platforms enable more traditional offline companies to create an online presence through direct participation, such as a restaurant on a food delivery platform or a hotel on a travel platform, or through partnerships and investments in platforms, such as the joint venture between Central Group and JD.com in Thailand.

Many platforms have also expanded to include multiple verticals, moving from a vertically-focused platform model to a horizontal platform; and entered multiple countries within Southeast Asia. This trend has contributed to increased competition in each vertical with more players in each market.



In the next section, we examine the role of Platforms in Southeast Asia's rising Platform Economy and the opportunities it presents

Figure 3
SEA's Platform Economy



Source: Bain analysis



Chapter 2

Southeast Asia's opportunity: Converging online and offline worlds

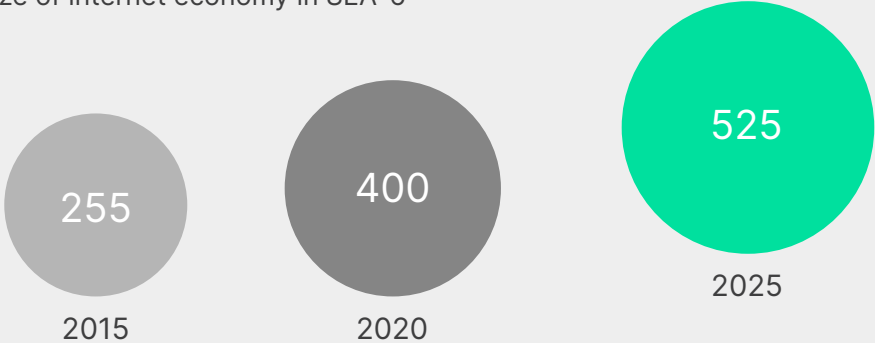
Opportunities in Southeast Asia's Platform Economy

Southeast Asia's socio-demographic trends are likely to support significant growth potential in its Platform Economy. Southeast Asia is the 3rd most populous region, only behind China and India, making up 8% of the world's population. It is the 5th largest economy in the world with a fast-growing projected GDP annual growth rate of 5.5% over the next decade.

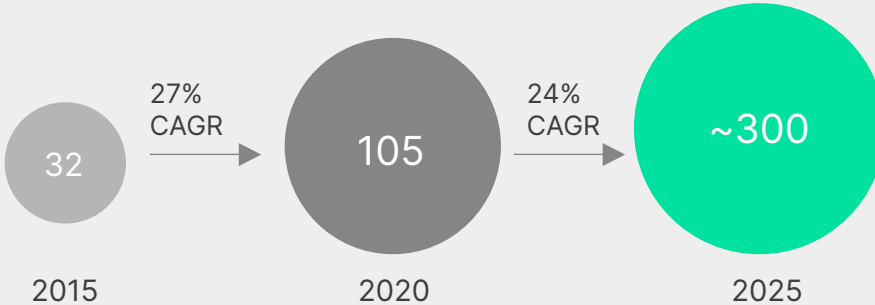
The number of internet users in the six largest Southeast Asia countries is expected to increase from 400 million in 2020 to 525 in 2025, and its internet economy gross merchandise value (GMV) is expected to surpass \$300 billion by 2025 (refer to Figure 4). These projections signal very promising growth for the region. That said, we believe that Southeast Asia is still in the early stages of Platform Economy development. Using the size of e-commerce as a percentage of total retail sales as one indicator of the maturity of the Platform Economy, Southeast Asia is at 8% in 2020, as compared to 17% in the US and 27% in China.

Figure 4 Increasing number of internet users and size of internet economy in SEA-6

Internet users in SEA-6 (million)



SEA-6 internet economy (GMV, US\$ billion)



Note: CAGR refers to Compound Annual Growth Rate
 Source: Google-Temasek-Bain e-Economy Report 2020; Euromonitor; Fitch Solutions

This growth was supported by the accelerated uptake of digital products and services in Southeast Asia in 2020 due to the COVID-19 pandemic. 1 in 3 digital consumers in Southeast Asia-6 had either purchased something online or subscribed to digital services for the first time during the pandemic, and 9 in 10 new digital consumers intend to continue using at least one digital service post COVID-19. This includes e-commerce and mobile wallet usage. The COVID-19 effect on digital consumption is beyond a fad. The number of users in the digital economy has increased and is expected to persist with socio-demographic factors supporting its growth trajectory.

“

People are no longer waiting for things to go back to normal. They are now creating livelihoods and opportunities through digital platforms.

”

Chief Digital Transformation Officer, FPT Holdings

Development challenges in Southeast Asia

Despite the optimistic outlook for Platforms and the digital uptake from COVID-19, there are several development challenges for the wider digital economy (and Platform Economy) to thrive in Southeast Asia.

The two overarching development challenges are:







- Disparity in digital and physical infrastructure
- Digital divide and financial exclusion among consumers and MSMEs

Disparity in digital and physical infrastructure

Inequality in Southeast Asia's digital infrastructure is firstly driven by varied internet coverage and network performance across the region. There is also disparity between urban and rural areas when it comes to the availability of digital financial services infrastructure. These differences in digital infrastructure can greatly impact the user experience and restrict the range of digital products consumed in the Platform Economy.

Disparity in physical infrastructure also affects the growth of the Platform Economy, especially in relation to one key component of the Platform Economy, that is logistics infrastructure. While there is performance variance across Southeast Asia, there are significant opportunities to improve (refer to Figure 5). Gaps and weaknesses in logistics performance can pose challenges in the efficient movement of goods. This could mean last-mile delivery delays, missing parcels, and limited geography coverage of same-day delivery.

Figure 5 Snapshot of SEA-6 digital & physical infrastructure development

						
Mobile broadband download speed (global ranking) ¹	104 th	89 th	75 th	19 th	48 th	58 th
Infrastructure gap, (US\$ billion)	\$2.1B	\$2.3B	\$2.1B	\$0.01B	\$3.0B	\$3.1B
Logistics Performance Index (LPI) ³ (global ranking)	46	41	60	7	32	39

Note:

1. Speedtest Global Index by Ookla, as of June 2021

2. Infrastructure gap is defined as the difference of infra. investment and needed infra. to match the infra. performance of their best performing peers, forecasted as of 2020

3. Based on 2018 LPI

Source: Ookla; Oxford Economics; World Bank

Digital divide and financial exclusion among consumers and MSMEs

The second set of development challenges that affects Platform users.

Consumers as users

A digital divide refers to the gap between those who have access to digital technology and reap benefits from it, compared to those that reap no benefit as they lack access. Southeast Asia has made great strides to improve access to and affordability of information and communications technology (ICT) such as mobile internet over the last decade, with over 400 million internet users in Southeast Asia-6 in 2020, compared to 122 million in 2010. While progress has been made, 30% of the Southeast Asia population is still not online and there remains a discrepancy in usage between urban centers and rural areas within countries.

A key indicator of the extent of financial exclusion is the size of the unbanked population. Without access to basic financial services such as a savings account, the unbanked will find it even more challenging to participate in the Platform Economy where digital payment is preferred over cash. This will prevent them from participating in and enjoying the benefits and opportunities from the Platform Economy presented in the e-commerce and digital financial services sectors. On average, more than 2 in 5 consumers across Southeast Asia are unbanked, though this figure varies across countries.

MSMEs as users

“

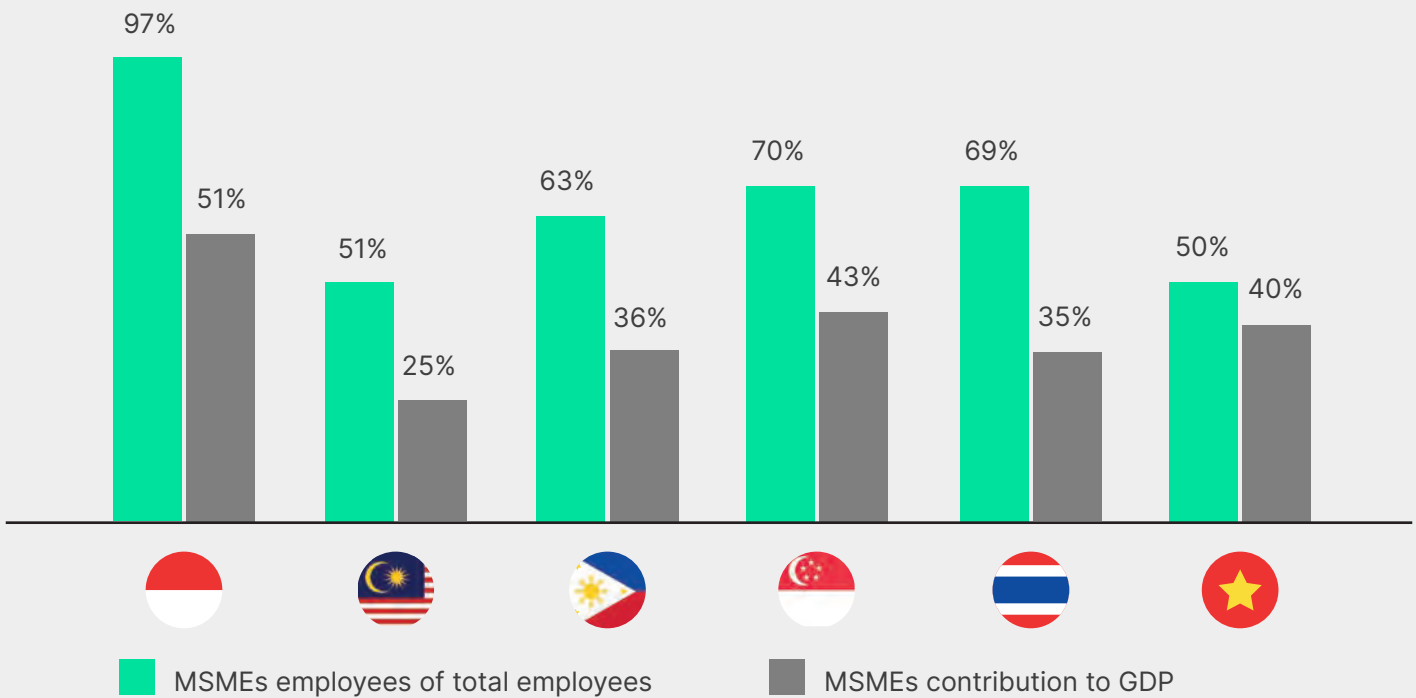
There is no doubt that promoting digitalisation of MSMEs is necessary to drive inclusive growth.

”

CEO, Futurise

MSMEs in Southeast Asia are very important for the jobs they provide in their country. However, many MSMEs often experience productivity challenges and as a result, have smaller contributions to a country's GDP (refer to Figure 6). Many of these MSMEs also lack the knowledge and expertise in technology know-how and need support from both policymakers and private sector providers in their transition to the digital economy. Supporting MSMEs to participate in the Platform Economy will be crucial.

Figure 6
MSMEs in SEA-6 employ a high proportion of the population, but lag in GDP contribution



Source: Singapore Department of Statistics; Thailand MSME Whitepaper Executive Summary 2019, 2020; Thailand Office of SME Promotion; Indonesia Ministry of Cooperative and SME, OECD, Department of Statistics Malaysia; ADB Asia SME Monitor 2020 database; Bain analysis

Platforms supporting Southeast Asia’s growth

Given the development challenges observed in Southeast Asia, Platforms have invested significant capital in infrastructure, led on-ground education and onboarding efforts to drive Platform adoption among consumers, partners and merchants, and to shift user behaviors, so as to continue building their respective platform ecosystems.

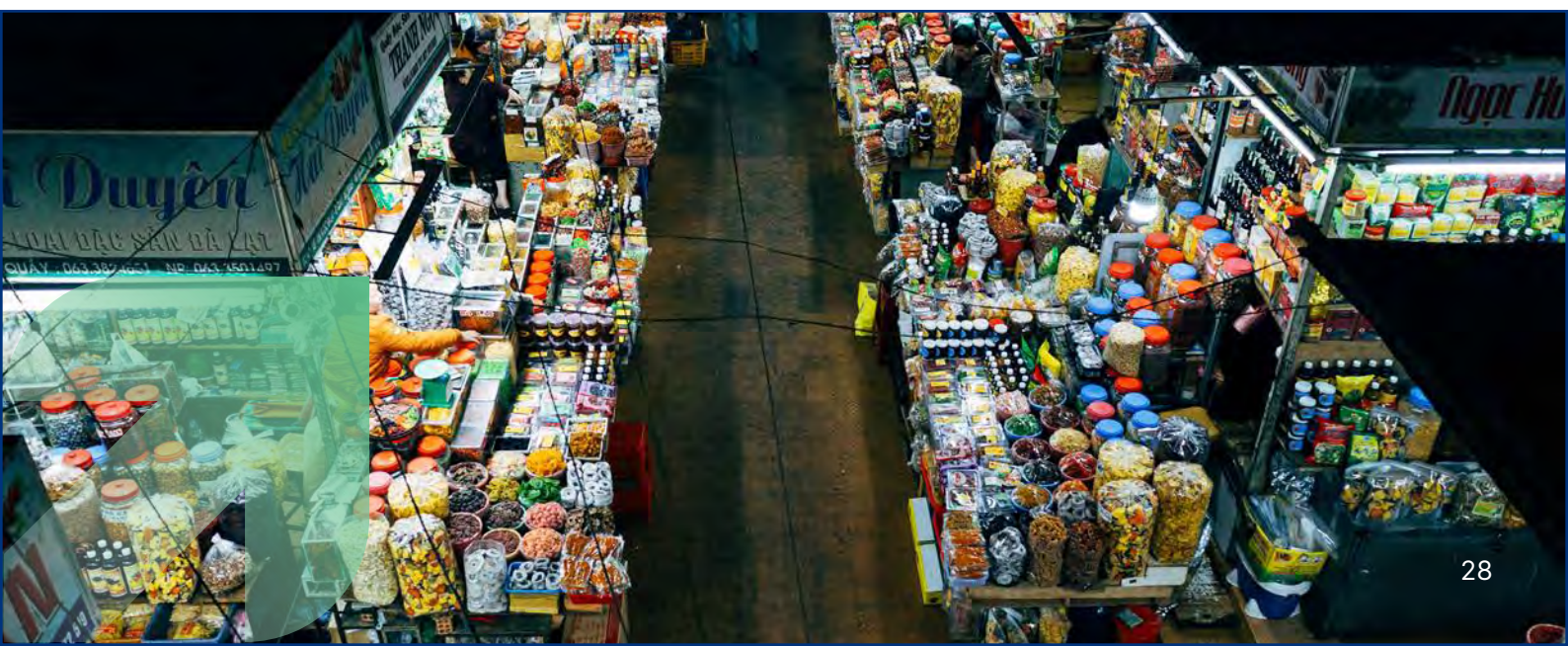
Where consumers lack internet access to participate on Platforms, Platforms have innovated for consumers to participate through a hybrid of offline methods. For example, an innovative workaround by Bukalapak, an e-commerce platform in Indonesia, was to recruit warungs (traditional Indonesian kiosks) as their network agents. Through a sub-platform called Mitra Bukalapak, consumers can go to their nearby warungs to remit money, pay bills, purchase bus tickets and online items, enabling these traditional kiosks to compete with modern retailers.

In areas with poorer physical connectivity, Platforms have invested in more warehouses and collection points to improve last-mile delivery efficiency, while public infrastructure like roads are being built by governments. This is the case of Shopee in Malaysia, which has increased the number of Shopee Xpress drop-off points for self-collection to more than 300 nationwide and expanded its network of warehouses and sorting centers to more than 50 nationwide. As such, Shopee is able to offer next-day delivery to most parts of Peninsular Malaysia. Lazada similarly invested in building over 30 fulfilment centers across 17 cities in Southeast Asia, with its in-house delivery reaching 70% of the region's population.

To address the digital and financial divide among consumers, specifically for the unbanked, Platforms have facilitated payment rails. GCash in the Philippines has more than 40,000 over-the-counter partners as part of its physical Cash-in and Cash-out network, where cash is deposited into or withdrawn from the GCash e-wallets. Even without a bank account, unbanked consumers are now able to shop online or make digital payments at physical shops via GCash e-wallets, enabling easier participation in the Platform Economy.

Lastly, in addressing the MSMEs' digital divide, Platforms have performed a range of initiatives, from imparting digital know-how through training to facilitating MSME loans. Grab, for example, in 2020, launched the Grab Merchant Academy, a self-learn training program with modules such as online marketing and menu optimization that help MSMEs pick up skills and knowledge to grow their digital businesses. Back in 2019, Tokopedia in Indonesia collaborated with a peer-to-peer lending platform to offer MSMEs working capital loans up to Rp300 million via Modal Toko, in addition to its other capital credit services, such as Pinjaman Modal and Saldo Prioritas. MSMEs that have the digital know-how and access to capital loans will be better able to digitize their businesses and expand their participation in the Platform Economy.

Against the development challenges in Southeast Asia, Platforms have constantly stepped up to close the access and resource gaps for both consumers and MSMEs, as well as to support greater participation in their respective Platforms and the wider Platform Economy. Where physical or digital infrastructure is lacking, Platforms have shown innovation and resilience by co-creating solutions with local MSMEs. Their importance is once again in the spotlight during COVID-19.



The role of Platforms during COVID-19

With restricted mobility from COVID-19 safety measures, consumers and enterprises found their traditionally offline ways of living and working suddenly disrupted. As digital intermediaries, Platforms were able to help users retain some level of normalcy by enabling them to continue their daily activities while staying safe.

Consumers

Platforms supported many households by providing continued access to essentials in a timely and convenient manner, enabling consumers to stay safe in their homes through food and groceries delivery. Some Platforms introduced measures to minimize misinformation and hoarding, while scaling up delivery capacity in a short period. For example, Lazada put in place maximum order restrictions and hired more staff in Singapore, resulting in 50% more consumers served during COVID-19. Tokopedia in Indonesia banned merchants from selling overpriced staple goods and essentials, while Blibli.com set restrictions on purchase quantities of personal protective equipment (PPE).

Platforms also allowed consumers to stay safe in their daily activities, such as making payments. Digital financial services (DFS) platforms gave consumers the option to pay digitally and reduce potential COVID-19 transmission through the physical handling of cash.

Last but not least, Platforms helped consumers retain some form of normalcy despite the restrictions. Certain services previously delivered offline, such as education in schools or healthcare services in hospitals, were disrupted. Through Platforms, consumers were able to continue receiving these services digitally. EdTech platform Zenius Education in Indonesia provided teachers and students free access to its 80,000 learning videos and materials. Telemedicine provider Doctor Anywhere in Singapore launched a COVID-19 Medical Advisory Clinic through which people suspected to have COVID-19 could be quickly identified for medical care.



Micro, small, and medium enterprises (MSMEs)

Platforms gave MSMEs the opportunity to diversify sales channels and revenue streams as offline channels were impacted by restricted mobility.

When farmers in Malaysia were impacted by lockdown measures and had to resort to throwing away their produce when their regular sales channels with wholesale markets and restaurants were shut down, Lazada set up a virtual store to connect farmers and retail consumers directly. Within a month, about 70 tons of produce were delivered to homes, cushioning COVID-19's impact on farmers' revenue. The Grab Small Business Booster Program across Southeast Asia also provided tools and initiatives to make it easier for MSMEs to adopt new digital solutions and expand their online visibility to grow their business

Governments

While governments in Southeast Asia may not be direct users of Platforms, they leveraged Platform networks with MSMEs and consumers to amplify COVID-19 policy initiatives. The Indonesia government partnered with Grab and Gojek to distribute COVID-19 loan aid — 0% interest People's Business Credit (KUR) — to MSMEs. Platforms supported in the pre-screening of loan applications from their merchant partners based on a set criterion on merchants' business activities, before referring them to the banks for a final screening. This not only sped up the distribution of aid, but also widened the reach to MSMEs. Malaysia had a similar partnership to distribute aid to consumers. As part of its COVID-19 recovery plan, up to 15 million eligible Malaysians could receive RM50 ePENJANA credit to be spent via e-Wallet service providers Boost, GrabPay and Touch 'n Go ewallet.

Governments also stepped up their partnerships with Platforms in their drive for MSMEs to digitize. In 2020, the Indonesia government launched the #BanggaBuatanIndonesia National Movement for MSMEs to learn technology know-how through a series of educational videos, created in partnership with Platforms. In the same year, Quezon City in the Philippines partnered with Shopee to provide free registration on the Platform for qualified and endorsed MSMEs, to help alleviate the COVID-19 impact on sales.

It is a consistent observation that Platforms are vested in Southeast Asia's transition to the broader digital economy. There are several benefits that Platforms can bring if given the right support and environment to thrive.



The New Economy Progress Index (NPI)

To measure and identify development areas in the Platform Economy, the report has created the New Economy Progress Index (NPI). This Index covers four important building blocks of Platform Economy development — digital infrastructure, physical infrastructure, consumers and MSMEs. The NPI is designed to be easy to understand, representative of the Platform Economy, and repeatable on an annual basis for future measurement.

Our approach

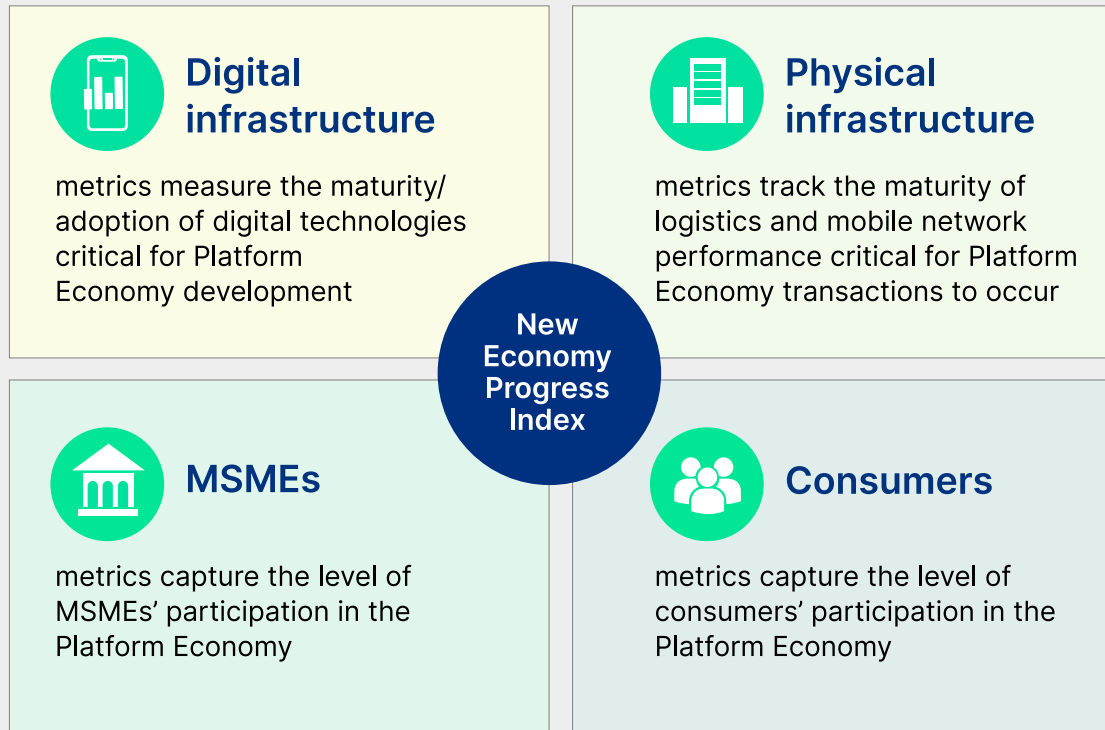
The NPI builds on the guiding principle to provide a simple reference point for countries to measure and assess various dimensions of the Platform Economy. The index is distinct in its core methodological choices:

- A holistic framework with four dimensions measuring the progress of the Platform Economy, each of which is further broken down into two equally weighted metrics.
- A measurement approach based on outcome indicators, rather than input measures.
- A list of metrics that is consistent in its methodology and source across all Southeast Asia-6 countries. The metrics are from published industry sources, Bain Southeast Asia-6 Consumer Survey and Bain Southeast Asia-6 MSME Survey.
- Scoring on a percentage scale that supports performance tracking of each country over time.

The 2021 NPI results are meant to be a reference point of the progress of each Southeast Asian country's Platform Economy, as each is in its own stage of development. The disaggregation within a country (e.g., regional or state) also provides important insight and actionable information to develop the Platform Economy further. The authors will continue to test our process and refine the methodology in future publications.

The selected eight metrics represent what we believe to be the most relevant set of outcome indicators, though we are aware that this set of metrics will not be exhaustive for the building blocks required for the Platform Economy development. The framework allows us to provide not only an aggregate country score, but also granular analyses and observations of specific areas of strength and weakness which allow us to act upon the most pressing issues in each country.

Figure 7
4 Dimensions of the New Economy Progress Index



Source: Bain analysis

Digital infrastructure

The first dimension of the NPI is about measuring the maturity and adoption of digital technologies critical for development in the Platform Economy. Individuals and MSMEs need reliable, affordable, and widespread access to digital networks and services to benefit from the Platform Economy, including mobile internet penetration and use of digital payments.

Physical infrastructure

The second dimension of the NPI is about measuring the availability and quality of on-demand logistics and mobile network performance critical for transactions in the Platform Economy.

Consumers

The third dimension of the NPI is about measuring consumers' participation in the Platform Economy and their depth of usage of O2O services. Individuals who have transacted at least once in the last 12 months are considered as digital consumers, while the depth of their usage is measured if the consumer uses at least three distinct Platform services. Higher usage depth signals higher levels of comfort in using Platforms.

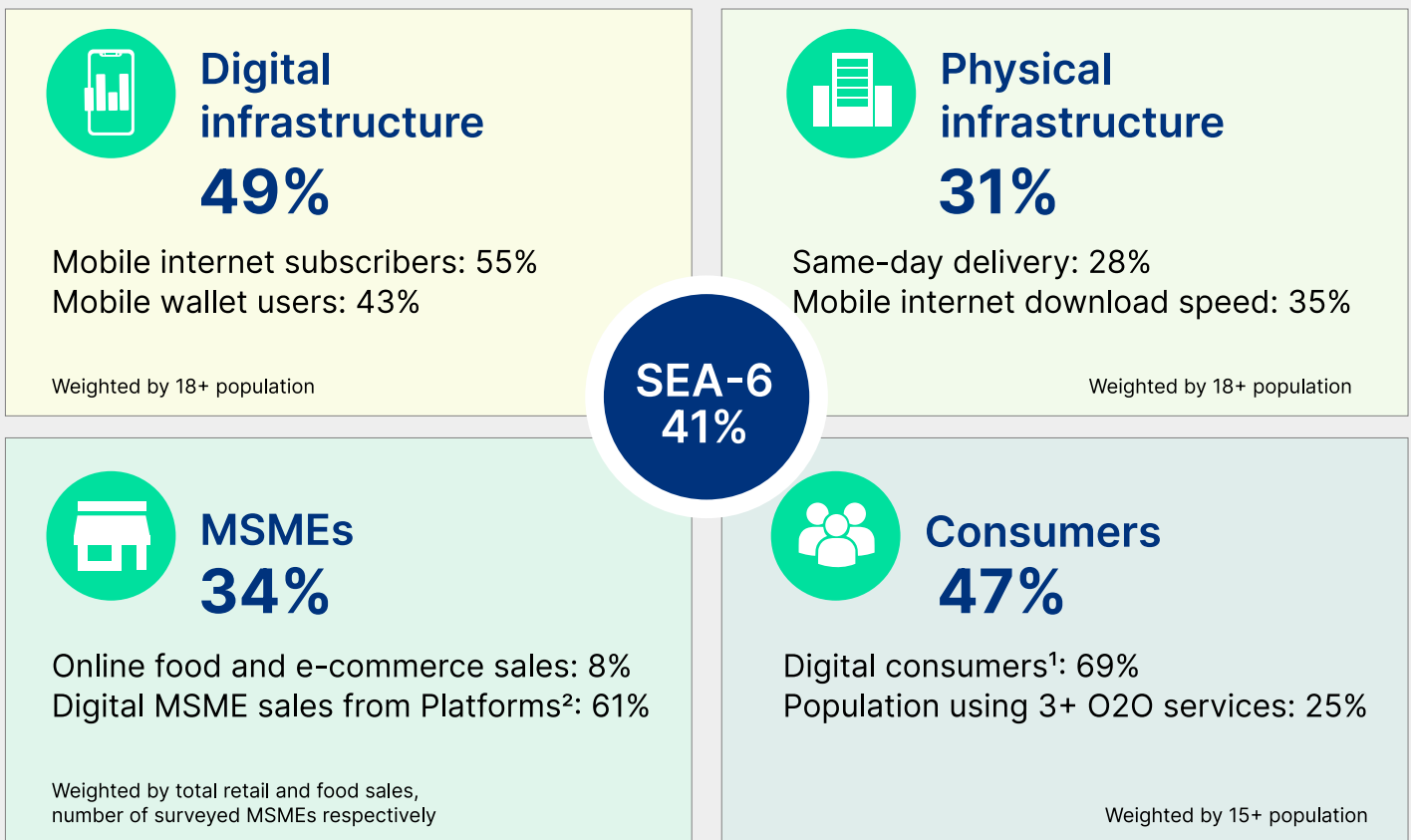
MSMEs

The fourth and last dimension of the NPI is about measuring business participation in the Platform Economy, especially MSMEs. MSMEs account for a large share of businesses and jobs in Southeast Asia. According to Asian Development Bank (ADB), in 2019, MSMEs made up 97.2% of total enterprises, engaging 69.4% of total employees in the region. Yet MSMEs typically face challenges in the use of digital technology. Therefore, it is even more important to ensure MSMEs actively participate in the Platform Economy.

Results from the 2021 Southeast Asia-6 NPI

The inaugural edition of NPI focused on the six Southeast Asian countries of Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Figure 8
2021 Southeast Asia-6 New Economy Progress Index



Note: ¹Digital consumers are consumers who had made an online purchase in the past 12 months

²MSMEs which uses Platforms at the point of being surveyed

Source: Bain analysis based on data from Euromonitor, Fitch Solutions, Forrester, GlobalData, GSMA Intelligence, Ookla

Some key observations for Southeast Asia on the current state of the 2021 NPI Index:

- ① **Great strides made in digital infrastructure development**
1 in 2 of the Southeast Asia-6 population have adopted mobile internet and digital payments.
- ② **More can be done for physical infrastructure**
There is a need for increased coverage of same-day delivery and mobile speed to support the growth of the Platform Economy.
- ③ **While usage of Platforms has increased MSME and consumer adoption, more can be done to create depth of usage**
There is an opportunity to increase online sales (8%) and consumers' depth of usage (25%).

In parallel with the 2021 NPI Index, it is important to understand consumers' and MSMEs' perception and trust on the value that platforms can bring them. Bain's Southeast Asia-6 Consumer Survey and Bain's SEA-6 MSME Survey found that **80% of MSMEs** consider platforms critical for their future success, and **78% of consumers** see platforms positively influencing their quality of life.



As Southeast Asia looks ahead, a few priorities stand out for the development of the Platform Economy:

① **Improve digital infrastructure adoption in non-urban areas**

While COVID-19 has accelerated the adoption of mobile internet and mobile payments, every country will still need to continue to expand penetration. Governments can help by building the right regulatory infrastructure, such as national digital IDs, regulatory reforms that promote competition, especially for under-served rural areas; and other initiatives to help lower prices and increase quality of service.

② **Improve logistics infrastructure in non-urban areas**

Affordable and reliable logistics is a key enabler for the growth of the Platform Economy. While the challenging geography of many Southeast Asian countries is an important factor, there are many potential initiatives that countries can pursue to reduce logistics cost and increase logistics reliability.

Focus on depth of participation with Consumers and MSMEs by strengthening the population's digital literacy and trust.

Consumers and MSMEs have come a long way and a significant majority are active in the Platform Economy. For consumers and MSMEs to further extend these benefits, an improved level of digital literacy and a higher level of trust in regularly transacting online will be critical.

“

Being able to transact safely is the first step in deepening their (consumers and MSMEs) participation in the digital economy.

Director (Industry Division),
Ministry of Communications and Information, Singapore

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Chapter 3

Going Digital with Platforms: Benefits of the Platform Economy

Overview and methodology

This chapter seeks to analyze the benefits and opportunities that Platforms bring, using empirical evidence through our Southeast Asia from our survey of 2,800 consumers and 666 MSMEs in Southeast Asia, Grab data and secondary research.

Key benefits and opportunities of Platforms

Even though Southeast Asia-6 countries are in the early stages of digital economy development, there is already considerable demand for O2O services in the region. According to the Bain-Facebook 'Digital Consumers of Tomorrow, Here Today' report, 7 in 10 of Southeast Asia-6's population aged 15+ have used an O2O service before. Moreover, in Indonesia alone, the Indonesian Cooperative and SMEs Minister had shared that 10.2 million, or 16% of, MSMEs in the country are already using online platforms for their business.

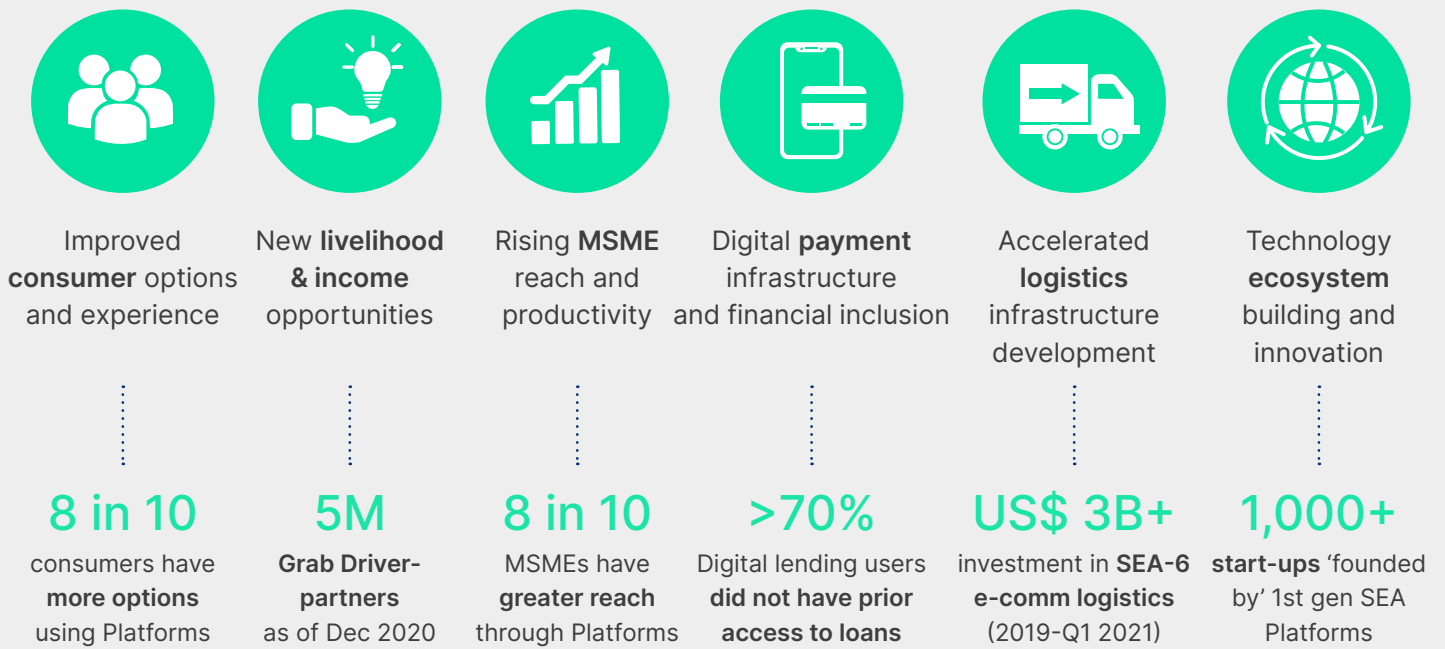
As demand for O2O services and Platforms increases in the region, benefits and opportunities will stretch far beyond immediate employment within Platforms. Platforms will be able to support the achievement United Nations' of 2030 Agenda for Sustainable Development in Southeast Asia, which builds on the principle of "leaving no one behind". Research from Koskinen, Bonina, and Eaton in 2019 has also shown that Platforms are already supporting development efforts by helping remove market frictions caused by insufficient information, weak institutions, and poor infrastructure.

For example, Platforms provide MSMEs with expanded customer reach, at a lower cost base compared to offline channels, by levelling the playing field with larger incumbents. Similarly, consumers from more remote regions in Southeast Asia can now engage in the Platform Economy, and access new economic opportunities as well as digital financial services through the use of Platforms.



In the following sub-chapters, this report will examine six key benefits of Platforms in Southeast Asia.

Figure 9
Key benefits and opportunities of Platforms



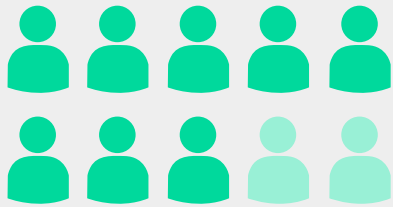
Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800); SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666); Grab Investor Presentation April 2021; Tech in Asia; LinkedIn; Bain analysis

More options and improved experiences for consumers

Platforms have created pathways for new O2O experiences for consumers to supplement their offline experiences. For example, consumers now have an additional option to order groceries or consumer electronics through e-commerce platforms, and meals through food delivery platforms.

These new O2O experiences have resulted in consumers in Southeast Asia experiencing a positive impact in their quality of life while using Platforms, with benefits such as greater convenience, better experiences and having more options as compared to their purchasing experience offline.

Figure 10
How Platforms impact consumers' quality of life



8 out of 10

Consumers agree that Platform have had a **positive influence on their quality of life**

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

Greater convenience, access, and transparency

Platforms provide consumers with the convenience of making purchases with just a few taps on their mobile devices, without the need to leave their homes. The benefits of such convenience have become more pronounced during the COVID-19 pandemic, when consumer mobility was significantly restricted across most of the SEA-6 countries.

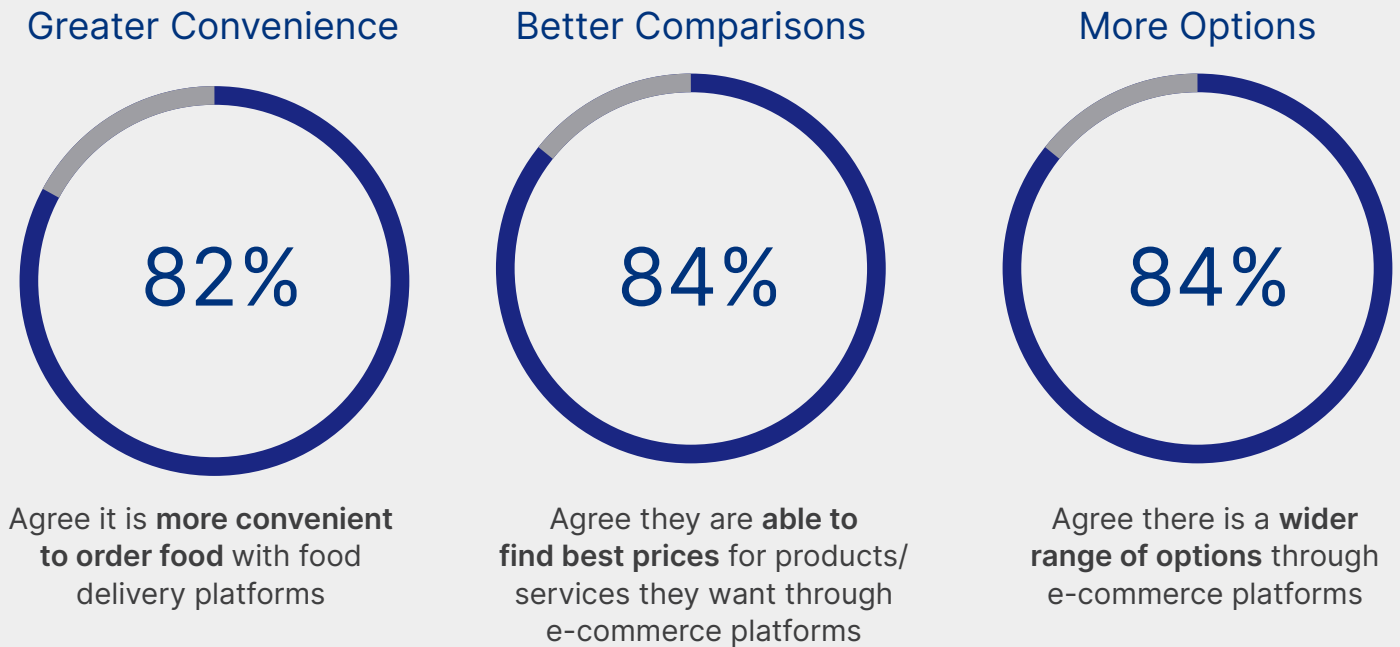
Furthermore, consumers can benefit by getting goods and services more quickly because of fewer intermediaries. In some cases, for example, consumers are able to place orders directly from the manufacturer rather than a retailer. Platforms also play a key role in aggregating a large number of merchants online in one space. This provides consumers with greater ease of product and price discovery, allowing consumers to make comparisons across different merchants on Platforms, instead of physically visiting each store.

Platforms have also reduced geographical boundaries for consumers, allowing them to benefit from access to a wider variety of global products and services, some of which were not available locally.



Figure 11

Consumers' perception of the benefits of using Platforms, compared to offline purchasing



Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

Better experiences, trust, and safety through Platforms

“

Digital platforms like Sejasa have created a layer of standardisation and trust in the services industry, enabling transactions to be brought online.

CEO, Sejasa (Part of Recommend Group)

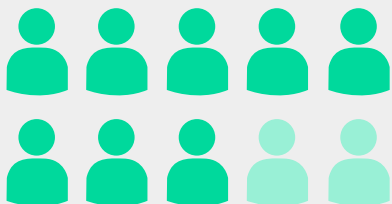
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Platforms play a critical role in building consumer trust in transactions, such as allowing consumers to provide product reviews on e-commerce platforms, or ratings for driver-partners on ride-hailing platforms. These features give consumers greater assurance on the reliability and quality of the products or services they are purchasing, without needing to rely on in-person checks or appraisals.

On top of that, Platforms globally, and in Southeast Asia, drove multiple innovative solutions in building trust and safety with their customers. For example, driver-partners for Grab and Gojek are required to upload a selfie to log into the respective Platforms to confirm their identities and prevent identity fraud. Grab also added an 'Emergency' feature in their ride-hailing application, allowing consumers to notify an external security company or the police in case of any immediate dangers. Another example is the 'Share My Ride' feature within the Grab platform that allows consumers to share their ride details with their friends and families.

The examples above are just some of the many innovations by Platforms in Southeast Asia, as they work towards improving customer experiences and winning market share from incumbents. With increasing competitive pressure from Platforms, traditional incumbents are also increasingly pushed to action in improving their own offerings and customer experiences. Consumers benefit from this competition with better experiences and pricing.

Figure 12 — Positive wider industry impact of Platforms



8 out of 10

Consumers agree that ride-hailing platforms have led to **taxi operators improving their ride experiences**

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

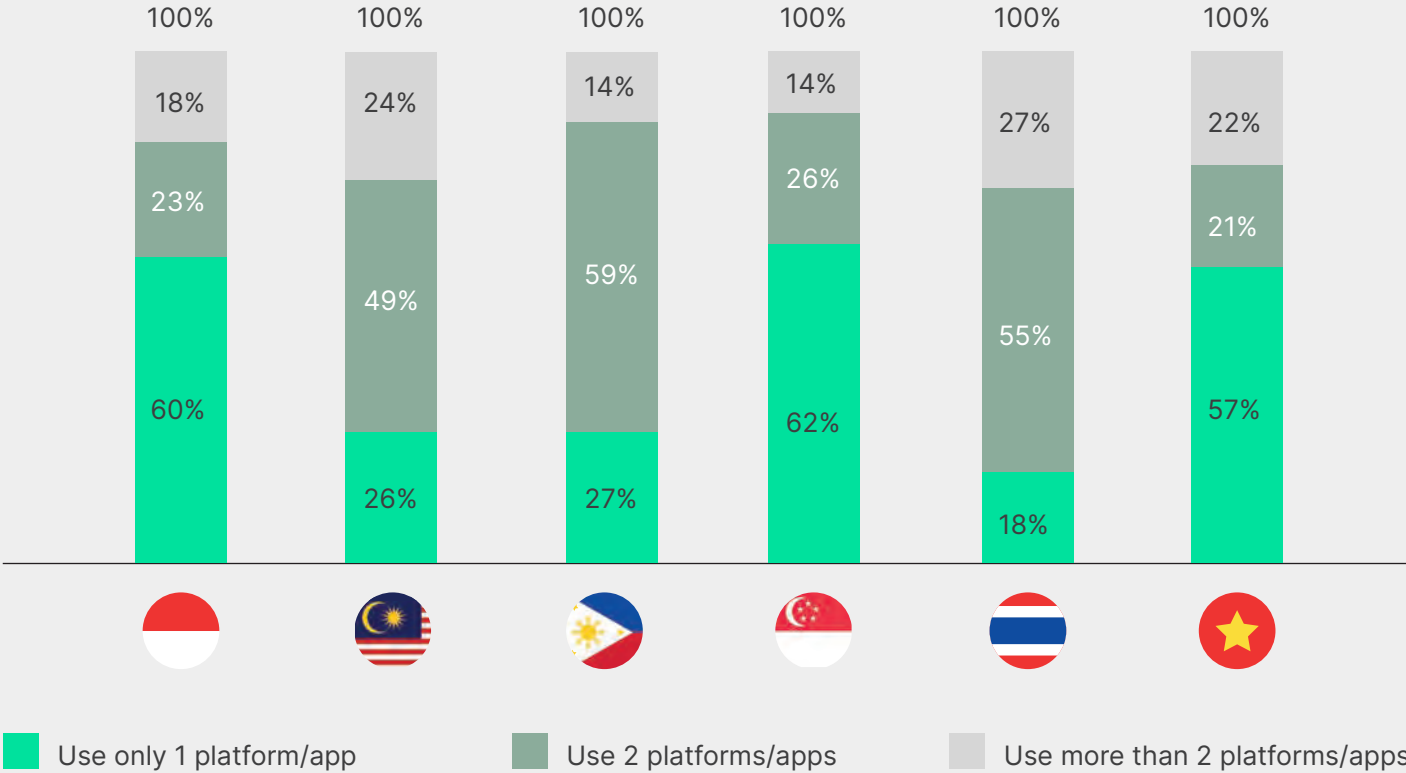
Access to more choices through multi-homing

Having access to more options and choices is highly valued by consumers in Southeast Asia-6, which is inferred from their preference for using multiple e-commerce platforms (refer to Figure 13). This also indicates that there is limited lock-in by Platforms with consumers surveyed appearing to make active choices on the Platforms they use.

There are various possible reasons for this behavior, such as the ease of using multiple platforms or each platform having a different set of merchants and products.

Given the strong consumer preference towards multi-homing, consumer use of Platforms in the region is likely to continue to be more diversified, promoting growth and healthy competition across multiple Platforms.

Figure 13 Most surveyed SEA-6 consumers use multiple e-commerce platforms for purchases



Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

New livelihoods and income opportunities

Platforms have created new livelihood opportunities in the labor market. These new opportunities range from being a driver-partner for a food delivery platform, to an online seller on an e-commerce platform. A defining feature of the new opportunities created by Platforms lies in greater flexibility—people have greater control in balancing their personal commitments and work schedules.

Although part-time and freelance work opportunities already exist, the advent of Platforms has made these flexible working arrangements a lot more viable, especially from the perspective of having a steady flow of income-generating opportunities. In this regard, Platforms have allowed people to connect with new opportunities more quickly and efficiently. For example, ride-hailing platforms match driver-partners to potential riders with pin-pointed locations, or e-commerce platforms match online sellers and buyers beyond geographical boundaries. This expanded connectivity to opportunities, driven by Platforms, has provided people with more income opportunities while they pursue a flexible working arrangement, compared to the past when more time and effort may have been required to source for new part-time or freelance work.

Transition to the future of work

The International Labour Organisation (ILO) defines Platform work as “one of the most important transformations in the world of work over the past decade.” This transformation will likely have a significant impact on the future of work in Southeast Asia, where both traditional (i.e., fixed hours) and flexible work opportunities could co-exist.

Although new flexible Platform working arrangements have benefits and opportunities (which will be elaborated in subsequent sub-chapters), it is important to highlight that there are also many concerns to be addressed. These range from continued skills development for people making their livelihood through Platforms to their access to social safety nets. This will be discussed in greater detail in the next chapter.



Flexible work arrangements as a viable alternative

Platforms are giving people in Southeast Asia a viable alternative in generating income. They are no longer restricted to working fixed hours in an office environment or in shifts in a retail- or production-related setting, (e.g., being bounded by fixed 'working hours every weekday in an office or retail environment, such as from 9am to 5pm) and can choose to make a living through more flexible working arrangements. For example, 'Flexibility of time' was one of the main reasons that driver-partners prefer working for ride-hailing platforms (refer to Figure 14).

Figure 14 — Top reasons for driver-partners preferring to work for ride-hailing platforms in SEA-6 (2021)

						
#1	Flexibility of time	Flexibility of time	Flexibility of time	Flexibility of time	Able to earn as much as I work	Flexibility of time
#2	Enjoy Driving	Able to earn as much as I work	Able to earn more than my previous job	Enjoy Driving	Opportunity to be my own boss	Enjoy Driving
#3	No discrimination	Low stress	Opportunity to be my own boss	Able to earn as much as I work	Enjoy Driving	Opportunity to be my own boss

Source: Grab Social Impact Survey 2021; Nielsen

Creating additional sources of income

With increasing adoption of Platforms in Southeast Asia, especially in rural regions, greater income-earning potential is being unlocked for those leveraging Platforms for their livelihood. For example, merchants on e-commerce platforms will be able sell their products to consumers living in rural areas that were previously difficult to reach.

With flexible working arrangements through Platforms, people are also gaining access to a variety of income-generating sources that could replace or supplement their income from traditional full-time work.

Impact Story

New income source for 700,000+ warungs and MSMEs

PayFazz is one of Indonesia's longest-running and largest fintech platforms, which built a network of 700,000+ agents throughout the country's rural communities by enrolling MSMEs and warungs (the local equivalent of mom and pop stores). In 5 years, they brought financial services such as POS, bill payments, cash transfers and loans to 80 million underserved Indonesians.

PayFazz agents obtained not only a new source of income, but also a way to further engage and retain their customers (the end-users). This proved even more important during the pandemic, when due to safety reasons, end-users could not visit in person these warungs or MSME and started processing transactions via WhatsApp. PayFazz launched a dedicated consumer app to enable these users to access financial services and remain in a safe and supporting ecosystem.

These agents see continuous innovation by PayFazz in the breadth of services offered to end-users and in the overall experience. For example, PayFazz has recently secured an e-money license to enable fully cashless transactions between Payfazz agents and end-users.

Source: PayFazz

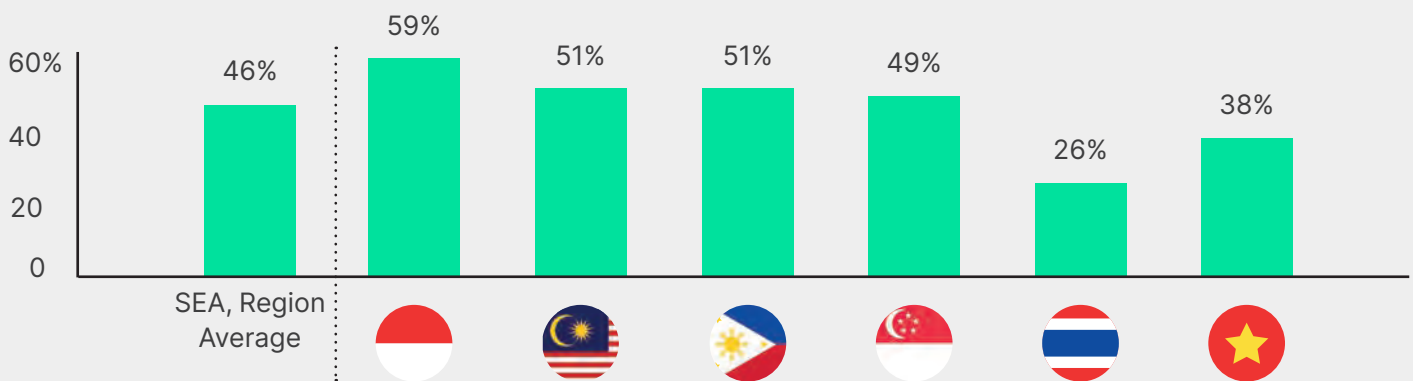


Carving out new livelihood opportunities

Platforms are also creating new livelihood opportunities for people who were previously unemployed, such as those who are unable to commit to work full-time due to personal circumstances. With flexible working arrangements, these people can now make a living while balancing their personal commitments (for example, needing to care for a child, or an ill or disabled family member).

According to the Grab Investor Presentation in April 2021, there were over 5 million driver-partners engaged by Grab in Southeast Asia as of Dec 2020, and at least 46% of surveyed driver-partners in the region were not working prior to joining Grab (refer to Figure 15).

Figure 15 — 46% of surveyed Grab driver-partners were unemployed prior to joining Grab



Source: Grab Social Impact Survey 2021; Nielsen

Lastly, those transitioning between jobs are also gaining access to new temporary options for continued income generation through Platform opportunities, providing them some respite while searching or waiting for the next job. These transitional income sources were highly valued during COVID-19, when sectors such as aviation faced lay-offs and furloughs, resulting in workers seeking temporary alternative work. For example, according to the Grab Social Impact Report 2019/2020, more than 115,000 new driver- and delivery-partners joined Grab during COVID-19.

Increased MSME reach and productivity

Compared to larger well-resourced corporates, MSMEs face more constraints in adopting technology and engaging in the Platform Economy. These constraints may range from financing, availability of technology-related talents and know-how, or even general awareness of available technology and digital solutions.

Acting as facilitators, Platforms have lowered the barriers for MSMEs to go digital. For example, MSMEs can sell products and/or services online by listing on e-commerce platforms, and therefore leverage on the existing digital and physical infrastructure, as well as partnerships that the Platforms have curated for their merchants. This is more convenient than building and maintaining in-house resources and capabilities to manage an online presence. According to Tokopedia, there are already more than 11 million merchants listed on their Platform, most of which are MSMEs.

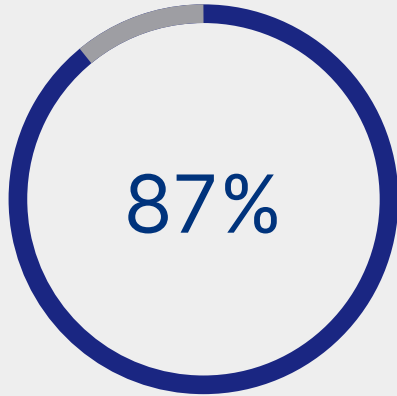
Access to a wider customer base

MSMEs that successfully adopt Platforms can expand their customer base beyond the proximity of their physical stores or even homes. On top of providing MSMEs with an online presence in marketing their products and services to potential customers, Platforms are also helping MSMEs access new customers that were previously untapped. Super, a social commerce platform, for instance, is enabling access to FMCG goods at competitive prices in second and third tier cities in Indonesia. This is accomplished by empowering agents within these communities to conduct group buying and serve as last-mile fulfillment. Another example, focused on service professionals, is Sejasa, which connects homeowners and small businesses to over 40,000 verified skilled workers specialized in home and property improvement and maintenance; while improving transparency for end-customers, the platform also provides tools and capabilities that professionals need to scale their business.

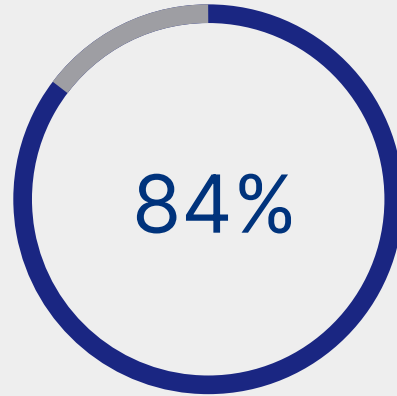
By leveraging Platforms, MSMEs are also able to stretch beyond previous geographical limitations in accessing customers further away. For some, Platforms may open pathways for them to sell their products or services across international borders to generate more revenue. That being said, international players may also gain access to local consumers through these same Platforms, creating a more competitive landscape for local MSMEs. According to JP Morgan, cross-border e-commerce accounted for 44% of overall e-commerce sales in Malaysia in 2020.

Figure 16

>80% MSMEs able to reach wider customer base using Platforms, compared to selling offline



Retail MSMEs able to reach more customers with e-commerce platforms



Food MSMEs able to reach more customers with food delivery platforms

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)



Impact Story

Jessyca

Grocery store owner

“

Now my sales have increased by double. Due to wider reach, my sales have doubled. I even get orders from out of town. I can now see how technology makes our lives easier.

”

Jessyca has been helping her mother to sell everyday food supplies through their grocery store. The grocery store has been around since 2004, and is the family's main source of income.

During COVID-19, Jessyca's grocery store sales declined by 30-40% as consumers were unable to visit during lockdown. Jessyca and her mom also had difficulties scaling up deliveries, as they had to manage deliveries by themselves.

Driven by declining demand, and an inability to raise prices, Jessyca decided to leverage GrabExpress (on-demand logistics) to facilitate online orders and deliveries. Through GrabExpress, Jessyca was able to receive and complete orders from further locations, alleviating pressures of not having customers in-store and even expanding her customer base. Her online delivery business was so successful that she managed to double grocery sales through the platform.

Source: Grab



Resilience during a pandemic

“

COVID-19 has accelerated the digital shift from offline to online. This has led to a surge in e-commerce and omnichannel shopping, creating new business models and consumer behaviors. Digitalization is no longer an option but a business imperative across all industries in order to remain competitive, accessible and inclusive.

”

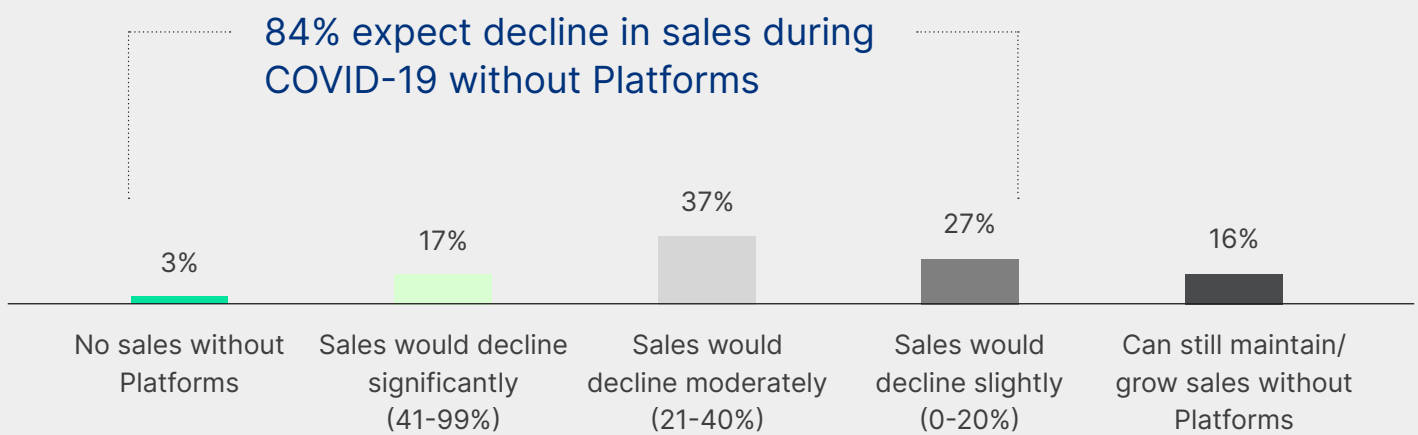
Senior Director, Asia Pacific Head, Government Relations, PayPal

During the COVID-19 pandemic, many MSMEs across Southeast Asia-6 experienced increased pressure in sales, as consumers had their mobility restricted. Food MSMEs in particular were acutely impacted because dine-in options were largely prohibited across the region.

Although not a panacea for the pandemic, Platforms have enabled MSMEs to become more resilient, ensuring MSMEs have continued access to consumers even if offline access is limited. This is made possible partially due to the digital nature of Platforms, but also driven through efforts from Platforms in continually optimizing their processes and deploying innovative solutions to address challenges brought by the pandemic. For example, during the onset of COVID-19, Grab had rapidly calibrated their processes and solutions to enable contactless delivery and payments across the region, and limit physical contact for users' safety. Onboarding processes were also accelerated so that MSMEs could list their products and services on GrabFood or GrabMart within three to five days.

Coupled with the availability of on-demand logistics, MSMEs were able to continue driving sales with consumers online and protect their revenue. In fact, over 80% of surveyed food MSMEs in Southeast Asia had expected sales to decline during COVID-19 if they had not used food delivery platforms (refer to Figure 17).

Figure 17 Most surveyed food MSMEs expected decline in sales during COVID-19, if they had not used food delivery platforms



Source: SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)



Impact Story

New sales channel for pasars during the pandemic

LinkAja is the first Sharia-compliant e-wallet provider aiming to accelerate financial inclusion for the micro and ultra-micro segments outside Tier 1 cities in Indonesia. Following its mission, LinkAja has collaborated with the local government to bring digital, QR-based payments to Indonesian pasars, i.e. traditional markets.

During the COVID-19 lockdowns, stores in the traditional pasars were severely affected in Indonesia. Through its “online pasar” service, LinkAja’s App connected these traditional markets’ stores to a broader consumer base, including in cities like Jakarta, Yogyakarta, Bandung, Palembang.

The platform enabled consumers to have their daily needs delivered to their homes, allowed for reduced cash usage, minimizing the spread of the virus. After experiencing a steep decline in sales when the lockdowns were first enforced, many of these traditional market stores saw their transactions increase by 20-25% in the first two months after they started using the “online pasar” service.

Source: LinkAja

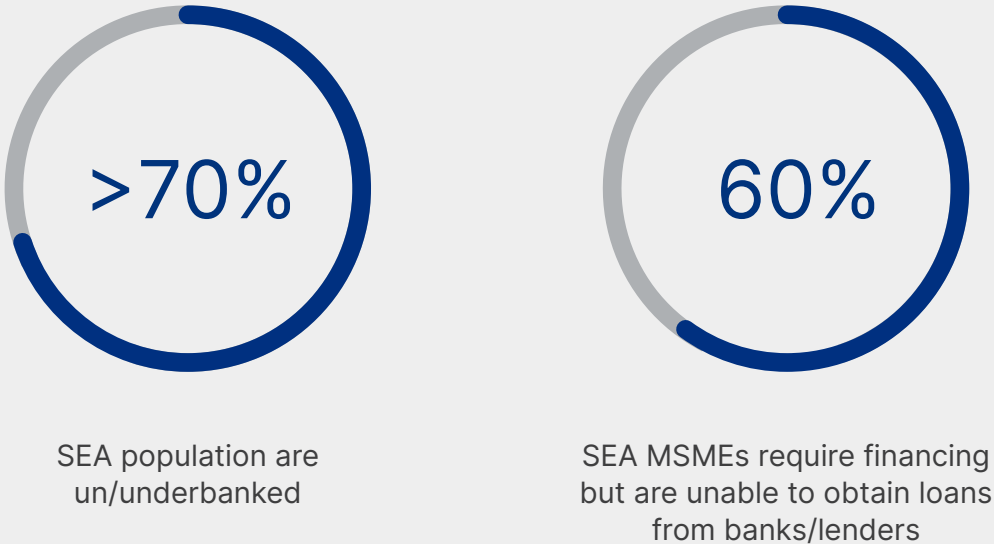


Digital payment infrastructure and financial inclusion

According to the World Bank, financial inclusion is a key enabler for achieving 7 of the 17 United Nations 2030 Sustainable Development Goals. Improvements in financial inclusion can enable nations, especially emerging economies, to 'reduce extreme poverty and boost shared prosperity', leading to more inclusive economic growth.

Given current limited access to financial services in Southeast Asia, the region stands to gain tremendous benefits by improving financial inclusion of its population and MSMEs. Over 70% of Southeast Asia-6 population are unbanked or under-banked. In addition, 60% of surveyed MSMEs in Southeast Asia requiring financing or credit were unable to obtain the needed loans from traditional financial institutions (refer to Figure 18).

Figure 18
Financial inclusion remains limited in SEA-6



Source: Bain-Google-Temasek 'The future of Southeast Asia's digital financial services' report; SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)

Bridging financial inclusion challenges with Platforms and financial services

There are three key challenges inhibiting the growth of financial inclusion in Southeast Asia. The continued existence of these challenges proves the great difficulty that governments and traditional financial institutions face in resolving them. The introduction of Platforms and digital financial service in Southeast Asia has provided a glimpse of how these challenges can be overcome in the longer run to drive greater financial inclusion in the region.

① Challenge 1: High cost-to-serve

Globally, as well as in Southeast Asia, financial inclusion gaps occur more frequently in rural regions as compared to urban centers. Traditional financial services delivery models are not as well established in these rural regions, resulting in high costs and difficulties in setting up physical distribution and scale in these areas. Transaction sizes (e.g., loan sizes) are also typically lower for these segments of the population and MSMEs, which means higher unit transaction costs.

Platforms are starting to help overcome this challenge by acting as a digital distribution channel for traditional and digital financial services providers to reach these customers, drastically reducing physical infrastructure requirements. For example, digital lending provider Krevido had partnered with Tokopedia to offer consumer financing for Tokopedia shoppers when they checkout.

Digital financial service players also tend to have leaner cost structures at scale, given that they do not have legacy technology systems and have lower physical infrastructure requirements. As such, digital financial services may be better positioned to serve the unbanked and underbanked segments with a lower cost base.



2 Challenge 2: Limited credit history and information

For many financial institutions, a good credit rating is a prerequisite for extending loans to consumers or MSMEs. However, the unbanked and underbanked typically do not have the credit history and information required to form a conclusive credit rating. As a result, traditional financial institutions either end up excluding these segments from financing opportunities entirely or charge a very high price to offset the uncertain lending risks.

In recent years, digital financial services have increasingly stepped in to plug this financing gap. New business models in unsecured consumer and MSME lending are emerging in the region. Some of these new business models involve alternative credit scoring, leveraging data from Platforms and other sources (e.g., mobile usage) in assessing the credit risk of consumers and MSMEs. As an example, Lazada had partnered with Funding Societies, providing Lazada's data as part of Funding Societies' risk assessment process in evaluating MSMEs' eligibility for e-commerce financing.

Alternative credit scoring has the potential to enable better evaluation of credit risks for the unbanked and underbanked, who otherwise lack credit history and information. With greater clarity on credit risks, lenders would be better able to discern the segments of unbanked and underbanked who would most likely not default, and thus have loans made available to them. It should be noted that risk standards are still upheld in alternative credit scoring, and the unbanked and underbanked who fail to meet these standards would still be turned away from financing opportunities.



3 Challenge 3: Limited financial literacy and awareness

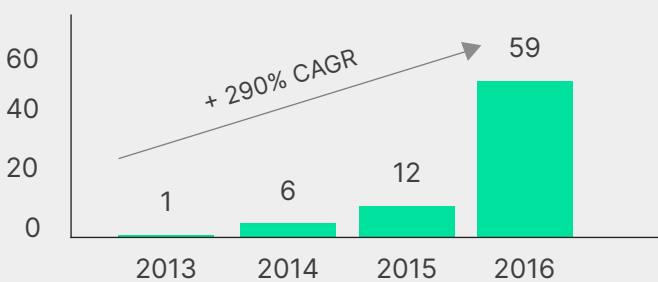
The lack of supply of financial services for the unbanked and underbanked is compounded by the limited demand from these segments, driven by low financial literacy and awareness of financial services in general. According to Standard & Poor's Financial Literacy Survey, Indonesia, Thailand, Philippines, and Vietnam ranked in the bottom half of the 144 countries assessed on financial literacy.

To address this challenge, Platforms are increasingly embedding digital financial services and financial literacy programs along with Platform services. As a case in point, Grab had partnered with Standard Chartered to provide financial literacy modules for their driver-partners, as part of the GrabBenefits program in Malaysia. As Platform adoption grows among the unbanked and underbanked, more of them will gain greater exposure and understanding of financial services, as well as the value of adopting financial services.

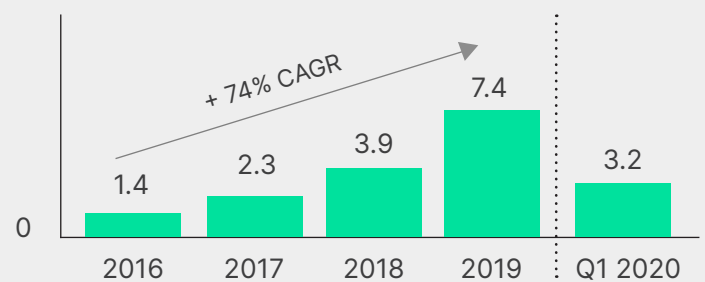
Case study: Role of Platforms in accelerating digital payments penetration

Globally, Platforms have played a key role in driving digital payments adoption.

Total mobile payment transactions in China (RMB trillion)



Total e-wallet payment transactions* in Vietnam (USD billion)



In China, mobile payment transactions had grown by almost 60X from 2013 to 2016. A significant contribution to this growth stemmed from targeted Platform-related digital payment plays by Alibaba and Tencent. Alipay is the key payment tool for Alibaba's e-commerce platform, and Tencent built use-cases around daily activities for WeChat Pay.

Similar patterns are now being observed in Southeast Asia. For example, in Vietnam, e-wallet players such as AirPay and ZaloPay are tapping into popular Platforms, such as Shopee and Tiki respectively, to drive e-wallet adoption.

Source: Global Data, WorldPay, State Bank of Vietnam

Signs of success in driving greater financial inclusion

Within Southeast Asia, signs of greater financial inclusion through Platforms and digital financial services are already emerging. More than 70% of surveyed consumers and MSMEs that were previously unable to get loans through banks or lenders, are increasingly gaining access through digital lending (refer to Figure 19). One driving force could be improved evaluation of credit risks through alternative data. For example, through data hooks with telcos, e-commerce providers and geo-based services, Kredivo in Indonesia can offer small personal loans and “buy now pay later” options to more than 3 million customers, also helping them build a credit history. In addition, new innovations in digital financial services will continue to arise in the region to drive financial inclusion. For example, digital IDs, a real-time verification infrastructure, and electronic know your customer (eKYC) are enabling faster, low-cost, and convenient customer identification and verification processes. This has led to an improvement in customer profiling and fraud detection, giving financial service providers greater confidence in servicing the unbanked and underbanked in Southeast Asia.

Figure 19 Consumers and MSMEs obtaining financing through digital financial services, when previously not accessible through traditional financial institutions



Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800); SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)

Platforms in Southeast Asia are also enabling greater financial inclusion by providing workers with opportunities to increase their income and personal savings, while investing in their financial literacy. Grab had set up GrabBenefits in Malaysia, which provides insurance coverage to their driver-partners, as well as access to financial literacy modules by Standard Chartered bank. Over 70% of OVO’s MSME partners in Indonesia embraced digital financial literacy and started keeping more regular financial transactions records.

Impact Story

Rudianto

Ride-Hailing Driver-Partner

“

Before, I only knew how to use my smartphone for chatting and Facebook. I didn't know you could ... use the map application for help with navigation and more importantly check my bank account. I didn't even have a bank account before joining Grab. But now, with the money I saved, I was able to build a new house for my family.

”

Rudianto is a Grab driver-partner in Indonesia. Before joining Grab, Rudianto was a construction worker, toiling under the sun to bring in US\$130 monthly for his family. He had no bank account to his name and stashed the limited cash savings he made in his home.

After becoming a Grab driver-partner, Rudianto was able to increase his monthly income, accumulating US\$850 in just three months from his trips. He had also been able to upskill himself on how to use different O2O platforms (e.g., map applications), and how to use a bank account.

Ultimately, Rudianto was able to successfully set up his bank account and has been managing his savings prudently through the account.

Source: Grab



Accelerated logistics infrastructure development

Logistics infrastructure plays a huge role in driving growth for economies across the world, including Southeast Asia. Logistics infrastructure supports the flow of economic transactions, and the movement of all goods within each economy, and across borders. Without well-established logistics infrastructure, consumers would be severely constrained in the goods they can access and purchases they can make. Businesses would also have much less access to trade and economic opportunities. In order to grow logistics infrastructure, a combination of public and private sector investments is often critical, the latter of which has shown promise to be driven through the growth of e-commerce platforms.

Ramping up logistics infrastructure development as platform transactions grow

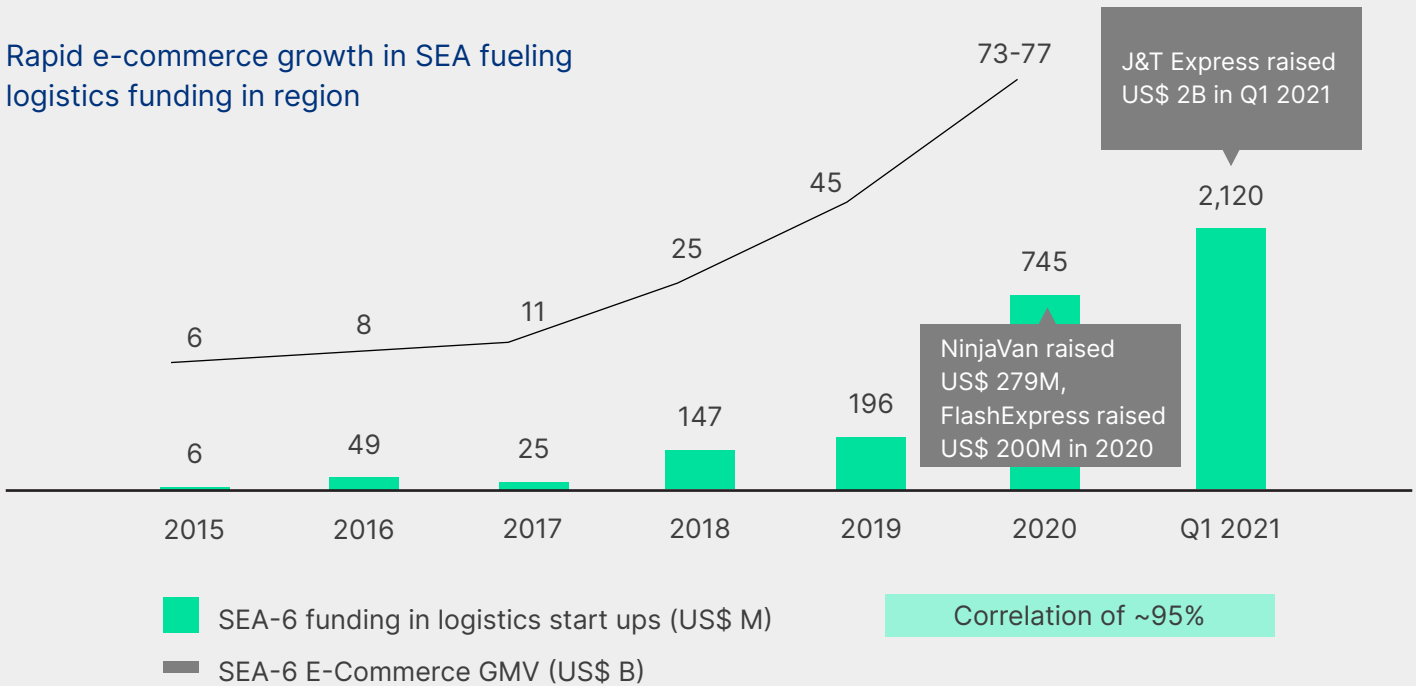
Logistics infrastructure plays a critical role in enabling O2O transactions within Southeast Asia. In particular, the spate of innovations and start-up activity in last-mile delivery had greatly enhanced the quality of services that Platforms can provide, such as provision of same-day deliveries for e-commerce platform purchases. As adoption of Platform in Southeast Asia grows, the demand for last-mile delivery will accelerate, making the logistics sub-sector increasingly attractive for investors.

Logistics start-ups in Southeast Asia-6 have received capital inflows totaling more than US\$3B between 2019 to Q1 2021 (refer to Figure 20), with a growth trajectory mirroring the rapid growth of e-commerce platforms. As logistics start-up investments in the region continue to pour in, third-party logistics providers that have received capital inflows, such as SiCepat and Ninja Van, are becoming more aggressive in expanding their logistics network in the region. E-commerce platforms are increasingly investing to build their own in-house logistics network (refer to Figure 20). It is unlikely that logistics development in Southeast Asia-6 would have grown at this pace without the rise of e-commerce platforms.

With the expansion of logistics networks in Southeast Asia-6, more consumers and MSMEs in physically remote regions can start sending and receiving e-commerce deliveries. The use of e-commerce platforms will become increasingly feasible for these segments, allowing them to get connected to new economic opportunities (for example, being able to sell products online to customers in other regions or cities).

Figure 20 — Accelerated logistics infrastructure development, driven by e-commerce platform growth

Rapid e-commerce growth in SEA fueling logistics funding in region



Examples of key players in SEA-6 driving logistics investments

85% **Lazada**

Parcels delivered in Nov '20 driven by **in-house logistics network**

67% **SICEPAT**
KETIKA SEMUA JADI MUDAH
EKSPRES

Increase in pick-up/drop off points in Indonesia from 2019 (600) to 2020 (1000)

3x **ninjanvan**

Increase in pick-up/drop off points in Singapore from 2018 (200) to 2021 (600+)

Note: Southeast Asia VC funding includes non-IPO investments in logistics-related companies, across Singapore, Malaysia, Thailand, Indonesia, Vietnam and Philippines

Source: Google-Temasek-Bain e-Conomy report; Ninja Van; SiCepat; Tech in Asia

Enhancing O2O e-commerce platform experiences as logistics infrastructure matures

As mentioned, logistics infrastructure, especially last-mile delivery, is a key enabler for the growth of e-commerce platforms, allowing consumers and MSMEs to have better O2O e-commerce experiences. Driven by increased logistics investments, consumers and MSMEs in Southeast Asia-6 are already benefiting from improved logistics when conducting transactions on Platforms.

Impact Story

Transforming first-mile shipping in Indonesia

Shipper is an Indonesian logistics company that leverages proprietary shipping and order management technology, combined with a network of local agents handling parcel delivery, to drastically reduce the cost of shipment for small sellers, especially in tier 2 and tier 3 cities.

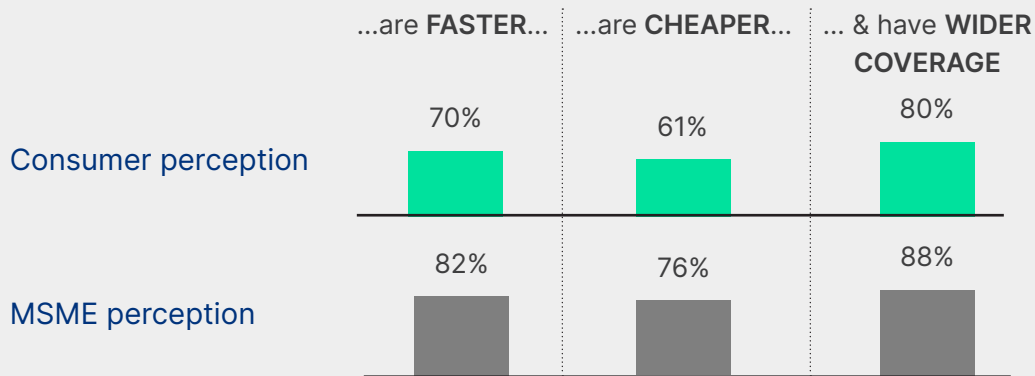
Indonesian logistics is heavily fragmented and shipping cost can reach up to 40% of a customer's total purchase amount, but Shipper was able to reduce these expenses by 15-20%, ultimately reducing the cost for the end-consumer.

Shipper's asset-light and flexible platform helped sellers adapt during the pandemic, when demand for its logistic services grew 10x-15x year-on-year. With inventory buffers, backup teams and facilities, and with adoption of digital payments in partnership with Dana, the company was able to support end-customers in receiving the goods they needed safely at their location.

Source: Shipper



Figure 21 — More than 60% of surveyed consumers and MSMEs believe e-commerce logistics has improved, vs. 2 years ago



Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800); SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)

Technology ecosystem building and innovation

During COVID-19, the value of the technology ecosystems across Southeast Asia rose to prominence. As pure offline consumption was limited, consumers and MSMEs had to leverage the technology ecosystems to drive interactions and transactions. Having experienced the importance of a flourishing technology ecosystem, many Southeast Asian have placed greater emphasis on growing and harnessing the potential of their technology ecosystem, such as investing in the digitalization of MSMEs.

For example, during COVID-19, the Singapore Government committed to absorbing the 5% commission costs charged by food delivery platforms so as to encourage more food MSMEs to go digital and sell through food delivery platforms. It had also established the Singapore Digital Office (SDO) in June 2020, with 1,000 Digital Ambassadors on the ground to help MSMEs adopt digital solutions. Similarly, in Malaysia, the PENJANA MSMEs e-commerce campaign launched in June 2020 has successfully on-boarded 45,000 MSMEs in e-commerce platforms and helped over 200,000 MSMEs adopt digitalisation solutions.

Beyond public sector funding, this pursuit of technology ecosystem growth will require additional private sector support, in particular the provision of capital investments, innovation, and talent. Within Southeast Asia, Platforms have played a pivotal role in orchestrating continued injection of investments, innovation, and talent into the region's technology ecosystem.

Investment appeal of Southeast Asia Platforms

The technology investment landscape in Southeast Asia-6 continues to flourish. Between 2015-2020, over US\$55 billion had been raised in Southeast Asia-6, with an increasing momentum in the number of deals (refer to Figure 22). A large proportion of this investment appetite had stemmed from the optimism over Southeast Asia-6 Platforms, as can be observed from recent high-profile deals, such as funding rounds, IPOs, and planned SPAC listings, for these Platforms.

Figure 22 — Deal activity across SEA-6 tech investment* landscape continues to grow

Deal Value (US\$ B)



Examples High profile capital inflows & exits of SEA digital platforms (>US\$1 billion)	Lazada	sea	tokopedia	Grab
	Funding round- Alibaba	U.S. IPO	Announced plans to go public	2021 onwards
	2016 & 2018	2017		

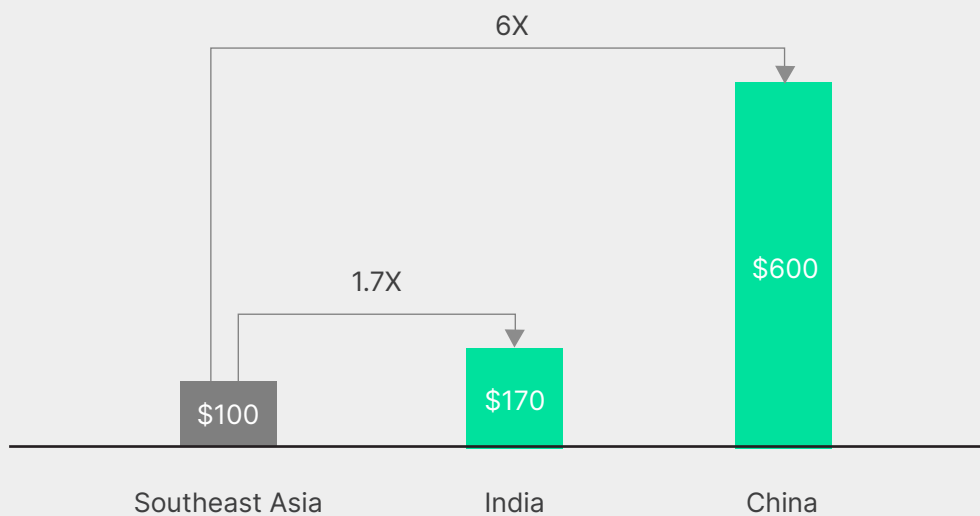
Note: *Tech investments include transport and food delivery, e-commerce, FinTech, Online Media, Online Travel, Online Marketplace, and others ²U.S. SPAC listing of Grab yet to occur at the launch of this report

Source: Google-Temasek-Bain e-Conomy SEA Report 2019 and 2020; Crunchbase

With a track record of Southeast Asia-6 Platforms' growth stories and successful exits, there is increased confidence in the prospects and liquidity of the Southeast Asia-6 investment landscape. As compared to China and India, SEA still has the lowest proportion of venture capital dollars invested per consumer (refer to Figure 23), suggesting that the region is still in the early stages of accelerating investment in technology startups.

Figure 23 — Disparity between venture capital investments per consumer in SEA, vs. China and India

Venture capital invested per consumer (US\$)



Source: Crowdfund Insider

Expanding the tech talent pool

Platforms have also contributed to the technology talent pool in the region. This talent pool plays a critical role in ensuring continued growth of Southeast Asia's Platform Economy. Without a talent pool of sufficient scale and quality, Platforms and other digital-related companies may not be able to build teams with skill sets they require in the region. This increases the risks of these Platforms or companies opting to allocate these jobs to other regions with sufficient talents instead. Furthermore, an expanding technology talent pool in Southeast Asia would necessitate a growing level of digital literacy within the population, which would facilitate future adoption of Platforms and technologies.

Over the past decade, these Platforms have employed thousands of talents as they scale. For instance, the select first-generation Platforms in Figure 24 have collectively employed more than 120,000 talents (both past and current employees) in the region since their inception. Moreover, year on year, new talents are also recruited by these Platforms and trained, eventually becoming a part of the expanding technology talent pool in Southeast Asia. As an example of the expanding technology talent pool in the region, based on data from the Singapore Ministry of Manpower, the number of people employed in Singapore within the infocomm technology sector had increased by more than 30% between 2012 to 2020, reaching 190,200 in 2020.

The rise of the tech start-up 'academy'

“

Second-time entrepreneurs have the experience to build and scale regional companies.

”

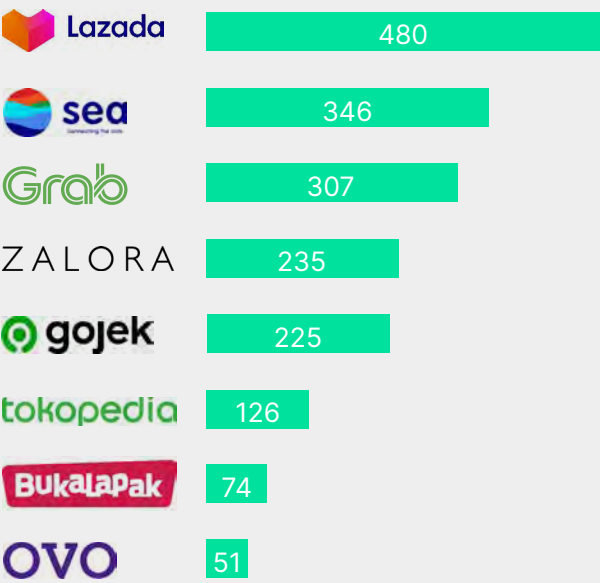
Co-founder & CEO, Vida



Beyond expansion of the talent pool, first-generation Platform companies have become a hot bed for raising the next batch of tech start-ups. More than 1,000 second-generation start-ups have been founded by alumni of first-generation Platforms, contributing to the growth of Southeast Asia's tech ecosystem.

Figure 24 — 1st generation Southeast Asian Platforms have 'groomed' the next batch of start-ups

of founders or CEOs who are alumni of selected 1st gen SEA O2O platform companies



Examples of 2nd gen start-ups



Note: Based on LinkedIn scan of former employees of select 1st gen Southeast Asia platforms, that are currently holding 'CEO', 'Founder' or 'Co-Founder' positions in new start-up companies

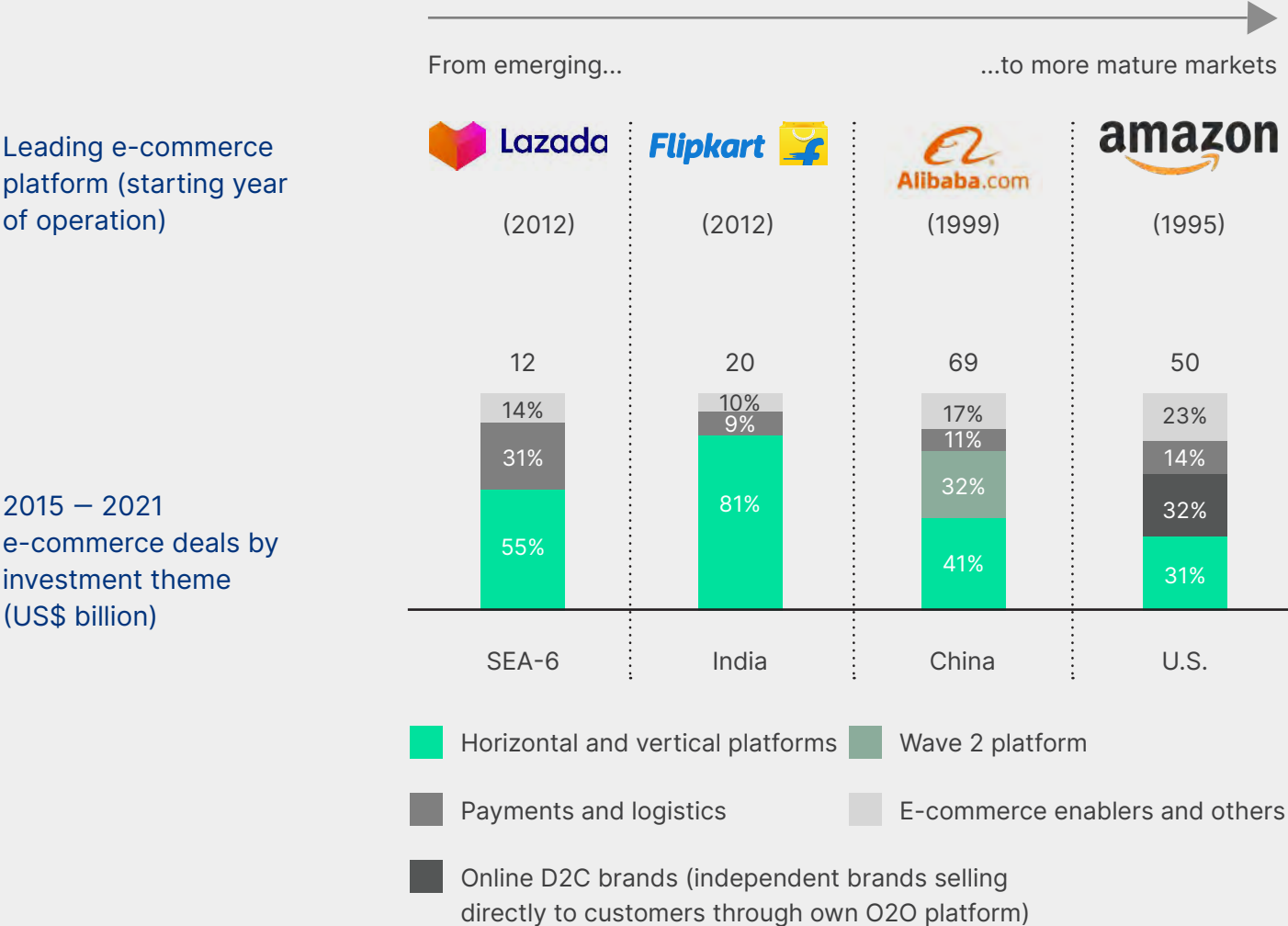
Source: Tech in Asia, LinkedIn

As start-ups proliferate in the region, a number of economic benefits would ensue, creating a thriving Platform Economy in Southeast Asia. These start-ups will generate new jobs and invest in human capital, continually growing the tech talent pool in Southeast Asia. Increased start-up activity also promotes greater innovation in the region, giving birth to new offerings and services to compete with first-generation digital companies. Ultimately, as some of these start-ups manage to scale, they would become magnets for greater investment inflows in the region, and pave the way for subsequent generations of start-ups in Southeast Asia.

The outlook for technology ecosystems and the Platforms landscape in Southeast Asia

Looking into the future, the investment outlook for Southeast Asia technology ecosystems remains strong. Taking reference from mature technology ecosystems in the U.S. and China, as Southeast Asia’s technology ecosystem becomes increasingly mature, more capital inflows may follow for the region, along with greater diversity of investments. In fact, from 2015 to 2021 H1, the e-commerce ecosystems in the U.S. and China have attracted more than 4X capital inflows compared to that in Southeast Asia-6 (refer to Figure 25).

Figure 25 — Mature markets with large investment inflows; Evolving nature of deals as market matures



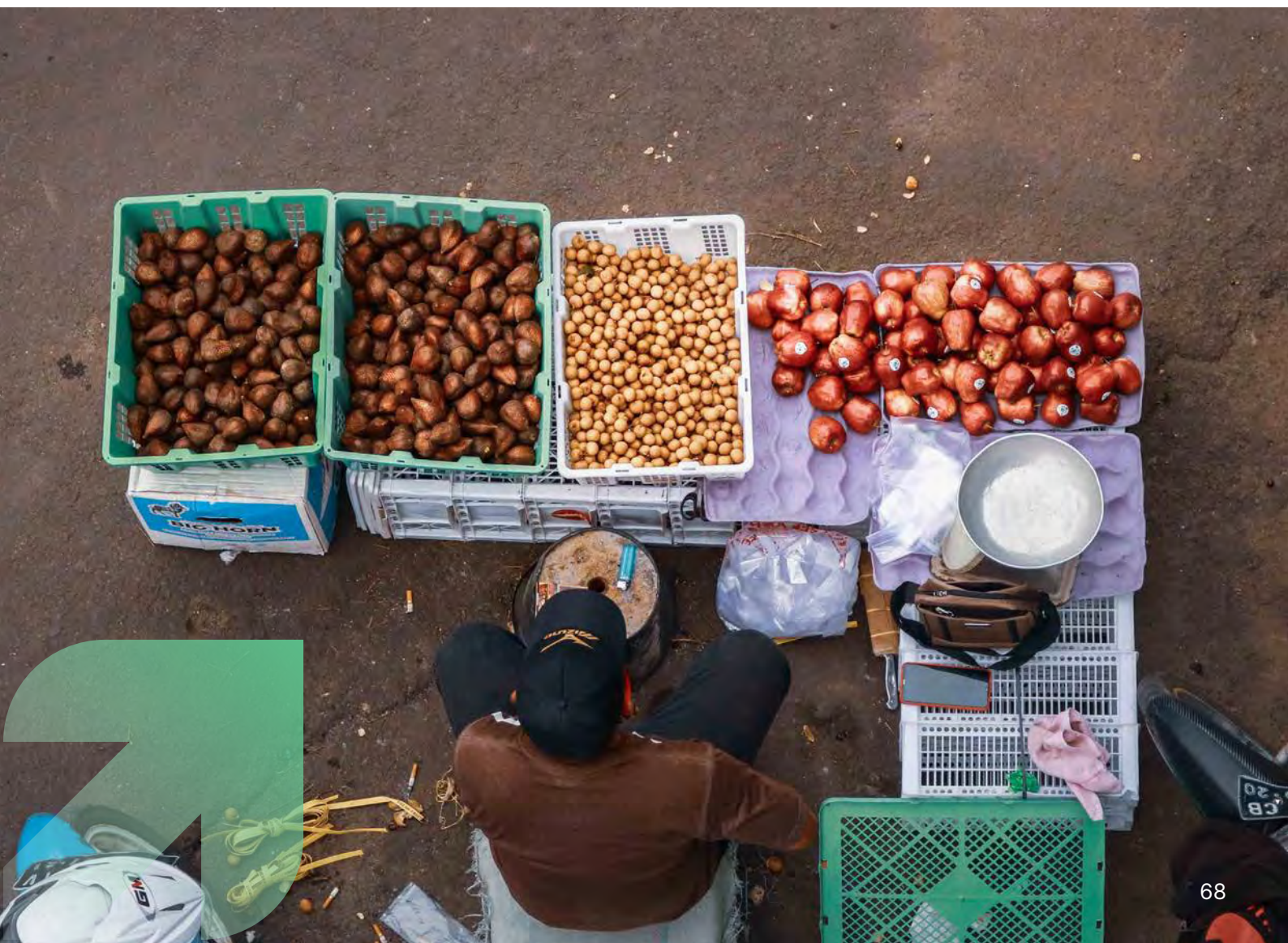
Note: Ecommerce enablers and others include classifieds, B2B sourcing platform, and merchant roll ups; Payments and logistics include 3PL logistics, payment service provider, e-wallets and BNPL

Source: Crunchbase; Bain analysis

As the Southeast Asia technology ecosystem evolves to maturity, the Platforms landscape will also continue to evolve. A second wave of Platforms is likely to emerge on the back of the foundations laid by the first generation. For example, we can expect greater consumer and MSME receptiveness towards Platforms, more developed logistics infrastructure, and a larger technology talent pool. In China, more than 30% of capital between 2015 to 2021 H1 has flowed to wave two platforms such as Pinduoduo, that have been riding the wave of first-generation Platforms such as Alibaba and Tencent.

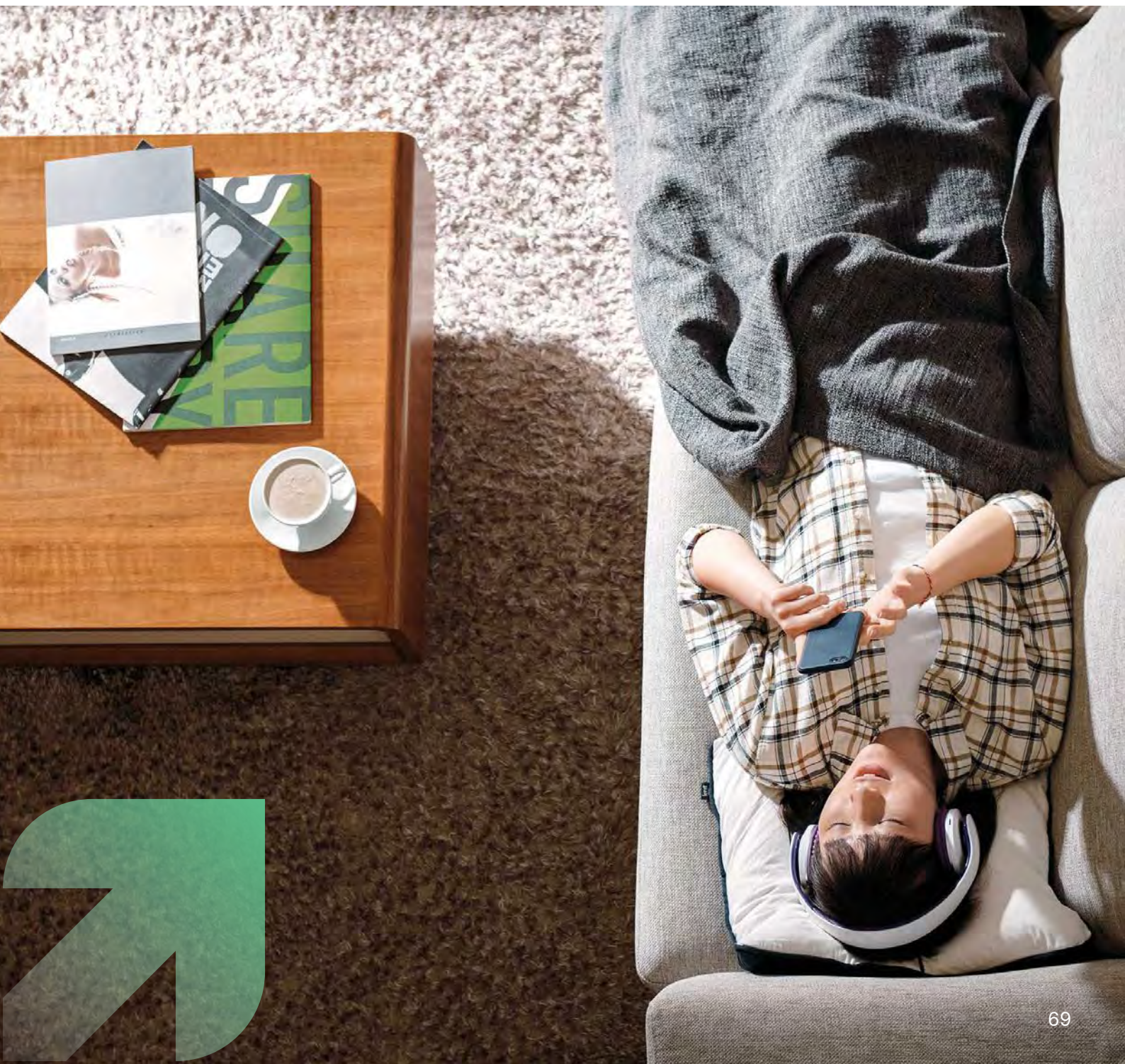
These wave two platforms will stimulate greater creativity within the ecosystem, developing new offerings to compete with established players. In the long run, these wave two platforms will foster higher levels of inventiveness and innovation in Southeast Asia, driving economic growth, creating new jobs, and improving livelihoods.

Investments may also start to gravitate towards other sub-sectors, such as payments, logistics and e-commerce enablers. For example, in the U.S., large amounts of investments had flowed towards online direct-to-consumer (D2C) brands (US\$16 billion), payments (US\$7 billion), as well as e-commerce enablers and others (US\$12 billion) between 2015 to 2021 H1. Capital inflows into enabling sub-sectors will help enhance the quality of O2O services and experiences that Platforms provide (e.g., further improving logistics delivery), and support further ecosystem growth.



Closer Look: Benefits and opportunities of each platform vertical

Multiple Platform verticals have collectively contributed to the six key benefits and opportunities discussed above. Nonetheless, each Platform vertical also brings about their own unique value and benefits for their users. The sub-chapters below will be examining the role, growth, and benefits of four key Platform verticals in Southeast Asia (e-commerce, food delivery, ride-hailing, and digital financial services) in greater detail.



E-commerce Platforms

The role and growth of e-commerce platforms in Southeast Asia

Based on market size, e-commerce platforms are one of the most widely used types of Platforms in Southeast Asia. E-commerce platforms provide an online marketplace that connects buyers and sellers, coordinating with enabling industries such as third-party logistics to provide seamless O2O experiences.

The e-commerce platform market has grown tremendously in Southeast Asia-6 over the past five years. The strong momentum is led by the maturation of e-commerce platforms in Southeast Asia like Shopee, Lazada, and Tokopedia, which resulted in a compound annual growth rate (CAGR) of 62% from 2015 to 2019. This growth has been accelerated by the advent of COVID-19, with the market growing by 63-97% between 2019 to 2020.

Looking ahead, there is still ample headroom for growth of the Southeast Asia-6 e-commerce platform market, especially when compared to China's online retail penetration in 2020 (~27%). The Google-Temasek-Bain e-Conomy report also forecasts that Southeast Asia's e-commerce market GMV will grow significantly to US\$175-200 billion by 2025.

Impact Story: Bringing trust and opportunities to a traditional sector

In markets like Malaysia and Indonesia, the home improvement industry has long suffered from fluctuations in quality, workmanship and price. Consumers are often unable to tell which vendor can be trusted, and face issues like being overcharged or cheated.

To resolve this, Recommend Group created a digital platform where consumers can browse through vendors that are pre-screened and verified. Standardised prices are stated upfront, removing the guesswork from negotiations. At the same time, the platform provides pre- and post-payment features, allowing consumers and vendors to have assurance when it comes to big projects.

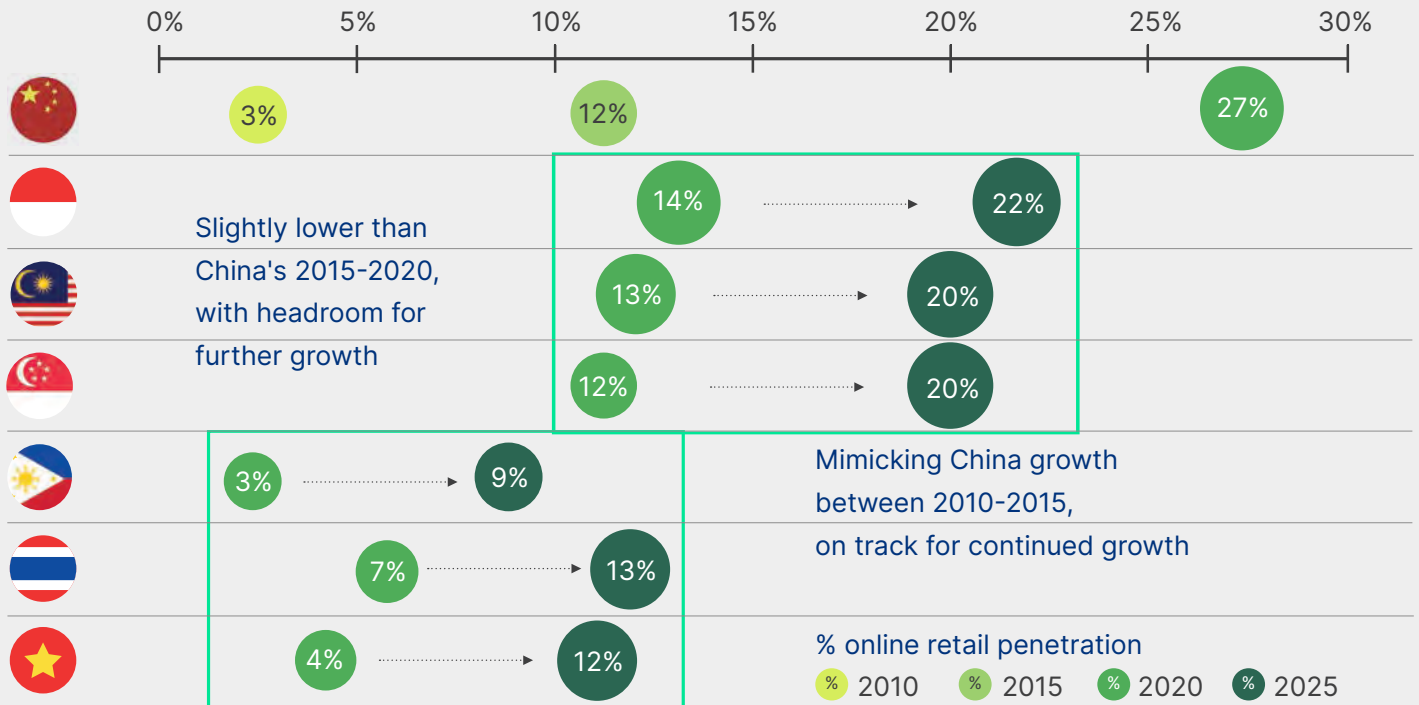
For service professionals plying their trade, the platform has enabled them to gain access to the tools they need to scale their business (e.g. marketing, sales, payments, workforce management). To date, over 40,000 skilled workers have gained access to increased job opportunities from prior informal work conditions.

Since 2014, more than 1 million homes have been served across Malaysia and Indonesia. Throughout the pandemic, Recommend Group has also supported service professionals on work authorization, vaccinations and COVID-19 testing.

Source: Recommend Group

Figure 26

Ample headroom for growth of SEA-6 e-commerce market, taking into account China's online retail penetration trajectory



Source: Bain analysis based on data from National Bureau of Statistics (China); Google-Temasek-Bain economy Report 2020; Forrester; Credit Suisse; eMarketer; Euromonitor

Enabling better consumer experience and creating new livelihood opportunities

The use of e-commerce platforms has improved consumers' purchasing experience in Southeast Asia-6, with over 80% of consumers agreeing that:

- There is **access to a wider range** of products and services through e-commerce platforms
- They can find the **best prices for products** and services on e-commerce platforms
- There is **greater ease in buying products** and services on e-commerce platforms

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

On top of providing better purchasing better purchasing experiences, e-commerce platforms also provide opportunities for people to earn a livelihood through online retail. As logistics infrastructure improves alongside the increase in e-commerce demand, on-demand logistics will become a reality for more segments of the population, connecting merchants to new opportunities to sell their products and/or services.

Impact Story: Enabling access to goods in second-and third-tier cities in Indonesia through group buying and hyperlocalized supply chains

With inadequate supply chains and transport infrastructure, prices of products from FMCG brands in second and third-tier cities in Indonesia can be as much as 200% higher than in Jakarta Region. This is further compounded by these consumers' purchasing power being a fraction of those in metropolitan areas.

To address this imbalance, social commerce platform, Super, built a platform that leverages group buying to provide FMCG at more affordable prices. Its hyperlocalized supply chain works across three levels:

- Super Centres that consolidate orders to buy in bulk from FMCG brands. This allows them to keep prices low and have fast delivery without relying on third-party logistics providers.
- Smaller hubs, like mom-and-pop shops, that serve as storefronts for last mile fulfilment.
- Super Agents who conduct group buying and last mile delivery to buyers through the Super mobile app.

Super's model has seen it expand to 17 cities across East Java, spanning a network of thousands of agents. It has also created income opportunities for the Super Agents, enabling them to earn extra income while helping their communities source for consistent supplies of daily essentials.

Source: Insignia Ventures, Super, Technode



Impact Story

Tonette

Meat store owner

Tonette is an online meat shop owner. When she was starting the business, she never imagined using O2O platforms, as meat has always been purchased in markets.

Fast forward to today – she currently manages a Facebook page for online sales. She was even able to build strong rapport with her customers through the social aspect of Facebook.

This revolutionary way of selling meat was made possible with the help of GrabExpress, as it made on-demand logistics possible, and Tonette is now able to reach a much wider customer base.

Source: Grab

Expanding MSMEs' reach and driving productivity improvements

With increasing consumer traction on e-commerce platforms, MSMEs are also gaining access to a larger customer base. Furthermore, e-commerce platforms are becoming increasingly vital from the lens of MSMEs in Southeast Asia in achieving better profitability and success in the future. More than 80% of MSME owners agree that:

- There is **access to a larger customer** base through e-commerce platforms.
- It is **more profitable** to sell through e-commerce platforms, compared to selling offline.

Source: SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)

Impact Story

Florist MSME

Utama Florist was first set up in 1997 and has been operating for more than 20 years. In 2020, sales were unprecedentedly poor, making it difficult for the owners to pay the shop's rent.

As a result, a decision was made to experiment with selling through O2O platforms. Utama Florist became the first florist on GrabMart. Although business was not encouraging at the start, sales gradually picked up.

After three months, Utama Florist benefited from the increased sales through GrabMart, and paid up the outstanding rental for its physical store.

Source: Grab



Food Delivery Platforms

The role and growth of e-commerce platforms in Southeast Asia

As a facilitator of O2O food transactions, food delivery platforms enable consumers to order food online, relaying the orders to food merchants, and subsequently coordinating food delivery from merchants to consumers (typically with its own delivery fleet).

In Southeast Asia-6, the food delivery platform market is still relatively nascent, having only surfaced in recent years. Driven by key player launches, such as GoFood in 2015, Uber Eats in 2016, and GrabFood in 2018, the Google-Temasek-Bain e-Conomy report highlighted that the SEA-6 food delivery platform market had grown at 72% CAGR between 2015 to 2020 to reach US\$6 billion GMV in 2020. With this strong regional momentum, the food delivery platform market is expected to reach US\$23 billion by 2025.

Continued access to food options and better food ordering experiences for consumers

The COVID-19 pandemic has increased consumers' usage of food delivery platforms across Southeast Asia. With most economies imposing restrictions on mobility, consumers were unable to head out for their meals. Food delivery platforms have stepped in to plug this gap by enabling online access to food options for consumers. From a consumer survey by Bain & Company, 85% of surveyed consumers agreed that food delivery platforms have helped them cope better with COVID-19.

Beyond providing continued access to food, food delivery platforms have also enabled better food ordering experiences for consumers. More than 80% of surveyed Southeast Asia-6 consumers agree that:

➤ It was **more convenient** to order food through food delivery platforms.

➤ It takes **less time** to order food through food delivery platforms.

➤ There is **access to more food options** through food delivery platforms.

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

Strengthening resilience of MSMEs, and potential for growth

As elaborated in previous sub-chapters, food delivery platforms have provided a lifeline for many food MSMEs in the region during COVID-19, in ensuring continued access to consumers online. Based on use of Grab Platforms during the first COVID-19 lockdown period in Malaysia, there was an almost two-fold increase in the number of new MSMEs onboarded. MSMEs on Grab Platforms also saw a 25% increase in online revenue during this period. This increase in online revenue had served to partially or fully offset losses in offline revenues due to COVID-19 restrictions. Based on an MSME survey by Bain & Company, 84% of surveyed food MSMEs would have expected a decline in sales during COVID-19 if they had not used food delivery platforms. 71% of surveyed food MSMEs also agree that food delivery platforms were critical to their survival during COVID-19.



Beyond coping with the pandemic, food delivery platforms have even enabled some MSMEs to accelerate their pre-Covid-19 growth and expansion plans.

Impact Story

Cieny

F&B MSME owner

Cieny was always interested in opening her own food business. She had experimented with setting up different food businesses in the past, with limited success. Her latest food business struggled to stay afloat as its location was far from the main road, and did not have sufficient foot traffic.

After learning about GrabFood, she instantly signed up. In just a few months, Cieny managed to reach many more customers on the platform and was able to open two more branches.

Since joining GrabFood, Cieny had seen her earnings grow by nearly 300%. She plans to continue expanding and opening two more branches in the coming months.

Source: Grab



Ride-Hailing Platforms

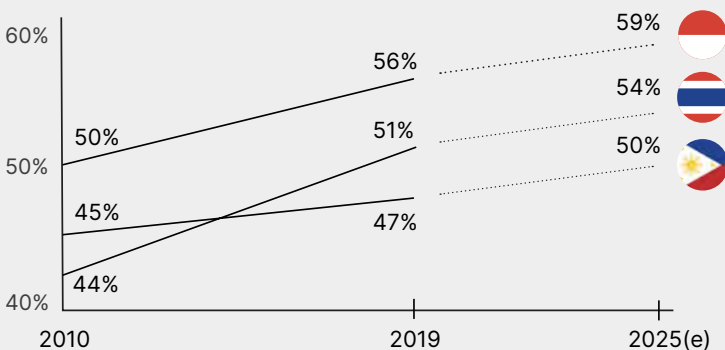
The role and growth of ride-hailing platforms in Southeast Asia

Ride-hailing platforms act as intermediaries in providing real-time and efficient supply-demand matching of riders and driver-partners. In doing so, ride-hailing platforms provide alternative transport options for the population, as compared to public and other forms of private transport. For countries such as Indonesia, Philippines, and Thailand, where there is rising urbanization and increasing population density (refer to Figure 27), ride-hailing platforms could potentially serve as a solution to relieve pressure on increasingly stretched public transport infrastructure.

Figure 27 — Rising urbanization and increasing pressures on public transportation in Indonesia, Thailand and Philippines

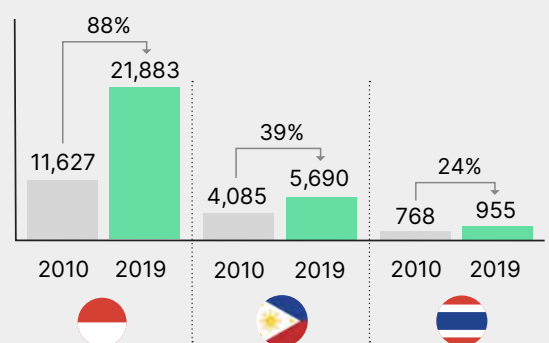
Rising urbanization is occurring across countries in SEA...

% population living in urban areas (select SEA markets), 2010-2019



Contributing to increased demand & pressure on existing public transport infrastructure

#Population per public bus (select SEA markets), 2010-2019



Source: World Bank, UNCTAD Handbook of Statistics 2020, ASEAN Stats Data Portal

For that to happen, the use of ride-hailing platforms must first be integrated into the day-to-day routine commute of the typical population. Based on a consumer survey by Grab, the most common use cases for GrabCar and GrabBike are 'going to office' and 'going home from office'. For surveyed consumers in Malaysia and Indonesia, 'alternative for own transport' had been identified as one of the top three use cases, providing an indication of how ride-hailing platforms have been embedded into the daily lives of consumers.

Ride-hailing platforms have experienced significant growth in Southeast Asia-6 over the past decade. Based on the Google-Temasek-Bain e-Economy report, since the inception of Grab in 2012 and the entry of Uber in 2013, the region's ride-hailing industry had grown to US\$8B by 2019, at 41% CAGR between 2015-2019. Despite a dip in market in 2020 due to COVID-19 mobility restrictions, it is forecasted that the ride-hailing industry in SEA-6 will reach US\$19 billion by 2025.



Enabling increased connectivity and greater transport experience for consumers

The growing demand for ride-hailing platforms in the region could be attributed to the benefits consumers perceive from their use, with 70% surveyed consumers agreeing that:

- Ride-hailing platforms provide greater mobility to places previously difficult to reach
- It is more convenient to travel using ride-hailing platforms
- It is safer to travel using ride-hailing platforms
- Ride-hailing platforms have led to an improvement in ride experiences of regular taxis

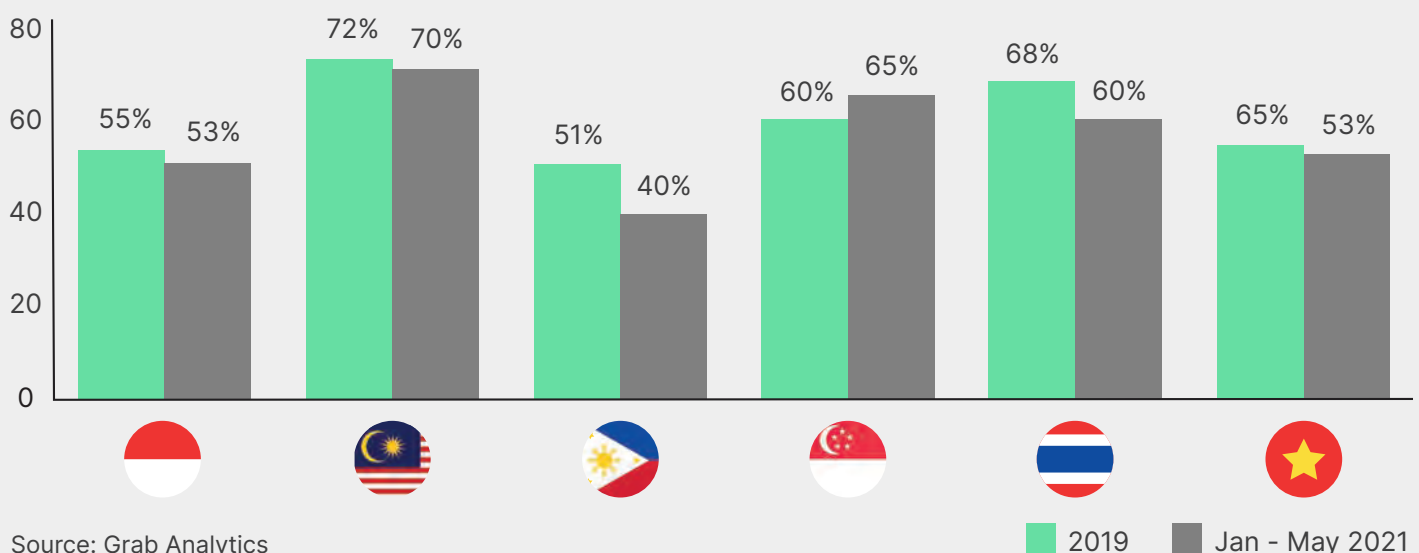
Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

Providing new income and livelihood opportunities for driver-partners

Ride-hailing platforms have also created new income and livelihood opportunities in Southeast Asia. Ride-hailing platform driver-partners can benefit from greater flexibility while making ends meet. In fact, there is a wide variance in hours worked per week by Grab driver-partners across Southeast Asia, with more than 40% of Grab driver-partners working (i.e., being online on the Grab Platform) on average less than 30 hours a week during 2019 (pre-COVID-19) and from January to May 2021 (refer to Figure 28).

Figure 28 — More than 40% of Grab driver-partners are working on average less than 30 hours a week

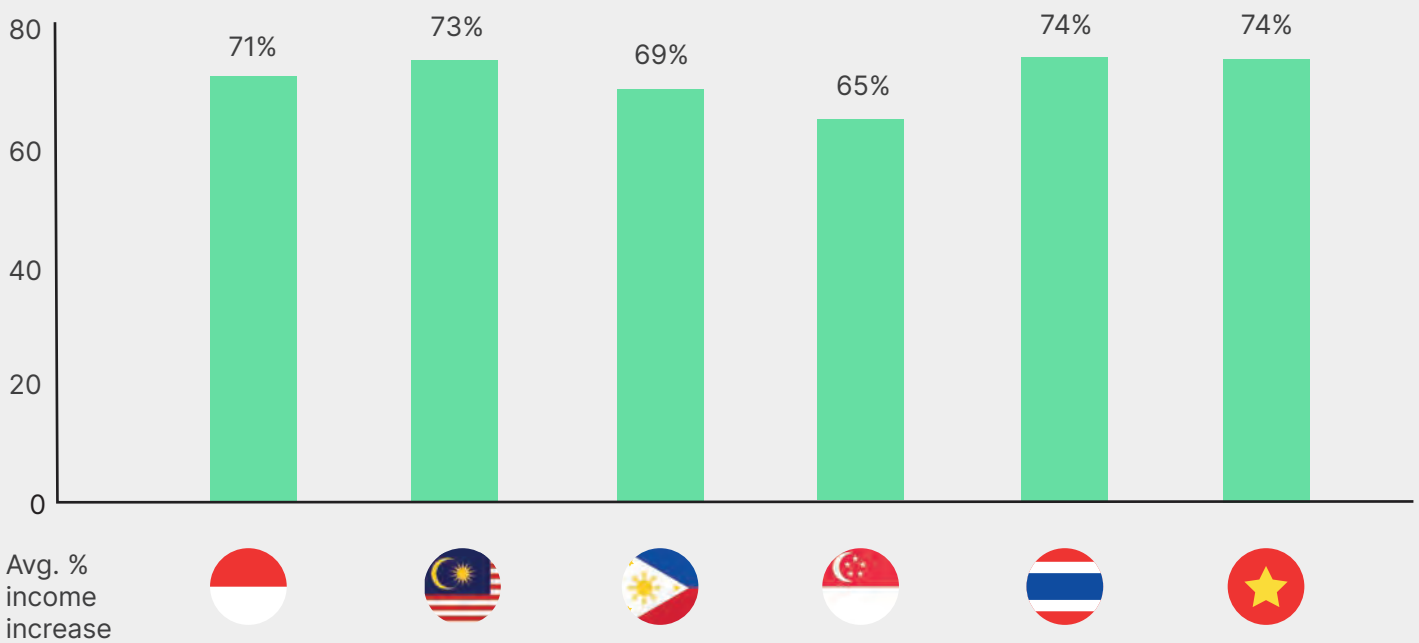
Grab driver-partners working on average less than 30 hours per work, by country



Work via Platforms, such as that of ride-hailing driver-partners, provides an opportunity for workers to improve on their livelihoods. As mentioned in previous sub-chapters, this improved income opportunity is especially pertinent for those who were previously unemployed due to the inability to commit to traditional working hours (e.g., 9am – 5pm office jobs, every weekday). Including new work opportunities for the previously unemployed, more than 60% of Grab driver-partners across Southeast Asia have experienced an increase in personal income after joining the Grab Platform (refer to Figure 29).

Figure 29 — More than 60% of Grab driver-partners have experienced an increase in personal income after joining Grab

Surveyed drivers experiencing increase in personal income after joining Grab platform, 2021



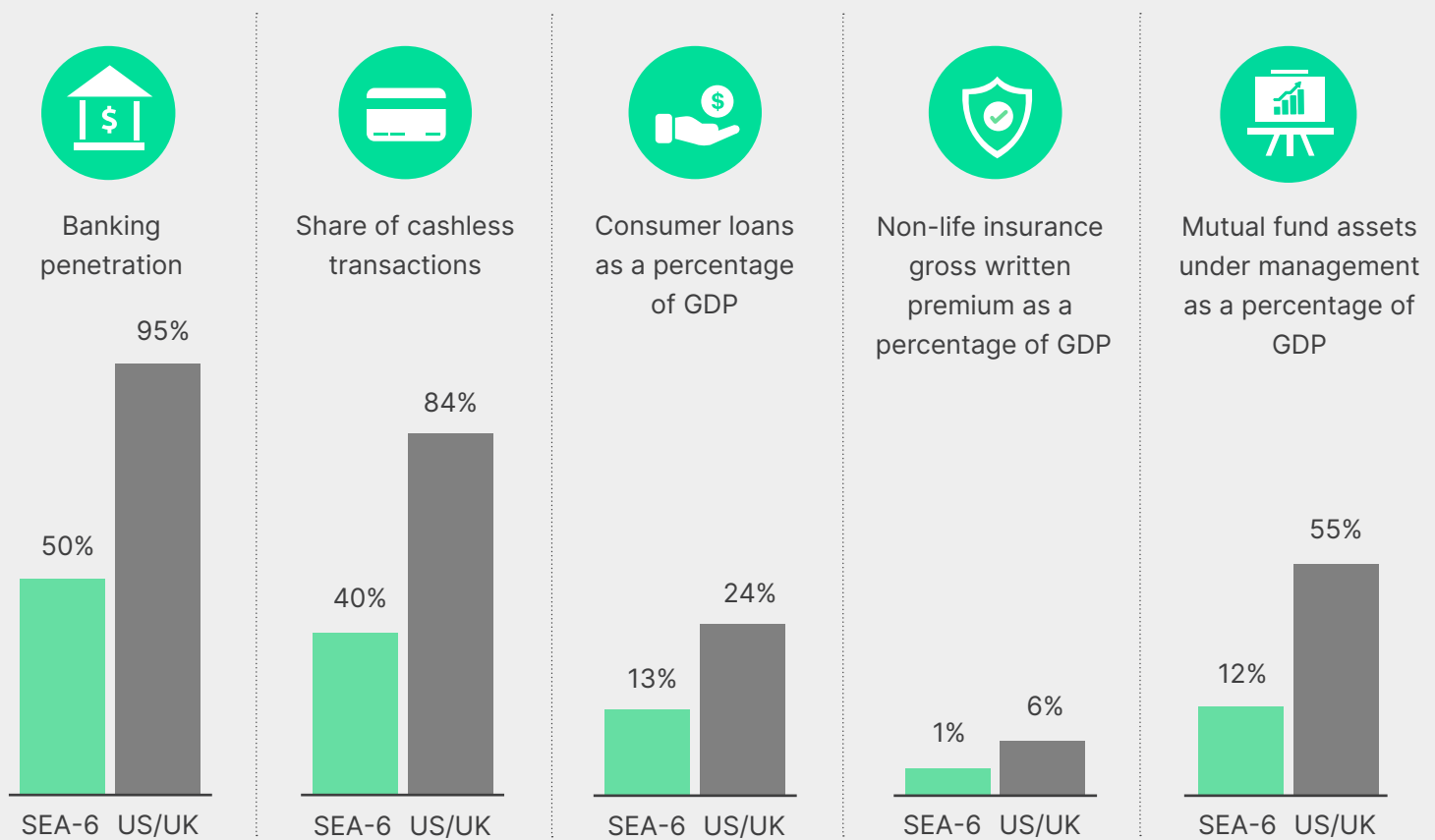
Source: Grab Social Impact Survey 2021; Nielsen

Digital Financial Services

The role and growth of e-commerce platforms in Southeast Asia

As described in the earlier sub-chapter on 'Digital payment infrastructure and financial inclusion', financial inclusion remains limited in Southeast Asia. In fact, Southeast Asia-6 consumers are almost 2X lower in financial services adoption and usage than benchmarked countries like the U.S. and U.K. (refer to Figure 30). Similarly, MSMEs in SEA-6 also remain largely underbanked, with >60% MSMEs surveyed in the Southeast Asia-6 O2O Platforms MSME Survey by Bain & Company unable to get a loan through banks or lenders, despite needing financing.

Figure 30— SEA-6 with almost 2X lower penetration across different financial services, compared to benchmarks

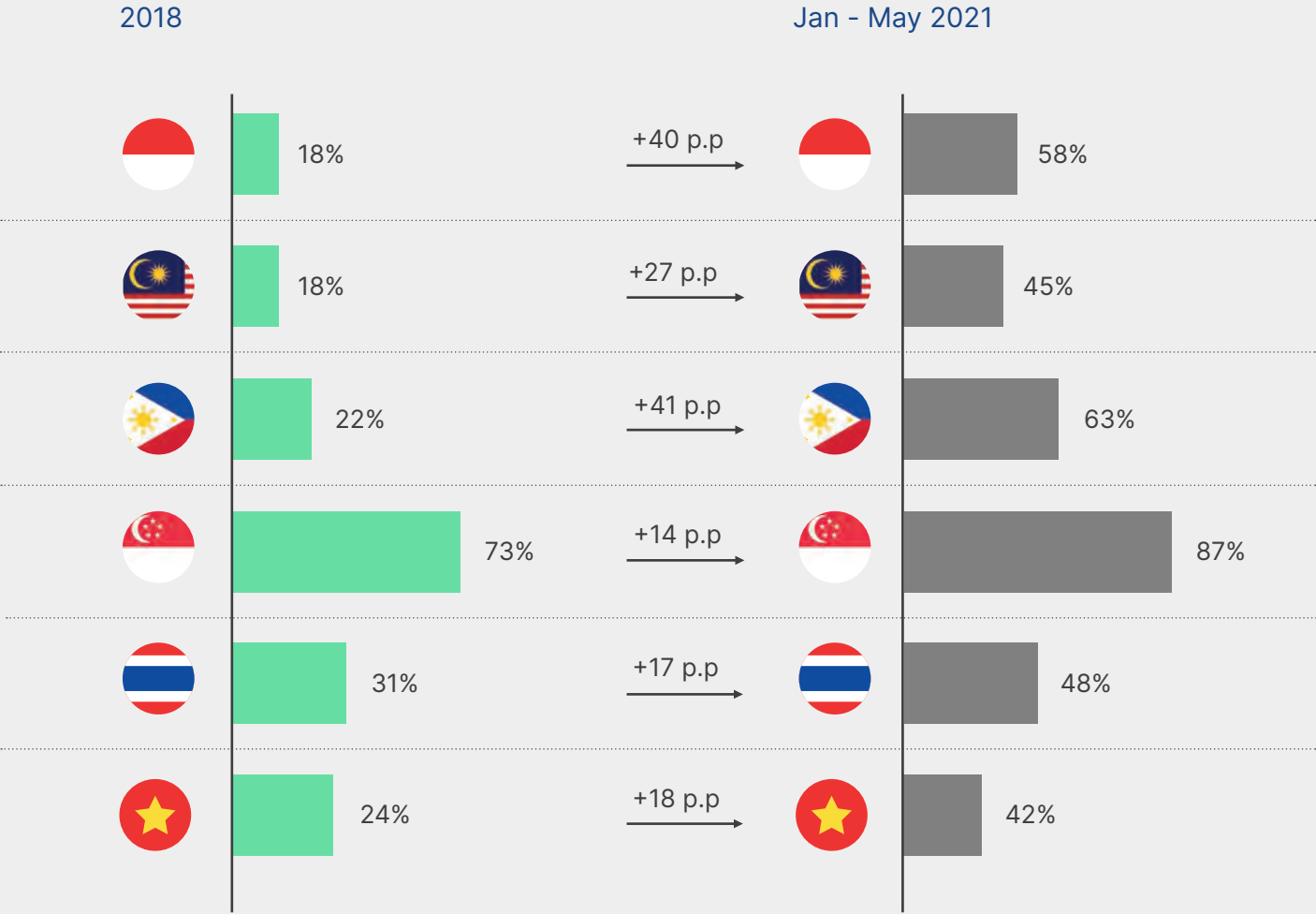


Source: Bain-Google-Temasek 'The future of Southeast Asia's digital financial services' report

From cash to cashless for Southeast Asian consumers

Despite current lower penetration rates, financial services adoption rates in Southeast Asia are expected to improve post COVID-19 (albeit still likely to be lower than benchmarks), as consumers and MSMEs are compelled to shift online and increase their usage of cashless or contactless transactions. For example, consumers on the Grab Platform are increasingly relying on non-cash payments for their O2O transactions (refer to Figure 31).

Figure 31 — Increasing consumers adoption of non-cash payment on Grab Platform



Source: Grab Analytics

As adoption of non-cash payments increases in Southeast Asia, consumers realize the value they bring compared to cash, with more than 70% surveyed consumers agreeing that digital payments are:

➤ **More convenient** to use, compared to using cash.

➤ **Safer and more secure** to use, compared to using cash.

Source: SEA-6 O2O Platforms Consumer Survey by Bain & Company, May 2021 (N=2,800)

Driving operational performance and financing opportunities for MSMEs

Similarly, MSMEs in SEA-6 stand to benefit significantly from greater adoption of digital payments, with more than 70% surveyed MSMEs agreeing that:

➤ **Sales have increased** after accepting digital payments

➤ It is **less costly** to process mobile and/or digital payments compared to cash and debit/credit cards

➤ It is **safer to process** digital payments compared to cash

Source: SEA-6 O2O Platforms MSME Survey by Bain & Company, May 2021 (N=666)



For example, almost 70% of the MSMEs partnering with OVO in Indonesia saw their monthly income increase by over 25% on average, with over 75% of them considering OVO's promos and banners as effective ways to increase the number of transactions per day. The growth in MSME sales applies also to international visitors, as AliPay, by promoting its user-friendly apps and QR payments technology in Southeast Asia, enhanced local merchants' ability to sell to Chinese tourists, already more used to digital transactions in their home Country.

As previously shared in the chapter on 'Digital payment infrastructure and financial inclusion', underbanked MSMEs in SEA are finding it easier to obtain much-needed financing through digital lending. This increased access to financing could be the result of, but not limited to, better credit risk assessment through alternative data, lower fees due to wider distribution of financial services through digital channels, and/or enhanced fraud detection.



Impact Story

Nicholas and Vincent

Retail MSME owner

Nicholas and Vincent, owners of Flesh Imp, a popular fashion brand in Singapore, had just received a huge order – close to \$1.2M in sales. This could help them expand their business to China. However, they could not rely on existing cashflow and needed financing to fulfil this order.

As a small business, getting a line of credit is tough. That changed when they applied for the Grab SME working capital loan. The paperwork required was straightforward, and they did not have to go through many checks.

Ultimately, Nicholas and Vincent were able to get the funds they needed in time and take an important step towards meeting their business ambitions.

Source: Grab





Chapter 4

Navigating Platform Economy growth for all

Despite emerging benefits of Platforms for consumers and MSMEs, there are issues and challenges that need to be addressed. The Platform Economy in Southeast Asia is in the early stages and on an accelerated growth trajectory as we look ahead to the “new normal” post COVID-19 pandemic. As this economy grows, Platforms and policymakers can play a critical role in navigating the opportunities and challenges to unlock the full value of the Platform Economy in the region.

“
The Government sees that digital platforms have reshaped business models across economic sectors, hence playing an important role to support the growth of the digital economy... [and] encourages leveraging digital platforms to empower micro entrepreneurs in expanding their businesses. ”

Undersecretary in Ministry of Entrepreneurship Development and Cooperatives, Malaysia



New “rules of the game”

With innovation in Platforms and new business models, the evolution of the Platform Economy introduces new complications for policymakers globally to navigate and manage. Many policies have been introduced in the last few years and are likely to evolve with the growth of Platforms. It is challenging, however, for Southeast Asia to look to the playbooks of other countries and regions while in its own discovery phase. Southeast Asia’s policymakers are also confronted with the unique situation that its Platform Economy is in — its geographical sparseness, consumers’ avid usage of mobile internet coupled with early digital literacy, and a fast Platform Economy growth trajectory. These collectively pose nuances that require tailored policy solutions across Southeast Asia.

According to “Framing Policies for the Digital Economy” research from the National University of Singapore (NUS) and the United Nations Conference on Trade and Development (UNCTAD), further complications can arise from policy tools and governance frameworks that are “outdated by the rapid emergence of the digital economy leaving policy makers and regulators constantly challenged in an ‘arms race of applied knowledge’ to try and stay up to date with the pace of change”. While this statement does not specifically reference Platform Economies, it still points to difficulties faced by policymakers in the wider digital economy, of which Platforms are a sub-set. The Digital Economy 2019 report by UNCTAD also cited a general shortage of reliable evidence and statistics to support evidence-based policy-making and effective monitoring of progress of the digital economy.

As Platforms transform business models and interaction among users, they need to be understood fully before policymakers formulate solutions. To cope with the fluidity and pace of the development, policymakers are encouraged to not only write up new rules as a region, but to be open to new approaches in policymaking.

Yet it is not all on policymakers to ensure a healthy and stable Platform Economy where users of Platforms thrive. The four priorities in the final section suggest the importance of public-private partnerships, bringing together Platforms and policymakers. As a region, with innovative and responsible business modelling from Platforms, smart solutions from policymakers and close collaboration between the private and public sectors, Southeast Asia can unlock the potential from its Platform Economy.

Emerging challenges observed in Southeast Asia's Platform Economy

As Southeast Asia works towards defining its own playbook to tackle the new “rules of the game”, it is important to understand and address the main emerging challenges. Mitigation steps can then be implemented to ensure sustainable growth for the Platform Economy while minimizing the potential risks.

Globally there are several issues in building out the Platform Economy, ranging from the need to support the circular economy to the enforcement of digital taxation. Here we will examine four key challenges that are more salient in Southeast Asia today – updating competition policy, advancing consumer rights, impact of ‘future of work’, and closing the digital divide.

Challenge 1: Updating competition policy for the Platform Economy

Southeast Asia is still in the early stages of Platform development. While there is competition among Platforms, a sizable portion of competition also occurs from more traditional players – ranging from large conglomerates like departmental stores, to firms operating in well-defined business vertical like taxi companies in the transport vertical.

Mindful of the evolving market landscape, policymakers may find themselves grappling with several complexities in competitive market discussions. These include the changing nature of competition in data-rich markets and the blurring of industry lines with more Platforms expanding to play in multiple verticals.

A fundamental characteristic of Platforms is the network effect that encourages scale. This network effect makes the product or service gain additional value when there are more users on the Platform. When this is combined with a confluence of factors, such as lock-in characteristics that disincentivize switching between Platforms, the result is high entry barriers that could affect competition dynamics in the Platform Economy.

While there are concerns over large Platforms becoming gatekeepers of entire platform ecosystems, the specificity of competition behaviors in Southeast Asian markets needs to be carefully assessed before determining the suitable level of regulatory intervention.

Southeast Asia has differing consumer behaviors and platform landscapes that need to be considered when managing competitive challenges. These include:

- Experimental consumer and MSME behavior, with 47% of Southeast Asian consumers open to trying new stores they never heard of before, while 82% of Southeast Asian MSMEs use multiple Platforms as they participate in the Platform Economy.
- Influx of new entrants with both new start-ups and traditional offline players participating in the Platform Economy.
- Fewer vertically-integrated platforms in Southeast Asia. For example, many e-commerce platforms partner with large third-party logistics platforms (J&T Express, Flash Express in Thailand, and Ninja Van) for their logistics and warehousing needs. With only a small number of vertically-integrated players, there is a more competitive landscape.
- Delayed digital infrastructure with Southeast Asia governments taking the lead in launching digital infrastructure (such as SGQR in Singapore, QRIS in Indonesia). The provision of digitized national ID systems, real-time payment systems, QR code standardization and effective credit bureaus contribute to a more competitive market as it allows for easier switching and less reliance on private digital infrastructure.

As much as Southeast Asia's Platform Economy grows, it is important for policymakers to continually consider how to foster fair competition across digital and traditional offline markets. This healthy competition would encourage Platforms to strive for innovation, to the benefit of consumers and of the overall digital economy.

There are multiple considerations ahead for policymakers in developing well-tailored and well-informed competition interventions for the Platform Economy. These considerations could range from identifying the adequate level of intervention needed for the Platform Economy, such as striking a balance between dynamic market competition and antitrust enforcement, to ensuring transparency of guidelines and thresholds for intervention when informing Platforms and other market participants. A deep understanding of unique business models of each Platform company will support this evaluation and require ongoing discussions in the coming years.

“
Policy tools should be used to ensure adequate protection to both business and consumer by making the business model of digital platform transparent... [but] not to a point that it becomes a deterrence”

Undersecretary in Ministry of Entrepreneurship Development and Cooperatives, Malaysia

Challenge 2: Progressing consumer rights and protection in the Platform Economy

Consumer protection involves safeguarding users' right to engage in Platforms that are safe and free from uninvited surveillance, and away from unfair, deceptive, or fraudulent practices online.

Policymakers globally are tackling policy questions such as how to build consumer trust, enhance transparency, protect data privacy, and regulate cross-border data flows, among other issues to be considered to further the goals of protecting consumers and ensure predictability for businesses.

Though consumer protection is also prevalent in offline industries, its importance may be more pronounced in online platforms given the amplifying impact of digital technology. For example, a single data breach today can lead to several unwanted consequences for consumers, such as identity theft and fraudulent transactions. In Mastercard's 'Digital Identity: Restoring Trust in a Digital World' report, it was reported that digital fraud rates are four times higher than physical fraud rates. There are benefits in using technology to enhance consumer protection, such as enabling the provision of smart and timely information that empowers users to make informed choices, but given the data gathering process involved, there are also privacy risks that need to be mitigated.

In the OECD's Consumer Protection in E-commerce recommendations, there are several key principles that would serve the Platform Economy well. This includes the suggestion of transparent and effective protection, whereby consumers who participate in e-commerce should be afforded transparent and effective consumer protection that is not less than the level of protection afforded in other forms of commerce.

While there are several consumer rights that policymakers may have to tackle, there are two pressing issues, data privacy and fraud, that policymakers are facing today that will be explored in more detail in this section.

Data Privacy

The misuse of data privacy is a concern given that it could lead to loss of consumer confidence and reduced control on the use of data for consumers. Consumers across Southeast Asia-6 economies already have lower trust towards digital transactions, technology companies and leaders, as compared to nations assessed in the Mastercard-Fletcher School at Tufts University Digital Trust scorecard in 2020. Based on the scorecard, four of the Southeast-6 economies ranked in the bottom half of 42 nations measured with regard to consumers' attitude towards the digital trust environment, including their sentiments around data privacy.

Negative publicity can also arise from data breaches, in addition to potential sanctions, fines and temporary halts from regulators. In fact, the number of publicly reported data breaches in the world had increased steadily (pre-COVID-19) at ~20% CAGR between 2013 to 2019, from 2,633 to 7,553 breaches.

Consumers in Southeast Asia are still familiarizing themselves with data privacy best practices, risks, and issues, given that many are still new to digital services. Data from Google-Temasek-Bain e-Conomy Report 2020 showed that in Southeast Asia-6, 1 in 3 (36%) digital service consumers are new to the service due to COVID-19, and 9 in 10 (94%) of those intend to continue with the service post-pandemic. This may create situations that are unfamiliar to them and put their interests at risk.

More discussions around data privacy especially in cross-border scenarios will possibly be needed. Policymakers can also consider introducing initiatives that serve the goals of promoting awareness on data privacy and creating a more transparent definition on what is considered appropriate use of data to tackle data privacy in the digital economy.

Fraud

Fraud occurs more commonly in our daily lives than we think.



1 in 3

people in Southeast Asia have experienced online fraud amid the boom in online activity sparked by the COVID-19 pandemic in 2020

Source: ADVANCE.AI, TFA Geeks report

There are various types of fraud occurring in the digital economy globally, such as identity theft, financial fraud, counterfeit products and Intellectual Property (IP) violations, that potentially undermine both consumers' and MSMEs' trust in digital transactions.

The widespread nature of fraud in the region is a cause for concern. In 2019 alone, Southeast Asia lost US\$260 million to digital fraud, with identity fraud being the most common form that accounts for 71% of online fraud. A 2019 analysis of LexisNexis Fraud Multiplier, which measures how many times more a fraudulent transaction costs over the amount of the lost transaction value, indicates that ASEAN businesses suffer significantly more than their global counterparts. The Fraud Multiplier is greatest for businesses in Malaysia (3.57), followed by Indonesia, Philippines, and Singapore at 3.52, 3.46 and 3.45 respectively. This is compared to global average of 3.13.

As governments try to figure out how to support Platforms in combating fraud, policymakers may propose a range of solutions, from strengthening the verification of customer identity to deployment of fraud detection technologies. According to PYMNTS, 62.4% of Platforms consider their fraud detection strategies to be "somewhat" effective, while only 1.2% rated their fraud detection as "extremely" effective. There may still be some way to go before governments and Platforms find a combination of solutions to bring down fraud rates and strengthen MSMEs and consumers' confidence and trust in conducting more transactions through Platforms.



Challenge 3: Advancing livelihoods in the ‘future of work’

The rapid pace of digital transformation requires policymakers, employers, and individuals, to react quickly to adapt to technology-induced changes in the labor market. Platform workers, defined as people who are providing labor services on Platforms, would be the main group of people whose employment is impacted by the evolution of the Platform Economy. Unfortunately, policies may not be able to protect platform workers’ welfare if they are not updated alongside the rapid changes in Platforms-related work.

Job creation and destruction are part of the digitalization journey. As the nature of work changes, and new jobs emerge while others are phased out, there are concerns about how the labor transition will look like. From the perspective of ‘creative destruction’ coined by Schumpeter (1942), the introduction of new technologies leads to some job destruction as some activities disappear, but also to job creation as new activities emerge. In the short term, job destruction will probably outweigh creation. In the long term, job creation linked to increases in productivity from digitalization may more than compensate for the job losses during the transition period. However, this does not mean that the labor transition will be easy, and this transition will need to be managed.

Platforms have also contributed to the gig economy because of their role as digital intermediaries. While the Platform work economy is sometimes referred to as the gig economy, there is a clear distinction — the gig economy also includes other forms of contingent work, including offline freelance contract roles, and temporary workers provided by staffing agencies.

This nature of gig work has allowed Platforms to play a role in smoothing the workforce transition by providing options in between jobs or opportunities for income supplementation. In addition, Platforms also play a role in the longer term shift to the ‘future of work’ with increased work matching, flexibility and geographic diversity.

Among Southeast Asian countries, there are large deviations in the percentage of informal employment due to the considerable difference in economic development. This causes the role of Platforms and Platforms-related work to vary accordingly and may impact emerging economies more disproportionately.

While Platform-related work is a relatively new phenomenon in Southeast Asia, and still comprises a small proportion of overall employment, policymakers may need to address several challenges to ensure that the welfare of Platform workers is taken care of in the long term. Some of the challenges include considerations for worker benefits, and access to social protection. Other challenges would revolve around ensuring that Platform workers in the lower end of the job market have sufficient upskilling opportunities for career advancements, among other areas for improvements.

Challenge 4: Closing the digital divide in the 'new normal'

Most importantly, Southeast Asia will need to consider how to make the Platform Economy work for many, and not just the few. While the pandemic may have accelerated the acceptance and adoption of Platforms and digital services among consumers and MSMEs (e.g., e-commerce sales, remote learning, financial services), there are those who have not benefited. Digital tools rapidly replacing physical interactions and transactions create a newfound sense of urgency to the digital inclusion agenda, especially in lockdown situations where physical channels might not be available at all.

Given the early stage of Platform development, policymakers may have a natural tendency to prioritize other matters such as building up infrastructure. But contrary to common belief (even after discounting the pandemic urgency), now is the prime time to tackle the digital inclusion agenda as it has the potential to sway the Platform trajectory.

“
Besides digital infrastructure,
policy infrastructure is important to
support its roll out. It is critical to
look at foundational digital literacy
and skillsets for the digital
economy too.”

Managing Director, Head of Asia Oceania Digital Transformation Division,
MUFG Bank

Together, Platforms and policymakers may commit to digital inclusion discussions and mitigate some of the following possible social, economic, and political effects:

- Inevitable worsening of financial inclusion and economic inequality: If digital inclusion is not top of mind, more and more people could get left behind in the process. The outcome may be greater financial and economic inequality, as the digitally literate benefit from the efficiency of the internet, while the have-nots get left behind.
- Southeast Asia may take a minimal share of the global Platform Economy market causing reduced competitiveness of the region Vis-a-vis the global Platform Economy. There would be a lot of opportunities that Southeast Asia will not be able to capture, as lack of skills, infrastructure, policies hold back a huge part of the population.
- Techlash driven by populist sentiments: Policymakers may see even greater techlash, with public attitudes shifting against new tech and towards rejection of the Platform Economy led by populist politicians. This would throw Southeast Asian countries and the region back in its development trajectory.

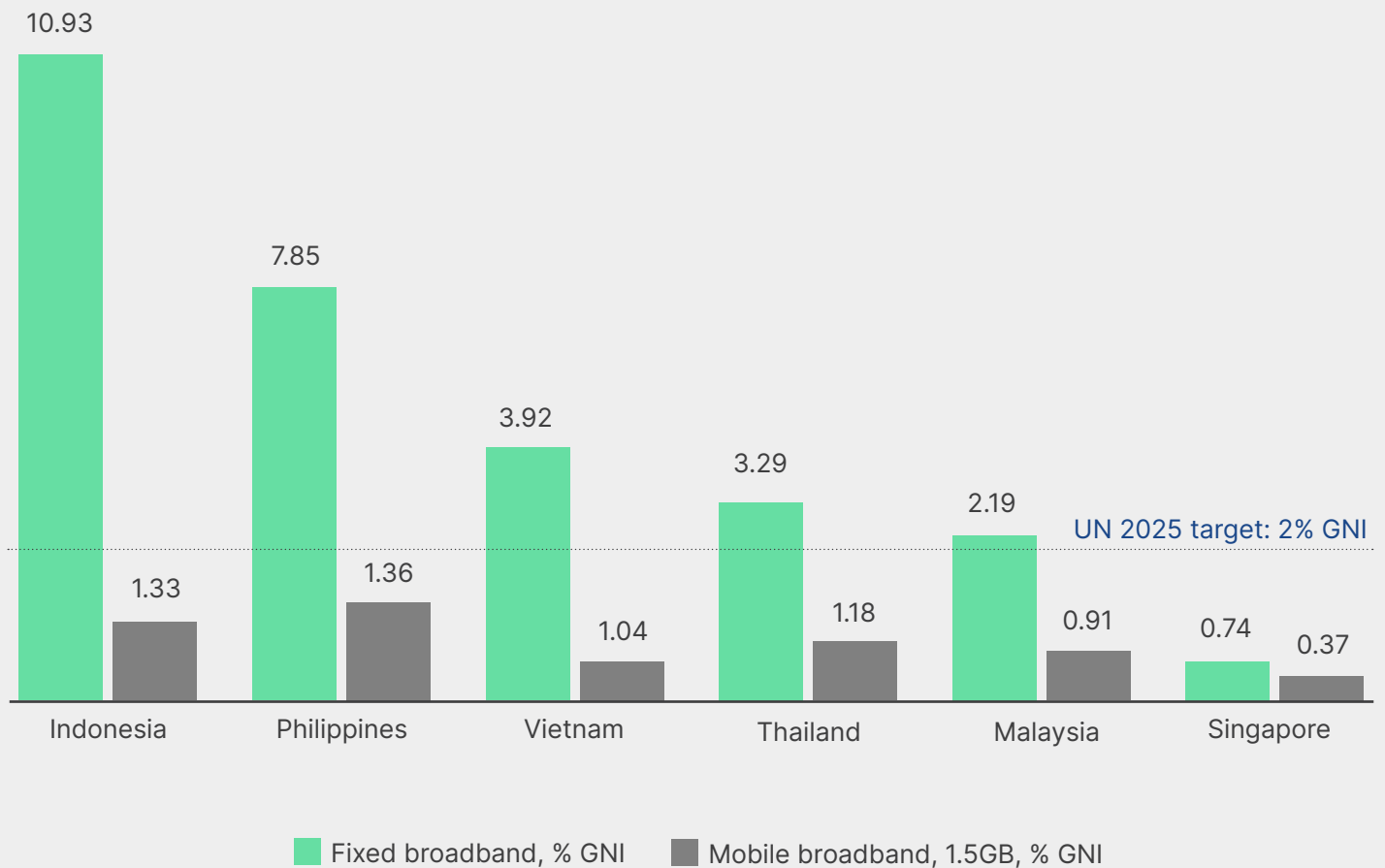
There are multiple challenges ahead for policymakers, including considering the differing needs of people from various income levels, geographies, and age groups. Across the population spectrum, policymakers may have to tackle digital literacy levels, which is essential as ~30% of adult individuals in Southeast Asia are currently still digitally excluded. Furthermore, issues such as the affordability gap could pose a challenge. According to the World Economic Forum's 'Accelerating Digital Inclusion in the New Normal Report 2020', the UN has targeted for monthly broadband subscription to cost less than 2% of Gross National Income (GNI) in developing countries by 2025. However, this goal is still far from reality in many Southeast Asian countries. 4 of the Southeast Asia-6 countries still have fixed broadband subscription that takes up more than 2% of GNI, and even far exceeding it to as high as 10.93% in Indonesia. Policymakers may have to think of all these factors, and more, to increase accessibility for all.



Figure 32

4 of 6 SEA-6 countries with fixed broadband subscriptions at more than 2% of GNI

Fixed and mobile broadband as a percentage of GNI, %



Source: Alliance for Affordable Internet

Supporting MSMEs to adopt new digital tools and technologies may also become an increasingly important agenda item for governments across the region. At the start of the COVID-19 pandemic, businesses were thrust into digitalizing their operations and many MSMEs were left vulnerable due to lack of skills and knowledge about the appropriate digital technologies to adopt, or insufficient capital and resources to invest in digitalization. Based on the ASEAN SME Transformation Study 2020, among key five ASEAN markets (excluding Philippines), one of the top three immediate business concerns is 'inability to engage customers and to provide customer service due to government lockdowns'. Those that were not able to digitally engage customers now have to play catch-up during an economic crisis, and it may be beneficial for policymakers and Platforms to step in to help.

Countries are exploring various Platform Economy policies with consequences yet to fully play out

As the Platform Economy evolves quickly, countries around the world are trying to keep up to understand its complexities and interaction with users. One of the ways to manage challenges is with policies and guidelines. As seen from the following case studies, policies can often bring about both intended and unintended effects as they play out differently on the ground.

Addressing competition

A policy closer to home that tried addressing competition is the anti-monopoly guidelines published by the Chinese government on Feb 2021. Targeting internet companies such as Alibaba and Tencent, these guidelines aim to promote fairer competition and protect consumer interests. These guidelines restrict anti-competitive behavior such as preventing merchants from opening a virtual shop or participating in promotional activities by rival companies. It is uncertain how the guidelines might impact the competitive landscape, consumers' experience, and growth of these companies. Guidelines on merger control may create hurdles for internet companies in their growth strategies.

Consumer protection

To protect consumers' data privacy, the European Union (EU) enforced the General Data Protection Regulation (GDPR) since May 2018 on businesses that store or process personal data of EU citizens. The regulations set out to protect EU citizens' rights to their own data and improve business operability with regional standards set on personal data gathering and management. However, enforcement challenges arose from different interpretations of standards among EU member states and a lack of resources. The impact on businesses was also mixed. Standards were not adjusted for smaller businesses with lower compliance capabilities such as a limited budget to upgrade their backend processes. VoxEU studied the deal flow data from Crunchbase between July 2017 and October 2018 and compared the 'differences of the pre- and post-GDPR periods in the EU and the United States using a difference-in-differences framework. They reported a 39% drop in venture capital (VC) funding and a 17% drop in VC deals for EU technology firms after the GDPR was implemented. During COVID-19, EU regulators' ability to use data as a pandemic management tool was limited by GDPR policy. These suggest how dynamic policy consequences can be, regardless of the policy's intent.

'Future of work'

The state of California in the United States approved Proposition 22 (Prop 22) in November 2020, sparking an important conversation on how to protect workers' welfare, one of the challenges in the way Platform Economies redefine work. Classified as 'independent contractors', workers are entitled to at least 120% of minimum wage and guaranteed employment benefits, while retaining flexibility in hours. The effects on consumers and workers are mixed. Business Insider in December 2020 reported Uber and DoorDash "raising prices for customers in California in order to pay for new benefits guaranteed to rideshare driver-partners and food delivery couriers". Workers may not necessarily be better off either. They are paid the higher minimum wage only during their engaged time, excluding time spent waiting for passengers or deliveries. Their entitlement to different tiers of healthcare stipends depended on the engaged time clocked per week. While Prop 22 was later ruled unconstitutional by the California State Superior court, it is still early to assess what specific policy measures are proven to effectively protect worker welfare.

While countries around the world experience similar challenges, their policies can have different responses and effects on users. For Southeast Asia, it will be important to look at the key characteristics of its own Platform Economy to determine what the potential path forward for Southeast Asia could be.

Southeast Asia to chart own path in its Platform Economy

Southeast Asia is a unique region that presents high growth opportunity in its Platform Economy. It presents a diversity of language, culture, and regulatory regimes, with fragmentation extending to its geographical sparseness. Yet as seen from the New Economy Progress Index (NPI), Southeast Asian countries are in similar early stages of their progress and have common areas to work on, such as getting more MSMEs online and growing their existing online presence. From consumers' preference to participate via mobile to the growing number of new internet users, the diversity and uniqueness of Southeast Asia needs to be considered when overcoming challenges and realizing its full potential.

Unique in geographical challenges

Its geographical sparseness poses a natural constraint to the offline component of the Platform Economy. According to World Atlas, Indonesia is ranked 5th globally (at more than 17,000 islands) for its number of islands, Philippines 7th and Thailand 11th. Platforms will need to work with these unique geographical challenges when looking to develop their offerings in Southeast Asia. This could influence their operating models (e.g., partnering with other local logistics players) and redefine the competitive landscape, hence the need for policies to be contextualized.

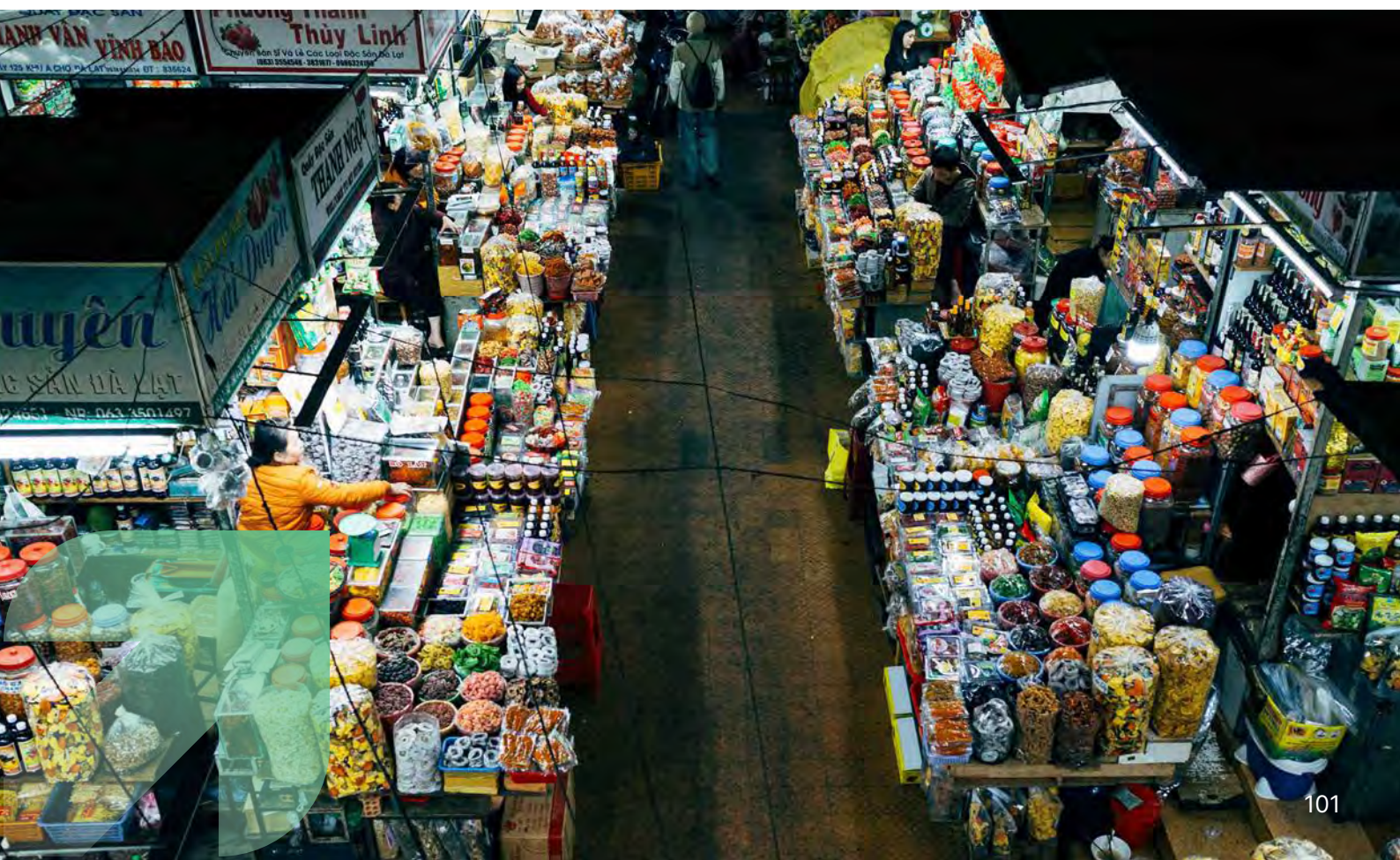
Unique in Consumers' behavior

Southeast Asian consumers are avid users of the internet with a preference for mobile. As reported by 'We are Social in Digital 2021', citizens in 5 of the 10 ASEAN countries spent more daily time on internet than the global average, ranging from 10.56 hours in the Philippines to 8.07 hours in Singapore. The same five countries display similar behavior with mobile internet, from Philippines once again topping the charts at 5.54 hours to Singapore at 3.40 hours. This is in addition to a growing size of internet users, with 140 million using the internet for the first time between 2015 and 2020, suggesting early stages of digital literacy.

Early stage with strong growth potential

Lastly, the early stage of Southeast Asia's Platform Economy and growth trajectory suggest immense potential. Between 2020 and 2025, the Southeast Asia-6 internet economy is forecasted to triple to US\$300 billion, and the size of digital payments to double to US\$1.2 trillion. Consumer demand for digital products and services is expected to grow as new internet users become digital consumers.

The different degrees of fragmentation in Southeast Asia predetermines the competitive landscape and will likely allow certain business models to thrive more than others. The state of consumers' digital literacy and the Platform Economy will also affect how policymakers prioritize and shape the intent of policies. Hence, given the pace of development and Southeast Asia's unique context, it is better to create and continuously refine its own playbook for the Platform Economy.



Trade-offs: Balancing the issues and benefits of Platforms

As discussed in the previous section, there is a wide array of challenges in the development of the Platform Economy. Southeast Asia will have to be cautious to not only mitigate potential issues that may arise, but also realize the multiple benefits brought about by the Platforms. It is a matter of finding the right balance to develop policies that optimize the welfare of Platform users and players (refer to Figure 34)

Figure 34— SEA needs to balance between potential issues and benefits of Platforms

Southeast Asia will have to consider mitigating potential issues

While realizing the benefits that Platform bring

Competition
Creating fair and open access for smaller players

Consumer protection
Progressing consumer rights in the Platform Economy

Future of work
Safeguarding interests of platform participants and wider labor population

Digital divide
Making Platform Economy work for the many, not just the few

Continued investment in infrastructure
Enabling a continued SEA-wide growth story to attract private investments for infrastructure development

Reach the undeserved
Allowing Platforms to leverage on network effect to achieve sustainable economics in serving rural areas

Drive affordability and wider options
Leveraging data to offer better consumer experience and product options

Improve livelihoods
Introducing new and flexible employment options that cater to needs of various segments of the population



Source: Bain Analysis

To find that balance, Southeast Asia policymakers may consider the intended policy objective and stage of Platform Economy growth to determine the required type of intervention. It is important to acknowledge that interventions could take many forms – regulations, policies, and initiatives – and it is a shared responsibility between policymakers and Platforms to collectively advance the Platform Economy. For example, partnerships in areas such as research and development can be undertaken with Platform players, instead of solely relying on regulations for infrastructure building.

Smart regulation could be more effective than over-regulation. It may be prudent for policymakers to consider picking its battles as it is less about the number of regulations but more of finding the right type of policies that would be most effective for the growth of the Platform Economy while caring for the welfare of Platform users, so that negative impact can be minimized. Policymakers should be cognizant of potential unintended negative side effects that could occur with the introduction of each policy. Figure 35 shows some examples on how these situations could play out, illustrating how proposals could invoke conflicting consequences on the multiple objectives that policymakers are trying to achieve.

Figure 35 Potential positive and negative consequences of regulations/ policies of the Platform Economy

Policy Example		Potential positive and negative consequences			
Competition	Enforce anti-competition on largest Platforms	Increase in fragmentations of Platforms lead to wider options	Increase in market innovation	Dilution of investment from largest Platforms decreases investment in infrastructure	Limited network effects lead to high cost-to-serve; focus only on high value customers increases digital divide
Consumer Protection	Develop restrictive data regulations to limit Platform's access to information	Empowerment of consumers to retain control over digital footprint	Increase in consumer trust with more secure digital economy	Limited ability to credit score the unbanked causing stagnation of financial inclusion	Inability to leverage on data to provide better customer experience
Future of work	Implement minimum wage and guaranteed benefits for gig workers	Increase in Platform workers' livelihood and income	Universal minimum set of benefits for gig workers	Lower affordability for consumers as Platforms increase prices to maintain profitability	Fewer employment opportunities as consumer demand reduces
Digital divide	Mandate serving the bottom of the pyramid	Increase in digital access for consumers and MSMEs in lower tier cities	Enhanced competitiveness of the region with increase in digital talent and resources	Unit economics may make this economically unviable for smaller players	Slower innovation as investments are channeled to serve bottom of pyramid

Source: Bain Analysis

■ Positive ■ Negative

As can be seen, there is considerable balancing of trade-offs to be undertaken as Platform stakeholders consider how best to create the right playbook for Southeast Asia. Both the positives and negatives would have to be assessed, and regulations put in place only after multi-faceted assessments have been completed. Only then will Southeast Asia's policymakers be able to progress towards finding a well-tailored solution that would work for the region.

Path forward for Southeast Asia

Southeast Asia is off to a good start in the Platform Economy with very rapid growth. There are currently 310M O2O service users out of 400 million internet users. It was also forecasted in Google-Temasek-Bain e-Conomy Report 2020 that Southeast Asia's internet economy could triple from US\$105 billion in 2020 to US\$300 billion in 2025.

The Platform Economy can be a powerful force to uplift the region and strengthen inclusivity as Southeast Asia develops. Yet the transition towards a more digitalized economy will create new set of challenges which may disadvantage some consumers and businesses. Realizing the potential of Southeast Asia's Platform Economy and maximizing benefits for users will not be an easy task.

Therefore, this section proposes **four priorities for Southeast Asia to navigate the Platform Economy:**

- 1 **Close collaboration** across stakeholder groups
- 2 **Iterative and adaptive** approach to deal with the evolving challenges in the market
- 3 **Responsible and sustainable** development of the Platform Economy
- 4 **Regional coordination** on pan-ASEAN topics

The basis of these priorities is the need for continuous transparency, ongoing engagement, and seeing the different actors as interdependent partners. It is about trust and open communication, instead of ambiguity in policy intent or Platforms' responses; working together to help each other succeed and grow, rather than to restrain and restrict; pulling resources together for more effective and meaningful contributions to communities, instead of disjointed, one-off, or short term initiatives. With collaboration among stakeholders, Southeast Asia has a better chance of growing the region with its Platform Economy and its wider digital economy.

Priority 1: Close collaboration across stakeholder groups

Well-formulated policies rely on a deep understanding of the Platform Economy and can be achieved by gathering input from a diverse range of relevant stakeholders. Working with Platforms brings policymakers closer to solutions that are targeted, grounded and implementable while upholding policy intent. Collectively, these solutions set the foundation for Southeast Asia's Platform Economy to take off and flourish. In tandem, Platforms benefit from the policy's predictability and transparency. A stable regulatory regime allows Platforms to chart out their growth plans. When policies take effect, Platforms are also better prepared and able to comply.

The impact of solutions can also be amplified in communities when collaboration exists. Stakeholders can be creative in seeing how best to protect the interest of users. Collaboration could entail greater communication and sharing of data to contribute to better policy support measures. Stakeholders could also work together to develop and implement foundational digital systems (e.g., digital IDs, digital payment services) which are interoperable, or work on initiatives to drive digital inclusion in Southeast Asia.

One example was the partnership between Indonesia's government and digital wallet companies (DANA, GoPay, LinkAja, OVO) that brought together the Platforms' networks and the government's intent to disburse monetary assistance to participants of the pre-employment card program. Another example of collaboration is public consultation to gather feedback on policies. Through public consultation, the Hong Kong Monetary Authority (HKMA) revised its Guidelines on Authorization of Virtual Banks to better manage exposure to technological risks, (e.g., requiring a more detailed IT system resilience assessment report), and provide policy clarifications for better compliance.

Policymakers and Platforms are encouraged to view each other as partners invested in the success of the Platform Economy. This can better uphold policy intent of protecting consumers and businesses, while supporting the broader stability of the Platform Economy.

“

Proactive policies that are forward looking will require greater private and public partnerships as well as more robust knowledge exchange between government and industry

Chief Digital Business Officer, Malaysia Digital Economy Corporation

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Priority 2: Iterative and adaptive approach to deal with the evolving challenges in the market

The development of a Platform Economy is a journey of discovery, unique to each country and region that would entail policymakers encountering innovation and development. Therefore, policymakers could consider adopting an iterative and adaptive approach at each step of the way to thoroughly assess implications and adjust course when necessary.

Policymakers are also encouraged to embrace more fluidity in the policymaking process. In addition to reviewing policies at a set frequency, consider an earlier review or further refinements in response to new developments in the Platform Economy. Instead of holding a public consultation only during policymaking, work towards maintaining a healthy and productive relationship with Platforms and other relevant stakeholders, including industry associations. The objective is to understand their day-to-day challenges, assess policy effects and constantly refine policies. Such an approach helps policies remain relevant and targeted at balancing the opportunities and risks of a Platform Economy.

A regulatory sandbox could be one tool by which policymakers can collaborate with Platforms to test innovation and gather more realistic feedback on the implications of new technology. In the FinTech space, the World Bank reported how sandboxes were used by regulators to “help assess and adapt a jurisdiction’s regulatory framework and to signal the regulator’s (or government’s) openness to innovation”. In Southeast Asia alone, Malaysia and Singapore created FinTech sandboxes as early as 2016, and Brunei, Indonesia, and Thailand in 2017. The Philippines adopted an alternative – the test-and-learn approach that “allow[s] innovators to operate in an environment free of specific regulation, while allowing regulators to respond as results become more apparent through the testing process.” When experimenting with mobile money products in 2004, the Bangko Sentral ng Pilipinas (BSP) allowed two large telecommunications firms SMART and GLOBE to test “new models of delivering financial services through nonbank entities” and “closely supervised the process”. In a GSMA Intelligence report “Mobile Money in the Philippines”, this five-year experiment led to guidelines on the “issuance of e-money and the operations of e-money issuers in the Philippines” in 2009. It also “played an important role in facilitating the success of mobile money” by providing transparency on the regulatory framework.



Priority 3 : Responsible and sustainable actions from Platforms

Even though Platforms in Southeast Asia are relatively early in their development, they have been active in their commitment to responsible behavior and sustainability. As they grow with the Platform Economy, they should aspire to do more, to continue to embody good governance beyond the effects of regulations and policies. This behavior would encourage Platforms to consider business decisions from the lens of a stable and inclusive Platform Economy, in addition to its profit objectives.

Platforms should be authentic, transparent, and collaborative with policymakers in a manner that deepens their understanding of the Platform's business and the broader Platform Economy. Where possible, Platforms could co-create policies and community initiatives to amplify the benefits of the Platform Economy to its users and the broader community. They should also deliver on their commitments as part of accountable behavior. These qualities would enable policymakers to design smart policies that are in the best interest of users and the broader Platform Economy. An example would be a mobile payment Platform in Southeast Asia that partnered with local governments to distribute aid to its users through its cash disbursement system, as well as with tax agencies to make contactless tax filing and payment possible.

Another characteristic of a Platform that shows sustainability is investment in Platform ecosystem building. A responsible Platform would support consumer and MSME participation in the Platform Economy, from facilitating access to imparting know-how on safe and responsible use of Platform services while benefiting from the experience. Workers would have the chance to upskill for longer term career advancements should they desire to do so. An e-commerce Platform in Southeast Asia demonstrates this with its MSMEs credit score that led to easier access to capital loans for online business expansion. It also encourages users interested in upskilling to apply for its digital training program which includes mentoring and training from industry experts.

A third aspect of good governance is the promotion of users' interests. A responsible Platform would act in a manner that builds trust and enhances security for users (e.g., safeguards for data protection). It would also engage in healthy and fair competition with other Platforms for better user experience (e.g., data interoperability that allows Platform switching). A global financial services company illustrates this by developing a set of data responsibility principles, such as how data can be held safely and securely and utilized in ways that are ethical, compliant and of benefit for individuals in its commitment to its users.

A responsible Platform would also create long term environmental value and social outcomes in communities through initiatives, either independently or jointly with other stakeholders, independent of its profit agenda. Ant Group was awarded “2019 Champions of the Earth” and “2019 UN Global Climate Action Award” by the UN for its “Ant Forest” program, which promoted eco-friendly activities on Alipay app, allowing users to earn points and “sponsor” the planting of more than 200 million trees with their positive behavior. In Southeast Asia, several platforms are also working towards sustainable practices such as carbon neutrality by accelerating the transition to electric vehicles for drivers, incorporating renewable energy into its business operations where possible, and holding itself accountable to the United Nations Sustainable Development Goals (SDG).

While not exhaustive, these key characteristics are typical of a Platform that promotes sustainability and responsible behavior. Platforms in the region are encouraged to strive towards this to build a healthy Platform Economy from its early stages. These can also strengthen the reputation of the Platform as a trustworthy and reliable force for good as it scales with time.

Priority 4 : Regional coordination on pan-ASEAN topics

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Closer regional coordination in cross-border data flows has significant potential to generate value, facilitate trade, and social development.

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Director (Industry Division), Ministry of Communications and Information, Singapore

There are many advantages for ASEAN to collaborate in its Platform Economy journey. Collectively as a region, the scale, regulatory transparency and predictability can be attractive to global investment. ASEAN is currently the fifth largest economy globally and is expected to grow at 5.5% annually for the next decade.

As suggested by the New Economy Progress Index (NPI), Platform Economies in Southeast Asia are similarly in an early growth stage and have similar development areas to improve on. The uniqueness of Southeast Asia as discussed in earlier sections also means that policies and solutions have to be tailored to the region. With these areas of common ground, there is value in regional coordination. Collaboration could take the form of policy dialogues, regulatory forums, and the sharing of best practices, guidelines, and frameworks in areas such as protection and security of cross-border data flows, competition, taxation, trade, and logistics infrastructure.

Platforms and businesses also stand to benefit from ASEAN cooperation. Many home-grown Platforms are currently pan-ASEAN or trying to scale in different markets that vary in language, culture, and regulatory regimes. When comparing valuations of other home-grown Platforms in China for example, Southeast Asia Platforms are still considerably early in their growth. ASEAN as a larger market for Platforms to operate in would prepare them for more intense competition in the global arena. Businesses, particularly MSMEs, benefit from not having to channel as many resources towards regulatory compliance, hence accelerating their growth. In addition, opportunities also exist for regional cooperation in promoting capacity and capability development of MSMEs in ASEAN, such as the sharing of best practices and know-how, that will drive towards more inclusive development across the region.

There is already good traction in driving regional coordination in pan-ASEAN digital topics, such as the ASEAN Master Plan on ASEAN Connectivity (MPAC) adopted in 2010, that had been updated in 2016. More recently in January 2021, the ASEAN Digital Masterplan (ADM) 2025 had also been adopted to guide the group's digital cooperation for the next five years. In addition, the Model Contractual Clauses for Cross Border Data Flows (MCCs) was also approved by ASEAN in January 2021 to help "reduce the negotiation and compliance cost and time especially for SMEs while ensuring personal data protection when data is transferred across borders", supporting regional expansion of businesses. While this is a good starting point, there are further opportunities and the benefits for ASEAN working together to drive towards an accelerated Southeast Asia digital economy development.

These four priorities will collectively set up the right support system for the growth of the Platform Economy, and uplift benefits to the region and communities while managing risks.

Concluding remarks

With the opportunities that lie ahead, the time is now for Southeast Asia to work together to navigate the Platform Economy for all.

1 The Platform Economy brings significant benefits in propelling Southeast Asia's digital ambitions.

Platforms are well positioned to bring new opportunities and innovations in the development of the wider digital economy in Southeast Asia. From normalizing flexible employment opportunities which create new livelihoods for different segments of populations including the previously unemployed, to improving consumer options and experiences through bringing convenience to consumers' everyday lives, users have been attracted by the opportunities available online, thereby encouraging more people to take part in the broader digital ecosystem.

2 However, challenges and risks of the Platform Economy will need to be managed while reaping the benefits of the Platform Economy.

For one, well-designed, clear, and transparent policies and regulations could help support the growth of the Platform Economy, as this may be viewed as a positive signal for investors which could increase investment flow into Southeast Asia. With each policy recommendation, policymakers would have to consider potential conflicting implications on multiple developmental objectives, such as how a push in promoting competition may have to be scaled back so that the digital divide agenda is not compromised. It will be up to stakeholders to find that right balance to optimize the multi-faceted aspects of the Platform Economy.

3 All in all, now is the prime opportunity to collaborate on playbook creation and find tailored solutions for Southeast Asia.

With the emerging nature of the Platform Economy, it is important to focus on what can work in the Southeast Asian context. It could mean finding smart solutions, being innovative yet iterative, and having a deep understanding of what the Platform Economy is about, which can be achieved through iterative input from both public and private players.

Appendix

Taxonomy and Definitions

Key terms	Definitions
New Economy Progress Index	
Digital Infrastructure	Digital technologies that provide the foundation for consumers and merchants to participate in the Platform Economy (including digital networks and services such as digital payments)
Physical Infrastructure	Foundational physical structures required for the Platform Economy to function and thrive, (e.g., infrastructure enabling delivery of on-demand logistics and mobile network performance)
Digital Consumers	Individuals who have made at least one O2O services transaction in the last 12 months
MSME	Micro, small and medium sized enterprises of which definition varies across countries — typically based on three indicators: 1) number of employees, 2) annual sales and/or 3) total assets
Digital Platforms Typologies	
Business-to-Consumer (B2C) Platforms	Platforms that facilitate direct interaction with consumers for both physical and digital products and services
Business-to-Business (B2B) Platforms	Platforms that facilitate direct interaction between businesses
Vertical Platform	Platforms that operate on a single vertical to offer a differentiated value proposition and user experience
Horizontal Platform	Platforms that operate multiple types of services across many different industry verticals
Transaction Platforms	Platforms that facilitate transactions between a large number of user types (e.g., buyers and sellers, riders and drivers) that otherwise would have more difficulty finding or transacting with each other

Development Platforms	Platforms that serve as technological building blocks where innovators can develop complementary product or services that run on the platform (e.g., Android, iOS, Microsoft)
Information Platforms	Platforms that facilitate the transfer of information between users (e.g., Google, Facebook, Twitter)
Online-only Platforms	Platforms that facilitate transactions of digital products between users solely in an online space
O2O Platform and Platform Economy	
Online-to-offline (O2O) platform economy or Platform Economy	Economic and social activity between two or more distinct and independent sets of users that is facilitated by O2O platforms
O2O platforms or Platforms	Platforms that facilitate O2O services, and require both physical and digital infrastructure to function (i.e., e-commerce, ride hailing, logistics, etc.)
O2O services	Consumer-to-business transaction services with both Online and Offline components (e.g., purchasing physical good on an e-commerce Platform and receiving the good offline)
O2O Platform Verticals	
E-Commerce Platforms	Online marketplace that connects buyers and sellers, coordinating with enabling industries such as third-party logistics to provide seamless O2O experiences
Food Delivery Platforms	Platforms acting as facilitator of O2O food transactions, enabling consumers to order food online, relaying the orders to food merchants, and subsequently coordinating the food delivery from merchant to consumers (typically with own delivery fleet)
Ride Hailing Platforms	Platforms acting as intermediaries in providing real-time and efficient supply-demand matching of riders and drivers

Digital payments	Consumer-to-business payment methods that involve digital technologies (including e-wallets, online bank transfers, prepaid cards, credit cards)
Mobile Wallet	A virtual wallet, usually in the form of an application, on a mobile device that stores payment information such as credit and debit card numbers
Digital remittance	Consumer-to-consumer cross-border transfers of money conducted solely through digital channels (i.e., no face-to-face, ATM or phone interaction)
Digital lending	MSME and non-housing, non-credit card consumer loans conducted solely through digital channels (no face-to-face, ATM or phone interaction)
Digital insurance	Life, health and general insurance (retail and MSME only) sold through digital channels
Banked	Population segment that is relatively well served in their financial service needs (e.g., setting up bank accounts, owning credit cards, insurance, investment products, etc.)
Underbanked	Population segment that has unmet needs in financial services (e.g., limited access to credit cards or lending, underinsured, no access to long term savings products)
Unbanked	Population segment that has no access to basic banking (e.g., bank account)
Electronic know your customer (eKYC)	Process of digitally verifying the identity of the customer and can be used for a risk assessment before or after serving the customer

Report methodology

The objective of the report is to 1) provide a holistic and balanced view of the Platform Economy in Southeast Asia, including the role of Platforms, as well as the benefits and challenges faced by policymakers and Platforms; and 2) support policy discussions on Platforms in Southeast Asia. In order to achieve these objectives, our approach has relied on fact-based research from multiple sources across the ecosystem.

- First, we conducted extensive research and a literature review on key developments of the Platform Economy globally, as well as within Southeast Asia. We supplemented insights from the research with interviews with subject matter experts from Platforms and other private sector networks.
- Second, we developed a practical and outcome-based tool, the “New Economy Progress Index” or “NPI” that serves to track and measure the progress of the Platform Economy in Southeast Asia based on two set of development challenges – 1) infrastructure and 2) digital divide. (See detailed methodology below)
- Third, we surveyed consumers and MSMEs across 6 Southeast Asian countries to obtain a bottom-up understanding on the use, benefits, and barriers of adopting Platforms in Southeast Asia (see detailed methodology below). Additional insights were sourced from Grab internal databases and market research to have greater clarity on consumer and MSME perceptions of the Platform Economy.
- Finally, consultations with both public and private sector stakeholders gave us a better understanding of challenges faced by policymakers with the Platform Economy. This guided us towards a set of priorities that could be considered by Platforms and policymakers when managing the growth of the Platform Economy, its potential risks and other unintended consequences.

New Economy Progress Index methodology

The New Economy Progress Index (NPI) is designed to measure and track the development of Platform Economies in Southeast Asia, particularly in infrastructure and the digital divide. The NPI is not meant to be a comparison among countries, as each country has its own development timeline and plan. Instead, this is a tool that stakeholders, such as policymakers, could use when prioritizing or allocating resources for their country to fully benefit from the Platform Economy.



Dimension selection

The dimensions of the NPI were conscientiously chosen to be simple, understandable and broad enough to measure the Platform Economy progress. To that end, the NPI has four dimensions:

- 1 Digital infrastructure
- 2 Physical infrastructure
- 3 Consumers
- 4 MSMEs

The first two dimensions — digital and physical infrastructure — measure how ready enablers are in supporting a Platform Economy. The digital infrastructure dimension demonstrates the availability and adoption of digital technologies critical for the “online” component of an online-to-offline (O2O) service. The physical infrastructure dimension provides insights into the “offline” user experience when the physical or digital good is delivered.

The experience with an “offline” delivery of a physical good depends on the geographical accessibility of the pick-up location and destination, the speed and cost of delivery, and reliability of logistics services (e.g., no missing or damaged parcels). This can be highly dependent on physical infrastructure, such as roads, and logistics players, such as the national postal carriers and third-party logistics services. When it comes to delivering digital goods and services (e.g., telemedicine or virtual courses), the user experience is affected by the network performance of fixed and mobile internet and its cost. A country that has a developed, affordable and accessible digital and physical infrastructure would be able to set in motion the growth of a Platform Economy and allow users to reap its benefits.

The remaining two dimensions — consumers and MSMEs — measure the degree of the digital divide by their participation in the Platform Economy, with Platforms as the intermediary. The choice of MSMEs, instead of businesses in its entirety, is driven by the unique role MSMEs have in the region. According to the Asian Development Bank (ADB), as of 2019, MSMEs in Southeast Asia on average hire 69% of employees but contribute a disproportionately lower percentage of 41% to a country's GDP. Compared to larger enterprises, MSMEs and by extension, the country, would stand to benefit much more from increased participation in a Platform Economy and digitization.

Metrics selection and rationale

As the NPI tracks growth of the Platform Economy with time, its metrics must be refreshed on a regular basis. As seen in Table 1, the metrics are taken from the latest available year.

Table 1
Overview of dimensions and metrics

Dimension (Weight)	Metric	Unit	Sources
Digital infrastructure (25%)	Mobile internet subscribers	Percentage of 18+ population	GSMA (2020)
	Mobile wallet users	Percentage of 18+ population	GlobalData, GSMA (2020)
Physical infrastructure (25%)	Same-day delivery coverage	Percentage of population	Bain analysis (2021)
	Mobile internet download speed	Percentile ranking	Ookla (2021)
Consumers (25%)	Digital consumers*	Percentage of 15+ population	Bain SEA-6 Consumer Survey (2020)
	Population using 3+ O2O services	Percentage of 15+ population	Bain SEA-6 Consumer Survey (2020)
Micro, small and medium enterprises (MSMEs) (25%)	Online food and e-commerce sales	Percentage of total sales	Bain analysis, Euromonitor, Forrester (2020)
	Digital MSME sales from Platforms	Percentage of total sales	Bain SEA-6 MSME Survey (2021)

Note: Digital consumers are consumers who had made an online purchase in the past 12 months

Digital Infrastructure

Users in Southeast Asia are very engaged with mobile internet, spending much more time than their global peers. According to 'Digital 2021' research by We Are Social and Hootsuite, Philippines topped the chart by spending 5.5 hours per day on mobile internet, followed by Thailand in third place and Indonesia in fourth place, compared to the global average of 3.4 hours. As such, participation in the Platform Economy is likely to be via mobiles, requiring mobile internet. Therefore, one of the Digital Infrastructure metrics is the mobile internet penetration rate among 18+ population of each country. The higher the penetration rate, the better the accessibility to participate in the Platform Economy.

However, access to mobile internet does not necessarily translate to a larger Platform Economy. When shopping on a Platform, from browsing to check out, payments remain the last to be digitized. Cash on delivery (COD), an "offline" payment method, is still an option offered by Platforms in Southeast Asia. Therefore, the other metric of the Digital Infrastructure dimension looks at the percentage of 18+ population who used a mobile wallet in the last 12 months. A higher mobile wallet percentage suggests a better digital experience on Platforms and a more complete transition to the Platform Economy.



Physical Infrastructure

Platforms transform the shopping experience for consumers. It brings convenience and safety to consumers, while keeping shipping duration reasonable. The option to receive the physical good on the same day of purchase sets a high bar for logistics quality. A Physical Infrastructure metric therefore looks at the population that lives within the coverage of same-day delivery option offered by either national or private logistics players. A higher population coverage of same-day delivery is likely to improve the Platform experience and attract more consumers to participate.

The other metric, mobile internet download speed (percentile), looks into the user experience when consuming digital products. As internet users in Southeast Asia are more engaged with the mobile internet, as shown above, the speed of mobile internet instead of fixed broadband is chosen. Digital products such as real-time video calls for a telemedicine consultation or live streaming of a virtual class often require a minimum download and upload speed. Hence a higher percentile ranking when benchmarked globally points to access to a wider range of digital products and a better user experience overall.



Consumers

With the present state of physical and digital infrastructure, the two Consumer metrics measure the digital divide in consumers' participation. One metric measures the percentage of digital consumers, defined as having made at least one online purchase in the last 12 months. While the threshold of transaction quantity may seem low, Southeast Asia is also in early stages of its Platform Economy. Therefore, an online purchase remains relevant to measuring consumers' participation and the digital divide between those who have and have not joined the Platform Economy.

The next metric measures the breadth of O2O services used (e.g., e-commerce and digital payments by 15+ population in the last 12 months). The digital divide in this metric goes beyond accessibility; it instead shows the integration of Platforms, hence the effects, with day-to-day activities and users' lifestyles. This fuels the growth and importance of Platforms and reflects the digital literacy of consumers.

Micro, small and medium enterprises (MSMEs)

The participation of MSMEs in the Platform Economy is measured by both a top-down and bottom-up approach. Online food and e-commerce sales as a percentage of total sales adopts a top-down lens on MSMEs participation. As MSMEs make up 97% of total businesses in Southeast Asia, a higher percentage of online sectoral sales suggests higher digitization among MSMEs in the Platform Economy and a narrower digital disparity with large businesses.

The metric of Digital MSME sales from Platforms complements the first by providing a bottom-up view on MSMEs participation. The higher the percentage of online sales, the more integrated MSMEs are with Platforms and by extension the Platform Economy.

Weighting

Each dimension represents different aspects of a Platform Economy and are equally important. Physical and digital infrastructure are critical enablers of the Platform Economy, while consumers and MSMEs are drivers of Platform Economy's growth. Each dimension is therefore allocated a 25% weight, with each metric having an equal weight of 12.5%, summing up to 100%.

While the aggregated score of the NPI is a snapshot on where each country's Platform Economy is at, the dimension and metric breakdown provides more targeted guidance on areas to prioritize.

The New Economy Progress Index country-specific analysis

Indonesia

Indonesia's Platform Economy is overall in early stages especially in physical infrastructure and MSME participation.

- On **digital infrastructure**, internet inequality exists within the country with 51% of population as mobile internet subscribers. However, it is encouraging to see that 81% mobile internet subscribers (or 41% of population) own mobile wallets, resulting in a more seamless Platform experience for these users.
- On **physical infrastructure**, Indonesia has potential to improve mobile internet download speeds from its global percentile rank of 16th and expand coverage of same-day delivery to the less urbanized areas.
- Initial **consumer** participation in the Platform Economy is positive but with only 26% of population using a wide range of digital services, growth potential exists for other O2O services.
- **MSMEs** are in early stages of digitization, specifically shifting their sale channel mix online, with 13% online sales for food and retail sectors. This presents an opportunity to support the growth of MSMEs' digital presence.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	51%	46%	38%
	Mobile wallet users	41%		
Physical infrastructure	Same-day delivery	33%	25%	
	Mobile internet download speed (percentile)	16%		
Consumers	Digital consumers	68%	47%	
	Population using 3+ O2O services	26%		
MSMEs	Online food and e-commerce sales	13%	34%	
	Digital MSME sales from Platforms	55%		

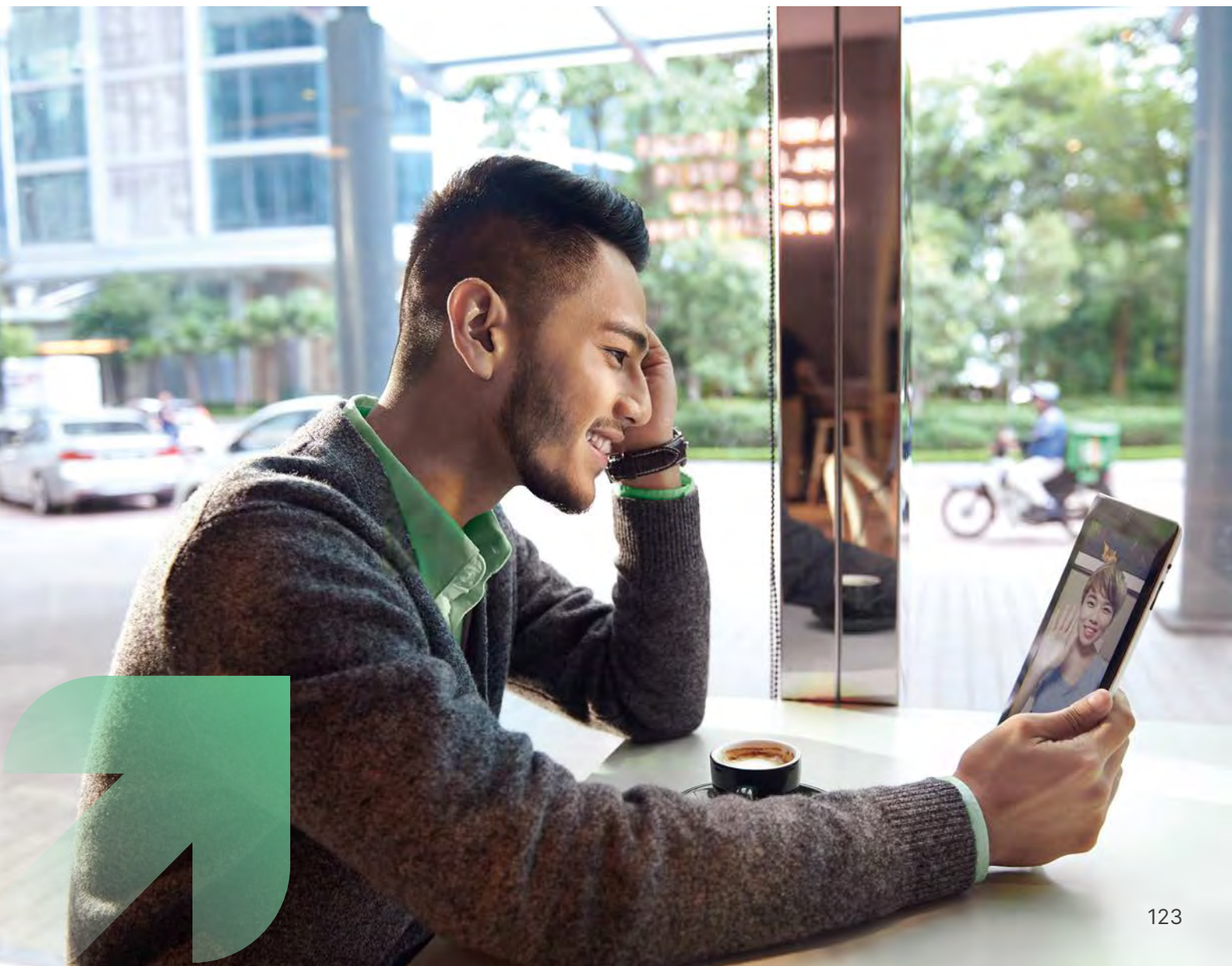
Malaysia

Malaysia's Platform Economy is mostly in emerging stages with the digital presence of MSMEs in the early stage.

This is an opportunity to increase online sales of food and retail from 12% and MSME sales from Platforms from 61%. On **Consumers**, only 1 in 3 digital consumers uses three or more O2O services, suggesting potential growth in other verticals of the Platform Economy given the right initiatives.

- On **digital infrastructure**, Malaysia has good mobile internet penetration (67%) that supports access to the Platform Economy, with room for the remaining 33% to be connected. It is also encouraging that among mobile internet subscribers, 83% (or 41% of population) have adopted digital payments with their mobile wallet usage and are able to experience a more seamless Platform experience.
- On **physical infrastructure**, Malaysia has good coverage of same-day delivery, with 2 in 3 having the option to a faster "offline" experience. However, slower than global average mobile download speeds affect the user experience of digital products and services. To reduce the infrastructure gap and improve broadband quality, especially in rural and underserved areas, the Malaysian Government announced the RM21B national digital infrastructure plan (JENDELA), as part of the 12th Malaysia Plan (2021-2025).
- It is a promising start for 83% of **consumers** to have participated in e-commerce, yet only 1 in 3 consumers is fully immersed in the Platform Economy by using three or more O2O services.
- **MSMEs** participation is in the early stage but there is good progress in shifting the sales channel mix online. More support for MSMEs, especially those in the food sector, to digitize can help improve online sectoral sales from 12%. For example, the Malaysian Government announced an MSME e-commerce campaign (PENJANA) to supporting the onboarding of MSMEs on e-commerce and food delivery Platforms.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	67%	61%	52%
	Mobile wallet users	55%		
Physical infrastructure	Same-day delivery	67%	54%	
	Mobile internet download speed (percentile)	40%		
Consumers	Digital consumers	83%	59%	
	Population using 3+ O2O services	35%		
MSMEs	Online food and e-commerce sales	12%	36%	
	Digital MSME sales from Platforms	61%		



Philippines

Philippines Platform Economy is in the early stage despite active participation by consumers.

- Internet inequality exists in its **digital infrastructure** within and between urban and rural regions. However, an encouraging observation is that among mobile internet subscribers, 2 in 3 (or 33% of population) have and use a mobile wallet.
- Disparity in access to same-day delivery is observed between cities and municipalities. With mobile download speeds at the 38th percentile, improvements to its **physical infrastructure** can be valuable to the consumption of both digital and physical goods in the Platform Economy.
- Promising start in its Platform Economy from 74% of **consumers** having made an online purchase in the last 12 months. However, only 1 in 4 consumers has a more immersive experience in the Platform Economy by using three or more O2O services.
- **MSMEs** with a digital presence show good progress in shifting the sales channel mix. Online sales made up only 3% of the US\$111B food and retail sectors, hence MSMEs that are playing in the offline space can be further supported in gaining a digital presence.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	48%	40%	38%
	Mobile wallet users	33%		
Physical infrastructure	Same-day delivery	16%	27%	
	Mobile internet download speed (percentile)	38%		
Consumers	Digital consumers	74%	50%	
	Population using 3+ O2O services	25%		
MSMEs	Online food and e-commerce sales	3%	35%	
	Digital MSME sales from Platforms	66%		

Singapore

Singapore has overall made good progress in its Platform Economy with the opportunity to improve MSME participation.

- At 82% mobile internet subscription, users have the **digital infrastructure** to easily access the Platform Economy. However, there is room for mobile wallet users to grow from the current 71% of mobile internet subscribers (or 58% of population).
- Singapore as a small, city-state shows 100% coverage for same-day delivery. Together with mobile internet download speeds at the 86th percentile, it shows strong **physical infrastructure** capabilities to deliver both physical and digital products “offline”.
- Majority of the population have purchased online in the last 12 months, but only about 1 in 3 is an avid participant of the Platform Economy. **Consumers** are familiar with the Platform Economy but are still warming up to other O2O services beyond e-commerce.
- Online sales of food and retail are still in early days at 13%, suggesting an opportunity to realize growth with the right support. **MSMEs** with a digital presence show a gradual but early shift of sales onto Platforms, that account for 57% total sales.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	82%	70%	64%
	Mobile wallet users	58%		
Physical infrastructure	Same-day delivery	100%	93%	
	Mobile internet download speed (percentile)	86%		
Consumers	Digital consumers	79%	57%	
	Population using 3+ O2O services	36%		
MSMEs	Online food and e-commerce sales	13%	35%	
	Digital MSME sales from Platforms	57%		

Thailand

Thailand is mostly in the early stages but shows similar progress in most dimensions

- Its **digital infrastructure** shows potential. There is good progress made on mobile internet penetration, hence access to the Platform Economy, with 32% remaining to be connected. 84% of mobile internet subscribers (or 57% of population) have a digital identity via mobile wallet usage and therefore a more seamless Platform experience.
- Accessibility to quality **physical infrastructure** can be more uniform throughout the population. Same-day delivery is concentrated mainly in the Bangkok region, while its 66th percentile ranking of mobile download speeds suggests disparity in user experiences between rural and urban areas.
- **Consumers** are participating in the Platform Economy but are not yet fully immersed. Of the 68% who have purchased online, only 29% (or 20% of population) use three or more O2O services
- **MSMEs** with a digital presence show good progress in shifting their sales onto Platforms. Despite sizeable food and retail sector revenues of US\$137 billion, online sales made up only 7%. Support targeted at building digital presence for MSMEs can improve their overall participation.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	68%	63%	46%
	Mobile wallet users	57%		
Physical infrastructure	Same-day delivery	16%	41%	
	Mobile internet download speed (percentile)	66%		
Consumers	Digital consumers	68%	44%	
	Population using 3+ O2O services	20%		
MSMEs	Online food and e-commerce sales	7%	35%	
	Digital MSME sales from Platforms	63%		

Vietnam

Vietnam is in the early stages with uniform progress in all dimensions.

- Inequality exists in its **digital infrastructure** with 57% mobile internet subscribers. However, there is good progress as 77% of mobile internet subscribers (or 44% of population) are also mobile wallet users.
- Opportunity exists to improve **physical infrastructure** and “offline” experience of Platform services. Same-day delivery is offered in main cities, leaving 82% of the country out of reach for faster delivery options. Its slower-than-global average for mobile internet download speeds impacts range of O2O services and user experience.
- An encouraging 65% of the population have purchased online in the last 12 months with only 1 in 4 using a wider range of services. **Consumers** are still new to interactions within the Platform Economy.
- Vietnam has impressive and sizeable food and retail sales of approximately US\$155 billion, but only 4% are from online channels. **MSMEs** with a digital presence are showing an encouraging start of 62% Platform sales. This is an opportunity to accelerate the digital presence of MSMEs.

Dimension	Metric	Score	Aggregated	Total
Digital infrastructure	Mobile internet subscribers	57%	51%	41%
	Mobile wallet users	44%		
Physical infrastructure	Same-day delivery	18%	35%	
	Mobile internet download speed (percentile)	51%		
Consumers	Digital consumers	65%	45%	
	Population using 3+ O2O services	24%		
MSMEs	Online food and e-commerce sales	4%	33%	
	Digital MSME sales from Platforms	62%		

Survey methodology

The Southeast Asia-6 Platforms Surveys for consumers and MSMEs were conducted across 6 countries: Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. The survey's purpose was to assess consumers' and MSMEs' perceptions, and usage, of Platforms and O2O services, specifically ecommerce, food delivery, ride hailing and digital financial services. During the survey, participants were asked a set of questions about their adoption of Platforms, as well as their perception on the benefits and barriers of using these Platforms. Both surveys were conducted in May 2021. The consumer survey polled 2,800 respondents, with a minimum of 400 respondents per country; the MSME survey polled 666 respondents, with a minimum of 100 respondents per country.



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