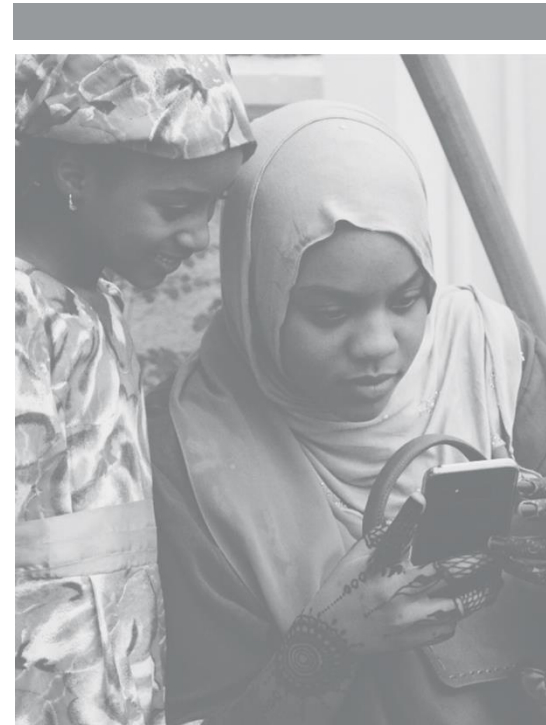




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ALLIANCE FOR ETRADE DEVELOPMENT

ASEAN ECOMMERCE WORK PROGRAM 2017–25 AT MIDPOINT: STATE OF MSME ECOMMERCE AND PATH FORWARD

September 30, 2021

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ASEAN ECOMMERCE WORK PROGRAM 2017–25 AT MIDPOINT: THE STATE OF MSME ECOMMERCE AND PATH FORWARD

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I. INTRODUCTION

The COVID-19 crisis has severely impacted trade and micro, small, and medium-sized enterprises (MSMEs) in the Association of Southeast Asian Nations (ASEAN) region. At the same time, ecommerce—the sale and purchase of goods and services online—is booming in the ASEAN economies and their export markets. This is bringing new opportunities for the region’s MSMEs to grow their sales and exports and recover from COVID. Ecommerce is also boosting growth in ASEAN logistics, payments, financial services, and IT sectors.

ASEAN economies have a long-standing commitment to ecommerce development, most specifically through the 2017–25 ASEAN Work Program on Ecommerce and the 2019 ASEAN Agreement on Ecommerce, which will be reviewed in 2022. Also ongoing is the implementation of the ASEAN Strategic Action Plan on SME Development 2016-2025, which covers several topics pertinent to MSMEs’ ecommerce development. Some ASEAN members also participate in deep trade agreements with binding ecommerce provisions, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), to open new ecommerce opportunities for firms in their economies. In September 2021, ASEAN adopted a Work Plan on the Implementation of the ASEAN Ecommerce Agreement 2021-2025, and a commitment to launch a study on an ASEAN Digital Economy Framework Agreement whose negotiations are expected to be launched before 2025.¹

The purpose of this report, which was prepared for the USAID-supported Alliance for eTrade Development II (“eTrade Alliance,” made up of Cargill, DHL, Element, Etsy, Google, the Latin American eCommerce Institute, Mastercard, PayPal, Ringier One Africa Media, UPS, and Visa), is to support the implementation of the ASEAN Work Program on Ecommerce and the forthcoming study on the digital economy framework agreement. This report takes stock of the state of MSME ecommerce in the region and of the opportunities and challenges posed by COVID-19 and the regional and international policy environment, especially for MSMEs’ cross-border trade. In particular, this report will:

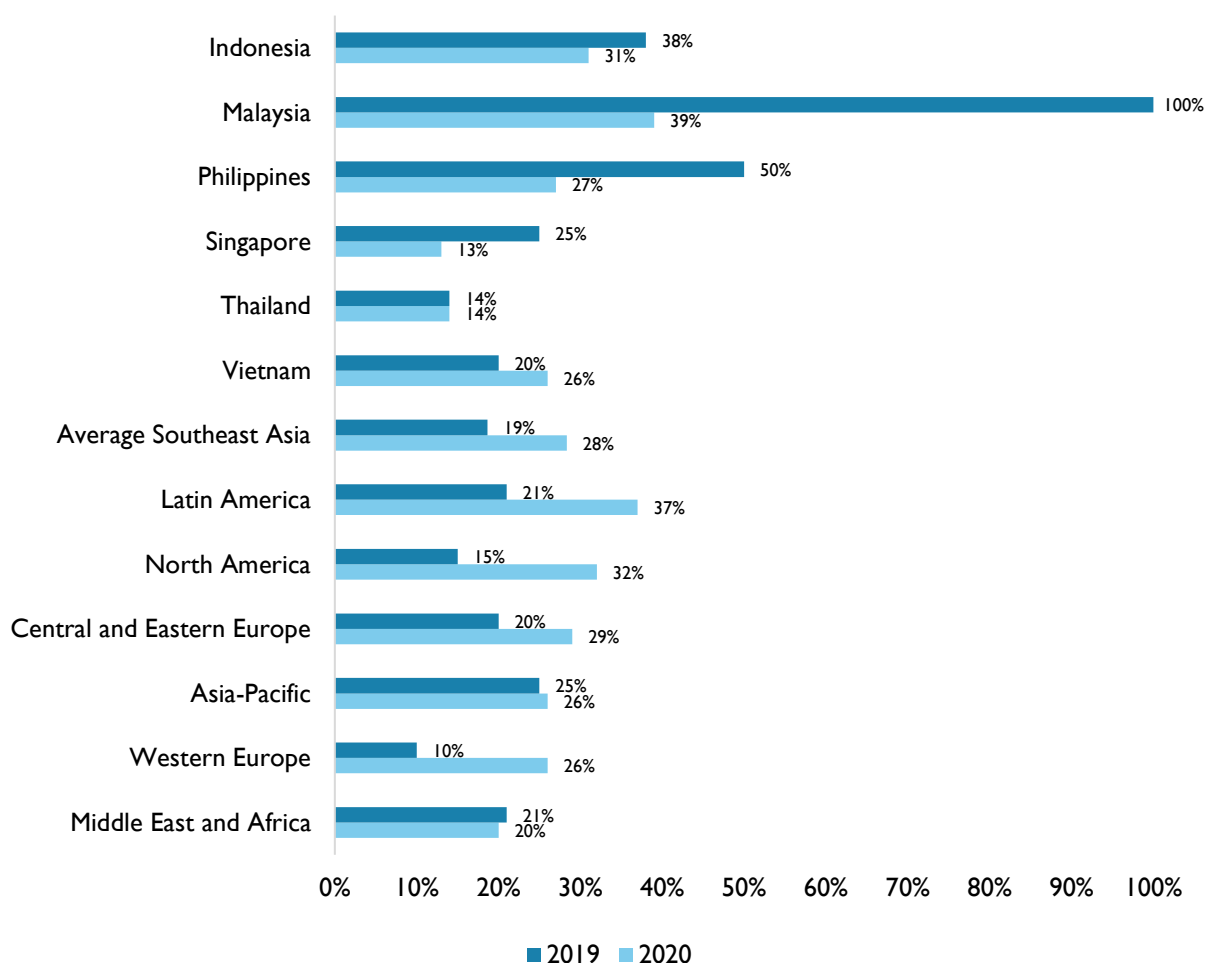
- Present new survey data on how different types of ASEAN MSMEs engage in ecommerce, how they benefit from ecommerce, and what challenges they face in growing their domestic, regional, and global online sales;
- Review ASEAN economies’ adoption of regional and domestic policies and regulations that are conducive to MSME ecommerce;
- Discuss frictions and challenges as well as opportunities for ASEAN digital integration and MSMEs’ cross-border commerce; and
- Put forth ideas on policy and technology solutions for enabling ASEAN MSMEs’ trade and growth through ecommerce.

The following section discusses the growth of ecommerce in ASEAN and how ASEAN MSMEs use ecommerce and digital services in their businesses. Section three discusses ASEAN economies’ policies, programs and practices to enable MSME ecommerce. Section four turns to the pending challenges that MSMEs in the region face to growing through ecommerce. Section five concludes with policy and programmatic recommendations for accelerating ASEAN MSMEs’ use of ecommerce and the growth of their online sales.

II. HOW ASEAN MSMES ENGAGE IN ECOMMERCE AND THE CHALLENGES THEY FACE

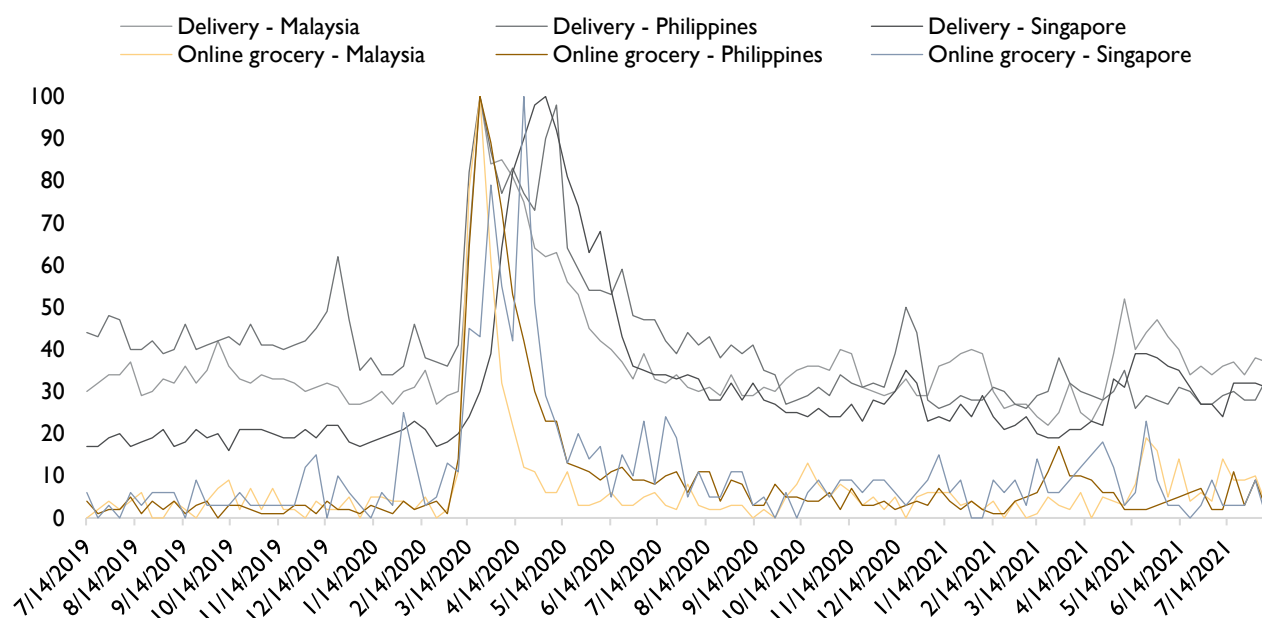
ASEAN members' ecommerce markets are growing rapidly. In 2019, the regional economies for which there is good data grew their ecommerce sales by an average of 19 percent and accelerated to 28 percent during COVID-19 in 2020 (figure 1). Google searches for “delivery” presaged the spike in ecommerce during the first COVID lockdowns in March and April 2020 (figure 2). Online transactions are, however, still rather limited in the region, representing only 6 percent of retail sales even in Singapore, a highly digitized economy, and less than 5 percent of these in the other major economies (figure 3). This contrasts with East Asian economies such as Korea and China, where ecommerce sales represent nearly 30 percent and 50 percent of all retail, respectively. This means that ecommerce still has tremendous potential for growth in the ASEAN region and that there are still significant opportunities for the regional MSMEs—particularly as more than 90 percent of the online buyers that went digital during COVID-19 have reportedly become permanent online shoppers.³

Figure 1: Growth of ecommerce in selected economies, 2019 and 2020



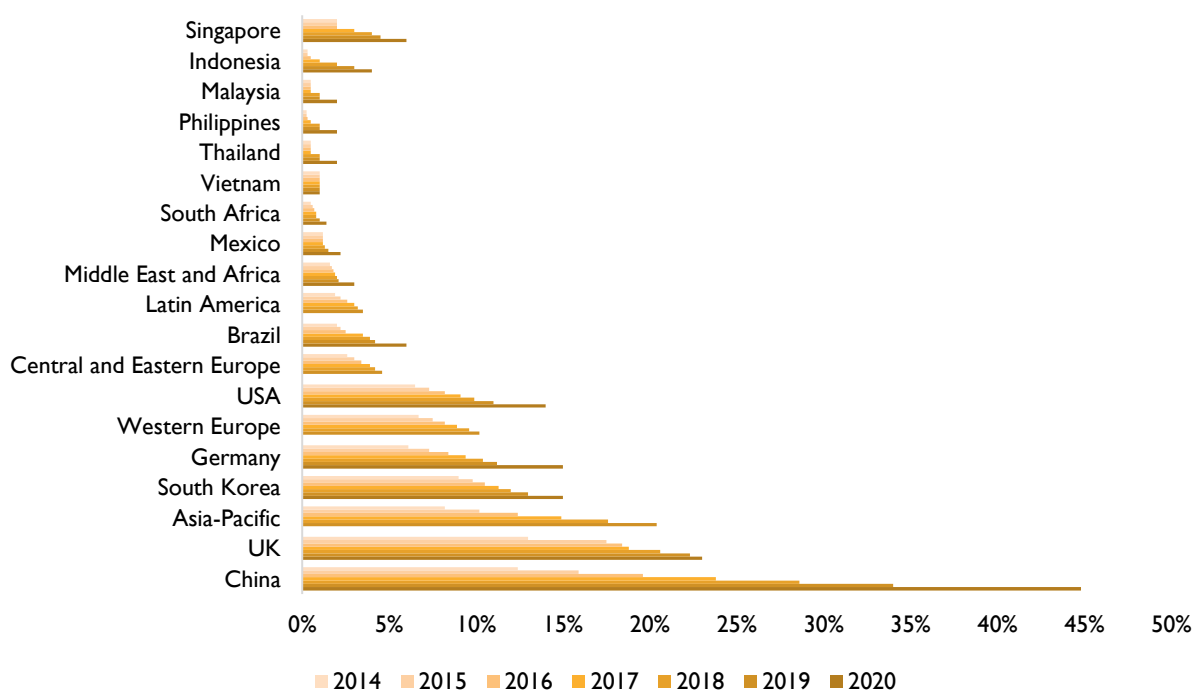
Source: eMarketer, PPRO Payments and E-Commerce Report 2019, 2020.

Figure 2: Google searches for “delivery” and “online grocery” in July 2019–August 2021 in Malaysia, the Philippines, and Singapore



Source: Author based on Google Trends.

Figure 3: Ecommerce as a share of retail in 2014–20, selected economies



Source: eMarketer, PPRO Payments and E-Commerce Report 2019, 2020.

There is little comprehensive data on ASEAN's cross-border ecommerce in goods. However, data on cross-border flows of services suggest that the ASEAN economies' digitally deliverable services exports grew at an annual average of 16 percent in 2007–2020 and imports grew at 10 percent, outpacing the growth of total commercial services trade in the regional economies. Professional and technical services trade has grown particularly fast, especially from the Philippines and Malaysia (figure 4).² As a result, ASEAN service providers have become more integrated into both Asian and global value chains (figure 5).

Figure 4: Exports of digitally deliverable services in 2007–19, selected ASEAN economies (millions of \$)

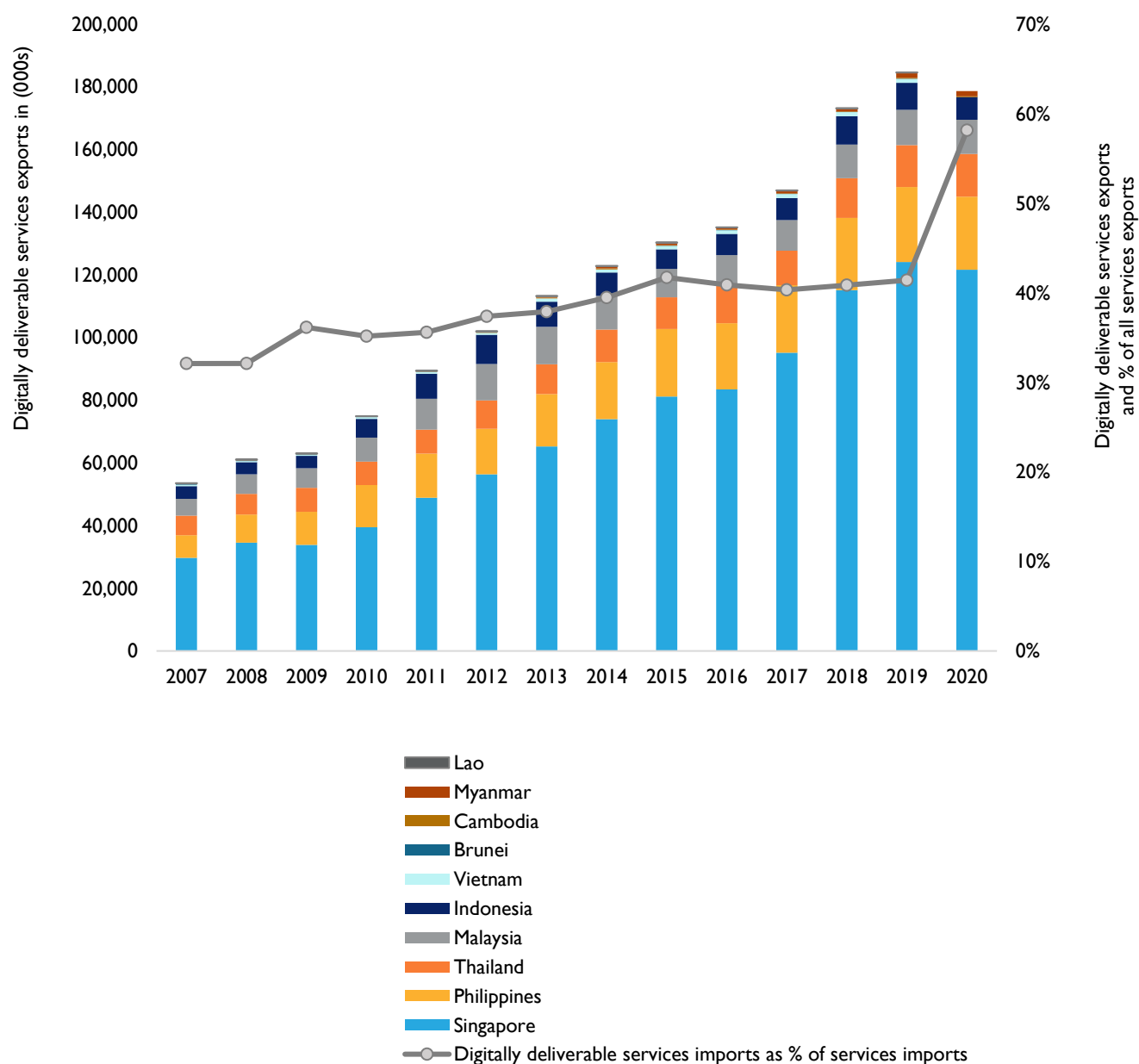
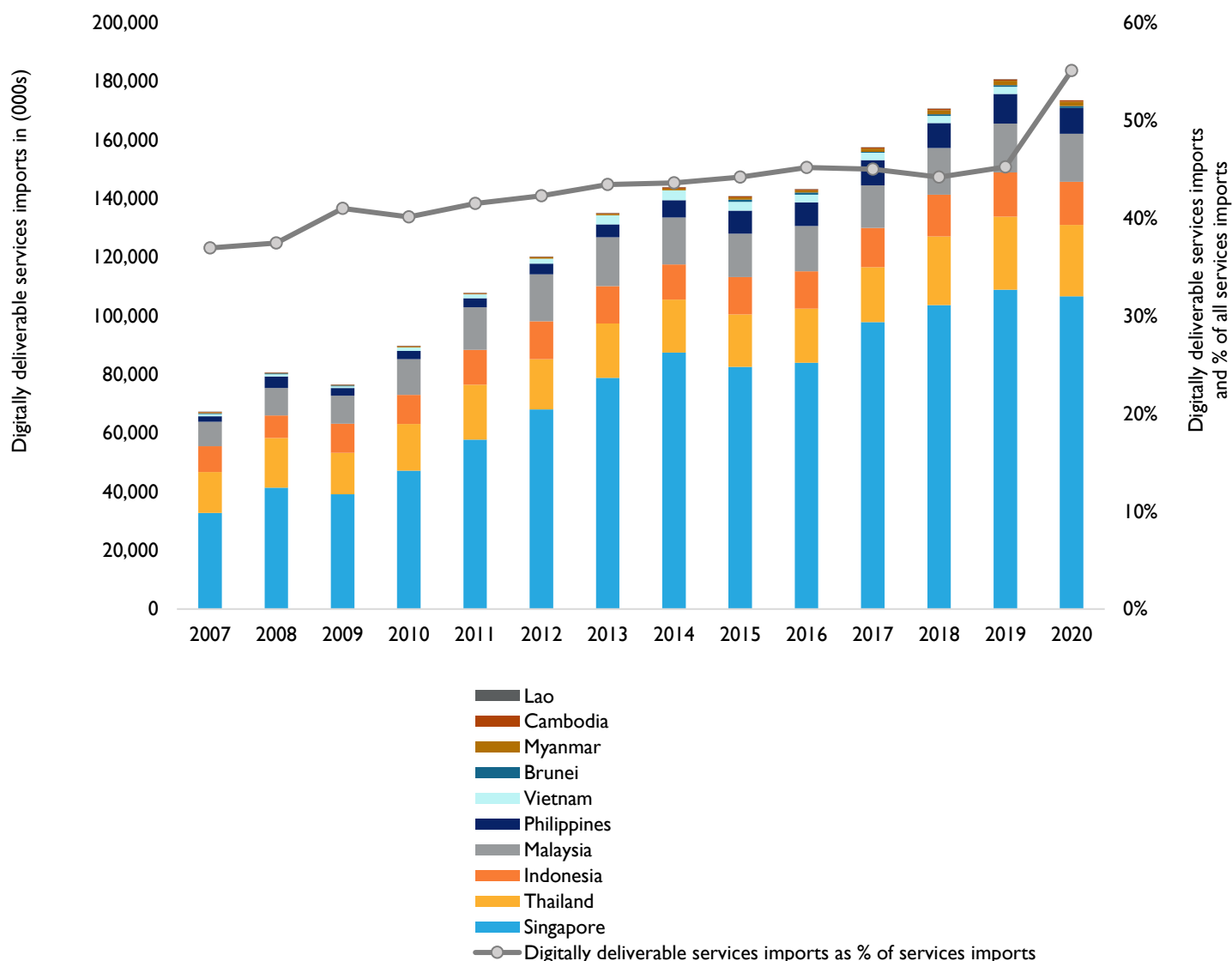


Figure 5: Imports of digitally deliverable services in 2007–19, selected ASEAN economies (millions of \$)



Source: Author, based on WTO services trade data.

I. HOW ASEAN MSMEs USE ECOMMERCE

Behind the growth of ASEAN ecommerce are hundreds of thousands of merchants that have set out to sell and buy goods and services online, as well as an ecosystem of services for merchants—ecommerce marketplaces such as Lazada and Shopee; e-payment platforms and fintechs; ride-hailing businesses-turned-superapps such as Grab and Gojek; and logistics leaders that enable merchants to transact, such as J&T Express (table I).

Table 1: Selected Local and Foreign Businesses in the ASEAN Ecommerce Ecosystem

Name	Operates in	Category	Description
Lazada	Indonesia, Malaysia, Singapore, Vietnam, Thailand, Philippines	Marketplace	Leading regional ecommerce platform featuring end-to-end logistics capabilities and fulfillment centers in 17 Southeast Asian cities, data leveraging in real-time to quickly adapt to changing demands and conditions and connect consumers to brands and customized experiences, and payments infrastructure that includes preferred and digital payments.
Shopee	Indonesia, Malaysia, Singapore, Vietnam, Thailand, Philippines	Marketplace	Shopee started as a mobile ecommerce app and has since expanded to an online marketplace that provides payment and logistics support. It does not charge commission or listing fees; however, sellers can upgrade for better visibility.
Grab	Singapore, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Thailand, Vietnam	Superapp, including delivery, logistics, and payments	Grab is a superapp providing consumers with food and grocery delivery, shopping services, ride-hailing, and financial services like digital payments and investment tools. For businesses, the app provides opportunities to sell deliveries and groceries, use GrabPay for digital payments, shipping services, ads, and even funding.
Gojek	Indonesia, Singapore, Thailand, Vietnam	Superapp, including delivery, logistics, and payments	Gojek is a superapp providing transportation and logistics services such as ride-hailing and shipping, cashless payments and PayLater payments, food and grocery delivery, and GoShop, which is available in 47 cities and allows users to buy almost any type of product and have it delivered.
Lalamove	Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam	Logistics	Lalamove provides companies of all sizes with same-day last-mile delivery solutions on-demand or in advance with live order tracking and account manager support.
J&T Express	Indonesia, Philippines, Thailand, Singapore, Cambodia	Logistics	J&T Express offers logistics services with an emphasis on 24/7/365 delivery and serving the ecommerce industry. The company offers cloud-based ecommerce-enabled warehouses to integrate with major marketplaces and ecommerce stores for omnichannel fulfillment, automated sorting machines for high-volume deliveries, and sales channel management.
Xendit	Indonesia, Philippines	Payments	Xendit offers payment infrastructure that enables businesses to accept payments via bank transfers, credit and debit cards, retail outlets, installment plans, and e-wallets through either payment links sent through WhatsApp, Facebook, and email; web/mobile checkout; or API integration.

Aspire	Singapore	Financial services	Aspire is the all-in-one finance operating system for growing businesses. The platform allows users to send and receive money and provides corporate credit cards, expense management tools, and accounting software integration.
PromptPay	Thailand	Payments	Bangkok Bank's PromptPay enables users to transfer or receive funds using Citizen ID or their mobile phone number instead of a bank account number, via electronic channels—namely, internet banking, mobile banking, and ATMs.
Ninja Van	Philippines, Singapore, Malaysia, Indonesia, Vietnam, Thailand, Myanmar	Last-mile delivery	Designed to help businesses streamline their deliveries through automation, connecting businesses to delivery drivers through their seamless interface, and providing real-time tracking and competitive pricing. Extra perks include return shipping or payment through cash-on-delivery or the app. The company also provides parcel boxes, where customers can retrieve their package from a nearby unit using a code.
BEST	Malaysia, Cambodia, Singapore, Thailand, Vietnam	Logistics	Integrated smart supply chain and logistics solutions provider, offering a comprehensive set of logistics and value-added services, including express and freight delivery, supply chain management, business-to-store-to-consumer supply chain and last-mile services, truckload capacity brokerage, international logistics, and financial services.
Cainiao	Malaysia, Thailand, Philippines	Logistics	Provides logistics services to Alibaba Group by operating warehouses and express delivery stations, and runs a logistics information platform that provides real-time access to information for both buyers and sellers.
WeChat Pay	Malaysia	Payments	Merchants can receive payments online and in person. Users can pay in stores by showing their WeChat Pay QR code, shop online with ecommerce sellers, transfer money to other users, and withdraw their WeChat Pay balance to a regular bank account.
Amazon	All ASEAN nations	Marketplace	Amazon, one of the largest global ecommerce marketplaces with over 300 million visitors worldwide, accepts sellers from all ASEAN countries. Amazon provides shipping, returns, and customer service capabilities, with varying commission structures and referral fees based on the category of goods sold.
Tokopedia	Indonesia	Marketplace	Leading marketplace in Indonesia which allows sellers to start selling for free, reaches 99 percent of subdistricts in the country, partners with 13 logistics providers to provide a complete logistics solution, and offers financial technology products to help sellers grow their stores.
Bukalapak	Indonesia	marketplace	Leading marketplace in Indonesia with a mission to empower SMEs and especially <i>warungs</i> , which are small or micro-merchants and mom-and-pop stores in Indonesia. There is no registration fee to sell, and the seller has options to sell on social media, through WhatsApp, and on the online store.

How, then, are ASEAN MSMEs in different business segments and countries using ecommerce and how do they benefit from marketplaces and other services in the ecommerce ecosystem? This study seeks to provide answers through an online survey of 1,300 firms in the ASEAN region supported by USAID. Survey A was fielded with 550 firms in the Philippines on June 6–9, 2021, and survey B with 750 firms in Indonesia, Thailand, and Vietnam on August 18–21, 2021 (see annex I for the methodology and sample).

I. ASEAN MSMEs ARE ALREADY ACTIVE ONLINE ON SOCIAL MEDIA, AND AMPLIFYING THEIR USE OF REGIONAL AND GLOBAL MARKETPLACES

ASEAN firms' use of online channels varies by their size and location. The majority of micro and small firms are social sellers that market their goods and services primarily on social media platforms and interact with customers using WhatsApp and other messaging tools (figures 6 and 7). However, two-thirds of the micro and small firms that were surveyed are also already using Shopee, about half reports using Lazada, and over a quarter has set out to use Amazon. Bukalapak and Tokopedia, Indonesian marketplaces, are also popular among MSMEs. Midsize and larger firms are already taking advantage of regional, and global marketplaces such as Amazon and Alibaba as well as direct-to-consumer platforms such as Shopify, Vietnamese marketplace Chototo, and Thai marketplace Chilindo, and global services platforms Freelancer.com, Upwork, and Fiverr.

Figure 6: ASEAN MSMEs' use of ecommerce in 2020, by channel

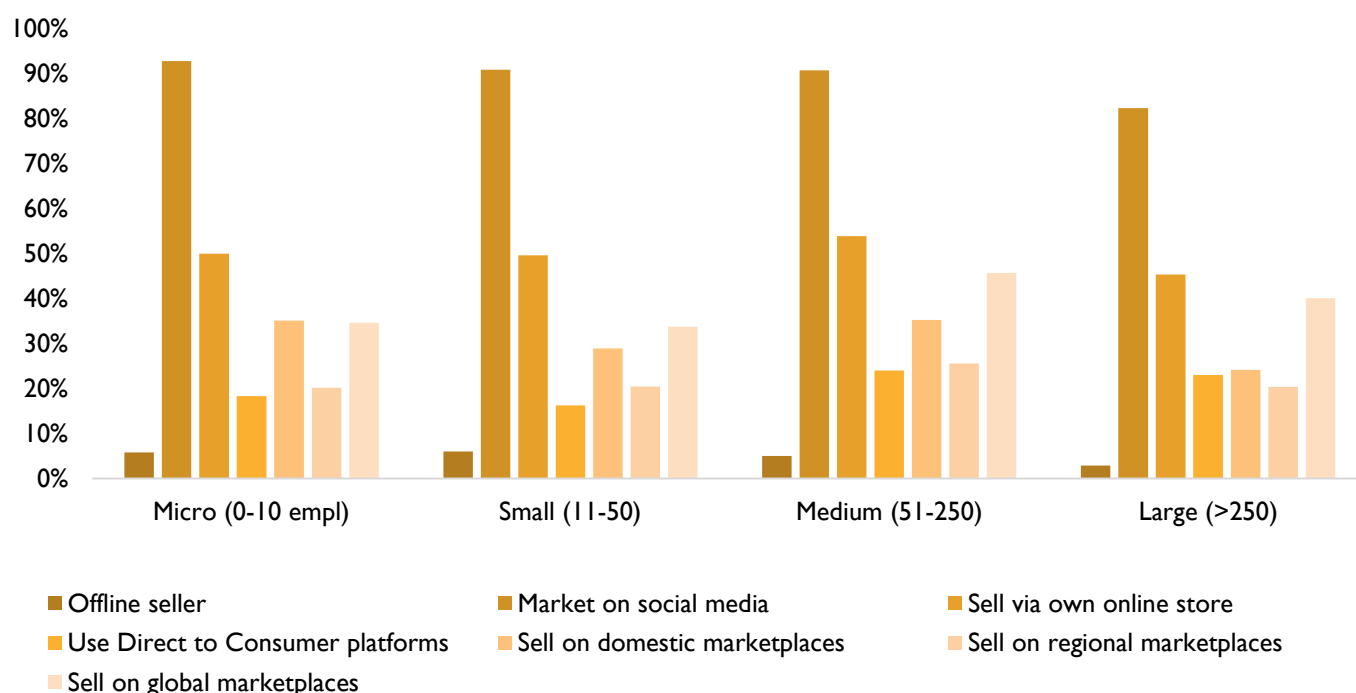
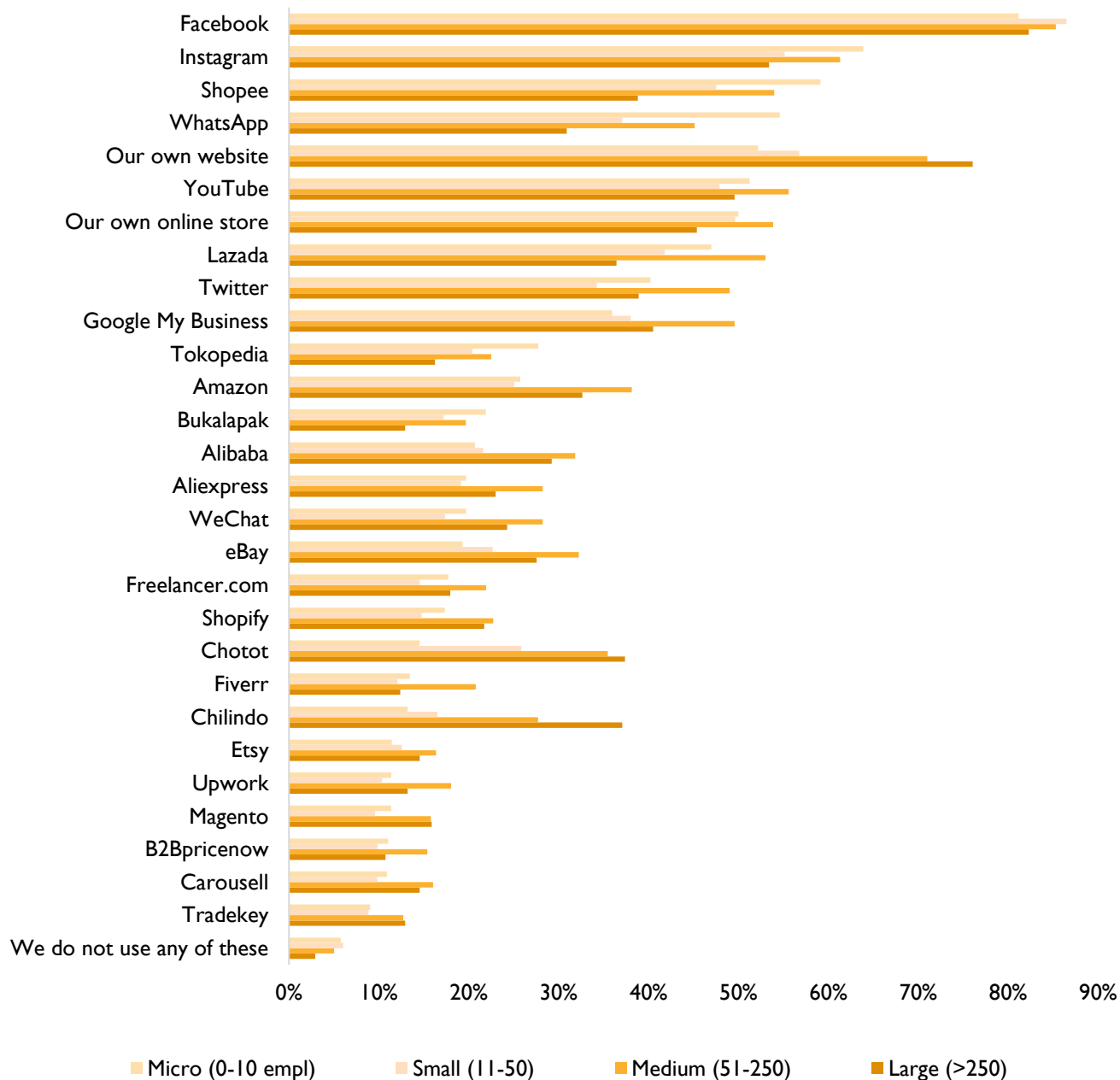


Figure 7: ASEAN MSME's use of platforms and marketplaces, by firm size



2. ASEAN MSMEs CAN BE GROUPED INTO FIVE ARCHETYPES BASED ON THEIR ECOMMERCE MATURITY, WITH GLOBAL MARKETPLACES SELLERS OUTPERFORMING SOCIAL SELLERS IN ONLINE SALES INTENSITY AND SALES GROWTH

ASEAN MSMEs still vary quite notably in their ecommerce maturity, falling into five main archetypes (table 2):

- **Type A: Global marketplace sellers (about 39 percent of the sample):** Established, fast-growing larger MSMEs and large B2B and B2C sellers that use global online marketplaces and derive more than 25 percent of their revenue from ecommerce. Nearly two-thirds of these firms export, and over 40 percent export to extraregional markets beyond Southeast Asia. These firms are relatively young and are “born digital”—43 percent are three years old or less. They are typically located in first-tier cities and prioritize ecommerce sales. A third are led by a female CEO.
- **Type B: Local and regional marketplace sellers (about 52 percent):** Small to midsize fast-growing B2C sellers that have their own online stores, use domestic or regional marketplaces such as Lazada, Shopee, and Bukalapak as well as social media, and often derive 1–25 percent of their revenue from online sales. Almost half of these firms export. These firms are typically located in first- and second-tier cities.
- **Type C: Sellers with their own online stores (50 percent):** MSMEs that have their own online stores to market their goods and services and transact online and typically also use social media intensively. These firms are older and more established; over half of these firms export, and 46 percent derive more than 25 percent of their revenue from exports. The majority of firms in this group also import. These firms also tend to see investing in ecommerce capabilities as a top priority.
- **Type D: Social sellers (about 90 percent of all firms, 29 percent if counting only “pure” social sellers, or firms that use marketplaces or online stores):** Micro and small firms that market their goods and services on social media such as Facebook and Instagram and may interact with their clients using WhatsApp, but typically close sales with cash. These firms are somewhat more established—75 percent are more than 3 years old—and often in services sectors than in goods and present across countries. These are firms that appear to be doing what they have always done, with limited digitization. Two-thirds of these firms are led by a female and 15 percent are located in rural areas.
- **Type E: Offline sellers (5 percent):** Micro and small firms in second- and third-tier cities and rural areas that are often in B2C and B2B services and typically do not see ecommerce or exporting as a priority. Women-led firms tend to be smaller than men-led firms and are thus more prevalent in this category.

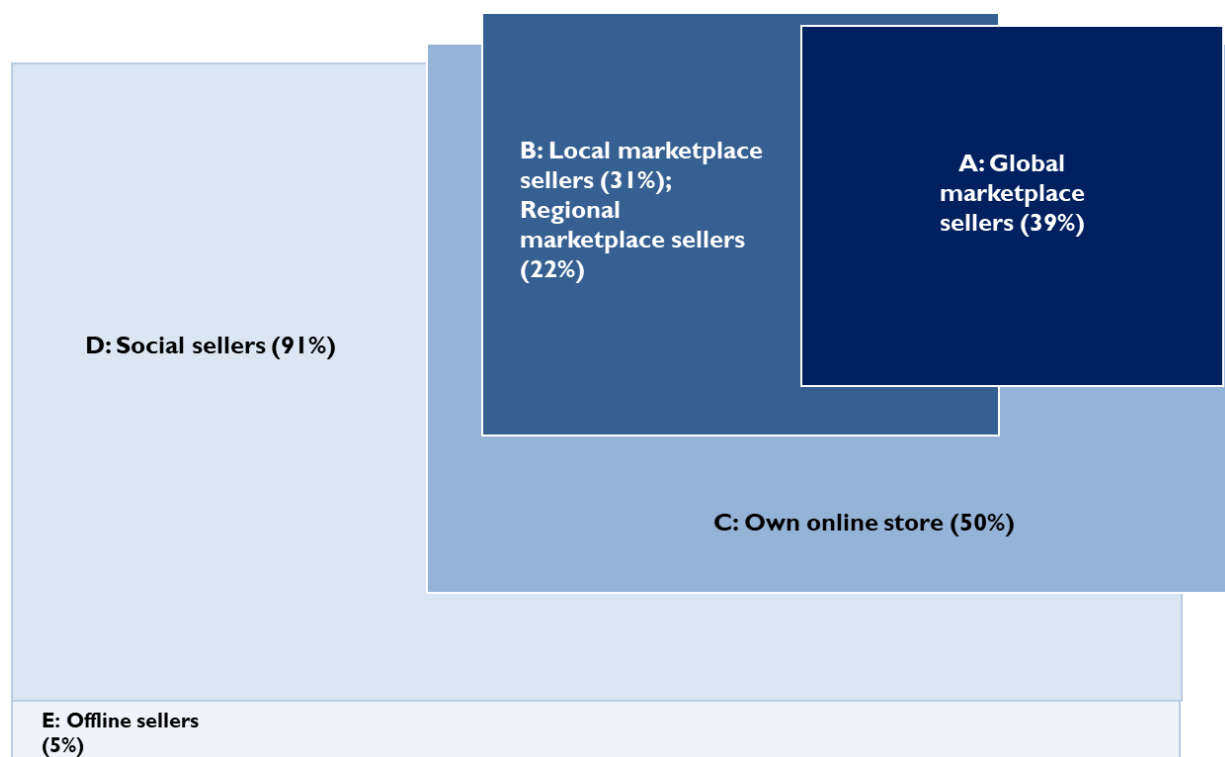
Table 2: ASEAN MSME seller archetypes

	Archetype	Size	% of firms with >25% of revenue from ecommerce	Typical clients	Typical sectors	Located in	Growth 2020	Export and import participation	Typical foreign markets	% of firms with female CEO	% of firms 0-3 years old
A	Global marketplace seller	50% midsize and large; 41% micro and small	56%	31% MSMEs, 25% consumers, 15% large businesses, 21% distributors	67% goods, 37% services; food products, textiles, electronics, office equipment, IT services, technical services	82% in first-tier cities	33% grow >10% p.a.	63% / 86%	76% Southeast Asia, 42% extraregional (esp. China, Japan, Korea)	33%	43%
B	Local and regional marketplace seller	58% micro and small; 42% midsize and large	45%	31% MSMEs, 27% consumers, 11% large businesses, 20% distributors	68% goods, 35% services; food products, textiles, electronics, office equipment, IT services	67% in first-tier cities; 22% in second and third-tier cities; 11% in rural areas	15% grow >10% p.a.	49% / 52%	43% Southeast Asia, 16% extraregional (esp. China, Japan)	49%	36%
C	Sell through online store (but not on marketplaces)	50% micro and small; 50% midsize and large	46%	36% MSMEs, 36% consumers, 13% large businesses, 16% distributors	60% goods, 38% services; food products, textiles, footwear, beauty products, home and garden, electronics, industrial products, office equipment, IT	68% in first-tier cities; 24% in second and third-tier cities; 7% in rural areas	15% grow >10% p.a.	57% / 52%	27% Southeast Asia, 14% extraregional (esp. China, Japan)	60%	27%
D	Social seller (and no sales on marketplaces or own online stores)	50% micro and small; 50% midsize and large	29%	32% MSMEs, 38% consumers, 23% large businesses, 14% distributors	43% goods, 57% services; food products, electronics, office equipment, IT services, educational services	59% in first-tier cities; 26% in second and third-tier cities; 15% in rural areas	14% grow >10% p.a.	42% / 41%	12% Southeast Asia, 7% extraregional (esp. China, Japan)	66%	21%
E	Offline seller	55% micro and small; 45% midsize and large	12%	25% MSMEs, 22% consumers, 20% large businesses, 13% distributors	27% goods, 49% services; food products, industrial products, legal and IT services	58% in first-tier cities; 25% in second and third-tier cities; 16% in rural areas	10% grow >10% p.a.	45% / 36%	16% Southeast Asia, 9% extraregional (esp. Japan, Korea, India, USA)	66%	25%

Source: Author based on survey data.

Of course, these groups overlap, as any one MSME can use various sales channels: practically all firms with their own online stores use social media as well, and typically regional and global marketplace sellers that sell goods have their own online stores (figure 8). Many global marketplace sellers also sell on regional marketplaces.

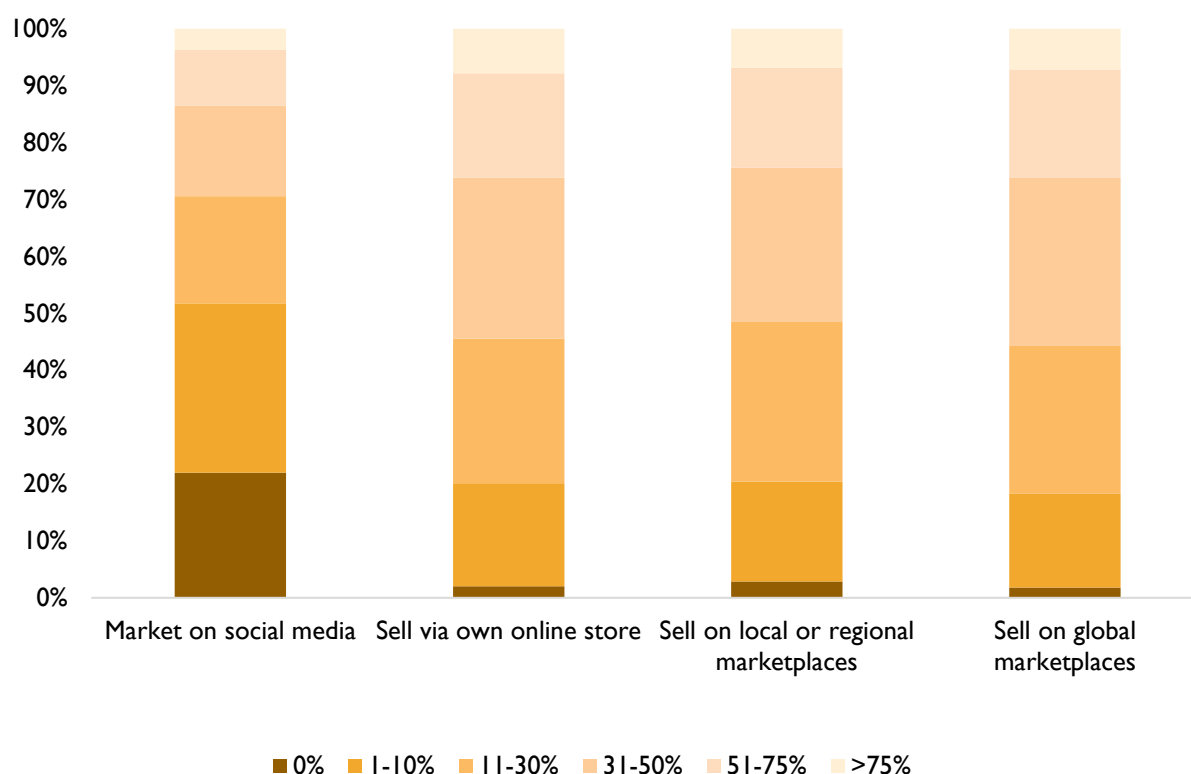
Figure 8: Overlap among surveyed ASEAN MSME seller archetypes



Source: Author based on survey data.

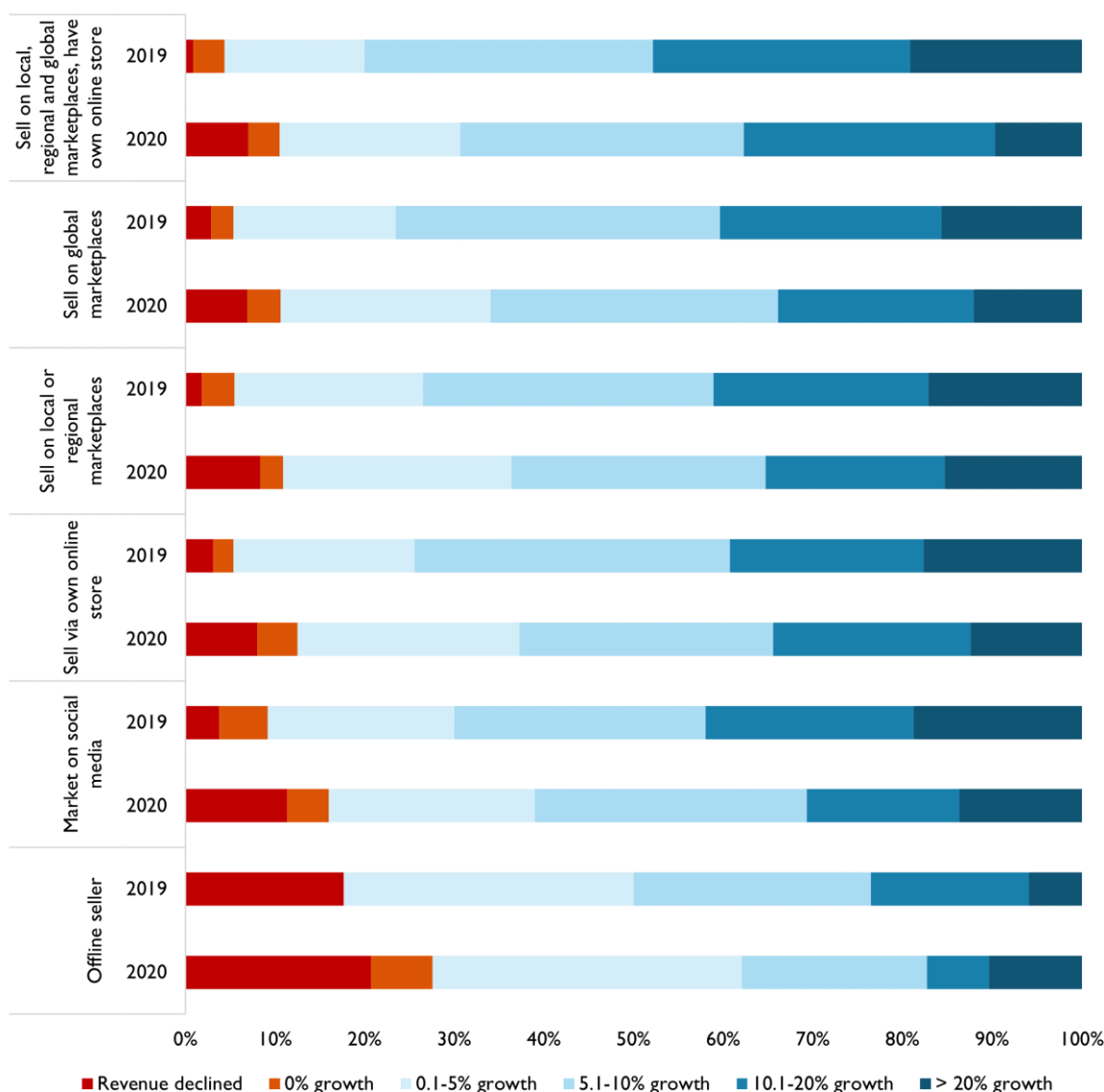
Marketplace sellers generally use ecommerce more intensively than firms in the other categories. While only 30 percent of social sellers derive more than 30 percent of their revenue from online, some 60 percent of global marketplace sellers' revenues come from online channels (figure 9).

Figure 9: Percentage of surveyed firms by revenue from online sales and sale channels used



The ASEAN region's marketplace sellers grow faster than firms that use analogue or social channels. They also appear to have weathered the COVID-19 crisis much better, perhaps partly because digitization enabled them to export and cater to customers in multiple markets. Fewer than 10 percent of the surveyed marketplace sellers had no growth or negative growth in 2020, and almost 30 percent of them grew, as opposed to offline sellers, nearly 30 percent of which stagnated or shrunk and only 17 percent saw growth of 10 percent or higher (figure 10).

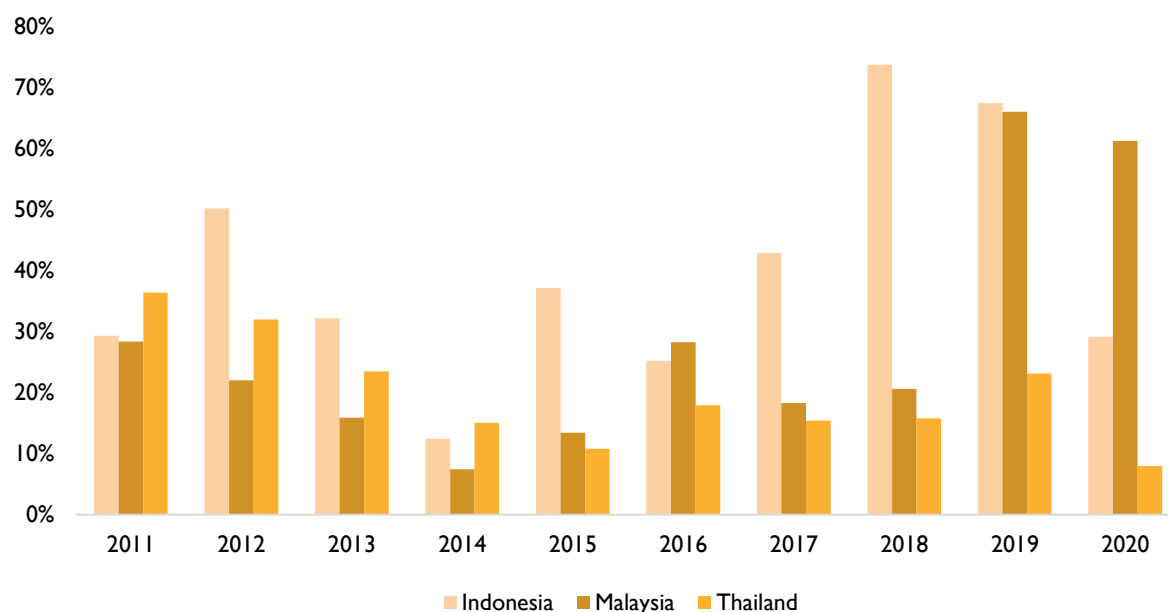
Figure 10: Surveyed ASEAN firms' growth in 2019–20, by online activity



I. AS REGIONAL PAYMENTS HAVE DIGITIZED, MARKETPLACE SELLERS ARE USING A PARTICULARLY WIDE RANGE OF ONLINE PAYMENT METHODS

E-payment transactions have been growing at very robust rates annually in Southeast Asia—2021 was the first year that digital payments outpaced card and cash payments in the subregion, partly due to the rise of real-time payment systems that, like cash, enable consumers, merchants, and financial institutions to settle payments instantaneously.³ E-money payment systems provided by banks and nonbanks that operate electronic payment service businesses have grown at robust 70–80 percent per year in Indonesia and Malaysia (figure 11).

Figure 11: Annual growth in e-money transactions in Indonesia, Thailand, and Malaysia in 2011–2020



The survey data on MSMEs in the region shows that firms that sell via online marketplaces are particularly likely to use diverse instruments for payment acceptance, including cash but also wires, cards, PayPal, quick response (QR) codes, and regional e-wallets (figure 12). Digital orders and electronic payments have translated into immediate gains: for example, practically all firms offering delivery via Grab and Gojek have gained new transactions and revenues from digital ordering.⁴ Grab, for example, says microentrepreneurs on its platform see an average 25 percent increase in sales.⁵ However, social sellers still primarily accept payment in cash and checks, and their use of QR codes and mobile payments is much more limited in domestic transactions.

In international transactions, PayPal has become an important tool for accepting payments among ASEAN firms; and the use of QR codes is also on the rise (figure 13). PromptPay enables domestic transactions in Thailand and cross-border payments between Thailand and Singapore and is also gaining ground in the regional payment landscape.

Figure 12: Payment methods for accepting payments from domestic and international customers, social and marketplace sellers, 2021

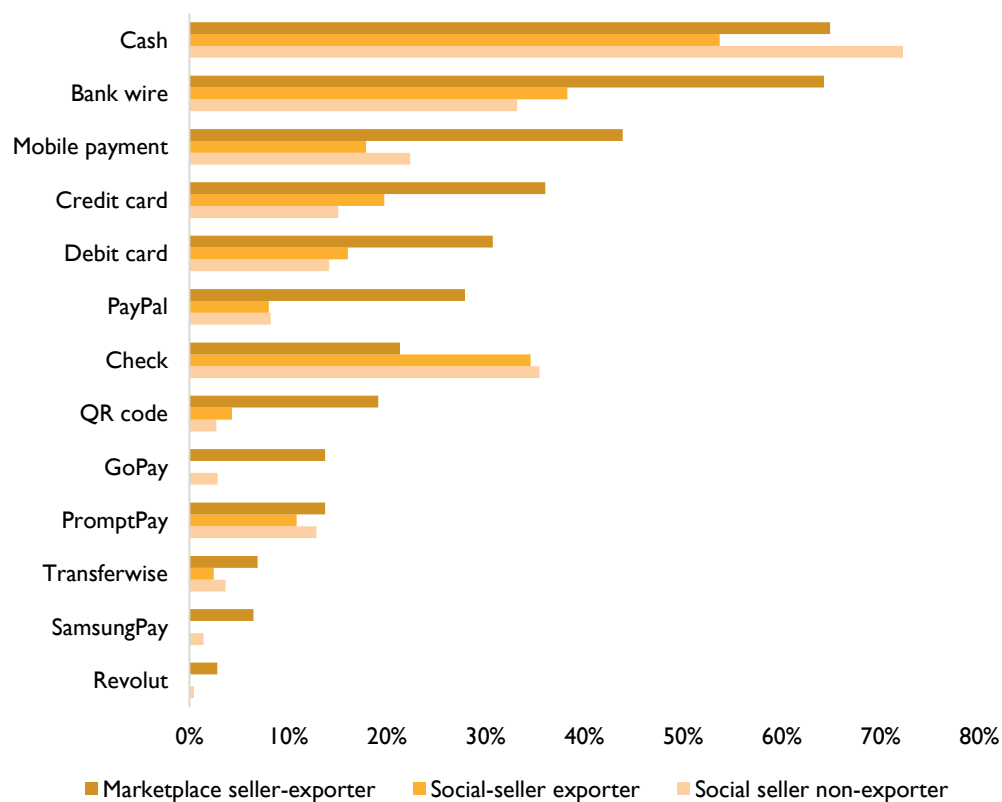
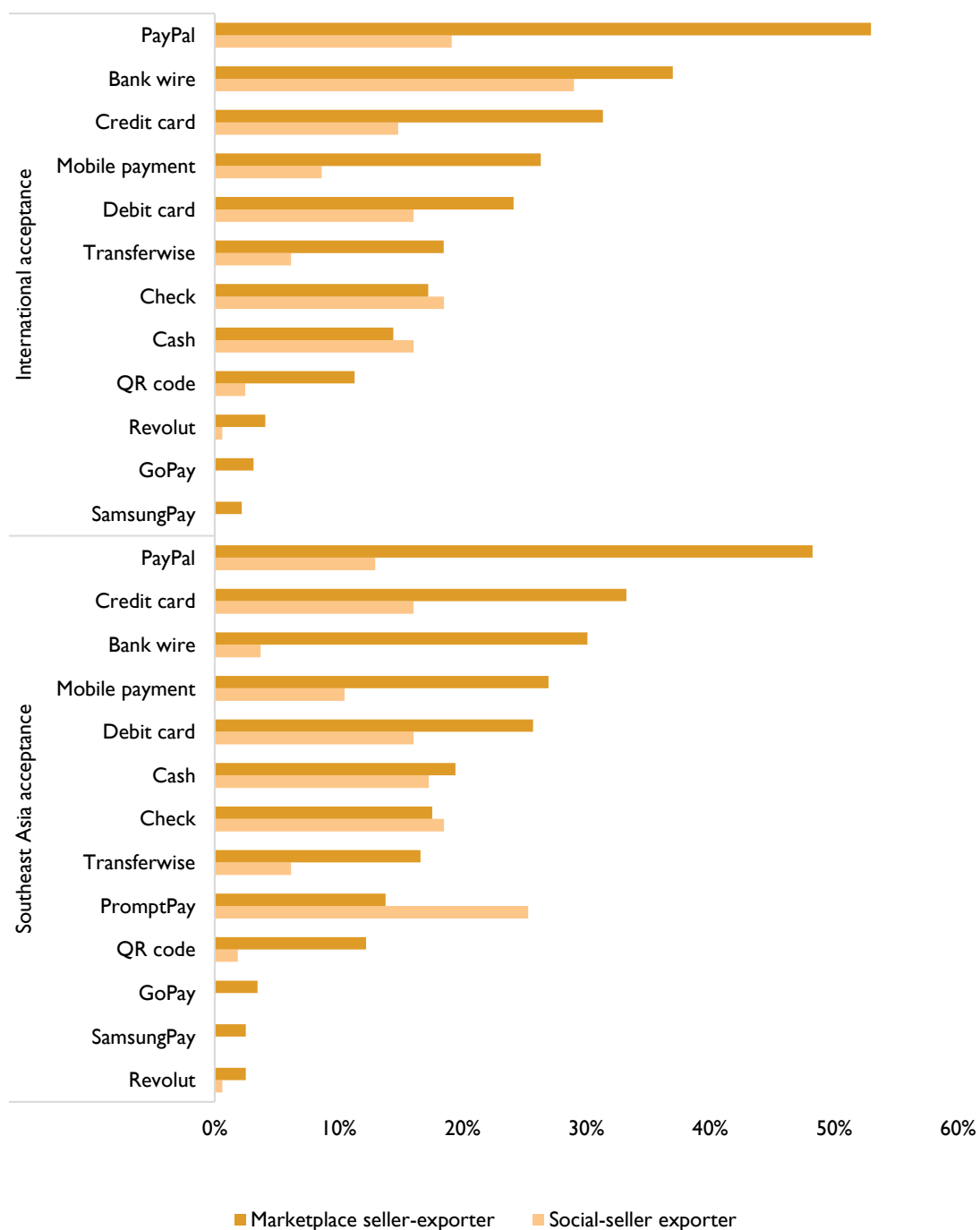


Figure 13: Payment methods for accepting payments from international and southeast Asian customers, social and marketplace sellers, 2021



These patterns reflect the proliferation of smartphones among consumers and firms, the diversification of the regional payment ecosystem, and the diversification of services by payment providers. Some trends in the region are as follows:

- Nonbanks with e-payment licenses have grown to dominate e-money transactions in ASEAN. Nonbanks like Grab, Sea, and Ant Group have a vast geographical footprint (table 3). They also make up a large share of transactions, accounting for 72 percent of e-money payments in Thailand in 2019, for example.⁶ Malaysia's top three nonbanks—Boost, GrabPay, and Touch 'n Go—serve no fewer than 21 million consumers.⁷
- E-payments in ASEAN have partly been built on thriving ride-hailing, delivery, and ecommerce platforms. For example, Gojek and Grab started out as ride-hailing platforms but now enable digital payments for services such as transportation, food delivery, and logistics via their superapps.
- Many technology and fintech companies offer digital payments: examples include Android Pay, Apple Pay, and Wise. There are also important local players, such as PayMaya in the Philippines and MomoPay in Vietnam.
- Banks in the region are an important player in the digital payment revolution, offering platforms such as PayLah (DBS Bank, Singapore), Sakuku (Bank of Central Asia, Indonesia), and CIMB Pay (CIMB, Malaysia).
- Nonbanks that facilitate digital transactions and other banking products are also on the rise, in the form of so-called digital challenger banks (DCBs), which enable more fluid access to banking services and finance than traditional banks. By 2021, there were some 50 DCBs in the region, often supported by tech and telecommunications companies (table 4).
- Domestic interbank instant payments work well in ASEAN: Thailand leads in interbank transactions on a per capita basis thanks to market leaders Kasikornbank and its K+ Wallet; the Malaysian counterpart is Maybank E-Wallet.⁸
- Payment technologies are developing rapidly: the use of digital and contactless payment methods at the point of sale, such as facial recognition, QR codes, and near-field communications (NFC) has grown in ASEAN since the start of COVID-19. QR codes open the door for cardless, secure, and hardware-independent payments.

The adoption of digital payments is poised to increase consumption of other financial services such as digital remittances, lending, investment, and insurance—none of which have made extensive inroads into the ASEAN region.⁹

Table 3: Leading nonbanks in the ASEAN region

E-wallet	Ultimate parent	Parent's business	Market cap or amount raised as of Nov. 30, 2020 (\$B)	Southeast Asian countries
GrabPay	Grab Holdings Inc.	Ride-hailing	10	SG, MY, TH, ID, PH, VN
AirPay, Shopee Pay	Sea Ltd. (NYSE: SE)	Ecommerce, gaming	89	SG, MY, TH, ID, PH, VN
GoPay, Coins.ph	PT Go-Jek Indonesia	Ride-hailing	NA	TH, ID, PH
Alipay, Lazada Wallet	Ant Group Go. Ltd.	Fintech	22	SG, MY, TH, PH, VN, KH, LA
TrueMoney	Ascend Group Co. Ltd.	Ecommerce, fintech	NA	TH, ID, PH, VN, KH, MM
Line Pay	Line Corp. (TSE:3938)	Social media	13	TH, ID
Boost	Axiata Group Berhad (KLSE: AXIATA)	Telecom	8	MY, ID
Dash	Singtel (SGX:Z74)	Telecom	29	SG, TH
OVO	NA	NA	NA	ID
DANA	Emtek (IDX:EMTK)	Telecom, media	3	ID
LinkAja	State-owned enterprises	Telecom, bank	NA	ID
Touch'n Go eWallet	CIMB Group Holdings Bhd. (KLSE:CIMB)	Bank	9	MY
GCash	Investor group	Telecom, fintech	NA	PH
PayMaya	PLDT Inc. (PHPSE:TEL)	Telecom	6	PH

Source: Nariyanuri, S&P Global, 2021

Table 4: Challenger banks in the ASEAN region

Country	Challenger banks
Philippines	<p>Tonik provides retail financial products, including deposits, loans, savings accounts, payments, and cards on a highly secure digital banking platform.</p> <p>UNO Bank provides credit lines, savings accounts with auto-approved salary advances, and hails an AI-first approach to apply advanced machine vision and learning models on customer onboarding, transaction authorizations, alternate data-based credit scoring, product and interface personalization at an individual level, and advanced security, risk, and privacy management patterns.</p>
Singapore	<p>In December 2020, the Monetary Authority of Singapore awarded the first digital banking licenses in the country after receiving applications from 10 contenders. The four winners were the Grab-Singtel Consortium, tech giant Sea, Ant Group, and a consortium comprising Greenland Financial Holdings, Linklogis Hong Kong, and Beijing Co-operative Equity Investment Fund Management. These new banks are expected to start business in early 2022.</p>
Malaysia	<p>Bank Negara Malaysia, the central bank, received over 50 applications for digital banking licenses by the deadline in July 2021 and is set to award up to five digital banking licenses in the first quarter of 2022.</p>
Vietnam	<p>Timo is a digital bank that allows for money transfers, bill payment, and online shopping. Timo provides a spending account, debit card, savings account, and credit card.</p>
Indonesia	<p>Jago Bank provides a financial application that involves money transfers, bill payment, and e-wallet top-ups, a debit card, and savings accounts.</p>

2. FIRMS THAT SELL ONLINE ARE MORE LIKELY TO EXPORT TO REGIONAL AND INTERNATIONAL MARKETS

Compared to their peers in other developing regions, ASEAN firms are in general quite export-intensive and integrated into regional value chains. However, ecommerce appears to enable MSMEs to grow their footprint in export markets. Surveyed ASEAN firms of all sizes that have an online presence are much more likely to export compared to offline firms. More than 60 percent of microenterprises that sell on global online marketplaces export (figure 14). Online seller-exporters are also more likely than offline sellers to export to multiple ASEAN markets and extraregional markets (figures 15, table 5).

The ASEAN market is the regional sellers' powerbase. Some 40 percent of the surveyed firms, almost half of them micro and small, export to the intraregional market, and a quarter, a third of which are micro and small firms, to extraregional markets. Ecommerce and marketplace use correlates with exporting and extraregional sales: 36 percent of the micro and small global marketplace sellers that export sell to extraregional markets, as opposed to only 14 percent of comparable social sellers. These patterns are not accidental: developing country firms intentionally use global online marketplaces *in order* to expand their markets and reach the hundreds of millions of foreign buyers that use these platforms.

Firms that use ecommerce are also likely to import goods and services—and many more marketplace sellers are two-way traders or both export and import than are social and offline sellers (figures 16 and 17). Of course, the use of marketplaces and ecommerce does not necessarily *cause* ASEAN firms to trade—the correlation between exporting, importing, and ecommerce use may simply mean that existing exporters and importers have self-selected into ecommerce. However, 25 percent of the surveyed online sellers that export stated they started to do so *after* starting to use ecommerce, and 17 percent of importers that use ecommerce said they started importing after doing so. Moreover, 51 percent of online seller-exporters report that they gained new international customers thanks to ecommerce, and 41 percent report growing exports to new international markets thanks to ecommerce.

Ecommerce enables MSMEs to trade in part because it essentially reduces the geographic distance that has for centuries curtailed visibility, trust, and trade between buyers and sellers located far apart.¹⁰ Online stores and marketplaces' customer reviews, payment tools, and dispute settlement mechanisms give the buyer a sense of trust, the lubricant of trade that it previously took several repeated transactions between buyer and seller to build up. By bringing together hundreds of millions of buyers from around the world, global online marketplaces are a particularly powerful means for MSMEs to reach new markets. In the first USAID-supported eTrade Alliance analysis based on transactional data from marketplaces, we found that over 95 percent of developing country firms using global online marketplaces to export, and over 90 percent of them export to 10 or more markets and derive over 90 percent of their revenue from exports.¹¹

In addition, online and marketplace sellers tend to have diversified product and service portfolios (figure 18). This can have two explanations. First, firms that sell many different products are more likely to find export market niches for them in different markets: marketplace sellers in particular increase their chances of being discovered by a range of international customers in different markets when selling wider varieties of products. Second, as marketplace sellers tend to export and interact with customers around the world, they are better placed than non-exporters to discover new needs, innovate, and introduce new products and services.¹² This is a familiar finding at the country level in international trade: sectors with higher export intensity tend to feature a wider range of products sold to a wider range of markets.

Figure 14: Percentage of surveyed ASEAN firms that export, by online activity and size



Figure 15: Percentage of micro and small firms by number of export markets and sales channels

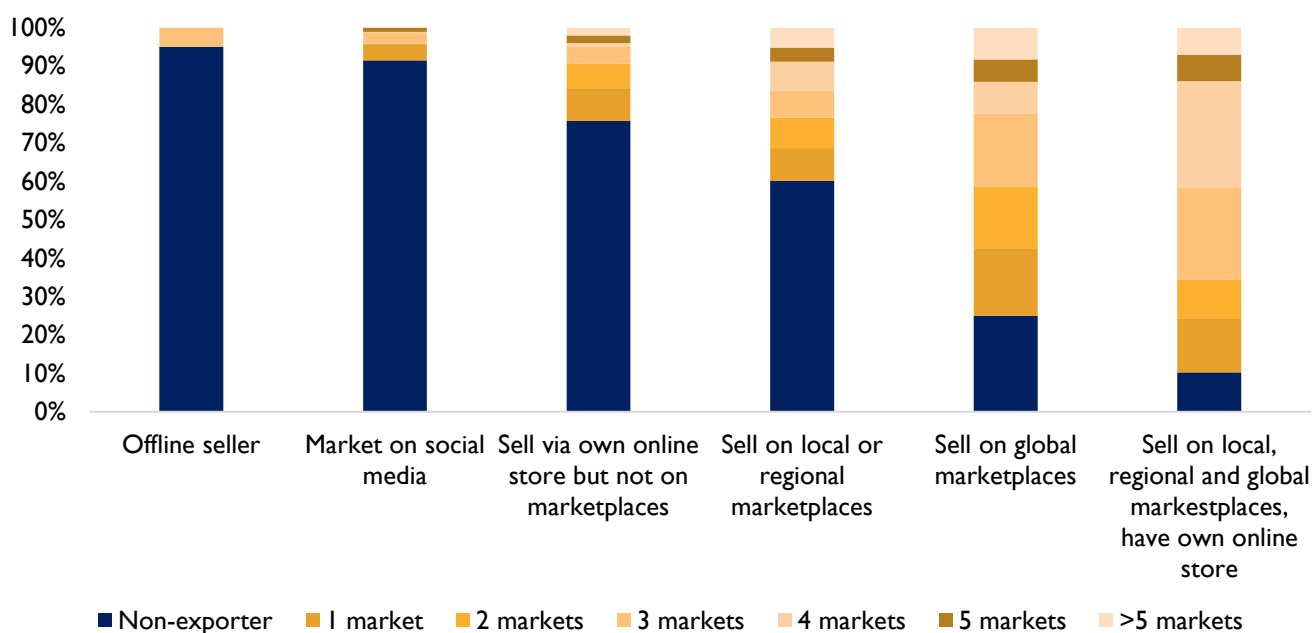


Table 5: Percentage of micro and small exporters selling to different markets in 2021, by online sales activity (exporters only)

Country	Market on social media	Sell on local or regional marketplaces	Sell on global marketplaces
Philippines	4%	17%	17%
Thailand	20%	38%	44%
Vietnam	10%	25%	23%
Indonesia	6%	19%	23%
Malaysia	12%	24%	25%
Singapore	28%	31%	28%
USA	1%	12%	9%
China	6%	24%	17%
Japan	10%	18%	15%
Korea	4%	15%	11%
India	2%	5%	3%
Europe	2%	9%	4%
Middle East	1%	3%	4%
Latin America	1%	2%	1%

Figure 16: Percentage of surveyed ASEAN firms that import, by online activity and size

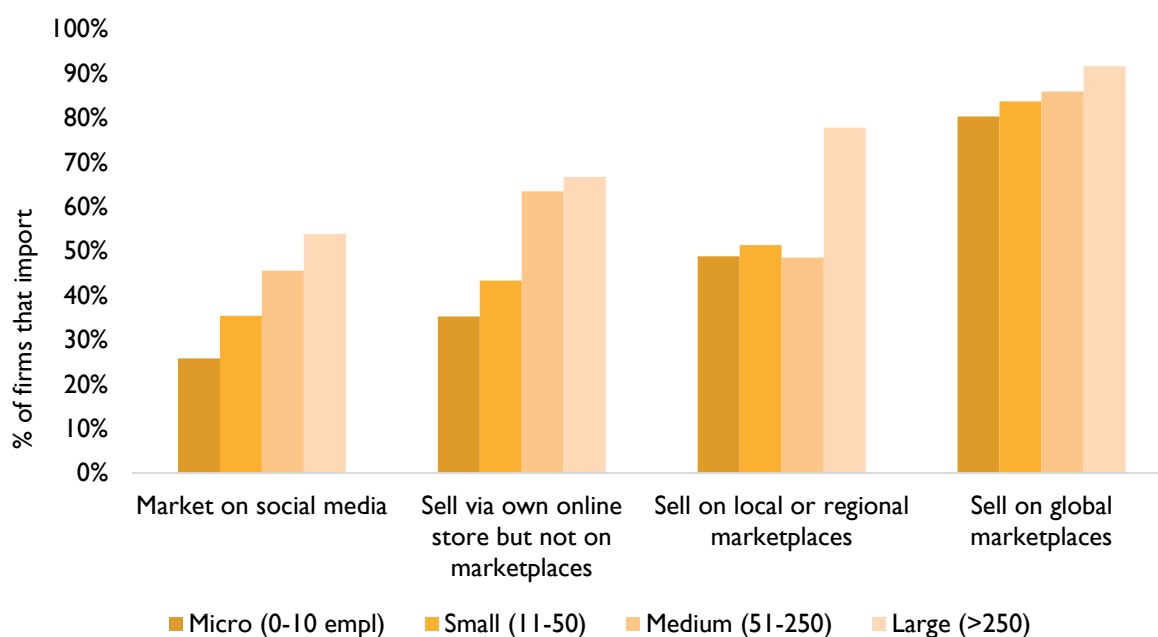


Figure 17: Percentage of surveyed ASEAN firms by export and import participation and use of online channels

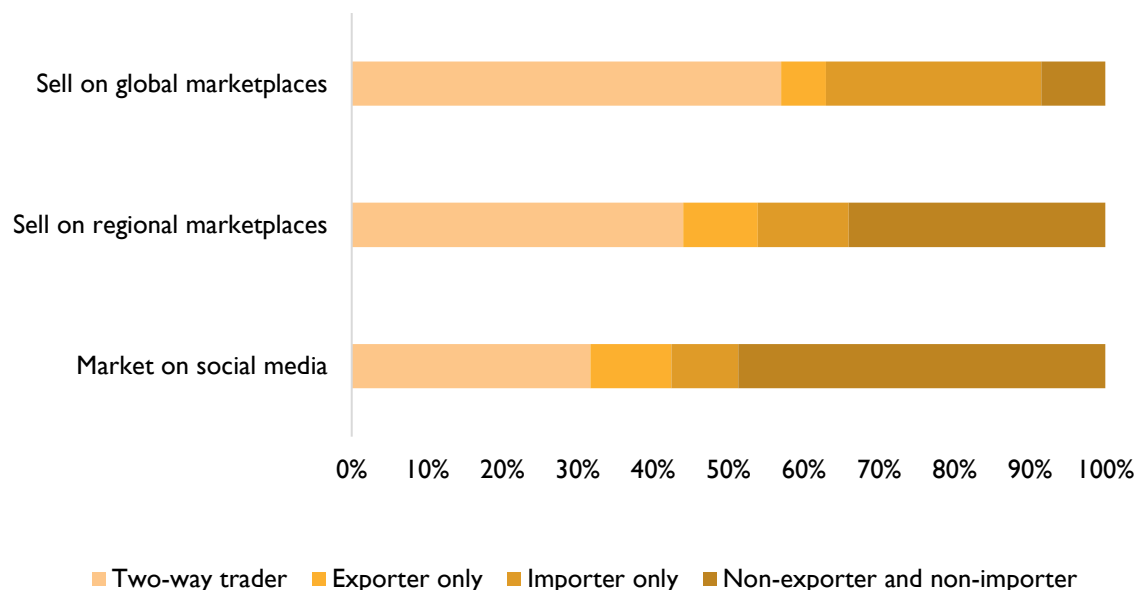
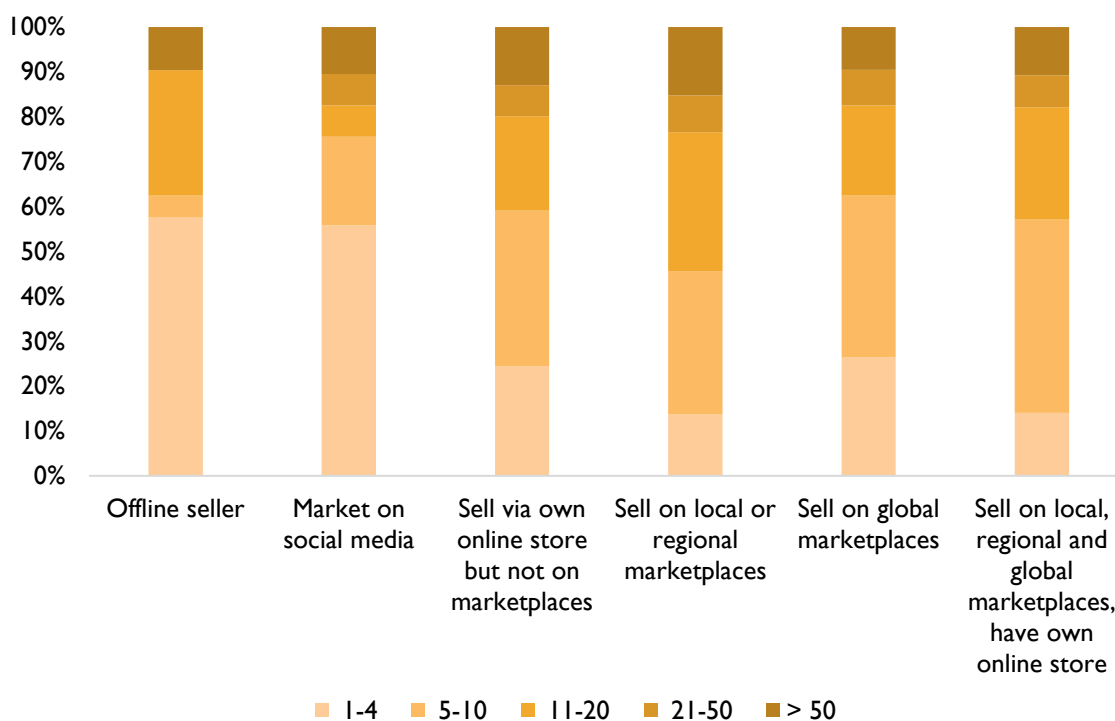


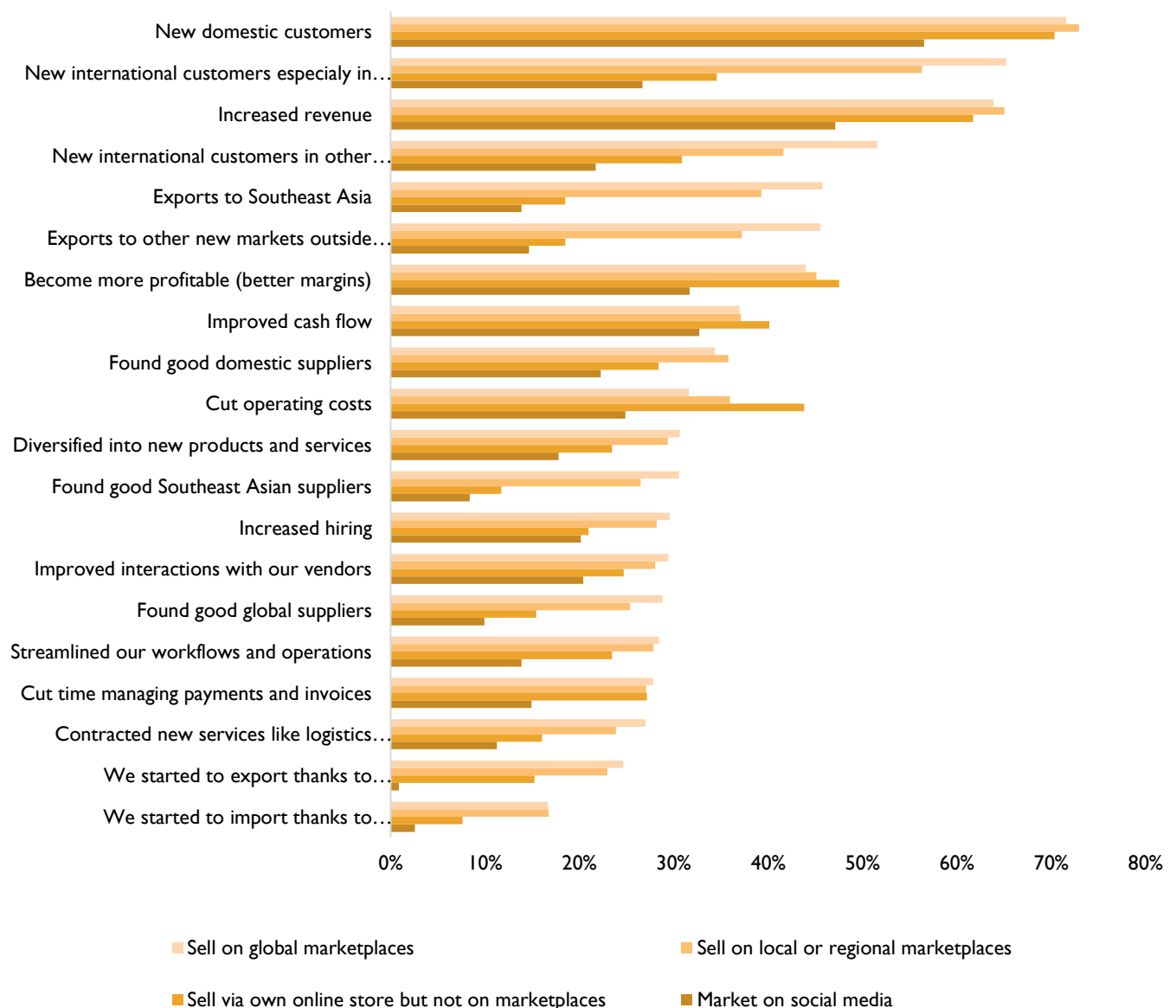
Figure 18: Number of products sold by micro and small firms, by online sales and export participation



3. FIRMS THAT SELL ONLINE AND ON MARKETPLACES REPORT A RANGE OF GAINS FROM ECOMMERCE

Marketplace sellers and sellers with their own online stores also report strong gains from ecommerce in terms of new clients, revenues, and export opportunities (figure 19). Social sellers are significantly less likely to have achieved these gains. However, they too report having acquired new customers, improved customer experience, and expanded sales to existing customers as a result of using online channels. Marketplace sellers also appear to create backward linkages to suppliers in their economies and benefit their communities. About a fifth of marketplace sellers have contracted new services in their domestic markets and a third have increased hiring as a result of selling online.

Figure 19: Benefits from the use of ecommerce as reported by surveyed firms, by firm size and ecommerce maturity, percentages



4. ASEAN ONLINE SELLER-EXPORTERS MOVE DATA ACROSS BORDERS—AND BENEFIT CONSIDERABLY FROM DATA IN TERMS OF CUSTOMER SERVICE, OPERATIONAL EFFICIENCIES, AND INSIGHT INTO EMPLOYEES

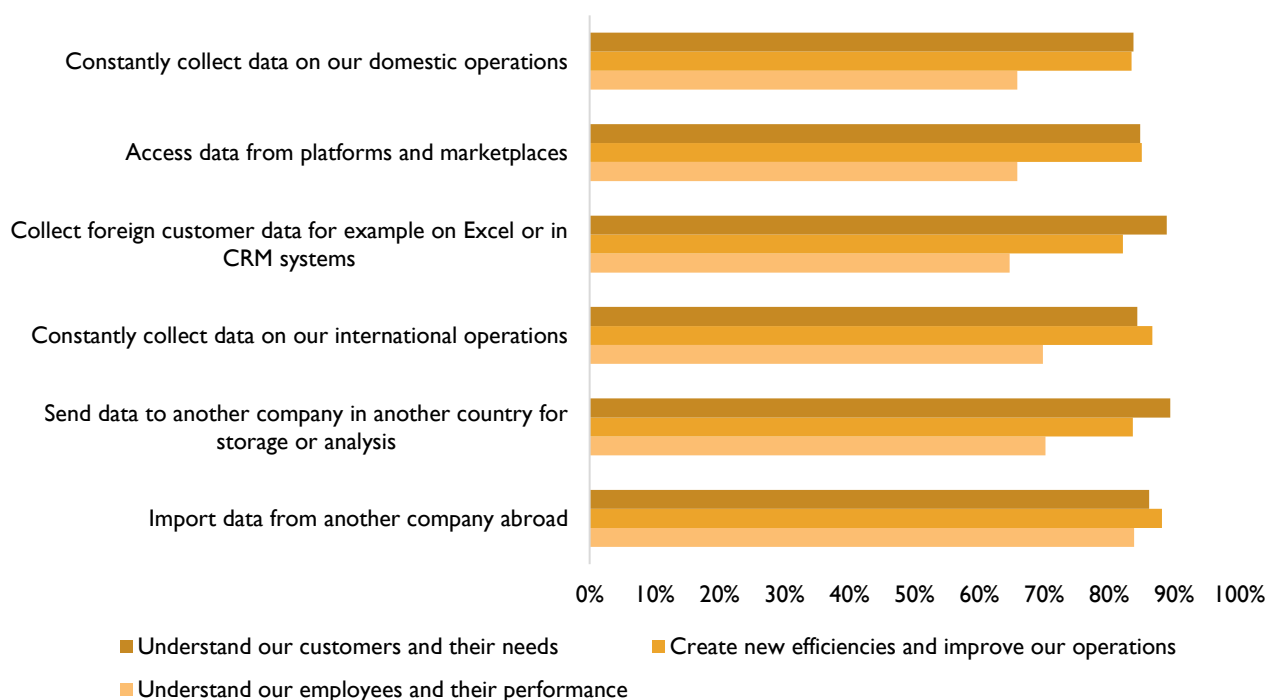
Access to data is an essential success driver for ASEAN online sellers. The region's online sellers are particularly far along in the process of collecting, storing, using, and analyzing customer, platform, and business data. Over half of exporters continually collect data on individual customers, almost half use data on their foreign customers, and more than a quarter send data abroad for storage or analysis (figure 20). More than a third collect data on their international operations, and a third use data from business customers. Firms also use machine-to-machine data, such as from sensors and IoT. This data often crosses borders, as firms extract data on their foreign customers and send data for storage and processing on cloud services located in other countries.

Firms that collect data in these various ways report overwhelming gains from this in terms of understanding their customers and their needs. As a consequence, they are able to create new efficiencies and understand more about their employees' performance (figure 21).

Figure 20: How surveyed firms use data across borders, percentages

	Marketplace seller- exporter - services	Marketplace seller- exporter - goods	Exporter - services	Exporter - goods	Non- exporter - services	Non- exporter - goods
Constantly collect data on our own domestic operations	55%	55%	54%	52%	54%	49%
Access data from platforms and marketplaces	51%	57%	43%	52%	39%	47%
Collect foreign customer data for example on Excel or in CRM systems	51%	49%	44%	44%	34%	38%
Constantly collect data on our international operations	39%	43%	34%	38%	31%	37%
Send data to another company abroad for storage or analysis	32%	24%	27%	22%	16%	18%
Import data from another company abroad	24%	16%	20%	13%	13%	14%
We do none of this	7%	6%	13%	10%	20%	16%

Figure 21: What surveyed firms gain from data, by data collection method, percentages



5. THE BEST-PERFORMING ONLINE SELLERS TYPICALLY USE PORTFOLIOS OF DIGITAL SERVICES AND TOOLS AND HAVE HUMAN CAPITAL TO TAKE ADVANTAGE OF THEM

ASEAN marketplace sellers are fast-growing, dynamic firms. One potential key behind their success is their use of data and technologies across their operations. Indeed, marketplace sellers have not only digitized their sales and marketing—they have digitized their entire enterprises, which makes them better contenders in the fiercely competitive online marketplace.

When asked about the use of various technologies in their businesses, marketplace sellers responded that they use complementary technologies such as online banking and digital payments, enterprise resource planning (ERP) systems, and other software and online tools for marketing, accounting, supply chain and inventory management, and human resources (figure 22, table 6). Meanwhile, offline sellers are much less likely to use technologies than online sellers. Their favored online tools are payment and banking services, online job platforms to identify talent, and digital accounting tools, but they are much less likely to use digital tools for procurement, inventory management, fulfillment, and enterprise planning.

Figure 22: How firms use digital technologies at different levels of ecommerce maturity, percentages

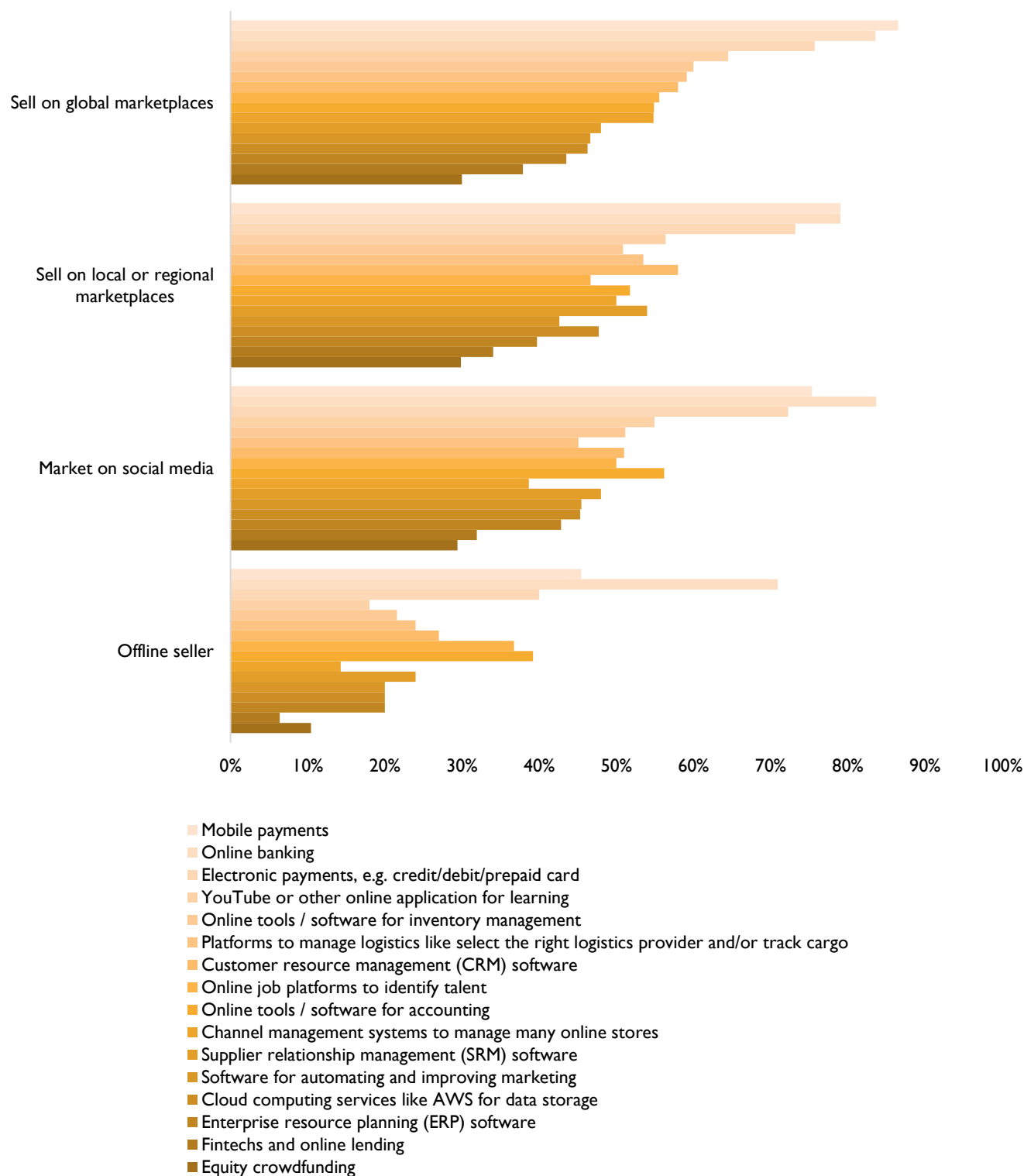


Table 6: Complementarities in the surveyed firms' use of digital technologies

	Customer resource management (CRM) software	Supplier relationship management (SRM) software	Online banking	Mobile payments	Electronic payments	Fintechs and online lending	Equity crowdfunding	Online tools/ software for inventory management	Enterprise resource planning (ERP) software	Online tools / software for accounting	Software for automating and improving marketing	Cloud computing for data storage	Channel management systems to manage many online stores	Platforms to manage logistics	YouTube or other online application for learning
Customer resource management (CRM) software	100%														
Supplier relationship management (SRM) software	64%	100%													
Online banking	17%	21%	100%												
Mobile payments	14%	17%	32%	100%											
Electronic payments, e.g. credit/debit/prepaid card	32%	31%	24%	29%	100%										
Fintechs and online lending	33%	41%	18%	21%	23%	100%									
Equity crowdfunding	36%	39%	11%	11%	23%	50%	100%								
Online tools/ software for inventory management	40%	43%	15%	13%	25%	38%	44%	100%							
Enterprise resource planning (ERP) software	46%	53%	14%	14%	29%	51%	58%	51%	100%						
Online tools / software for accounting	38%	38%	28%	25%	35%	40%	38%	47%	50%	100%					
Software for automating and improving marketing	45%	50%	19%	23%	31%	51%	52%	50%	63%	46%	100%				
Cloud computing services for data storage	42%	38%	18%	21%	34%	41%	45%	39%	53%	49%	53%	100%			
Channel management systems to manage many online stores	44%	45%	14%	21%	27%	35%	46%	43%	53%	43%	56%	46%	100%		
Platforms to manage logistics	44%	52%	21%	22%	30%	44%	44%	48%	52%	46%	54%	46%	53%	100%	
YouTube or other online application for learning	27%	29%	18%	25%	31%	30%	28%	26%	30%	35%	37%	35%	35%	37%	100%
Online job platforms to identify talent	34%	42%	13%	16%	30%	38%	47%	37%	49%	43%	52%	43%	45%	55%	44%

Firms that sell to consumers and large businesses are particularly digitized, controlling for firm size and marketplace use; the majority of large firms are already using software for automating and improving marketing, cloud computing services for data storage, channel management systems to manage many online stores, and platforms to manage logistics by selecting the right logistics provider and/or tracking cargo (figure 23). However, wholesalers and firms that sell to small businesses are not trailing far behind; they too leverage online tools and services for their operations, which perhaps attests to the region's vibrant digital ecosystem and availability of digital tools, and the fact that the regional consumer is increasingly accustomed to making online transactions, thanks to ride-hailing, social media, and superapps.

Figure 23: How surveyed firms use digital technologies, by firms' customer base, percentages



MSME segments are of course not static—many firms start out as offline sellers or social sellers and “graduate” from one to the next on their digital journey. Looking at the data this way suggests that the gateways into the digital economy for ASEAN firms include social media, digital payments, and online banking. They then set out to use online accounting tools and software to automate and streamline their operations. Firms that end up using technologies across their operations outperform their peers in terms of revenue growth and ecommerce sales (figure 24 and 25). Firms in the AEN region actively pursue digital transformation to reap these gains. Both marketplace sellers and social sellers highlight digitizing sales, marketing, finance, and accounting as being among the top needs for their businesses (figure 26).

Figure 24: Growth in firms' level of digitization in 2019 and 2020, percentages

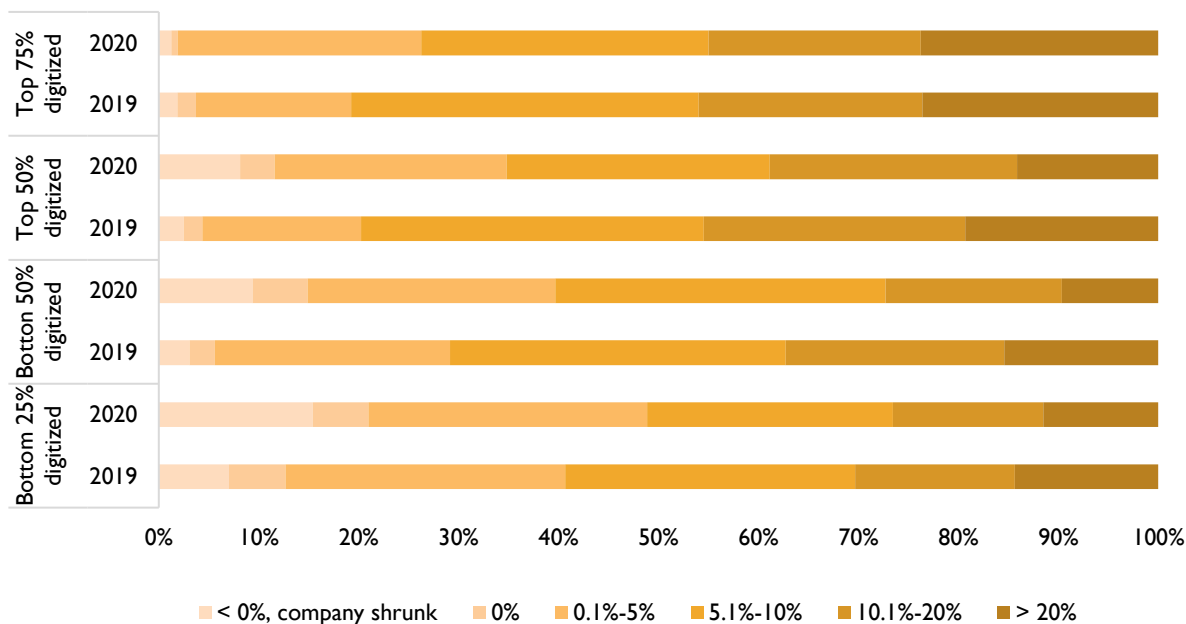


Figure 25: Surveyed firms' online sales as a percentage of all sales in 2018–19 and 2020–21, by firms' level of digitization

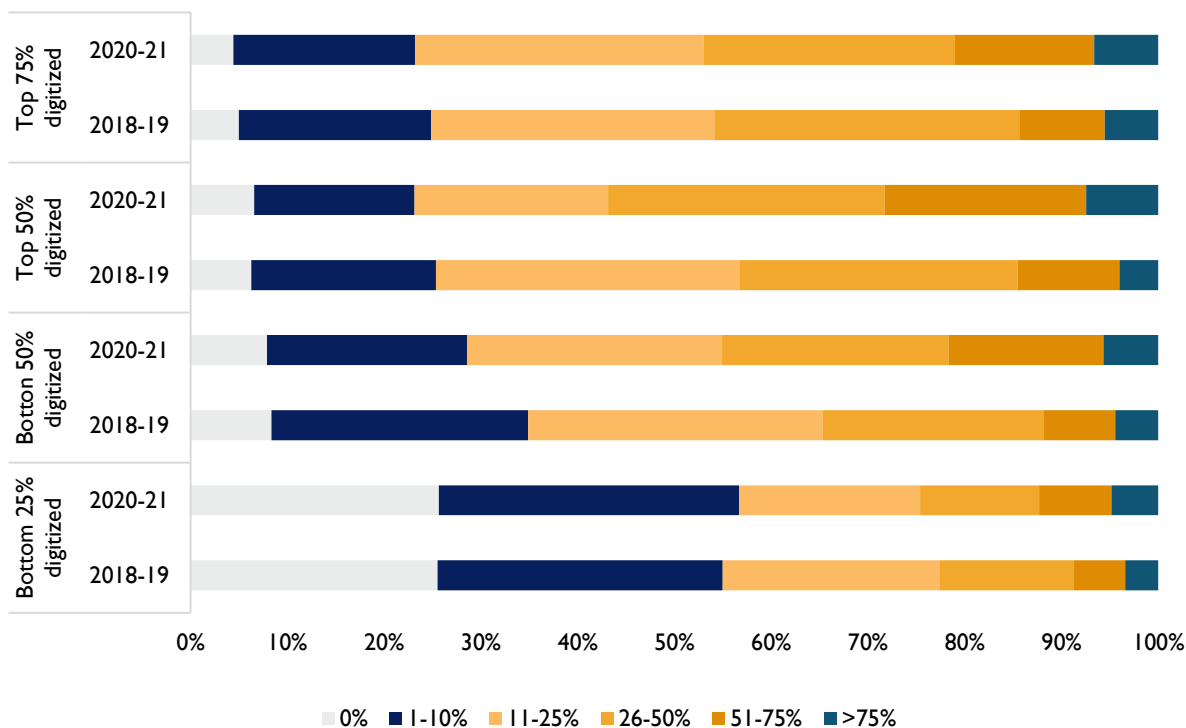
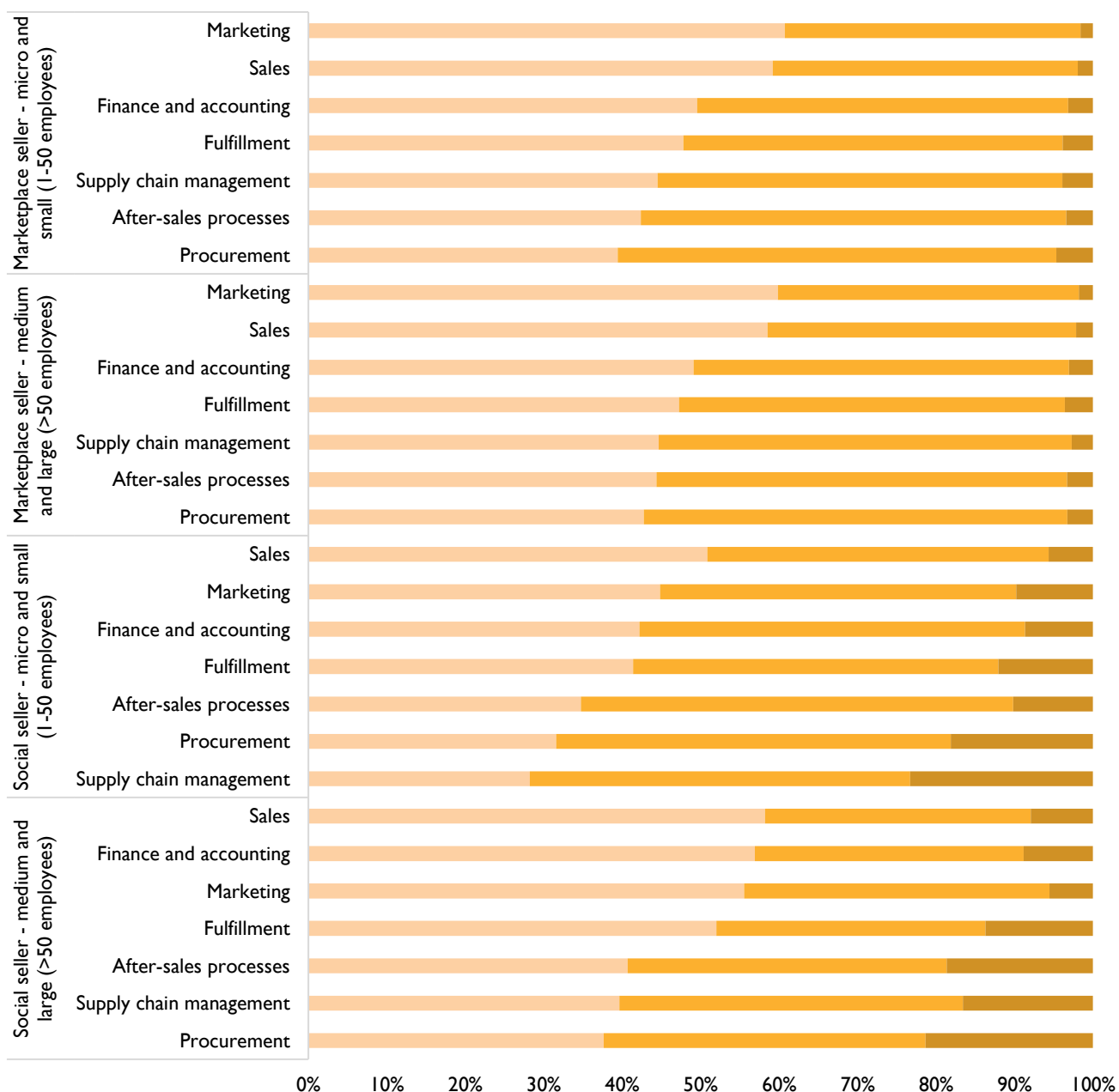


Figure 26: Firms' views on the need for digital transformation across business functions



6. ECOMMERCE AND TECHNOLOGIES APPEAR TO BE BRIDGING GENDER DISPARITIES IN THE REGION

Ecommerce may be paving the way for an era of female entrepreneurship in ASEAN. Women-led firms are a minority of the total in ASEAN: they are typically less prevalent among formal, technology-intensive firms and more prevalent in the region's informal sectors. However, when comparing women-led firms to *comparable* men-led firms (ones of the same size, in similar locations, and with similar levels of human capital), several eTrade Alliance and Nextrade surveys show that women-led firms use online channels in a highly similar manner and have similar ecommerce intensities, export participation rates, and annual growth rates to comparable men-led firms. This is also the case in ASEAN: micro and small urban women-led firms have similar marketplace use, export participation, and ecommerce intensities as their men-led counterparts (figure 27).

Women-led firms also use a range of technologies as intensely and often more intensely than comparable men-led firms (figure 28). This suggests that women-led firms are eager to test and use technologies to advance their businesses—and perhaps that ecommerce and digitization can be a great equalizer between men- and women-led firms. However, women-led firms are still in the minority among all firms and are a particularly small minority among technology-intensive, formal firms. This means that public policy needs to support women-led firms to get started and access the technologies and financing to build their businesses and accelerate their digital journeys.

Figure 27: Online channel use and performance of firms led by female and male CEOs

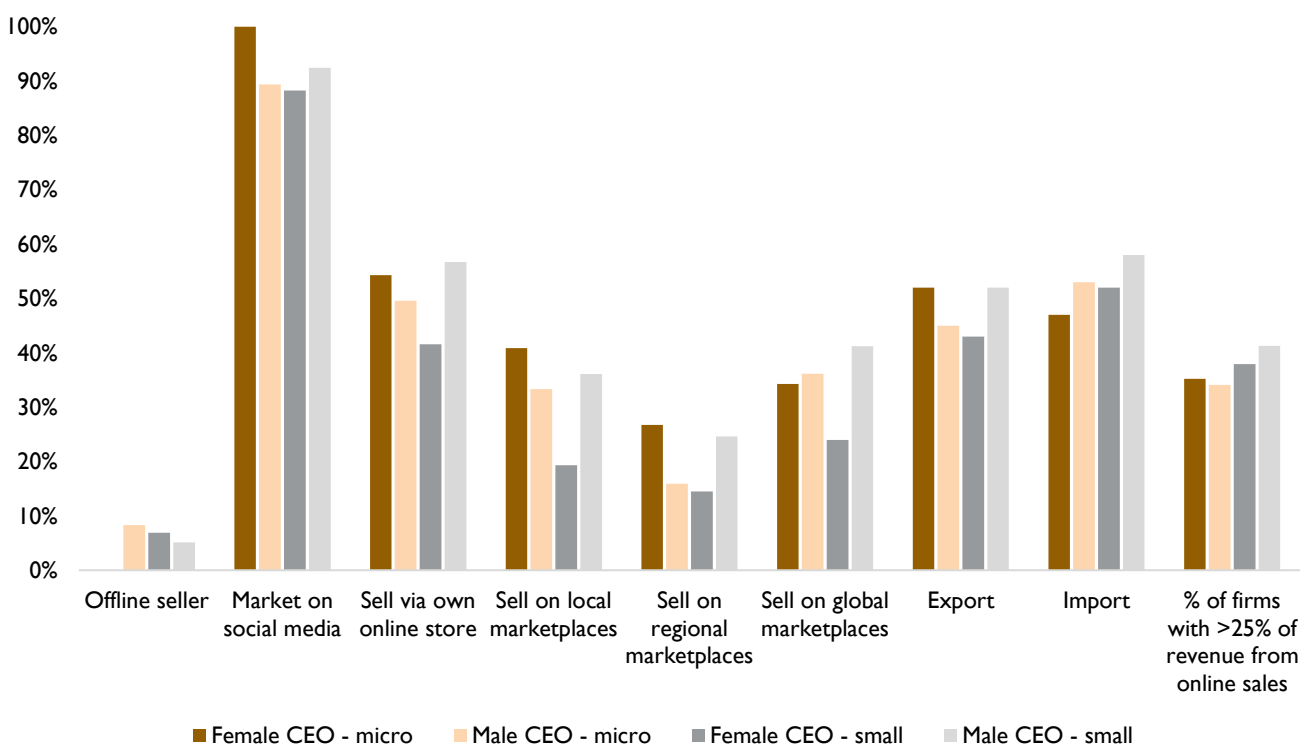
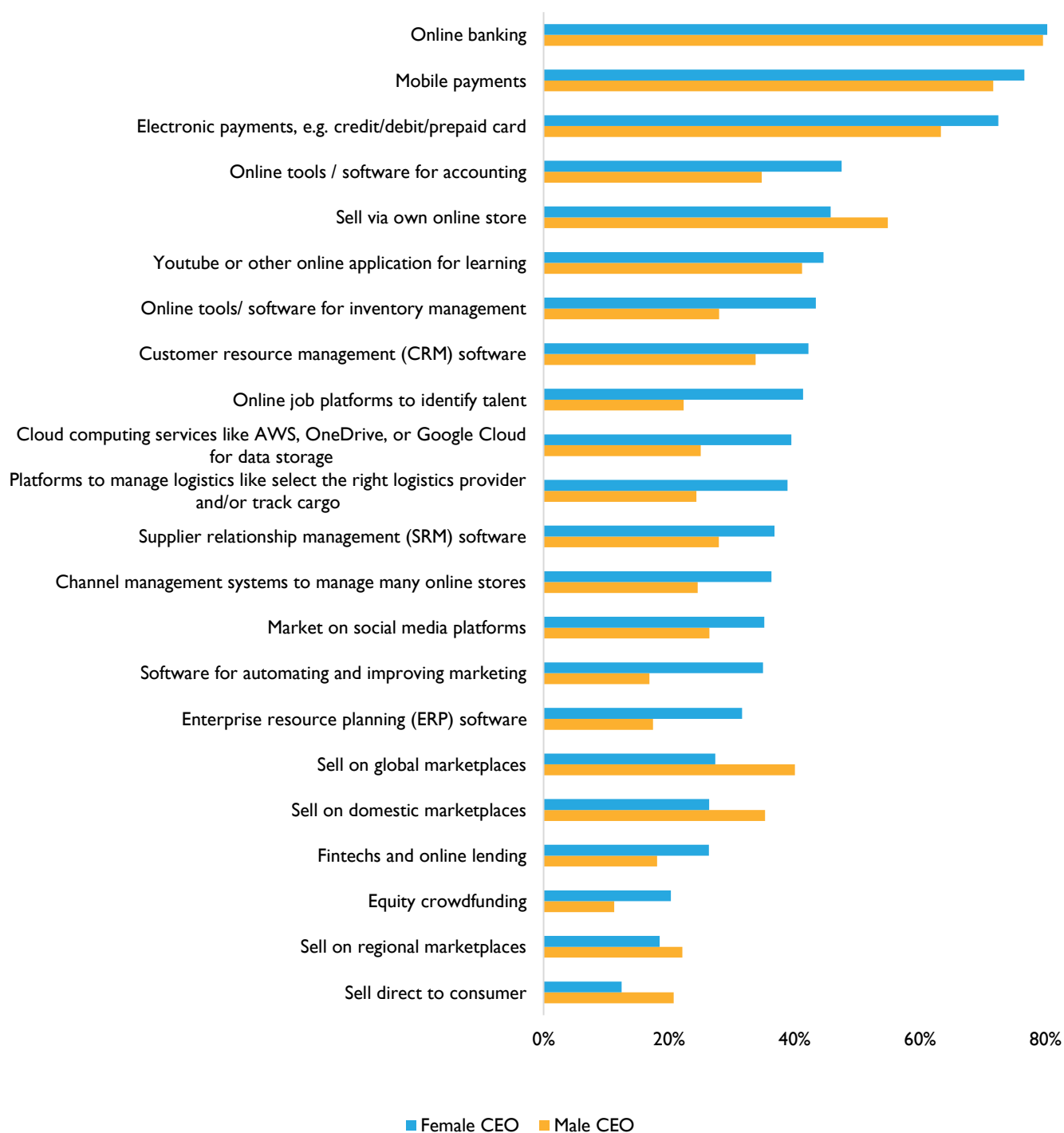


Figure 28: Use of digital technologies in micro and small firms led by female and male CEOs



III. STATE OF REGIONAL AND NATIONAL POLICIES THAT ARE CONDUCTIVE TO MSME ECOMMERCE IN ASEAN

ASEAN economies have focused on ecommerce development for a long time. The 2017–25 ASEAN Work Program on Ecommerce includes mandates for the ASEAN sectoral bodies, for example on digital infrastructure, consumer protection, secured transactions, and logistics (table 7). The ASEAN Economic Community Blueprint 2025, Masterplan on ASEAN Connectivity 2025, and the Digital Integration Framework Action Plan (DIFAP) support specific aspects of cross-border ecommerce, such as electronic payments, trade facilitation, and convergence of national commerce-related regulations (table 3). These build on a visionary set of documents such as the 2015 AEC Blueprint, which established a roadmap for policy and legal reforms to enable ecommerce in the region and to implement the e-ASEAN Framework Agreement of November 2000.¹³

Table 7: Main digital economy and trade initiatives in ASEAN

Initiative	Purposes and goals
ASEAN Economic Community Blueprint 2025	<p>The AEC Blueprint 2025 contains five aspirations:</p> <ul style="list-style-type: none"> highly integrated and cohesive economy to facilitate seamless movement of goods, services, investment, capital, and skilled labor competitive, innovative, and dynamic ASEAN to increase the region's competitiveness and productivity enhanced connectivity and sectoral cooperation to enhance economic connectivity involving various sectors, especially transportation, telecommunication, and energy resilient, inclusive, people-oriented, and people-centered ASEAN, including to strengthen the role of MSMEs and close the development gap "Global ASEAN," to integrate ASEAN into the global economy through FTAs and comprehensive economic partnership agreements
ASEAN Work Program on Electronic Commerce 2017–2025	<p>The Work Program is divided into different segments in parallel with the strategic measures under the AEC Blueprint 2025. It promotes:</p> <ul style="list-style-type: none"> region-wide broadband infrastructure and accessibility capacity-building in technology and education to enable successful ecommerce businesses updated consumer protection principles with ecommerce considerations, consumer protection awareness training, and online dispute mechanisms modernization and harmonization of the ecommerce regulatory framework, improvement of security of electronic transactions, strengthening of anticompetition measures in ecommerce improvement of regional logistics services for ecommerce
2019 ASEAN Agreement on Electronic Commerce	<p>The agreement aims to facilitate cross-border ecommerce transactions in the ASEAN region by:</p> <ul style="list-style-type: none"> creating an environment of trust and confidence in the use of ecommerce deepening cooperation among Member States to develop and intensify the use of ecommerce to drive inclusive growth and reduce development gaps in the region enabling a legal and regulatory environment that is conducive to ecommerce development, a competitive business environment, and protection of public interest cooperation in areas such as ICT infrastructure, education, and technology competency, online consumer protection, legal and regulatory frameworks, electronic transaction security, including the protection of online personal information, electronic payments and settlement, trade facilitation, IP rights, competition, cybersecurity, and ecommerce logistics
Masterplan on ASEAN Connectivity 2025	<p>The Masterplan on ASEAN Connectivity 2025 focuses on five key areas:</p> <ul style="list-style-type: none"> building sustainable infrastructure promoting digital innovation within MSMEs through the adoption of digital technology and improving open data use and digital data management promoting seamless logistics by enhancing the speed and reliability of supply chains promoting regulatory excellence by harmonizing trade standards and regulations promoting people's mobility in the region by supporting ease of travel throughout ASEAN, reducing the gaps between demand and supply for vocational skills, and increasing mobility for intra-ASEAN university students
Digital Integration Framework Action Plan (DIFAP) 2019–2025	<p>The Digital Integration Framework has six priority areas:</p> <ul style="list-style-type: none"> facilitating seamless trade through reliable physical infrastructure and favorable trade policies protecting data while balancing digital trade and innovation and allowing for data flow across member states enabling seamless digital payments through interoperability frameworks and working with financial institutions to develop open API standards and develop digital ID systems broadening the digital talent base through partnerships with the private sector to roll out digital skills-building programs fostering entrepreneurship by simplifying existing hurdles for MSMEs and preventing new policies from being a burden on MSME growth coordinating actions through one designated body

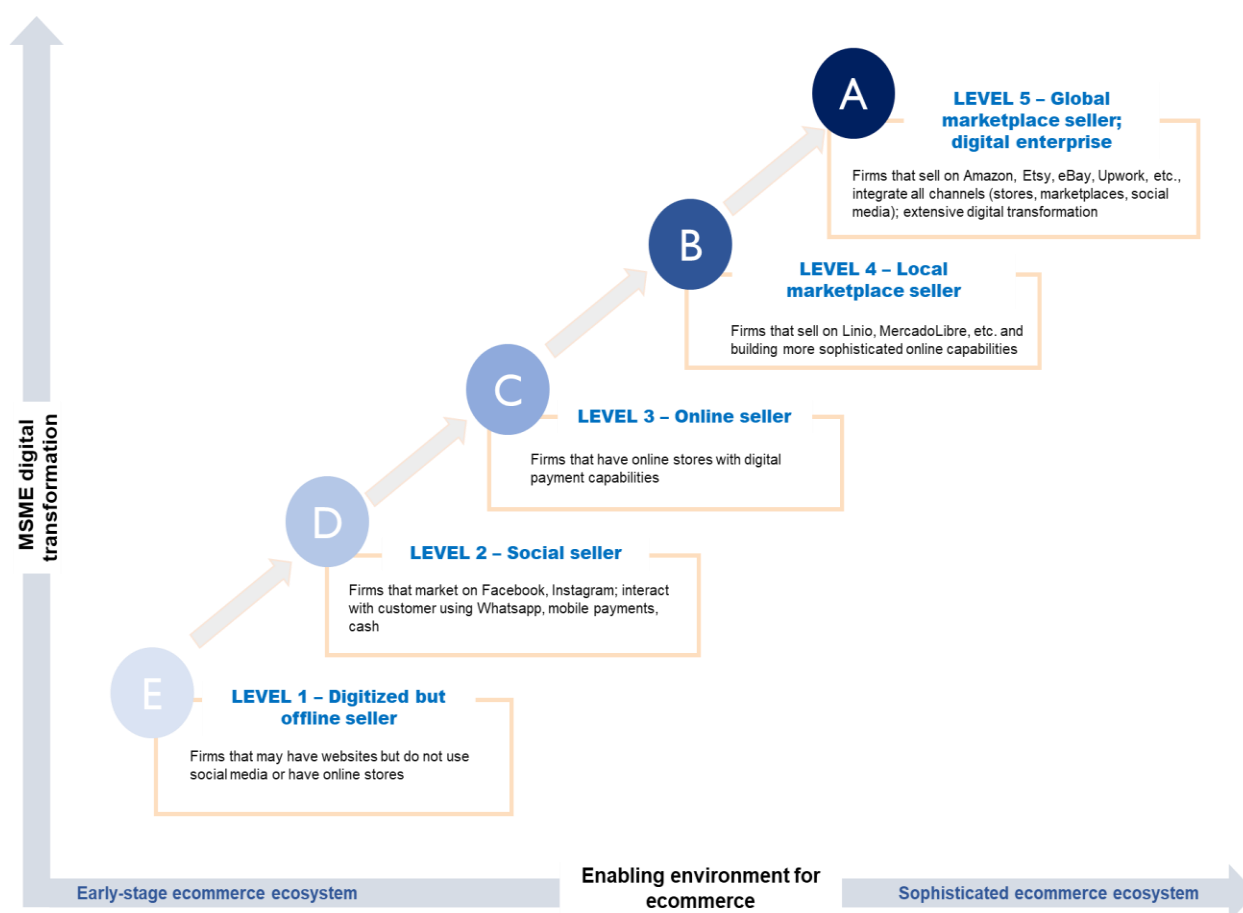
Business associations, especially the region's ecommerce associations, have also launched several programs to support MSME ecommerce (table 8).

Table 8: ASEAN region ecommerce associations' work on ecommerce development, selected initiatives

Institution	Examples of activities
Cambodia e-Business Association (CEA)	The Cambodia e-Business Association was established to mobilize, collaborate, promote, and enhance the development of ecommerce in Cambodia. The Association's Strategic Framework 2020–2023 encompasses training, research, and professional development; communication and publication of ecommerce-related issues; legal protection and advocacy; and networking through the development of an ecommerce platform and promotion and collaboration of partnerships with related sectors. ¹⁴
Indonesian Ecommerce Association (idEA)	The Indonesian Ecommerce Association teamed up with the Ministry of Communications and Information Technology to provide online classes for 2,500 SMEs, with classes covering a variety of digital skills including digital branding, soft skill development, and business financing. The classes aimed to enhance digital inclusion among Indonesian small businesses and also target SMEs outside of the main urban hubs, including in remote areas and tourist locations. ¹⁵
Digital Commerce Association of the Philippines (Dcom)	The Digital Commerce Association of the Philippines teaches merchants how to engage in ecommerce, such as through an ecommerce and fintech bootcamp, partners with the government in shaping sound policies to enable digital commerce, and seeks to establish standards and best practices to attract trade and investment to the digital commerce industry of the Philippines. ¹⁶
eBusiness Malaysia	The eBusiness Association Malaysia aims to assist businesses in Malaysia with adopting ecommerce as a means to grow their business by providing free consultations, help with market research for exporting, an eTrust certification, assistance on how to apply for a Malaysia External Trade Development Corporation (MATRADE) subsidy, opportunities for organized overseas trips, and workshops and events such as free webinars on how to grow business internationally. ¹⁷
Malaysia Digital Chamber of Commerce (MDCC)	The Malaysia Digital Chamber of Commerce focuses on providing business networking opportunities and training to leverage the benefits of technology for business. MDCC hosts events and free webinars on topics such as digital marketing, how to take great product photos, exporting through global marketplaces, and workshops on marketing and raising capital. ¹⁸
Thai Ecommerce Association	The Thai Ecommerce Association has joined with the Office of Small and Medium Enterprises Promotion (OSMEP) and other leading organizations for the SME Online project. This project involves capacity-building and training for SMEs in areas such as marketing, logistics, payments, with the overall goal of encouraging entrepreneurs to increase their online marketing channels, increase competitiveness, and generate more business. ¹⁹
Vietnam Ecommerce Association (VECOM)	VECOM hosts the Retail University project in partnership with Google, Visa, and local partners, to promote and enable SMEs in ecommerce. The 2020 activities attracted nearly 1,400 trainees from businesses nationwide and over 700 participating firms. Following the program, retailers offered positive feedback, saying that their orders surged by over 57 percent and their consumer bases increased by 60 percent. ²⁰

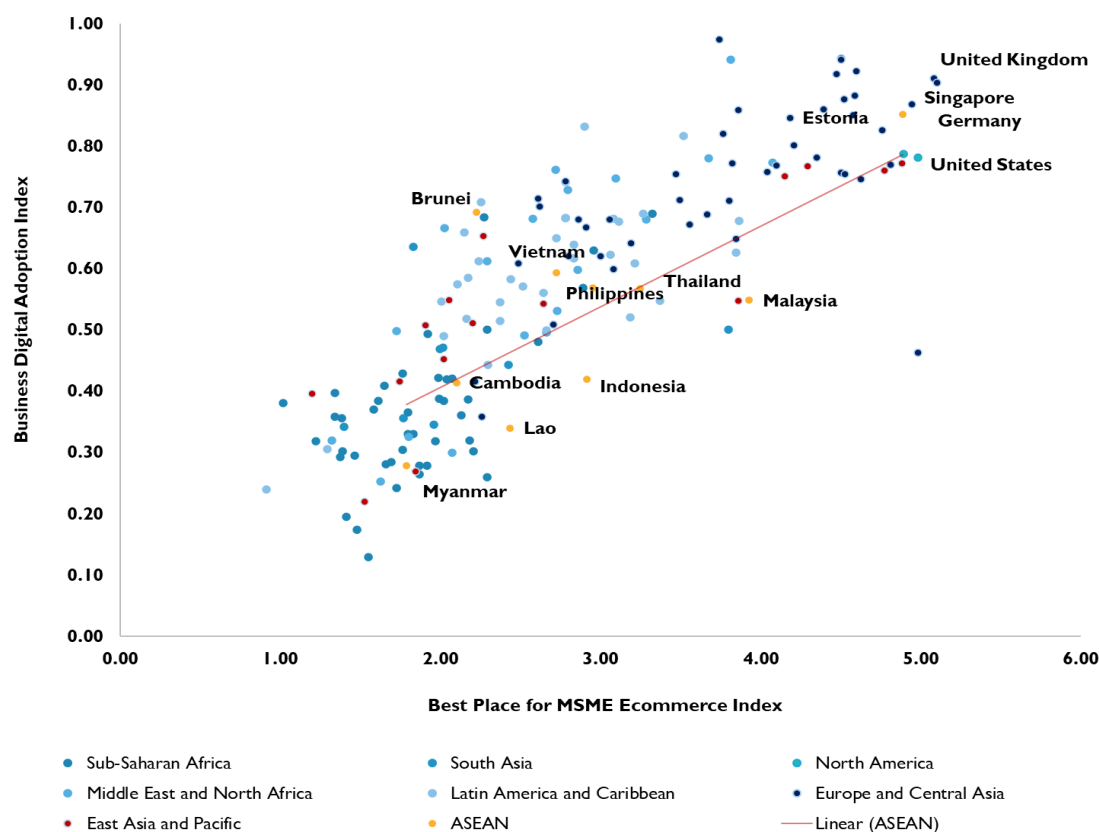
The various ASEAN economies too have made progress in adopting and implementing domestic policies conducive to ecommerce. Conceptually, there are two main drivers for success in ecommerce development. The first is firms' digital transformation and evolution into global online sellers—that is, the journey shown in figure 30, moving from being type D firms to type A. The second driver for success is a policy environment that is conducive to firms' use of ecommerce. Overall, ASEAN economies vary widely along these axes. The region's least developed countries (LDCs) lag considerably behind the more advanced markets on both axes (figure 31; see appendix II for variables in our Best Place for MSME Ecommerce Index).

Figure 30: Online sellers' journeys and their drivers



Source: Nexttrade Group.

Figure 3 I: Firms’ digital transformation and enabling environments for MSME Ecommerce, selected economies



Source: Digital Adoption Index: World Bank; Best Place Index: author’s composite index based on various sources listed in annex II.

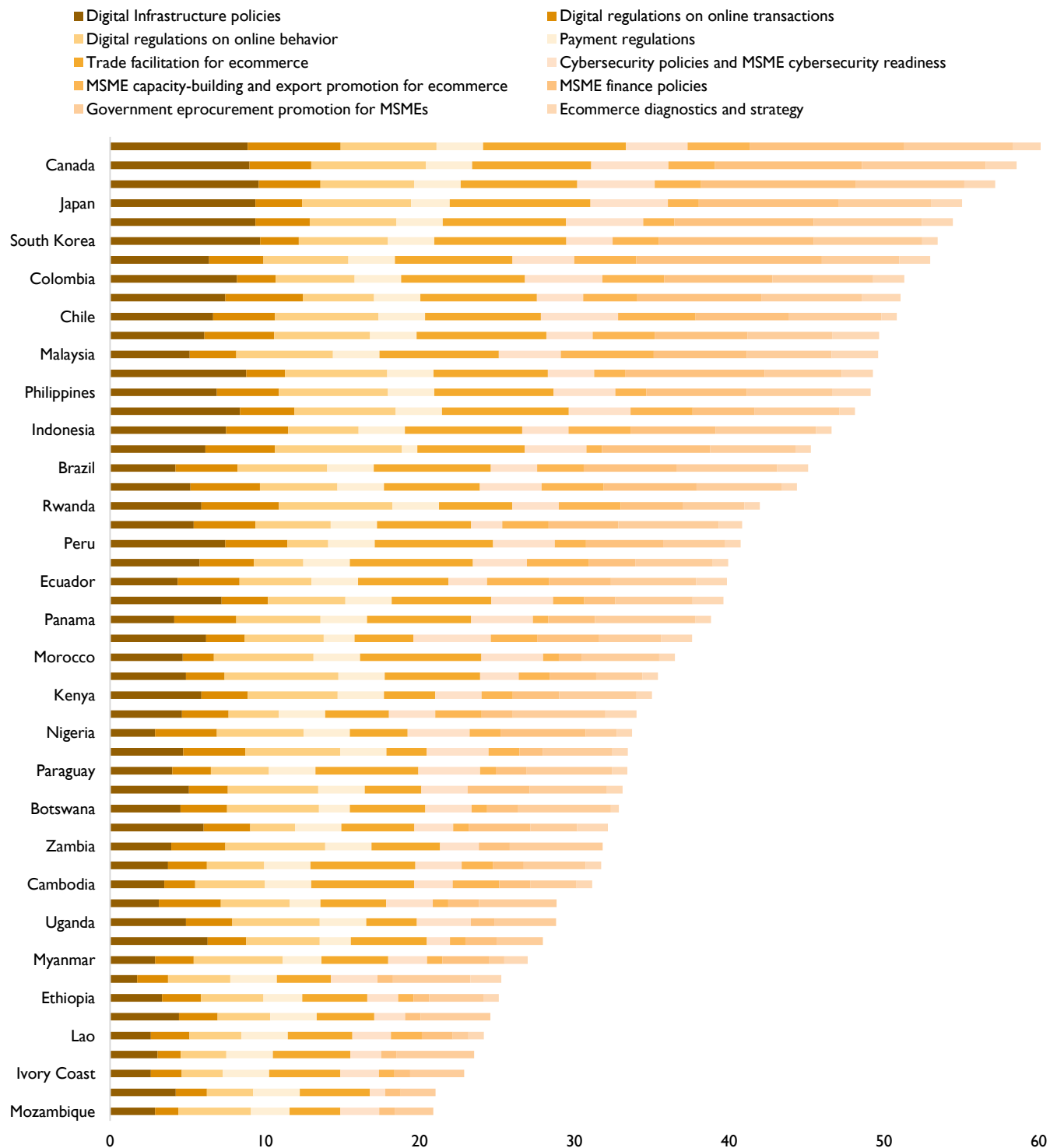
One of the reasons for the differences in performance among ASEAN nations is the uneven adoption of policies conducive to ecommerce. Our comparative mapping of the adoption of over 100 policies in 10 major policy domains reveals that some ASEAN economies such as Singapore, Malaysia, and Thailand have adopted a great many policies that are conducive to MSME ecommerce, whereas Lao, Myanmar, and Cambodia still lag other ASEAN nations for example on digital infrastructure policies, digital policies, and payment policies (figures 32–34; see appendix III for variables).²¹

Figure 32: Policy areas covered, with examples of subcomponents mapped



Source: Suominen, Vambell, and Furtak (2021).

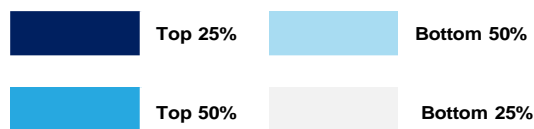
Figure 33: Digital Policy and MSME Ecommerce Index 2020–21 (maximum: 75)



Source: Suominen, Vambell, and Furtek (2021).

Figure 34: Digital Policy and MSME Ecommerce Index 2020–21, by world region

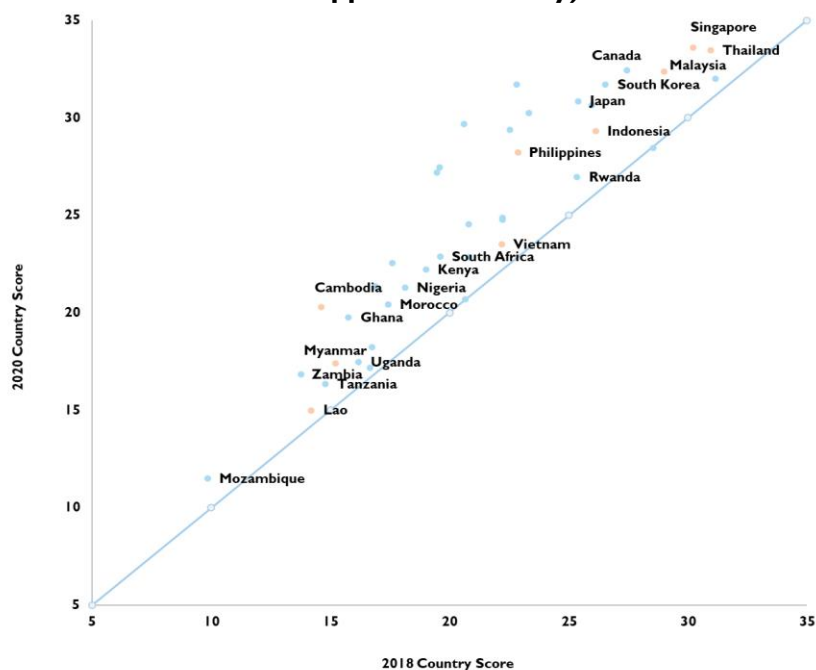
	ASEAN	ASEAN LDCs	Advanced	South Asia	Latin America	MENA	Sub-Saharan Africa
Digital Infrastructure							
Digital regulations on online behavior							
Digital regulations on online transactions							
Payment regulations							
Cybersecurity readiness							
Ecommerce logistics and trade facilitation							
SME capacity-building and e-export promotion							
SME finance							
Government eprocurement promotion for SMEs							
Ecommerce diagnostics and strategy							
Overall							



Source: Suominen, Vambell, and Furtek (2021).

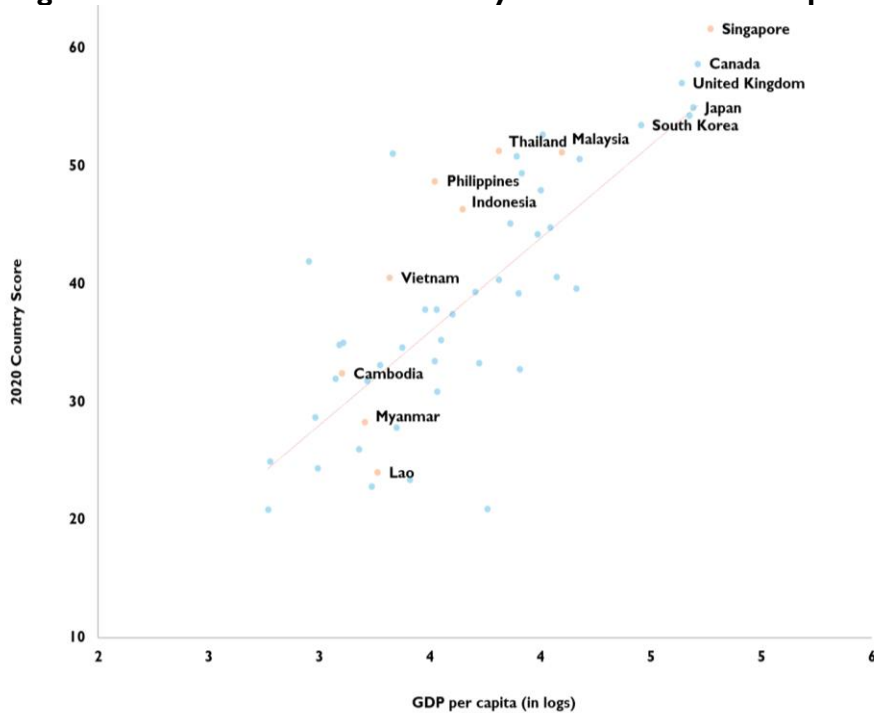
Granted, Cambodia, Indonesia, and the Philippines have particularly made progress since the first eTrade Alliance mapping in 2018, mainly by adopting good policies and practices that are conducive to MSME ecommerce (figure 35). And except for Lao and Myanmar, ASEAN economies do better than their counterparts at the same level of development when it comes to adopting policies that are conducive to MSME ecommerce (figure 36). Some examples of good policies and practices in the region include the use of technologies to facilitate trade compliance and logistics; e-payment laws that are calibrated to different types of providers; and SME e-export capacity-building and finance (table 9).

Figure 35: MSME Ecommerce Policy Index 2018 and 2020 (countries and policy areas mapped in 2018 only)



Sources: for 2018, Suominen (2019); for 2020, Suominen, Vambell, and Furtek (2021).

Figure 36: MSME Ecommerce Policy Index 2020 and GDP per capita



Source: Suominen, Vambell, and Furtek (2021).

Table 9: Selected emerging good practices in ASEAN countries' policies to facilitate and promote MSME ecommerce

Policy domain	Initiative	Description
Trade facilitation and logistics	Singapore Networked Trade Platform; Thai National Trade Platform	"Single windows+" that enable interoperability across the trade ecosystem and trade-related B2B, B2G, and G2B transactions and services. These single windows are primed to particularly benefit SMEs that engage in trade.
	Vietnam	Pilot with Japan, with plans to expand to all ASEAN member states, to use blockchain and AI to manage and integrate trade transaction information. ²²
	Singpost Smart Post	Drives ecommerce logistics across Southeast Asia, including via Last-Mile Platform (LaMP), a networked, distributed delivery system that brings together couriers, parcel lockers, and some 660 brick-and-mortar collection points across Southeast Asia onto a single platform, helping retailers offer their customers delivery services practically anywhere in the region. ²³
Digital payments	Singapore's Payment Services Act of 2020	Brings new coherence to the country's regulatory requirements for various payment services, regulating seven types of licensable payment services: account issuance services, domestic money transfer services, cross-border money transfer services, merchant acquisition services, e-money issuance services, digital payment token services, and money-changing services. The requirements are commensurate to the risks posed by the scope and scale of services provided by the licensee.
MSME finance	Malaysia: SME Automation and Digitization Facility (ADF)	Loan guarantee scheme operated by the Credit Guarantee Corporation Malaysia and SJPP SME to encourage SMEs across sectors to automate processes and digitize operations to increase productivity and efficiency; offering an 80% guarantee on loans of up to \$725,000.
	Cambodia: Co-Financing Scheme for SMEs	The Ministry of Economy and Finance launched and implemented the Co-Financing Scheme for Small and Medium-Sized Enterprises, along with 33 participating financial institutions. SMEs can borrow up to \$200,000 for working capital and up to \$300,000 for investment capital at maximum 7% interest. ²⁴
MSME capacity-building	eTRADE program by Malaysia External Trade Development Corporation	Promotes exporter MSMEs' use of 20 different international and national online marketplaces. Successful applicants can receive advisory services, training, online assistance, and financing, including RM5,000 (about \$1,300) to cover listing and marketing fees, photography fees, translation fees, fulfillment fees, and costs to ship products to Amazon or other overseas warehouses.
MSME Cybersecurity	Singapore	The Cyber Security Agency of Singapore (CSA), Infocomm Media Development Agency (IMDA), and Enterprise Singapore (ESG) offer MSMEs funding of up to 70 percent of the cost of pre-approved cybersecurity products and services including subscription, license, and installation fees. ²⁵
E-procurement	Singapore InnoLeap Program	Singapore has simplified the procurement process for SMEs through its InnoLeap Program. InnoLeap provides a platform for governments to share problems with companies, then companies get opportunities to showcase their ideas and solutions directly to the government agencies, and finally, agencies and companies are connected through one-to-one consultations when there is a good match between problem and solution. ²⁶

IV. PENDING CHALLENGES FOR ASEAN MSMEs' TO GROW CROSS-BORDER ECOMMERCE SALES

ASEAN economies have latent potential in MSME ecommerce. Firms' use of online stores and marketplaces is still limited in the region, and most firms use traditional methods such as social media, messaging apps, and cash-based transactions with their customers. Governments can consider growing both the intensive and extensive margins—the volume of online exports and the number of online exporters and the products and services they sell. What are the main frictions standing in the way of this?

The main challenges for sellers of all sizes relate to access to finance, logistics, and internet connectivity (figure 37). The top challenges are similar across the regional economies and for marketplace sellers and social sellers (figure 38). When asked about their main impediments to engaging in ecommerce, mature online sellers that engage in trade find customs procedures, market access issues, and international delivery costs especially challenging. These firms also struggle to attract talent. Social sellers also report challenges with customs procedures in inbound trade, as well as with cybersecurity, cross-border payments, and funding their digital transformation.

When asked “What has stopped you from making online sales?”, firms report high delivery costs and currency exchange fees that bite into sellers' margins and can defeat the purpose of the sale, and challenges with payment acceptance and online buyers' trust (figure 39). These challenges point to a clear agenda for regional policy makers—to remove barriers that would immediately unlock new export sales.

Figure 37: Percentage of surveyed ASEAN firms citing areas in the enabling environment for ecommerce as “a huge challenge” or “one of the main challenges” for growing their ecommerce business, by online channel used

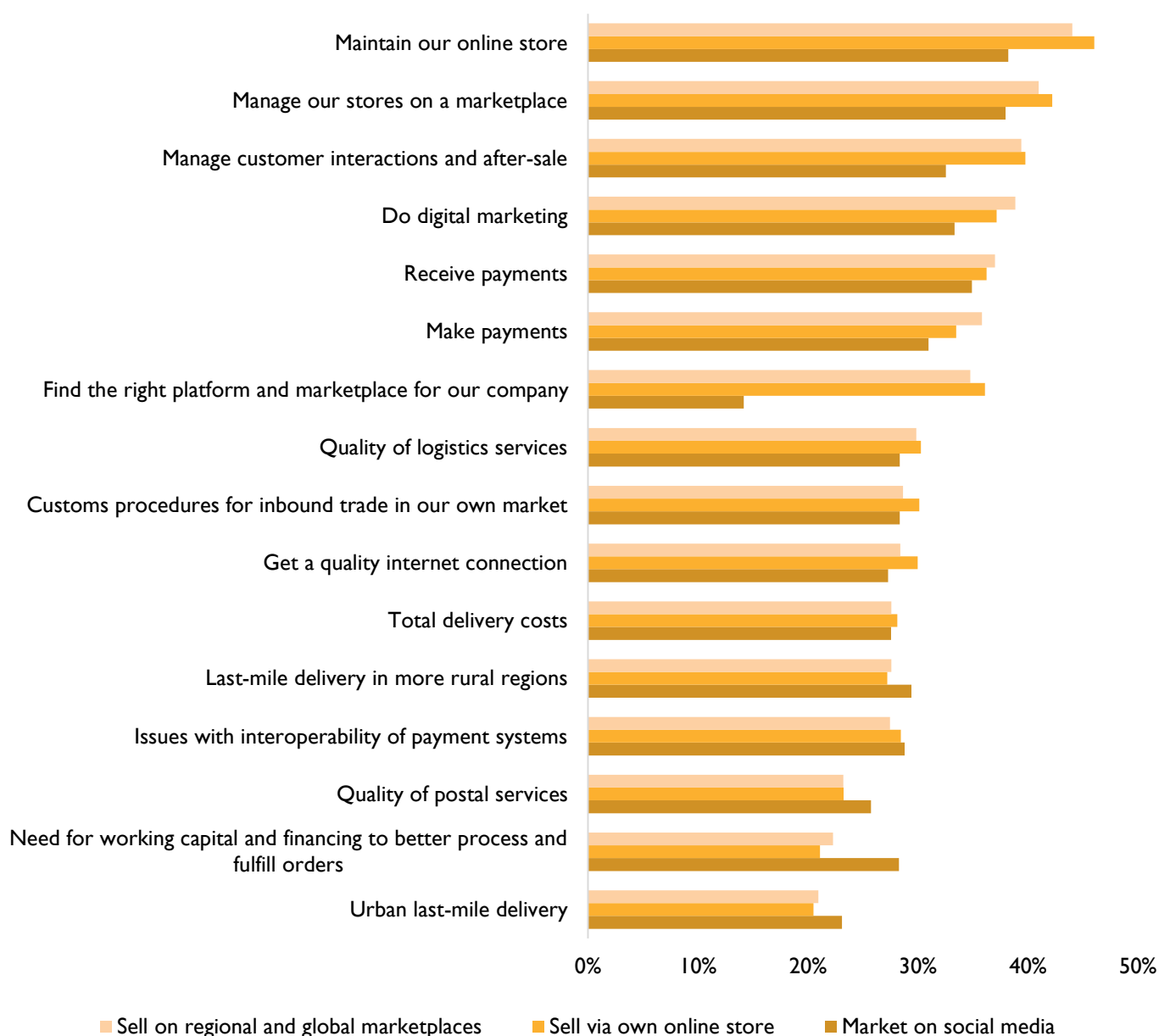
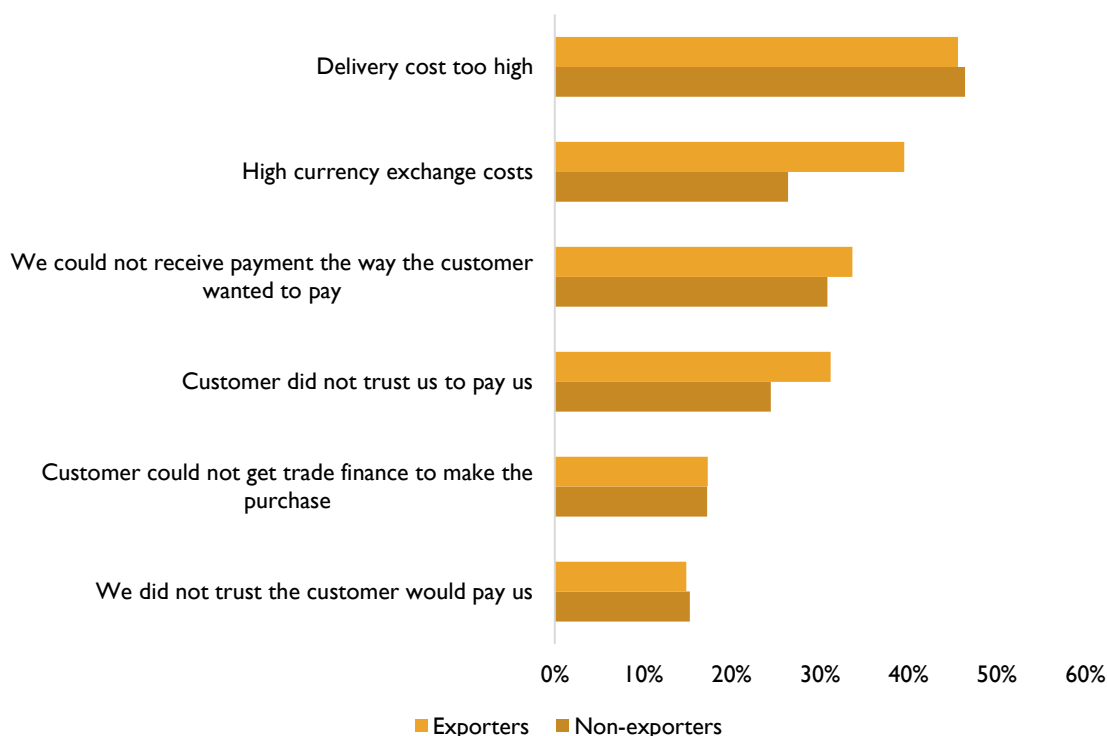


Figure 38: Ranking of surveyed ASEAN firms' top business and operational challenges to ecommerce, by online channel used

	Marketplace sellers					Sellers with own online store					Social sellers				
	Regional	Indonesia	Philippines	Thailand	Vietnam	Regional	Indonesia	Philippines	Thailand	Vietnam	Regional	Indonesia	Philippines	Thailand	Vietnam
Maintain our online store	1	1	11	3	1	1	1	9	3	1	1	1	1	3	1
Manage our stores on a marketplace	2	2	7	2	6	2	2	3	5	2	2	2	5	1	3
Manage customer interactions and after-sale	3	7	4	4	3	4	6	1	8	2	5	6	10	3	3
Do digital marketing	4	3	3	5	7	3	3	12	3	2	4	6	3	5	5
Receive payments	5	4	4	6	4	5	4	4	10	9	3	3	2	8	5
Make payments	6	6	1	7	5	7	8	2	11	9	6	8	7	8	9
Find the right platform and marketplace for our company	7	5	16	1	2	15	4	16	2	9	16	4	16	2	1
Quality of logistics services	8	8	15	8	8	9	9	4	5	13	9	9	12	6	16
Get a quality internet connection	9	10	12	12	8	9	7	15	11	6	13	10	13	6	14
Last-mile delivery in more rural regions	10	9	12	10	12	12	12	8	11	16	7	5	11	10	12
Issues with interoperability of payment systems	11	14	8	8	8	11	16	9	8	8	8	11	5	12	9
Total delivery costs	11	11	2	13	13	8	10	12	5	2	12	11	4	15	5
Customs procedures for inbound trade in our own market	11	12	10	11	11	5	10	9	1	6	9	16	7	10	8
Quality of postal services	14	16	8	14	15	14	13	4	15	14	14	11	13	14	9
Need for working capital and financing to fulfill orders	14	15	6	15	16	12	14	4	14	14	11	11	9	12	12
Urban last-mile delivery	16	12	12	16	14	15	14	12	16	12	15	11	13	15	15

Figure 39: Main obstacles to ecommerce (percentage of surveyed for ASEAN exporters and nonexporters that answered affirmatively when asked “Which of these has at some point stopped you from making a sale online?”)



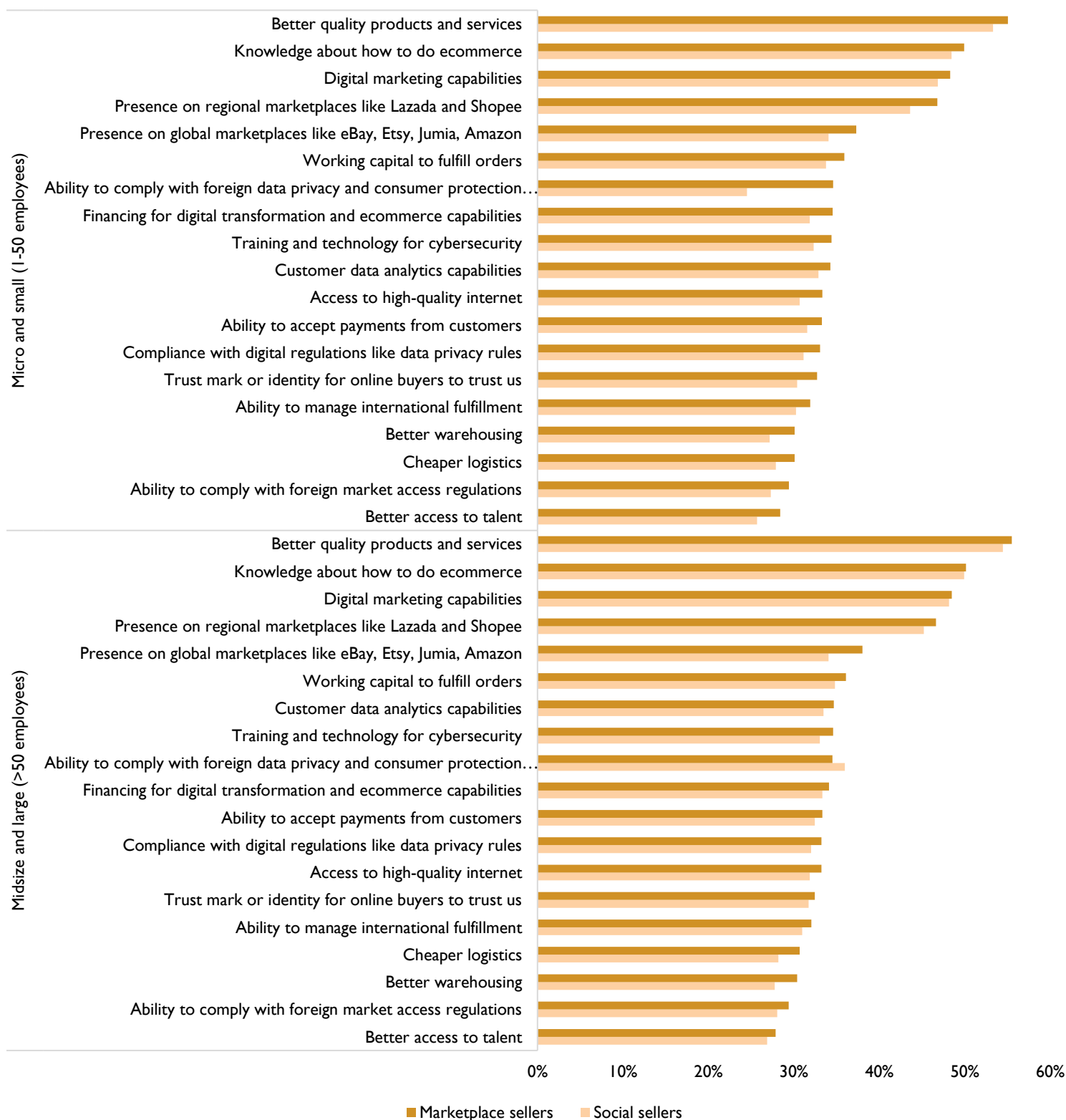
ASEAN region firms also worry about digital regulations when seeking to engage in cross-border ecommerce. Over 40 percent of social sellers in Indonesia, the Philippines, and Thailand highlight compliance with national consumer protection rules, and over 40 percent of Philippines, Thai, and Vietnamese social sellers see data privacy rules as challenging (figure 40). Over a third of marketplace sellers and over 40 percent of social sellers struggle with the fragmented digital regulatory landscape—the diversity of national data privacy, consumer protection, and other digital regulations. The only sources of greater concern for firms when transacting online are online taxes and cybersecurity challenges.

Figure 40: ASEAN firms’ views on digital policy issues (percentage of surveyed firms that indicated that issues “caused them a great deal of concern” when selling into Southeast Asian markets)

		Indonesia	Philippines	Thailand	Vietnam
Marketplace sellers	Compliance with consumer protection rules	31%	28%	43%	40%
	Compliance with data privacy rules	35%	30%	49%	32%
	Concerns with our copyright	9%	30%	36%	36%
	Cybersecurity challenges	55%	34%	55%	41%
	Diversity and complexity of national data privacy, consumer protection, and other regulations	35%	28%	37%	37%
	Making sure the customer pays us	39%	29%	46%	28%
	Taxes on online sales	55%	26%	50%	33%
Social sellers	Compliance with consumer protection rules	43%	42%	53%	24%
	Compliance with data privacy rules	33%	42%	51%	52%
	Concerns with our copyright	48%	38%	45%	29%
	Cybersecurity challenges - When doing online business in Southeast Asia	59%	43%	59%	33%
	Diversity and complexity of national data privacy, consumer protection, and other regulations	43%	49%	39%	33%
	Making sure the customer pays us	52%	45%	29%	19%
	Taxes on online sales	63%	38%	44%	33%

When asked about their needs for new capabilities, surveyed online and offline sellers of all sizes highlighted a need for enhanced digital marketing capabilities, digital identities, or trust marks that enable consumers and vendors to trust them; better internet connections; and enhanced knowledge about doing ecommerce (figure 42). Over a third of firms expressed a need for working capital and seed and growth capital for digital transformation. These needs are similar across geographies; women- and men-led firms too face similar challenges.

Figure 42: Top-3 capabilities or assets firms claim they need to start or expand online sales, by firm size and online presence, percentages



The following sections explore the challenges to cross-border ecommerce facing ASEAN firms, namely, trade compliance and logistics, cross-border payments, human capital, regulatory compliance, and rural-urban disparities.

I. LOGISTICS COSTS, CUSTOMS PROCEDURES, AND TRADE COMPLIANCE REMAIN KEY OBSTACLES FOR ASEAN MSMEs' ECOMMERCE

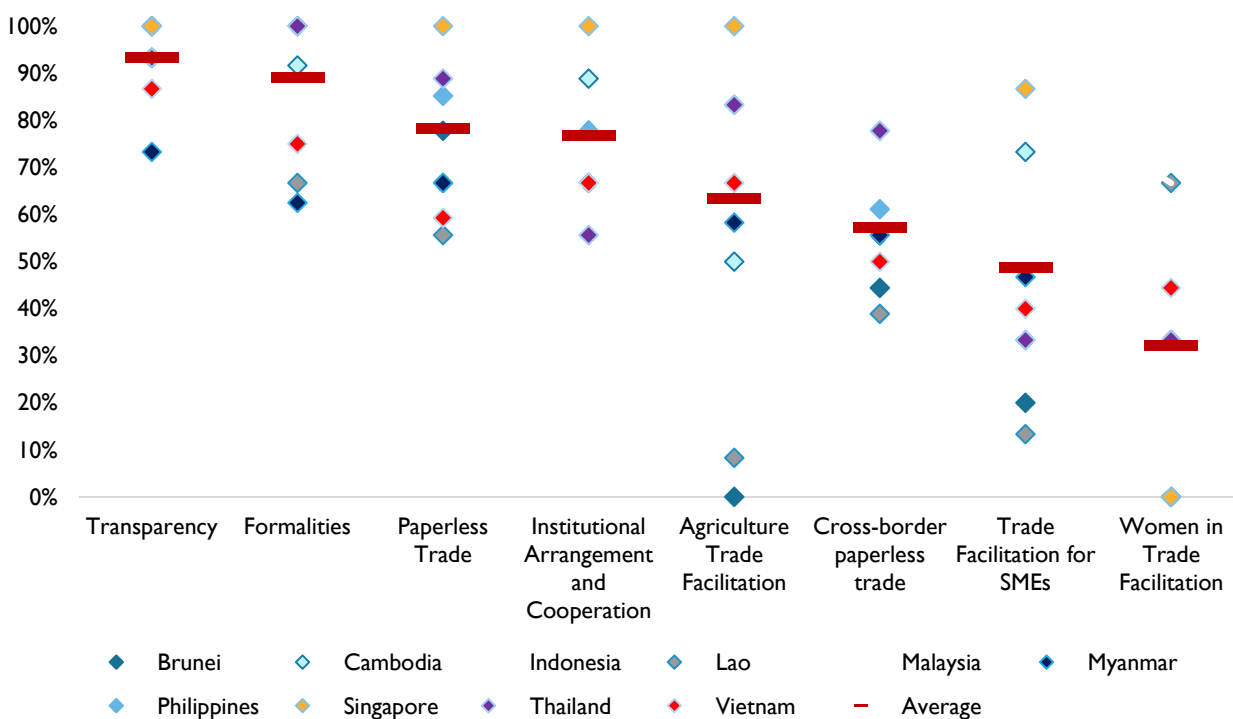
Efficient logistics and customs procedures are critical for MSMEs' participation in cross-border ecommerce. Southeast Asia's logistics sector is being transformed by significant innovation and investment, driven by the region's proliferating ride-hailing and food delivery companies and the growing last-mile parcel delivery sector, including providers such as Indonesia's J&T Express, Singapore's Ninja Van, Pickup and Easyship, Thailand's Dragon Courier, and Malaysian Pgeon, among many others. There are also emerging drone delivery and autonomous vehicle delivery companies, such as Malaysia's Aerodyne, which optimizes drone delivery with AI, and Thailand's Fling, which enables digital transformation.

Many of the region's postal services have embraced ecommerce, with Singpost emerging as the visionary leader in ecommerce warehousing and logistics. They have also made significant inroads into facilitating a last-mile delivery network in the region.

ASEAN economies perform unevenly on the United Nations 2021 trade facilitation and paperless trade survey: Singapore and Thailand do very well across most indicators, Cambodia has made progress, but Vietnam, Lao, and Myanmar are still far from the frontier economies (figure 43). Grated, the region has improved in the survey since the last measurement in 2019—this is particularly true for Cambodia and Myanmar in cross-border paperless trade; Vietnam, Philippines, and Indonesia in institutional cooperation; and the Philippines, Indonesia, and Cambodia in trade facilitation for SMEs (figure 44). Except in the region's LDCs and the Philippines, import and export times have been cut to a few days, with Thailand and Singapore being the global benchmarks (figure 45).

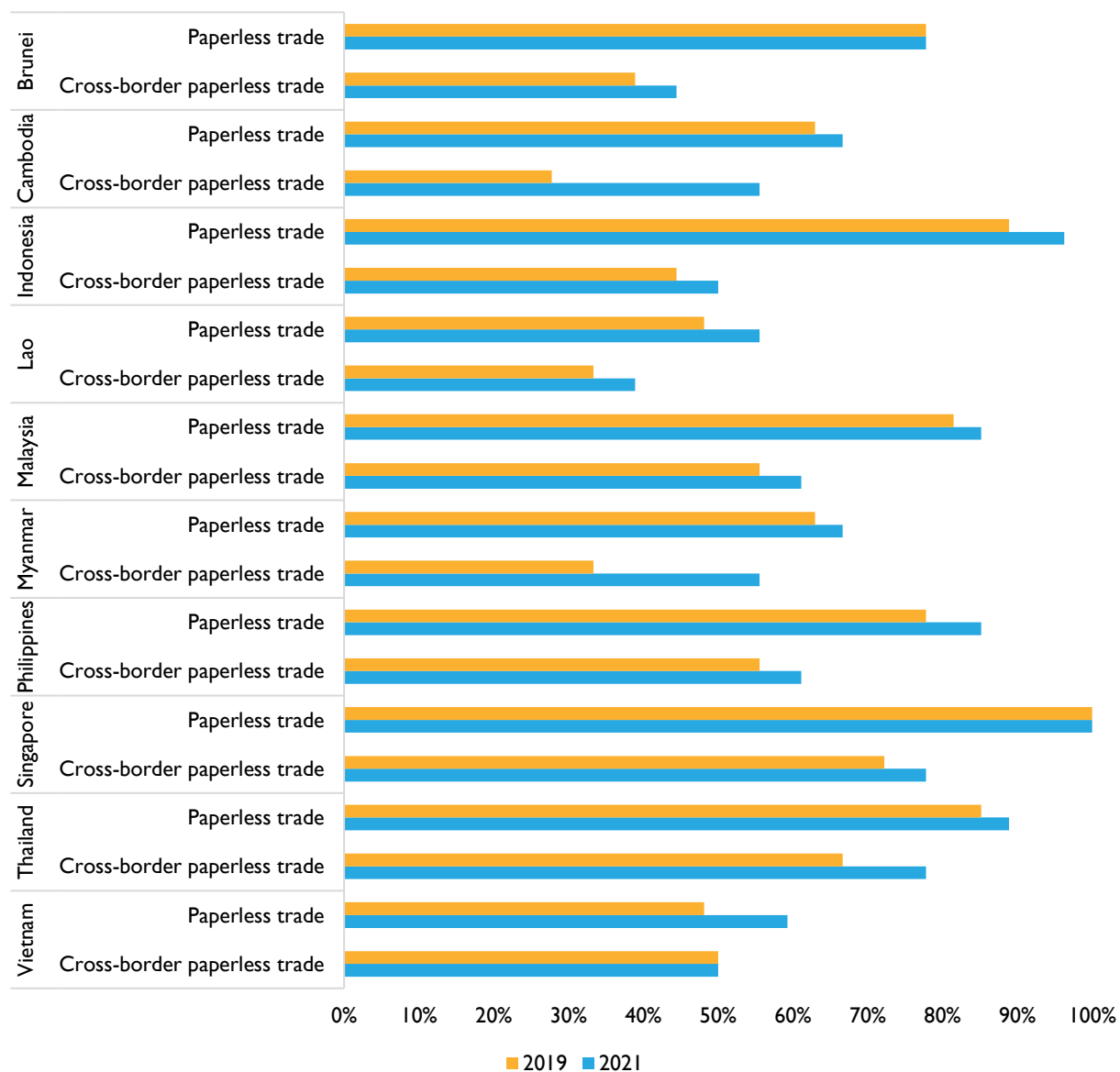
Since the start of the COVID-19 pandemic, there have been many experiments around digitizing import processes, partly because agency staff have not always been available for processing documents. For example, in November 2020, Cambodia, Lao, Malaysia, Singapore, Thailand, and Vietnam implemented the ASEAN Customs Transit Systems, a digital system that requires only one customs formality to facilitate the transportation of goods between participating countries.²⁷ In late 2020, Vietnam began a pilot with Japan of a digital platform to manage and integrate trade transaction information through the use of blockchain and AI.²⁸ This could potentially expanded to further ASEAN economies.

Figure 43: ASEAN economies' trade facilitation and paperless trade indicators, 2021



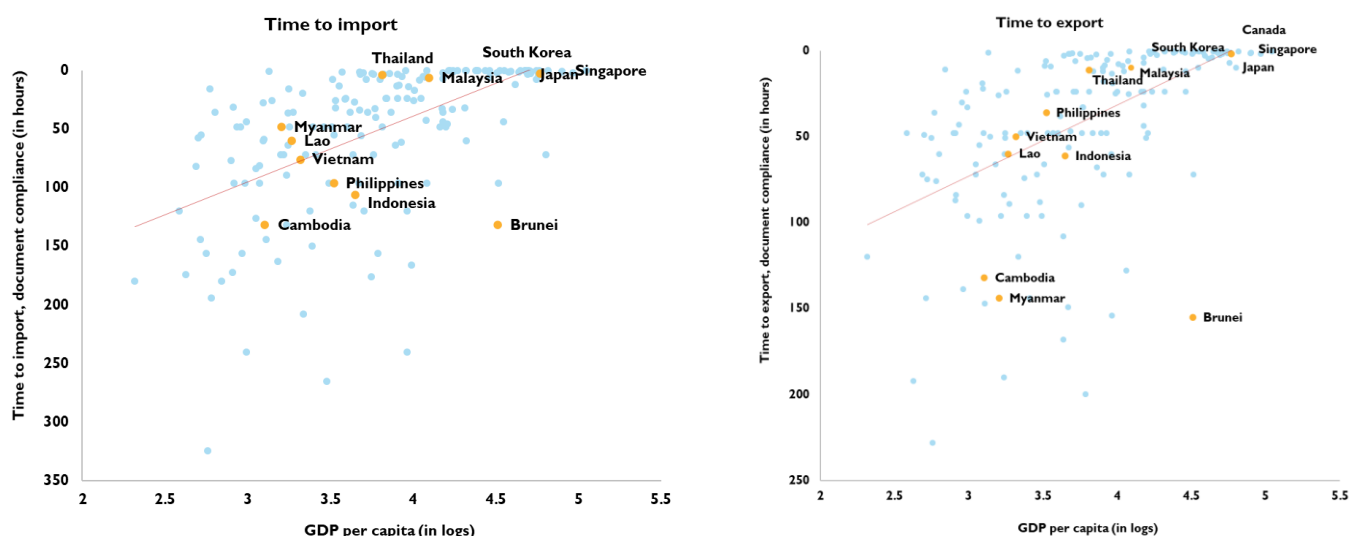
Source: UN Global Survey on Trade Facilitation and Paperless Trade Implementation.

Figure 44: Paperless trade adoption in ASEAN economies, 2019 and 2021 (max. 100%)



Source: UN Global Survey on Trade Facilitation and Paperless Trade Implementation.

Figure 45: ASEAN countries' comparative times to import and export, 2019



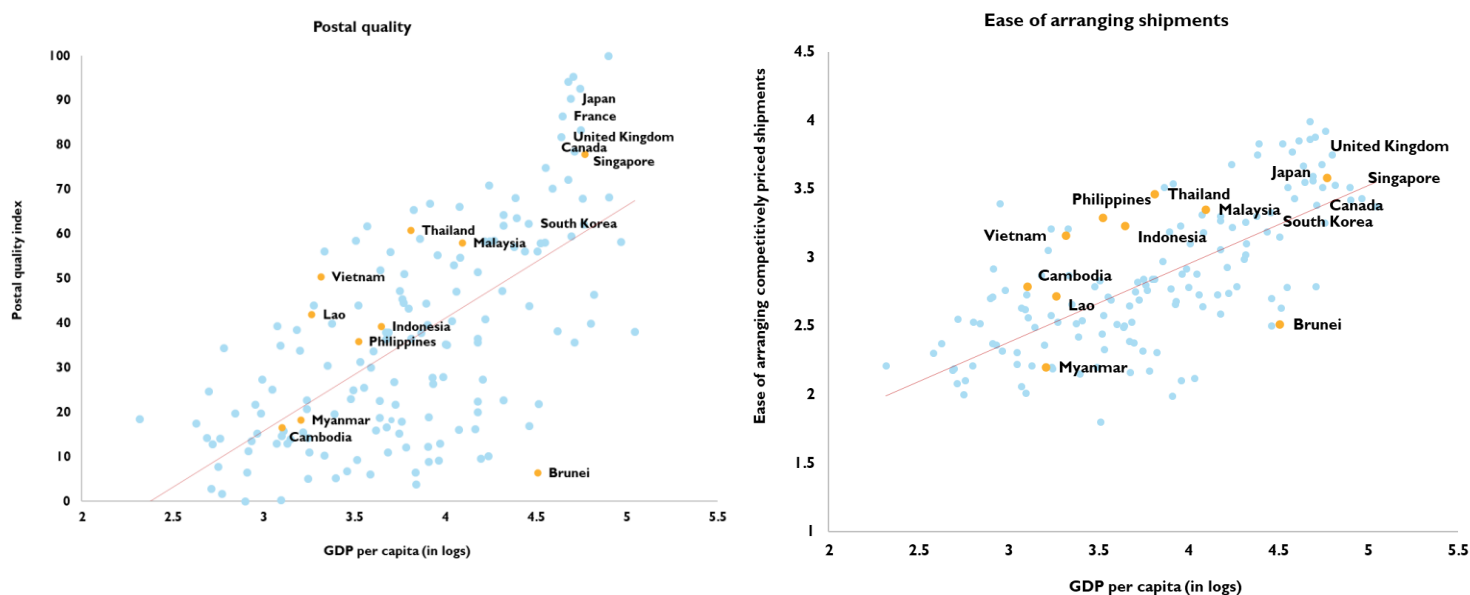
Source: World Bank Doing Business.

ASEAN economies have also progressed in launching the ASEAN Single Window (ASW) in 2005 to digitize cross-border electronic exchange of trade-related documents such as customs declarations, certificates of origin, and sanitary and phytosanitary certificates. Since December 2019, the ASW has enabled the electronic exchange of certificates of origin for granting preferential tariffs under the ASEAN Trade in Goods Agreement.²⁹ According to ESCAP, the payoffs from full digital trade facilitation set out in the ASW and the WTO Trade Facilitation Agreement could reduce ASEAN's trade costs by 10.6 percent.³⁰

In addition, in November 2020, the ASEAN Secretariat published the ASEAN Comprehensive Recovery Framework (ACRF) and its implementation plan, including the harmonization of standards for essential goods and the expansion of the ASW to further partners.³¹ Since late 2020, Cambodia, Myanmar, Singapore, Malaysia, and Thailand have also started to exchange the ASEAN Customs Declaration Document (ACDD) through the ASW.³²

However, there are challenges facing the region's ecommerce export and import processes and hinterland logistics, especially in Cambodia, Myanmar, Brunei, and, to an extent, the Philippines (figure 46). In our surveys, firms indicate that arcane customs procedures are a top-5 constraint to online sellers in all regional economies. Firms also complain about delivery costs and rural last-mile delivery challenges—challenges that often have to do with inefficient services and limited scale economies in shipping to rural areas, and perhaps also with delivery times in regions with poor addresses.

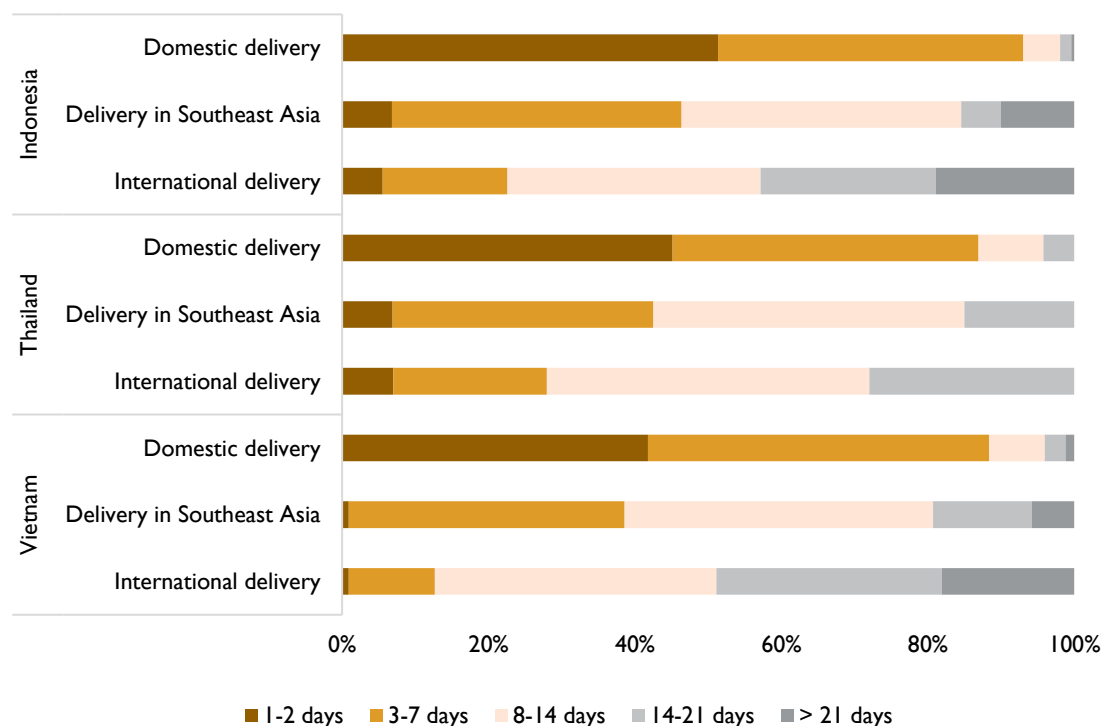
Figure 46: ASEAN countries' domestic delivery indicators: quality of postal services and ease of arranging delivery, 2019



Sources: for ease of arranging shipments, Logistics Performance Index (2018); for postal quality, UPU (2020).

International deliveries also take much longer to arrive and be shipped out than domestic deliveries—typically more than a week, or in some 40–50 percent of cases in Indonesia and Vietnam, more than two weeks. Domestic deliveries are handled within a week, often 1–2 days, indicating challenges in both the efficiency of delivery and delays at the borders. Indeed, the expansion in the volume and diversity of inbound ecommerce shipments is posing new challenges for the region's customs (figure 47). The region's LDCs lag particularly behind in the digitization and automation of border processes, as reflected in long border clearance times. These arcane border measures and high trade compliance costs arrest the growth of MSME cross-border ecommerce and impede firms' integration into the region's value chains.³³ National border requirements also still vary across the region, complicating multimarket traders and freight forwarders.

Figure 47: Surveyed firms' experiences with typical delivery times and costs in domestic and international ecommerce delivery, percentages



In addition, the region's authorized economic operator (AEO) programs have yet to be fully operationalized and made interoperable.³⁴ The payoffs from AEO programs would be significant: for example, Brazil has found that its AEOs' export and import clearance times are 65 percent and 81 percent lower than those of non-AEOs, respectively.³⁵ Brunei and Vietnam reportedly intend to implement the AEO program in 2022–24, while Cambodia, Lao, and Myanmar have yet to announce dates. This work is to be paralleled by mutual recognition arrangements (MRA) among ASEAN countries that will enable countries to recognize and accept each other's AEO programs.

2. CROSS-BORDER PAYMENTS STILL NOT INTEGRATED

The proliferation of electronic payments systems in Southeast Asia is in part due to recent regulatory reforms. As payment providers have grown and diversified, governments have worked to balance the aspirations of financial innovation and inclusion with consumer protection, anti-money laundering, and potential systemic risks posed by large, relatively unregulated payment providers. For example, in 2020, Singapore introduced a three-tiered regulation for payment companies that encourages innovation in smaller businesses and imposes appropriate oversight on larger ones (Case 7).³⁶

However, there are still frictions in the interoperability of cross-border payments. In the survey for this paper, a third of MSME exporters noted they have lost a sale because they could not receive payments the way the buyers wished to pay. Three challenges remain for payment interoperability: First, even if the use of digital payments has accelerated significantly, cash is still a major part of the region's payments landscape, especially in the region's LDCs and the Philippines. Paradoxically, even if online payments would enable merchants to reach more consumers and transact with greater ease, one

factor impeding consumers' use of e-wallets is merchants' continued reluctance to accept digital payments.

The second challenge to cross-border digital payments is their cost, which estimates put at 3-5 percent. Third, though many of the region's payment providers are present in several countries, their national operations do not necessarily interoperate across borders due to regulatory issues: a Gojek user in Indonesia is still unable to use her electronic wallet to hail a ride in Singapore or to send money to a Gojek user in Thailand.³⁷

These issues have been addressed before—for example, the Master Plan for ASEAN Connectivity 2025 envisions financial integration where member states adopt seamless cross-border transactions.³⁸ In addition, banks can and have been integrating forex services into their e-wallets.³⁹ And selected country pairs have also already made progress toward interoperability:

- In 2017, Singapore's NETS, Malaysia's PayNet, Thailand's ITMX, Vietnam's Napas, and Indonesia's Rintis came together to sign an MOU to push regional collaboration for real-time, cross-border payments.
- In 2019, Malaysia's and Singapore's payment service infrastructures (PayNet and NETS, respectively) officially launched real-time, cross-border debit card payments; the two are now collaborating to enable instant credit transfers and QR code payments between Singapore and Malaysia.
- In 2019, Thailand and Singapore connected their PromptPay and PayNow retail payment systems into a seamless cross-border payment system, which enables customers of participating banks in Singapore and Thailand to be able to transfer funds of up to about \$800 daily across the two countries, using just a mobile number.⁴⁰
- The Bank of Thailand has launched interoperable QR code payments, a promising method for cross-border payments, with Lao (2019), Cambodia (2020), and Vietnam (2021).⁴¹

In addition, ASEAN governments and businesses have been promoting mobile-based cross-border payments through the adoption of (1) QR code standards; (2) ISO 20022 standards that enable streamlined, standardized communications among payment systems; and (3) regionally compatible standardized interfaces and open APIs that help all players—sellers, billers, fintechs, and intermediaries—to access and leverage any platform even as technology advances.⁴² Such panregional payment systems can have attractive economics, to the extent that they are based on the principles of full competition among providers. The interoperability can be furthered with distributed ledger technology (DLT).⁴³ ASEAN nations' ICT infrastructures still need to be improved for interoperability and data security.⁴⁴

3. ACCESS TO FINANCE HAS IMPROVED BUT IS STILL A CONSTRAINT TO ECOMMERCE

The ASEAN region has a hugely vibrant financial services sector of superapps, digital banks, and various fintech lenders (table 10). There are various solutions to online sellers emerging from the alliance between ecommerce leaders and fintechs, such as Goliath GoTo between Tokopedia and Gojek in Indonesia.

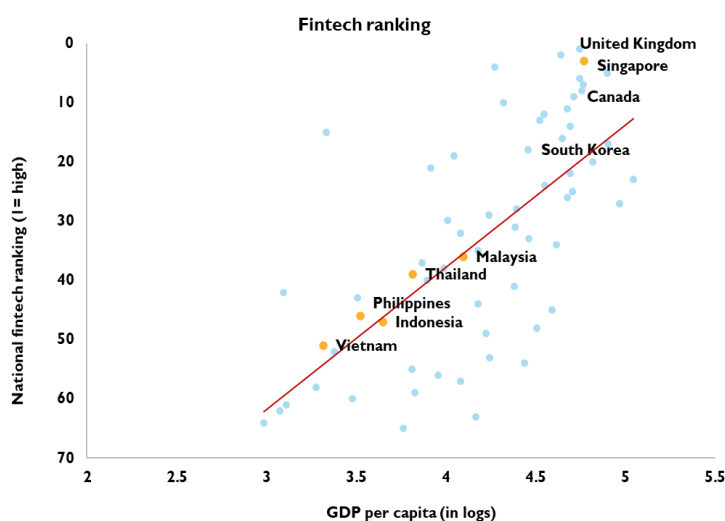
Table 10: Leading fintechs that lend to MSMEs in ASEAN

Company	Country	Description
Xendit	Indonesia	Xendit works with partners to provide invoice financing, working capital loans, and overdraft for access to flexible financing that banks traditionally cannot provide. Xendit considers start-ups and SMEs with varying credit histories and offers tailored solutions. Repayment is automated from the business account as the business receives payments.
Aspire	Singapore	Aspire provides working capital through a 100% online application with approval as fast as 2–7 business days. The company offers revenue-based financing, where payments are made as a percentage of revenue, revolving lines of credit, short-term loans, and reverse factoring. The company focuses on small and growing businesses.
Moolahsense	Singapore	Peer-to-peer digital lending platform that focuses on connecting SMEs seeking short-term business loans with prospective investors who are looking for high-yield returns.
SeekCap	Philippines	SeekCap is an online lending marketplace for Filipino entrepreneurs. This platform is for business owners who need additional capital for growing and running their business and provides multiple business loan options by partnering with registered lenders and banks.
SeedIn	Philippines	SeedIn is a P2B crowdlending platform that connects local SMEs seeking short-term financing with individuals and businesses looking for short-term investing. The platform focuses on SMEs and provides a dedicated client adviser and focuses more on the growth potential of the business rather than only financial history.
MoneyWeCan	Thailand	MoneyWeCan is an online credit marketplace, connecting businesses and investors directly. It offers loans such as working capital, refinancing of existing loans, and SME loans.
Talad Invoice	Thailand	Taladinvoice is a peer-to-peer lending platform to connect investors and businesses looking for working capital by using their unpaid financial notes and digital asset as collateral.
Funding Societies	Malaysia	Funding Societies offers a digital financing platform to connect SMEs with investors in an online marketplace, increasing access to finance for SMEs. Financing options include short-term loans, loans for business growth, invoice financing, and a microcredit line.

The regional economies' fintech ecosystems rival those of their peers at the same level of development (figure 48). Fintechs have established themselves as a choice for regional online sellers, of which nearly

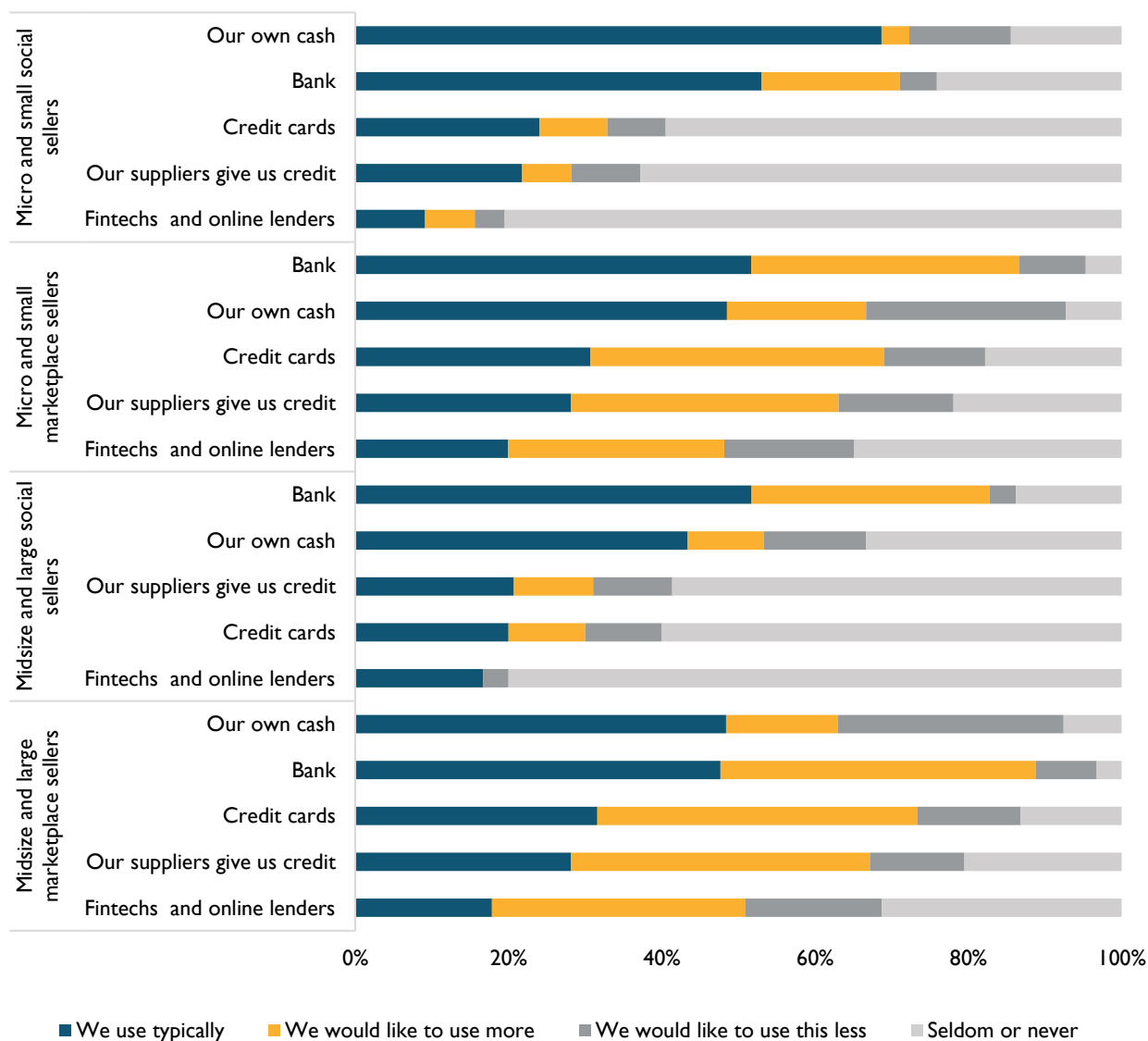
half either typically use fintechs or would like to use fintechs more for their working capital needs; meanwhile, social sellers are less keen on fintechs (figure 49). This suggests that fintech enables online sellers to access fast-disbursing working capital loans to fulfill orders. Unique models have been emerging, often developed by payment providers. For example, the leading ride-hailing and ecommerce firms have fintech departments that offer financial and insurance services, particularly for the region's underserved and unbanked populations.

Figure 48: ASEAN economies in Fintech ecosystems vis-à-vis peers, 2019



Source: Findexable (2019).

Figure 49: Surveyed online sellers' sources of working capital, by firm size, percentages



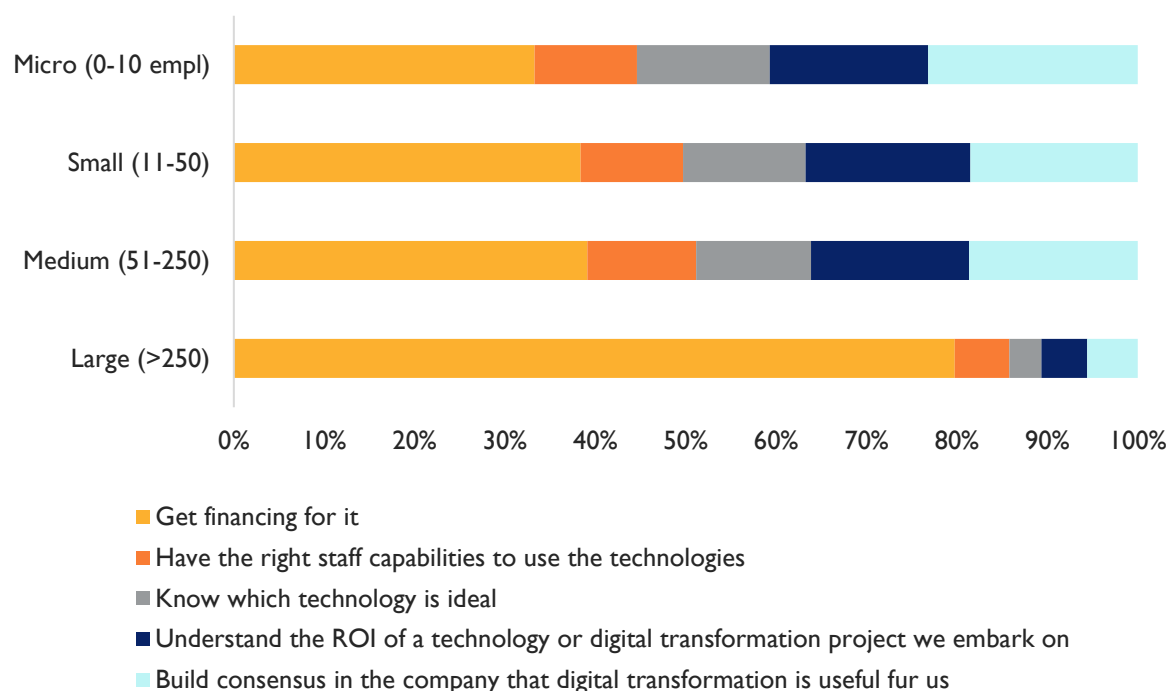
However, ASEAN MSMEs highlight the lack of access to finance as a constraint for them to engage in ecommerce and export. These financing challenges take three formats:

- **Difficulty in securing working capital to fulfill online orders.** About a quarter of regional firms highlight challenges in accessing working capital as an impediment to their ecommerce growth. These challenges are likely more acute in the LDCs that were not included in the survey.
- **Obtaining trade finance.** Almost a fifth of exporters, especially B2B sellers, cite challenges in accessing trade finance as leading to loss of sales. This reflects the region's acute MSME trade

finance gap, which is estimated at some \$600 billion per year in Asia and the Pacific and is especially acute among the region's emerging and developing economies.⁴⁵

- **Access to longer-term funding for digital transformation.** Firms of all sizes also see access to finance as a leading challenge for their digital transformation (figure 50). For small firms, also the challenges of understanding the return on investment from a digital transformation and building consensuses around this transformation are among the key challenges to acquiring new technologies.

Figure 50: Main challenges to implementing digital transformation processes, by firm size, percentages



4. MSMEs' HUMAN CAPITAL IS STILL LAGGING BEHIND THAT OF COMPARABLE ECONOMIES, LIMITING COMPETITIVENESS IN ECOMMERCE AND THE ADOPTION OF PRODUCTIVITY-ENHANCING TECHNOLOGIES

No asset is as important for success in the global digital economy as human capital. In Southeast Asia, the demand for talent is intensifying in digital business models: the 2021 LinkedIn Jobs on the Rise report for Southeast Asia identifies the following professions as being most in demand: digital content specialist, digital marketing specialist, ecommerce and online marketing, customer service, business development, and sales, as well as cybersecurity experts (table 11).

Table 11: Occupations in demand in ASEAN

Occupation	Top skills	Top locations
Digital marketing specialist	Social media marketing, copywriting, Google analytics, lead generation, digital marketing	Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; Bangkok, Thailand
Data analyst	Data analysis, data visualization, analytical skills, SQL, requirements analysis	Bangkok, Thailand; Jakarta, Indonesia; Chachoengsao, Thailand; North Sumatera, Indonesia
Software and technology developer	JavaScript, web development, AWS, MySQL, HTML5	Bangkok, Thailand; Chiang Mai, Thailand; Kuala Lumpur, Malaysia
Cybersecurity specialist	Penetration testing, information security, security information and event management (SIEM), cybersecurity, vulnerability assessment	Kuala Lumpur, Malaysia
Digital content specialist	Public speaking, proofreading, video editing, Adobe Premiere Pro, creative writing	Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; Bangkok, Thailand
Ecommerce specialist	Online marketing, Shopify, ecommerce, search engine optimization (SEO) Amazon Seller Central	Kuala Lumpur, Malaysia; Manila, Philippines; Jakarta, Indonesia

Source: LinkedIn Jobs on the Rise 2021 Report for Southeast Asia

However, firms struggle to identify and access this talent: 29 percent of small and 32 percent of midsize firms cite access to talent as being one of their top three needs for growing their ecommerce export business. Access to talent is a challenge within the ecosystem: in one recent survey, 39 percent of fintechs in the ASEAN region reported experiencing difficulties with attracting the right talent.

Specifically, 25 percent said that lack of access to talent hindered product development, and 22 percent said it saw it as a limitation when convincing investors of the company's potential.⁴⁶ Firms provide different reasons for lack of access to talent. Smaller companies mention the inability to pay for the talent as the leading challenge, while larger, better-resourced firms discuss challenges to find qualified staff (figure 51). While the supply of talent is improving in ASEAN, it could be better. Human capital and share of population with technical skills in Cambodia, Indonesia, the Philippines, and Thailand lag those of advanced economies like Japan and Singapore and countries at the same development level (figure 52).

Figure 51: Surveyed firms' experiences with hiring technical talent such as engineers, data scientists, and digital marketing experts, percentages

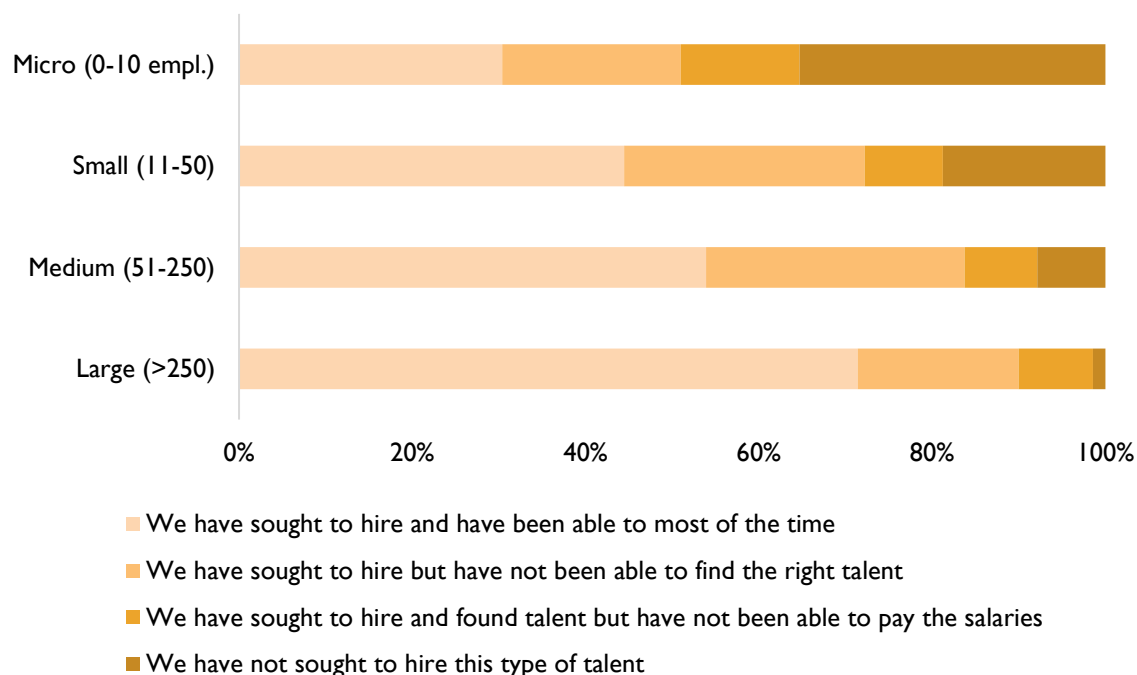
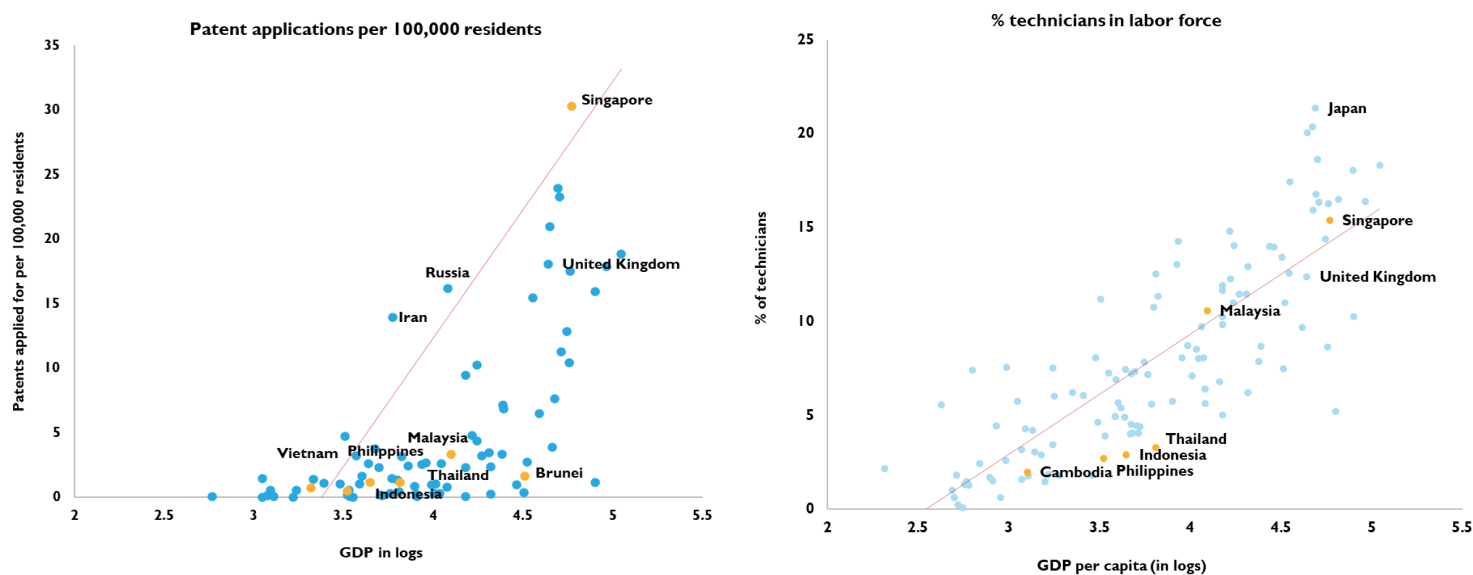


Figure 52: Patents and technical staff per capita, 2019



Sources: for patent applications, World Bank Development Indicators; for technicians, International Labour Organization.

5. REGIONAL DISPARITIES ARE SIGNIFICANT WITHIN MOST ASEAN ECONOMIES IN ECOMMERCE USE, LIMITING THE GROWTH OF EXTENSIVE AND INTENSIVE MARGINS IN ECOMMERCE

There are considerable regional disparities in firms' ecommerce use and gains from ecommerce *within* ASEAN nations. Small firms in rural areas are less likely to use marketplaces than comparable urban firms (figure 53). The reasons for the disparities are clear and addressable. Rural firms face greater challenges with access to high-quality internet connections and world-class talent and digital services than their urban peers (figure 54). Less digitized and rural firms are also less likely to use and trust online services such as fintechs.

This is nothing particularly new: for decades, companies have clustered in major cities as such hubs typically have valuable talent, ideas, and knowledge spillovers and provide productivity gains. Yet firms in remote and rural regions are not necessarily mobile—agricultural producers are inherently immobile. Promoting ecommerce in more remote and rural areas can bring high payoffs in terms of rural firms' and consumers' access to products that have traditionally only been available to their urban peers.⁴⁷ The survey data shows that rural sellers that do use marketplaces report benefiting from ecommerce, in terms of domestic and export sales—which suggests that there may be major payoffs from bringing rural firms to the online economy.

The question then is how to get the same services to rural and remote regions as are available in urban areas. One interesting example is the over 4,000 Chinese “Taobao Villages,” which have generated significant outbound ecommerce sales from diverse locations in rural China because they have had access to hardware, internet, logistics networks, and educated talent able to use marketplaces to generate and grow online sales.⁴⁸

Figure 53: Surveyed ASEAN micro and small firms' use of online channels, by firm location, percentages

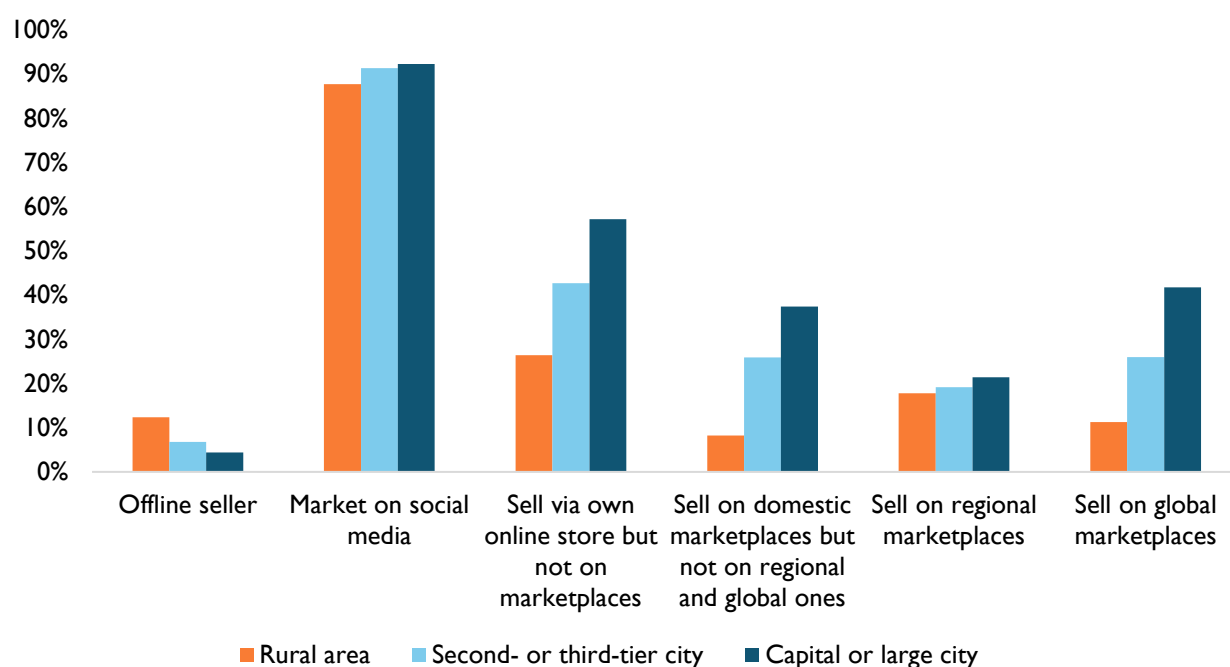
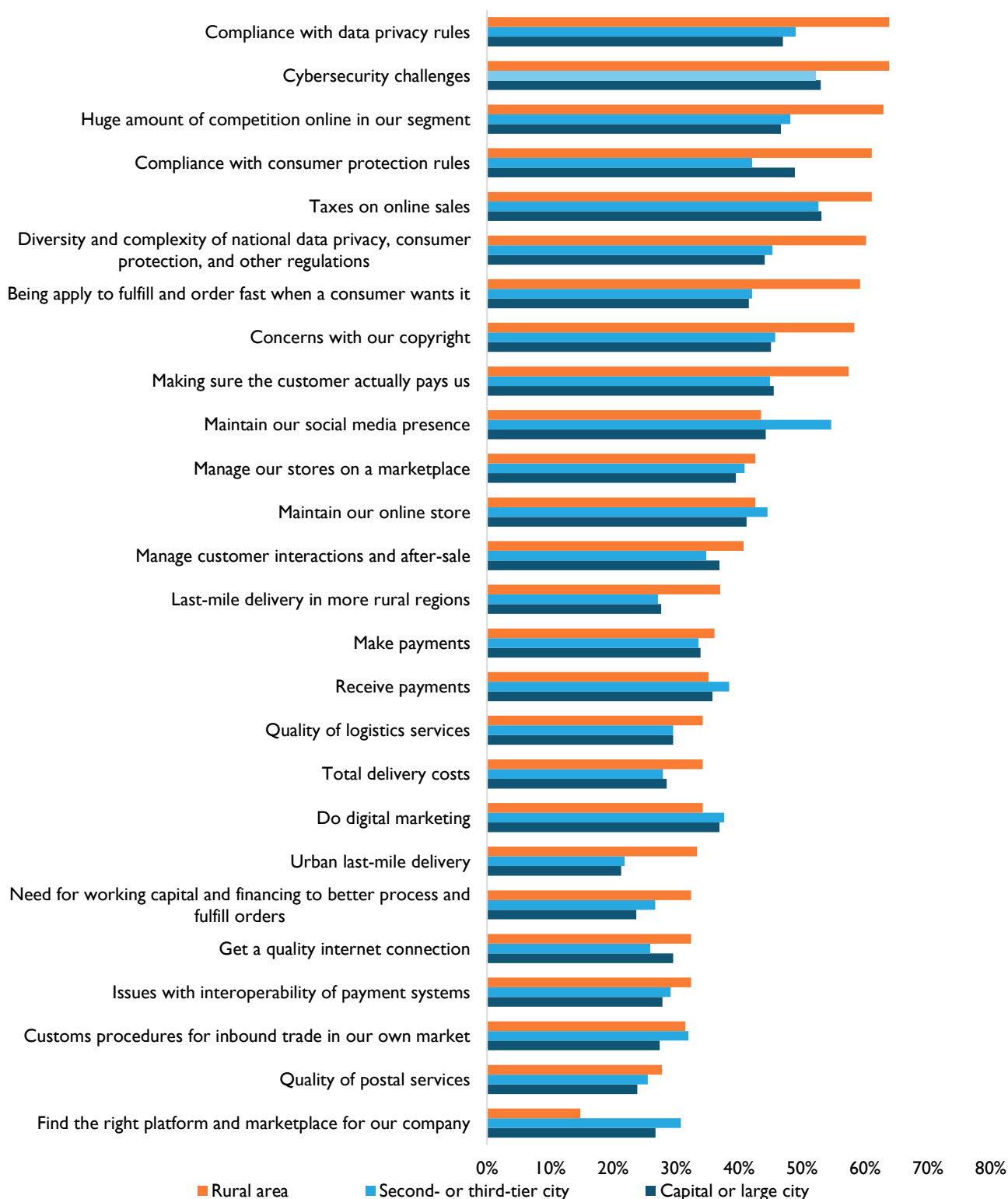


Figure 54: Challenges to ecommerce experienced by surveyed ASEAN micro and small firms, by firm location, percentages

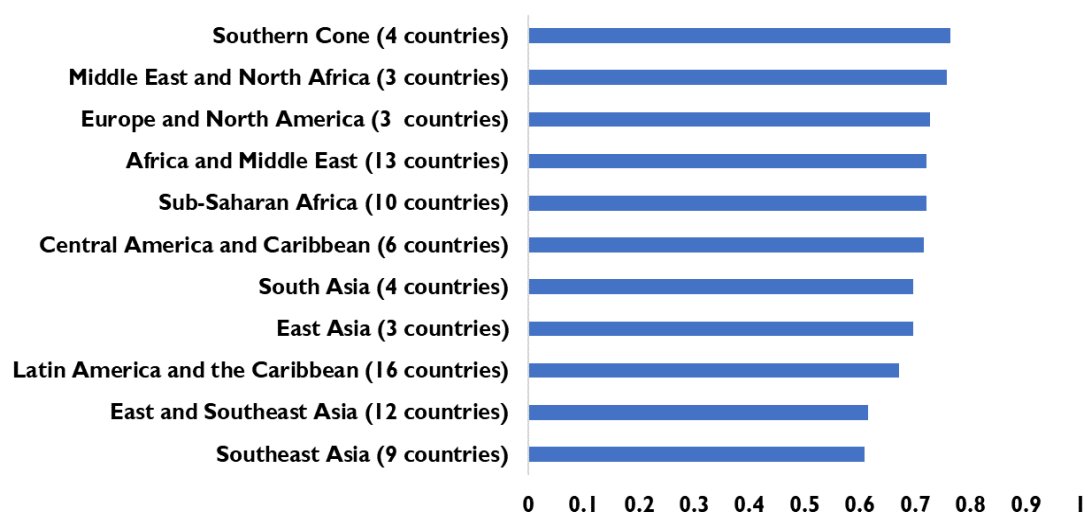


6. REGULATORY FRAGMENTATION POSES NEW CHALLENGES TO MULTIMARKET ONLINE SELLERS

In the past few years, ASEAN economies have worked on setting the rules of the game for the digital era, such as for data privacy, online liability, cross-border data flows, consumer protection in online transactions, and taxation of digital services. The progress is positive—but it has also resulted in a checkerboard of diverse national digital regulations that are not necessarily compatible and make it challenging for multimarket online sellers or ecosystem players like e-payment leaders to comply with different regulations in different markets. Well over a third of marketplace sellers and over 40 percent of social sellers report being concerned about the diversity of digital regulations across markets for the future of their ecommerce growth.

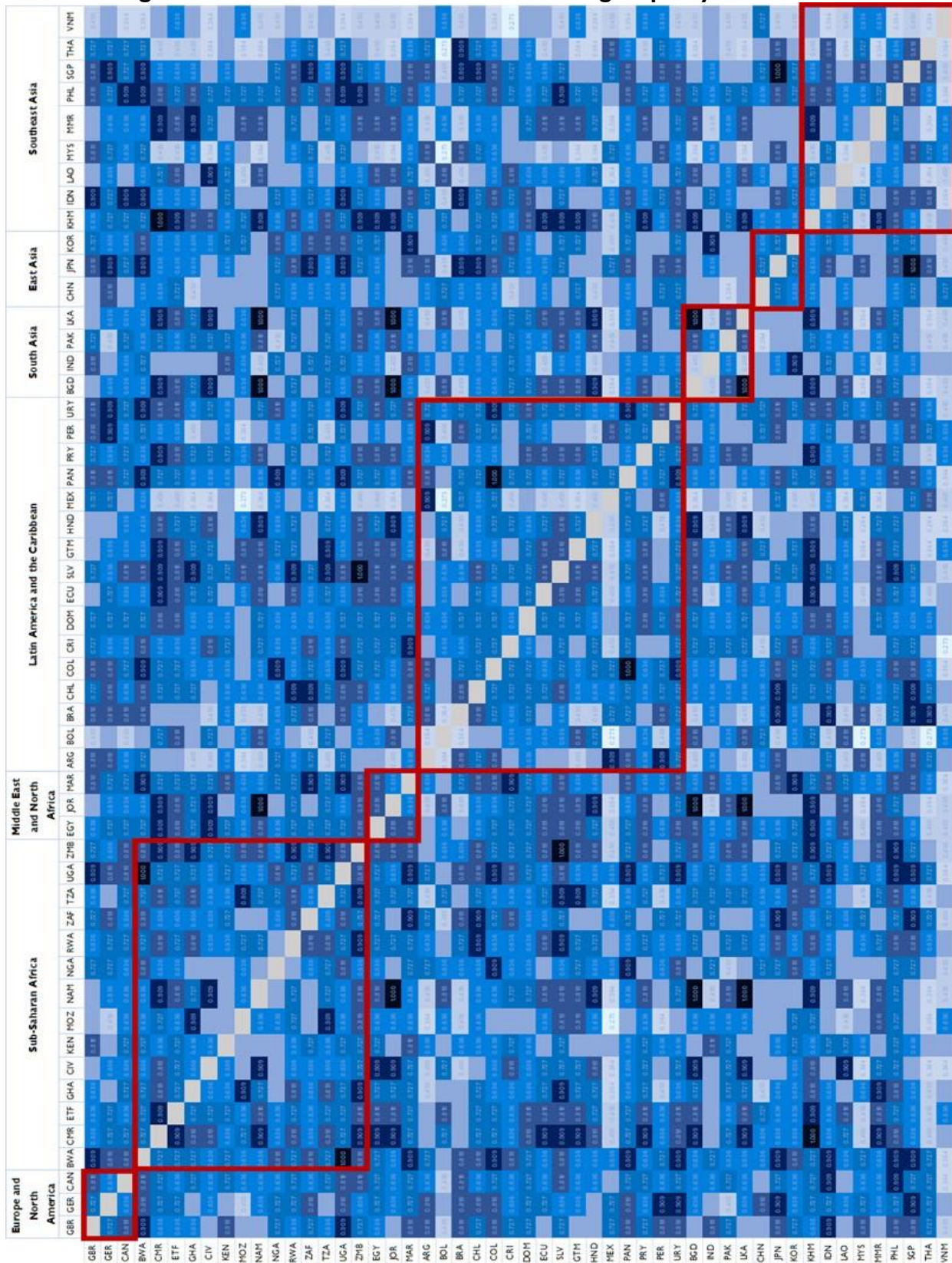
These findings are echoed in a recent survey conducted by the author among firms in the CPTPP region (Australia, Mexico, Singapore, and Vietnam). The survey found that 62 percent of small online seller-exporters saw national data privacy rules as a major challenge for growing their online sales and over 20 percent saw the diversity of national digital regulations as one.⁴⁹ Indeed, data on digital regulations suggest that Southeast Asia has one of the most fragmented digital regulatory landscapes in the world (figures 55 and 56).

Figure 55: Similarities in national digital regulations within regions (1 = all countries within a region share the same regulations; 0 = all countries have different regulations)



Source: Suominen, Vambell, and Furtak (2021).

Figure 56: Differences in ASEAN countries' digital policy frameworks



Source: Suominen, Vambell, and Furtek (2021).

There have been regional attempts to converge regulations via both ASEAN and the CPTPP. The latter has three ASEAN members and commits members to:

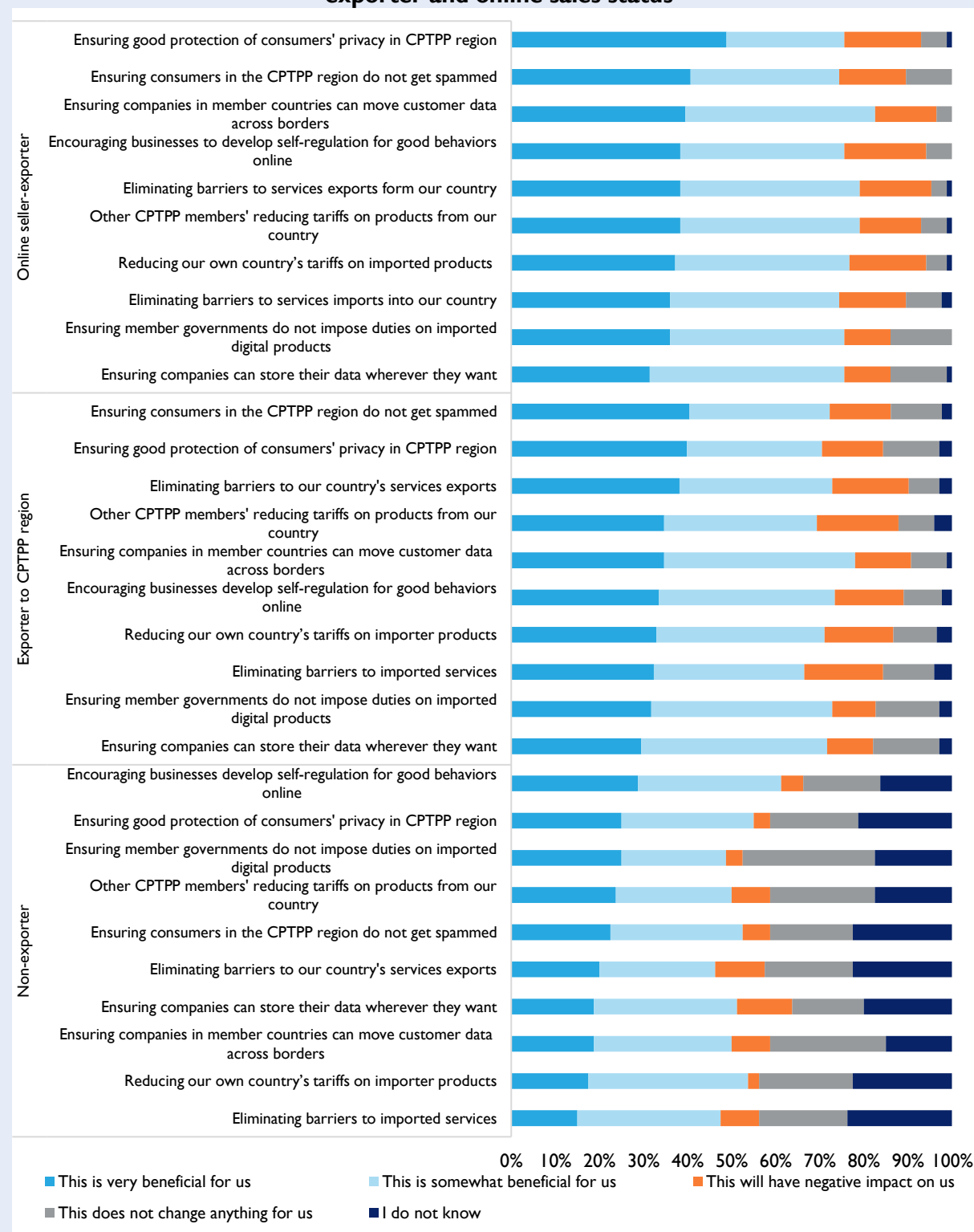
- Refraining from imposing customs duties and other discriminatory measures on digital goods (such as e-books, videos, music, software, games, 3D printable designs, etc.);
- Allowing data to be transferred across borders while respecting each signatory country's data privacy laws, and
- Protecting consumers online, such as via data privacy laws and rules against unsolicited online communications.

Firms from CPTPP member and non-member countries alike see the agreement's commerce chapter and common digital rules as highly beneficial for doing commerce in the region (case study 1). Thailand, Indonesia, and the Philippines are considering joining the CPTPP: their doing so would promote the use of high-quality regulations and regulatory convergence in the ASEAN region.

Case study 1: Firms' views on the CPTPP ecommerce chapter

The author's recent studies with the Center for Strategic and International Studies (CSIS) on the impact of the CPTPP showed that CPTPP region firms find the CPTPP's key ecommerce provisions to benefit their businesses.⁵⁰ The gains are especially great for online seller-exporters. Some 73 percent of small online seller-exporters find the provisions of the CPTPP that ensure free data transfer across borders to be somewhat or very beneficial (figure 57). Some 66 percent find the CPTPP's ban on server localization to be beneficial, and 61 percent say its liberalizing effects on trade in services are important. The benefits are even greater for midsize and large firms: for example, 83 percent state that free data transfer is beneficial. Comparable Vietnamese and Mexican firms that export to the CPTPP region prize the ability to move data—over 80 percent of Vietnamese firms see the CPTPP's data transfer rules as “very” or “somewhat” beneficial for their business.

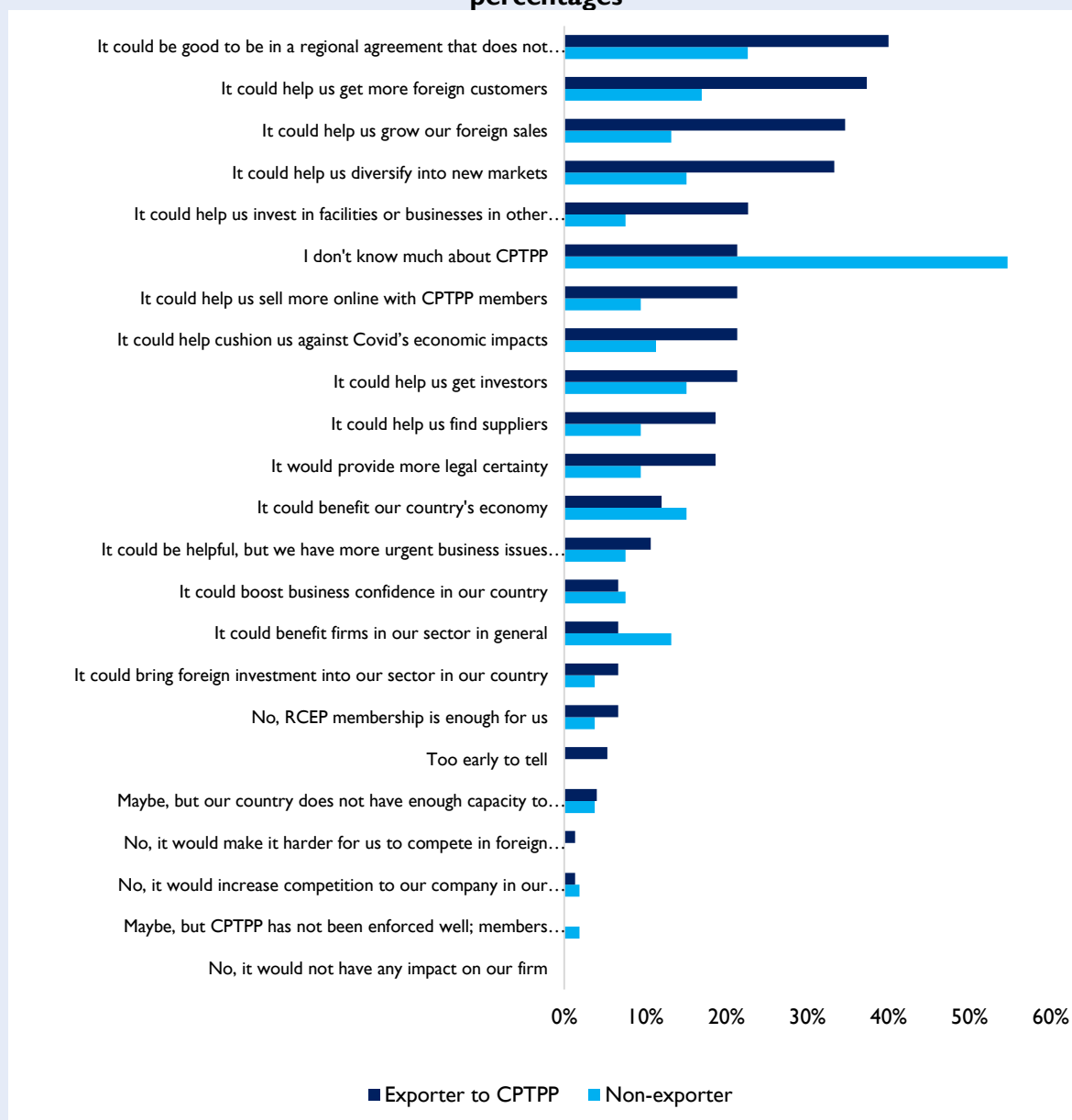
Figure 57: Views on CPTPP provisions among member country micro and small firms, by exporter and online sales status



Source: Kati Suominen, "What Do CPTPP Member Country Businesses Think about the CPTPP?", Center for Strategic and International Studies, August 24, 2021, <https://www.csis.org/analysis/what-do-cptpp-member-country-businesses-think-about-cptpp>

Furthermore, 135 surveyed firms in non-CPTPP member economies such as the Philippines and South Korea see the CPTPP's e-commerce provisions as beneficial (figure 58).⁵¹ These results likely in part reflect the interests of the Philippine services sectors, where firms habitually handle and transfer personal data across borders. The binding data transfer rules included in the CPTPP could catalyze further investment in the digital services sector in the Philippines.

Figure 58: Top three capabilities or assets that CPTPP non-member country firms say they need to start selling online or expand online sales, by firm size and online presence, percentages



Source: Kati Suominen, "CPTPP as a Global "Docking Station" for Free Traders?" Center for Strategic and International Studies, September 20, 2021, <https://www.csis.org/analysis/cptpp-global-docking-station-free-traders>

V. ENABLING MSME ECOMMERCE IN ASEAN

Ecommerce use is growing rapidly in ASEAN. Most firms are already marketing their goods and services on social media, and a growing share of MSMEs are building their own online stores, onboarding to marketplaces, and transacting across borders. ASEAN also has a vibrant ecosystem of IT firms, fintechs, and logistics service providers that support firms' digitization and online transactions. These patterns are partly the result of ASEAN economies' efforts over many years to expand internet connectivity, facilitate trade, enable financial innovation, and so on—and work together on promoting ecommerce through common strategies and initiatives. At the same time, ASEAN can accelerate MSMEs' use cross-border ecommerce through further work in four key areas—customs procedures and logistics, interoperable payments, MSME skills development, and provision of finance to MSMEs.

I. ENABLE CROSS-BORDER AND LAST-MILE LOGISTICS

The boom in ecommerce since the start of the COVID-19 pandemic has led to exponential growth in demand for ecommerce logistics globally and across major metropolitan regions. Firms, cities, and customs authorities alike are facing the challenges of managing the growth in the volume and diversity of stock-keeping units and expectations of fast, low-cost delivery. Some potential priorities to pursue include:

- **Expand the ASEAN Single Window beyond the region.** Given the potential of the ASEAN Single Window to reduce the time and costs of cross-border trade, the system should be fully implemented and expanded to include trading partners that already have free trade agreements with ASEAN, namely, Australia, China, India, Japan, Republic of Korea, and New Zealand. These six countries are also ASEAN dialogue partners.
- **Implement AEO programs and mutual recognition agreements—and fuel customs interoperability in AEO management.** Implementation and mutual recognition of AEO programs, as planned in ASEAN, can save trade compliance time and accelerate release times for AEOs. An excellent example of interoperability in the management of AEO programs comes from Latin America, where Chile, Colombia, Costa Rica, Mexico, and Peru have piloted a project supported by the Inter-American Development Bank called CADENA, which uses blockchain to share mutual recognition agreements for their AEO programs. By using blockchain, the various customs agencies will have one-stop access to the same information, securely and in one place—and AEO beneficiaries will secure AEO benefits immediately when they receive their AEO certification.
- **Promote logistics technologies and modern warehousing models with ASEAN businesses.** ASEAN economies could partner with technology firms to create a logtech academy to help small and midsize businesses learn about and test warehousing and logistics technologies and business models. This would also help cultivate a digitally savvy workforce for the region's logistics sector.
- **Reconfigure city logistics to ecommerce delivery and enable digital addresses.** MSMEs and logistics companies now have higher delivery volumes for residential addresses, which implies new frictions at the last mile and “Final 50 Feet” due to numerous issues such as failed delivery attempts, local traffic and regulatory conditions, and challenges in completing a delivery in places without formal addresses. Local governments across ASEAN meanwhile face the challenges of accommodating the growing volumes of ecommerce warehousing and delivery,

while using ecommerce to enable MSMEs and logistics providers to grow and create new jobs. Many cities from São Paulo to New York and Los Angeles have created policies such as favoring nighttime deliveries and promoted new facilities like urban micro warehouses to facilitate ecommerce. During COVID-19, many cities have also accelerated the use of autonomous vehicles such as drones, last-mile bots, and driverless vans to deliver groceries, medicine, and frozen goods.

- **Simplify customs procedures for low-value items.** Intra-ASEAN trade should be duty-free. For extraregional partners with which ASEAN economies have positive duties, the simplest way to reduce the time and cost of border clearance is to increase duty-free thresholds for entry.⁵² In addition, for low-value items above de minimis thresholds, ASEAN economies could implement a simplified process and a flat rate or “buckets,” as Canada does (case study 2).

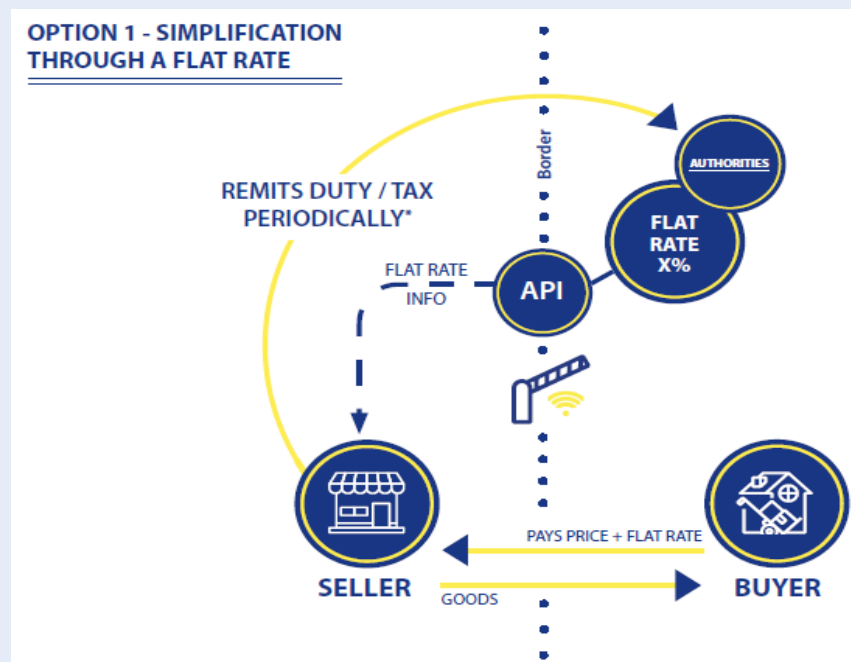
Case study 2: Facilitating trade for low-value items above de minimis thresholds

ASEAN economies can further facilitate inbound ecommerce in low-cost items from extraregional markets that are above de minimis thresholds but are still low value, such as below \$2,500.⁵³ The Global Express Association has recently proposed some options for countries to facilitate ecommerce:

Option 1: Combined flat rate

Some countries have chosen to implement a reasonable flat-rate import charge that replaces all duties and taxes. This has the benefit of simplicity and predictability. Information on the rate can be provided through an API (application programming interface), making collection at origin from the foreign vendor very easy (figure 59).

Figure 59: Flat-rate import charge system



Source: “Proposal on Tax/Duty Collection on Imported Low Value Shipments,” Global Express Association, September 2020.

Option 2: Simplified classification of products

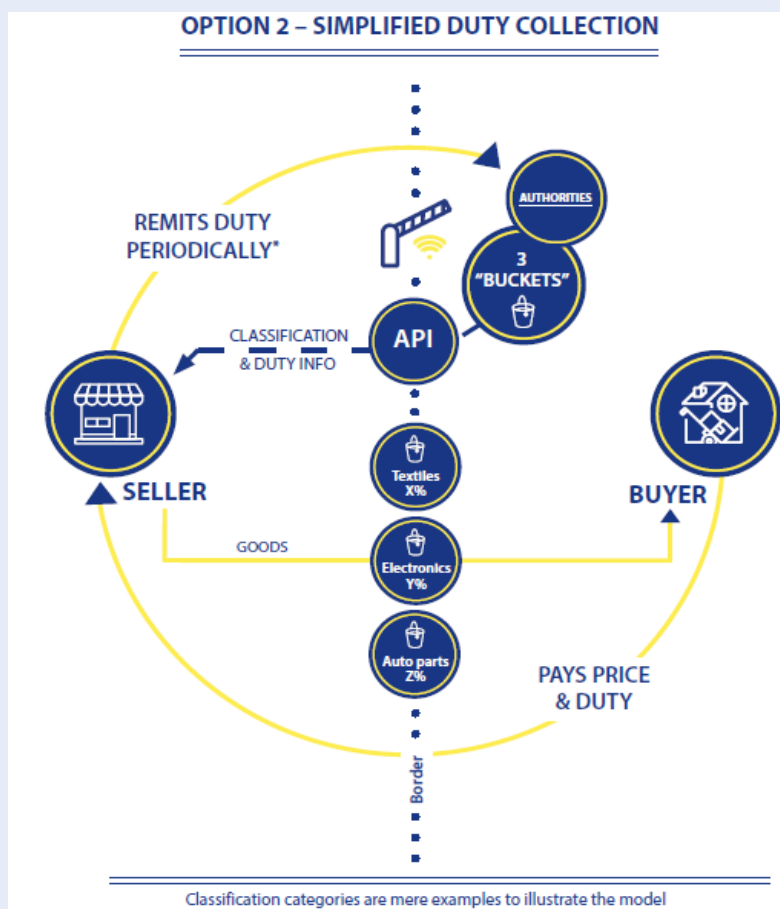
Another method for facilitating inbound ecommerce in low-cost items is the simplified classification and duty rate system applied in Canada.⁵⁴ Under this scheme, shipments below CAD500 are grouped into three “buckets” that collectively contain the nearly 5,400 harmonized system codes used to classify imports. Each bucket is assigned a rate depending on whether the goods imported enter under FTA preferences (see table 12). The solution enables the foreign vendor to easily calculate the duties and offer customers a landed cost at the point of sale (as there is no confusion over which specific HS code it may be under.) This also makes it easier for customs to forecast revenue (figure 60).

Table 12: Canada’s simplified classification and duty rate system

"Buckets" of simplified tariffs in Canadian General Harmonised System 2012	MFN Rate	FTA Rate
<u>BUCKET 1 - HS 982515100000</u> Bedding / Linen / Towels / Curtains / Clothing / Apparel (excluding religious & saris) / Footwear & parts thereof (including skates) / Textiles	20%	Free
<u>BUCKET 2 - HS 9825200000</u> Auto Parts (excluding engine / ignition) / Beauty aids / Cosmetics / Toiletries / Wax / Travel Sets / Bicycles / Tricycles / Brushes / Candy / Chocolate, Snack Foods / CD / DVD's (prerecorded music) / Ceramics / Cleaning / Polishing / Lubricating products / Clock / Coffee / Tea Makers / Cookware / Kitchenware / Tableware / Golf Clubs / Balls / Handbags / Wallets / Hats / Instruments for writing / drawing / painting / Jewelry (Finished/Imitation) / Leather & goods thereof / Luggage / Miscellaneous goods not elsewhere specified / Musical Instruments (Guitars, Keyboards, Drums etc.) / Plastic Articles, NES / Saris / Sports Equipment (excluding downhill skis / rackets / hockey sticks / football) / Textile floor coverings / Tools, hand held (not powered) / Umbrellas / Walking sticks / Whips / Crops	8%	Free
<u>BUCKET 3 - HS 9825300000</u> Auto parts for engine / ignition / Bicycle parts / Cameras & parts / accessories thereof / CD / DVD's (blanks / unrecorded) / Computers / Laptops & parts / accessories thereof / Downhill skis / Hockey sticks / Racquets / Football equipment / Electrical apparatus (Switchers / Plugs / Sockets etc.) / Exercise Bicycles / Stair climbers & parts thereof / Eyewear (Sunglasses etc.) / Machinery parts, NES / Microscopes / Motorcycle parts / Musical Instrument parts & accessories / Novelty / Festive items / Phones - Tele / Cell Head / Ear / Micro / Power tools (hand held) / Precious gems / metal findings / Printed Matter (Printed art / Books / Brochures etc.) / Safety Headgear / Software / Toys / Cards / Handicrafts / Hobby crafts / Video game consoles & Electronic games / Video / Digital cameras / Watches & Watch / Clock parts & accessories	Free	Free

Source: “Proposal on Tax/Duty Collection on Imported Low Value Shipments,” Global Express Association, September 2020.

Figure 60: Simplified classification import charge system



Source: "Proposal on Tax/Duty Collection on Imported Low Value Shipments," Global Express Association, September 2020.

2. PROMOTE PAYMENTS INTEROPERABILITY—AND INTEROPERABILITY IN TRADE LOGISTICS THROUGH PAYMENTS

- Promote interoperable regional payments.** The ASEAN region is a leading market for payment innovation—and most countries have succeeded at interoperability among the many payment services and methods. There remains an enormous opportunity for the region to enable cross-border ecommerce through digital payments: it already has a huge array of e-payment providers, including several with presence across the region, and ASEAN economies like Thailand and Singapore have already implemented various interoperability pilots and initiatives with other countries. The region is also advancing on adopting ISO 20022 standards and QR codes for cross-border payments.
- Calibrate e-payment regulations to the changing, diversifying universe of payment providers.** As e-payment solutions proliferate, ASEAN economies can follow Singapore's lead in calibrating e-payment rules to each provider's risk. Singapore's 2020 Payment Services Act

introduced a three-tiered regulation where the rules are commensurate to the risks posed by the scope and scale of services provided by the licensee. The act helps balance the aspirations of innovation (coming from smaller new providers) and rigorous oversight (especially on larger providers and banks and providers that hold deposits). All payment providers holding a license under the Payment Services Act must meet anti-money laundering and countering the financing of terrorism (AML/CFT) requirements.

Promote interoperable logistics value chains through smart contracts and instant B2B payments.

Except for global express delivery firms that provide end-to-end services, logistics players that “touch” any one shipment (freight forwarders, shipping/air carriers, terminal operators, ports, warehouses, and so on) are fragmented and interoperate poorly, partially due to analog payments and settlement practices. ASEAN economies can work on digitizing and automating the “handshakes” among the players in logistics supply chains, for example through the use of smart contracts, to accelerate payments reconciliation and improve all parties’ cash flow.

3. MSMEs’ ECOMMERCE CAPACITIES, TALENT BASE, AND DIGITAL TRANSFORMATION

Surveys indicate that MSMEs in ASEAN want to prioritize the development of their digital marketing, ecommerce capabilities, and internet connections. Governments and other stakeholders can support MSMEs in their skills development and digital journeys in various ways, such as:

- **Providing scalable and customized online capacity-building and financing for social sellers to build online stores and onboard to marketplaces.** Most ASEAN MSMEs market their goods and services via social media, messaging apps, and classifieds, and now can move to creating their own online stores and onboarding marketplaces that could enable them to scale their customer bases and export. The perennial challenges are (1) how to support different types of MSMEs at scale; and (2) how to make busy MSMEs’ learning highly applied so it is part and enabler of their work rather than a distraction. A key solution is technology, such as AI-driven microlearning applications that provide customized skills development and guidance at scale to hundreds of thousands and millions of MSMEs. A further strategy is to offer matching grants for firms that seek to build their online presence. More mature MSMEs sellers could also benefit from peer learning and executive education-type approaches on ways to manage thriving omnichannel businesses.
- **Enable B2B sellers to adopt direct-to-consumer business models.** ASEAN, like most emerging markets, has a huge opportunity to enable its large segment of B2B manufacturers in such sectors as food processing, apparel, appliances, and furniture to use ecommerce to reach consumers directly, instead of selling via distributors, and become more profitable. The direct-to-consumer (DTC) model is gaining traction in major markets such as the United States, where consumers are buying directly from manufacturers and brands, bypassing marketplaces and retailers. By 2022, over 100 million Americans are expected to buy directly from brands and manufacturers without offline or online intermediaries.⁵⁵ ASEAN MSMEs need to be supported to use DTC platforms like Shopify—which are increasingly popular in Southeast Asia among sellers to set up their online stores, accept payments, and orchestrate logistics, and reach customers directly.⁵⁶

- **Support MSMEs' digital transformation and the use of new technologies.** Successful online selling is about more than just marketing a product online and accepting online payments: it entails digitizing a company's operations, workstreams, and supply chains. ASEAN government agencies can usefully partner with local and global technology companies that can help MSMEs learn about, test, and acquire technologies and new solutions. The public sector could also step in and co-finance firms' digital transformation or provide loans guarantees for it, as done in Malaysia, for example. Thailand and Malaysia bring valuable experiences in creating ecommerce parks and digital trade zones that bring together talent, services, and capital to support online sellers to grow and export.

4. EXPAND ONLINE SELLERS' ACCESS TO WORKING CAPITAL AND DIGITAL TRANSFORMATION FUNDING

ASEAN MSMEs appear to have somewhat less difficult time than their counterparts in regions such as Latin America and Africa to access finance, possibly because of the region's fierce innovation in the financial services sector and the proliferation of providers. However, the survey data suggests that firms still face challenges in accessing fast-disbursing working capital to fulfill ecommerce orders, longer-term digital transformation financing, and trade finance. ASEAN governments have already done a great deal to promote financial innovation, but could now also implement the following:

- **Leverage fintechs and guarantees to broaden online MSMEs' access to working capital.** The survey data suggests that ASEAN online sellers turn to local fintechs, among other providers, to access working capital loans. Governments could support fintech lending to a broader set of online sellers by offering guarantees on fintech-issued loans, for example. ASEAN region's export credit agencies could also explore guarantees on export working capital loans issued by fintechs to MSME exporters.⁵⁷ Embedded finance solutions can accelerate MSME online sellers' access to finance—and would be aided by a corporate digital identity that brings together MSMEs' vitals and transactional data on and beyond marketplaces.
- **Promote digital transformation funds and guarantees.** ASEAN MSMEs and large firms see access to finance as the main constraint to their digital transformation. This is not news to the region: efforts such as Malaysia's SME Automation and Digitization Facility are already in place and well-established. ASEAN could also consider a regional Digital Transformation Fund whereby MSMEs can (1) learn about the latest technology solutions for the various areas of digital transformation they would like to pursue; and (2) secure co-investments from a range of funders (such as donors, social impact funds, existing government funds, investors, and banks) to support MSMEs' transformation into global online sellers and digital enterprises. The fund could well become self-sustainable; after all, firms that succeed at becoming digital enterprises and scaling their online sales outperform the broader market.

5. CROSSCUTTING POLICIES AND EFFORTS

There is also a set of crosscutting policies that enable MSMEs to engage in ecommerce, facilitate their use of online services, and allow their customers and vendors to trust and transact with them online:

- **Deeper digital trade agreements to converge digital regulations.** ASEAN sellers are using the region as their powerbase and most important market. However, one of the main challenges preventing ASEAN online sellers from scaling their sales and presence across the region is the proliferation and fragmentation of national digital regulations. Further accessions by ASEAN

members to CPTPP, in addition to Singapore, Malaysia, and Vietnam, and other trade agreements with robust and binding ecommerce chapters will help promote regulatory convergence and lock each economy into high-quality rules for digital trade. The recently announced intention to negotiate an ASEAN Digital Economy Framework Agreement is a positive step, but to be effective, its provisions should be robust and binding to promote ecommerce—and the agreement should be in place as soon as possible.

- **Enable MSMEs and firms in the ASEAN ecommerce ecosystems to use and transfer data** MSMEs that sell online and all service providers to MSMEs' that do ecommerce—including financial, logistics, and payments service providers and online marketplaces—require fluid access to data on their operations and customers and the ability to store, process, and analyze data cost-effectively. The ASEAN Model Contractual Clauses for Cross-border data flows is a good first step. To further strengthen regional data connectivity, more ASEAN members should consider joining the CPTPP as well as the APEC Cross-Border Privacy Rules system, which balance the objectives of free flow of data that is essential for MSME ecommerce with the objectives of data security and privacy.
- **Corporate digital identity for MSMEs.** ASEAN MSMEs struggle to build trust with online shoppers, who are worried about online fraud. One solution is to arm companies with data-rich corporate digital IDs. This would help MSMEs to be authenticated quickly by customers and service providers such as marketplaces, banks, border agencies, and logistics service providers. It could be built as a private sector-led, decentralized, self-sovereign solution drawing on publicly available and private data on MSMEs' corporate vitals and transactions—and readily build on several ASEAN countries' extensive open corporate registry data and recent successes toward developing a digital identification system for individuals.
- **Promote cybersecurity solutions for MSMEs.** COVID-19 has significantly increased fraud and cyberattacks. ASEAN governments such as Singapore have already implemented practical measures to help MSMEs acquire cyber defenses that are tailored to their needs and budgets; an interesting further approach is New York City government's partnership with a venture capital fund to invest in businesses that develop and deliver affordable and scalable cybersecurity solutions to New York's MSMEs.⁵⁸ Singapore funds MSMEs' cyberdefenses by covering up to 70 percent of the cost of pre-approved cybersecurity products and services, such as subscription, license, and installation fees.⁵⁹
- **Bridge geospatial and gender disparities through digitization.** There are significant geospatial economic and digital disparities within and across ASEAN nations. To access new markets and customers, firms in remote and underserved regions need better connections and technologies, digital and logistics services, talent, and financial services. Helping women-led firms launch their business and access technologies can have, as this report has shown, high payoffs—women-led firms are still latent resource as they account for the majority of those that lack access to technology and tools, whereas men-led firms dominate segments that have access to technology, talent, and finance.
- **Upgrade human capital.** Despite their vibrant technology firms and digital industries, ASEAN nations lag their peers in human capital needed for the digital economy. This arrests broad-based ecommerce development in the region. The regional economies need to adopt new, far-reaching skills development initiatives within and beyond the formal education system. They can also better leverage technology to undo labor market mismatches and sort talent into the right jobs. This is especially relevant for regional governments seeking to provide scalable, personalized continuous learning.

- **Formalizing MSMEs.** Most MSMEs in emerging markets, including in the ASEAN region, are informal. As such, they are unable to access bank accounts, transact formally online, or scale by exporting online. Informality also deters economic productivity. Reducing barriers to formalization and reducing the fiscal burdens for small online sellers would both increase the ranks of formal firms and reduce the still significant number of informal workers used in formal firms' employee pools.⁶⁰ Positively, ASEAN countries such as Vietnam and Singapore have done a great deal to simplify and facilitate business registration for small businesses. ASEAN can also help firms formalize their status through incentives such as tax holidays in exchange for registration, drawing on the experience of countries like Singapore, which provides a tax holiday for start-ups for the first three years of operations, and Panama, which exempts microenterprises that formalize their status from income tax for the first two years.

There are various methodologies for accomplishing the above objectives and supporting ecommerce development, such as:

- **Building public-private partnerships to support MSMEs' digital transformation.** Public-private partnerships with marketplaces for digital marketing, fintechs, logistics technology, and payment providers are essential to raising MSMEs' awareness and use of solutions and services for ecommerce. Such partnerships also help develop and support sustainable MSME ecommerce development initiatives, as in the USAID-supported eTrade Alliance. There may also be excellent opportunities to empower ASEAN women-led firms through such marketplaces as Lazada, Shopee, Bukalapak, Tokopedia, Etsy, eBay, and Amazon.
- **Engagement with state and local governments in ecommerce development.** ASEAN has excellent opportunities to create partnerships between national, state, and local governments and other subnational stakeholders, such as local chambers of commerce, to support MSME ecommerce development across the country. Some of this work is already taking place—but more can be done, for example, to promote learning among different cities and regions on policies and programs that support MSME ecommerce and help promote investment in ecommerce-related activities.

Tables I3 and I4 summarize these ideas.

Table 13: National and regional policy and pilot program proposals





Enablers	MSMEs' pain points	Solutions - Domestic	Solutions - Regional
 Logistics	<ul style="list-style-type: none"> • High total cost of delivery to foreign customers • Slow customs clearance in some markets that adds to costs • Cost and time of hinterland logistics and rural last-mile delivery • Informal addresses and cash on delivery payments raising delivery times and inefficiencies in the “Final 50 Feet” 	<ul style="list-style-type: none"> • Finalize TFA implementation • Increase de minimis levels to \$200, simplify border clearance for low-value items above <i>de minimis</i> thresholds (e.g., up to \$2,500) • Promote AI and blockchain for customs risk management and automation • Reconfigure city logistics to ecommerce delivery; Adopt digital addresses for last-mile delivery • Promote smart logistics solutions and networks • “Smart Port” and “Smart Airport” pilots to increase capacity and throughput 	<ul style="list-style-type: none"> • Accelerate implementation of ASEAN Single Window, create ASEAN-Plus Single Window • Interoperability among national trade platforms, e.g., Thailand-Singapore • “LogTech Academy” to promote online sellers’ adoption of leading-edge warehousing and logistics technology solutions • Regional eLogistics Fund to support online sellers and governments’ smart logistics projects • Regional logistics tech sandboxes, for example for testing autonomous and drone delivery regionally
 Payments	<ul style="list-style-type: none"> • Frictions to interoperability of cross-border digital payments • Paper-based and siloed B2B payments in logistics value chains 	<ul style="list-style-type: none"> • Advance regulations as in Singapore that govern payment providers that are calibrated to risk • Promote biometric IDs and 3D Secure standards for customer authentication for small purchases • Support open data transfer policies to enable fraud-prevention in digital payments 	<ul style="list-style-type: none"> • Meet goal of interoperable cross-border mobile payments with ISO 20222, standardized QR codes, APIs, in 2025 • Pilot distributed ledger technology for fast B2B payments clearance • Promote digitized invoicing and automated payments using smart contracts among players moving B2B ecommerce cargo
 MSME Skills	<ul style="list-style-type: none"> • Still limited ecommerce and digital marketing capabilities • Knowledge on optimizing stores on global marketplaces to export extra-regional markets • Knowledge about technologies and solutions for business digital transformation • Challenges with managing cybersecurity and aftersale 	<ul style="list-style-type: none"> • Leverage public-private partnerships to onboard MSMEs on marketplaces and secure logistics, finance, digital marketing, and payment services for ecommerce • Provide mass-customized online capacity-building for social sellers to set up online stores, online sellers to onboard global marketplaces • Promote digital capabilities and labor market matching in workforce development strategies • Promote online dispute resolution (ODR) systems for a scalable and quick resolution on disputes in online transactions 	<ul style="list-style-type: none"> • “ASEAN 360° eCommerce Academy” to enable MSMEs to access holistic capabilities for running a global online business • “ASEAN Ecommerce Executive Education” program for leaders of established firms to uplevel ecommerce capabilities and carry out digital transformation with regional peers • Regional “RegTech” solution to enable MSMEs to access market access data for all products and markets and automate trade compliance
 Finance	<ul style="list-style-type: none"> • Cash flow constraints to fulfill orders online, including limited access to fast-disbursing working capital loans • Access to long-term funding for digital transformation • MSME trade finance gaps 	<ul style="list-style-type: none"> • Promote the adoption of self-sovereign digital ID for MSMEs, to automate KYC • Guarantee Fintech-issued working capital loans to online sellers • Promote e-invoicing and procure-to-pay solutions in supply chains 	<ul style="list-style-type: none"> • Pilot a regional credit guarantee to support B2B online buyers’ access to financing to make online purchases • Develop a regional Digital Transformation Fund for online sellers’ digital transformation projects

Table 14: Crosscutting policies to enable ASEAN MSME ecommerce

 Digital integration	 Access to data	 MSME Digital ID
<ul style="list-style-type: none"> • Promote prompt launch ASEAN Digital Economy Framework Agreement and ensure the agreement has high-quality, binding rules to enable ecommerce. • Promote convergence of national digital regulations for MSMEs to apply similar rules when transacting across the ASEAN. • Promote ASEAN public-private dialogues to track impact of national digital and other regulations on crossborder ecommerce. • Continue the work on the ASEAN Digital Integration Index launched in 2021. 	<ul style="list-style-type: none"> • Promote use of ASEAN Model Clauses and, with global partners, data transfer regime such as APEC Cross Border Privacy Rules (CBPR) system to enable orderly cross-border data transfers, while respecting national data privacy laws in that are in place. • Promote public-private dialogues on regulatory implications of emerging privacy-preserving technologies such as encryption and confidential computing. 	<ul style="list-style-type: none"> • Promote decentralized self-sovereign regional corporate digital ID identity solutions for MSMEs to be authenticated and verified quickly by their service providers and customers, drawing on experiences from CorpPass and other examples.
 Binding digital trade agreements	 Cybersecurity	 Business formalization
<ul style="list-style-type: none"> • Promote members' accessions to high-quality trade agreements with binding ecommerce provisions such as the CPTPP, to advance regulatory convergence to facilitate multimarket online sellers. • Exchange lessons learned from the emerging digital trade agreements and ecommerce chapters in FTAs and their impacts on MSME ecommerce. • Promote agreements with complementarities for market access for goods services, investor protections, competition policy, and ecommerce. 	<ul style="list-style-type: none"> • Continue supporting and subsidizing MSMEs' cybersecurity training and technology purchases • Partner with technology companies and VCs to develop cybersecurity solutions tailored to MSMEs. 	<ul style="list-style-type: none"> • One-stop shop fully online business registration (where not implemented yet). • Carrots and sticks approaches – tax holidays and fee exemptions coupled with inspections.

VI. CONCLUSION

ASEAN economies have a long-standing commitment to promoting ecommerce, including through the ASEAN Ecommerce Work Program and the growing adoption of domestic policies and programs that are conducive to MSME ecommerce. Today, ecommerce is booming in ASEAN economies, unlocking new opportunities for ASEAN MSMEs to recover from COVID-19, grow their sales, and export. However, there is only limited data on which and how ASEAN MSMEs engage in ecommerce, what barriers they face, and how public- and private-sector leaders are supporting MSMEs' ecommerce.

This report has sought to bridge this knowledge gap with granular survey data from 1,300 firms and comparative policy data covering 10 major policy areas pertinent to ecommerce. The data indicates that while most ASEAN MSMEs are still social sellers, MSMEs in the region are also rapidly onboarding local, regional, and global marketplaces that enable them to reach hundreds of millions of customers around the world. Firms are also increasingly “born digital”—young firms are more likely to use marketplaces than firms that are 6 or more years old.

MSMEs report that they particularly benefit from their ecommerce business in terms of new domestic sales and customers, improved profit margins, and greater exports. The best-performing online seller-exporters tend to be metropolitan firms that stand out for their use of numerous complementary digital technologies to scale and streamline their operations and for their human capital and skills to leverage technologies.

However, social and marketplace sellers share certain challenges, typically related to logistics, internet connectivity, and payments acceptance, and, increasingly, cybersecurity and the proliferation of disparate national data privacy, consumer protection, online copyright, and other digital regulations. For mature online sellers that engage in trade, customs procedures, market access issues, international delivery costs, and attracting talent are among the top challenges. Social sellers, in contrast, report challenges with customs procedures for inbound trade, as well as with cybersecurity, cross-border payments, and funding their digital transformation. Firms report that high delivery costs, currency exchange fees, and challenges with payment acceptance are issues that have at some point made it unfeasible to complete an online transaction.

This report has proposed specific solutions to these challenges in logistics, payments, MSME ecommerce skills development, and finance, and discussed ways for the region to bridge geographic disparities in ecommerce use, especially between rural and urban areas. Mechanisms such as (1) public-private partnerships that support MSMEs' ecommerce use and digital transformation; (2) engaging local governments in ecommerce promotion; (3) and using trade agreements with binding, high-quality ecommerce provisions for ASEAN MSMEs to transact easily across markets are some of the additional tools that will enable ASEAN MSMEs to connect with and transact at home and beyond borders.

ANNEX I: SURVEY SAMPLE

Survey fielding

Two surveys were conducted: survey A was fielded with 550 firms in the Philippines on June 6–9, 2021, and survey B with 750 firms in Indonesia, Thailand, and Vietnam on August 18–21, 2021, across firm size categories, sectors, and geographies. Unlike a traditional survey process in which we would first have drawn up a sample frame of firms in a country and then randomly selected firms from it for phone interviews, in this instance, we leveraged online survey methods by using Centiment’s proprietary panel of respondents.

Respondents take the survey on their laptops or computers, online, in their own time. This method is scalable and saves a considerable amount of time and resources compared to computer-assisted telephone interviews (CATIs). In several prior studies utilizing both CATI and online surveys in a country simultaneously, Nextrade Group has found that online surveys as executed using the methodology described here have minimal tradeoffs: they produce very similar patterns as CATI surveys and even if the surveys are unsupervised, they produce robust, high-quality responses from serious survey-takers. This in part owes to robust quality control before, during, and after the survey, through such practices as questions to identify inattentive survey-takers and digital fingerprinting to prevent duplicates. A mix of further solutions ensures that even users that have multiple accounts and devices attempt a specific survey only once.

Figure I-1: Surveyed firms, by number of full-time employees

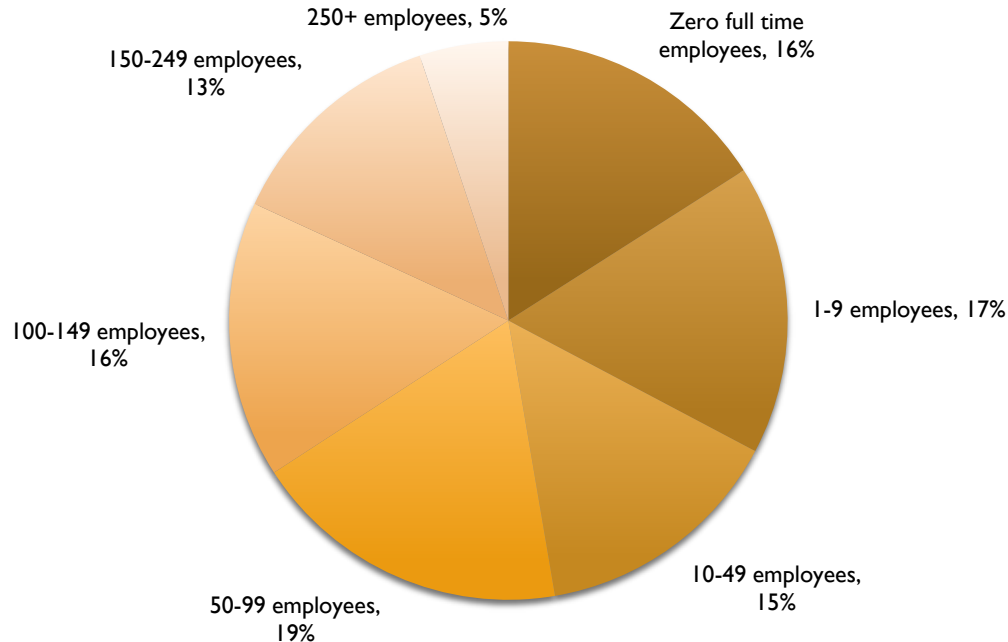
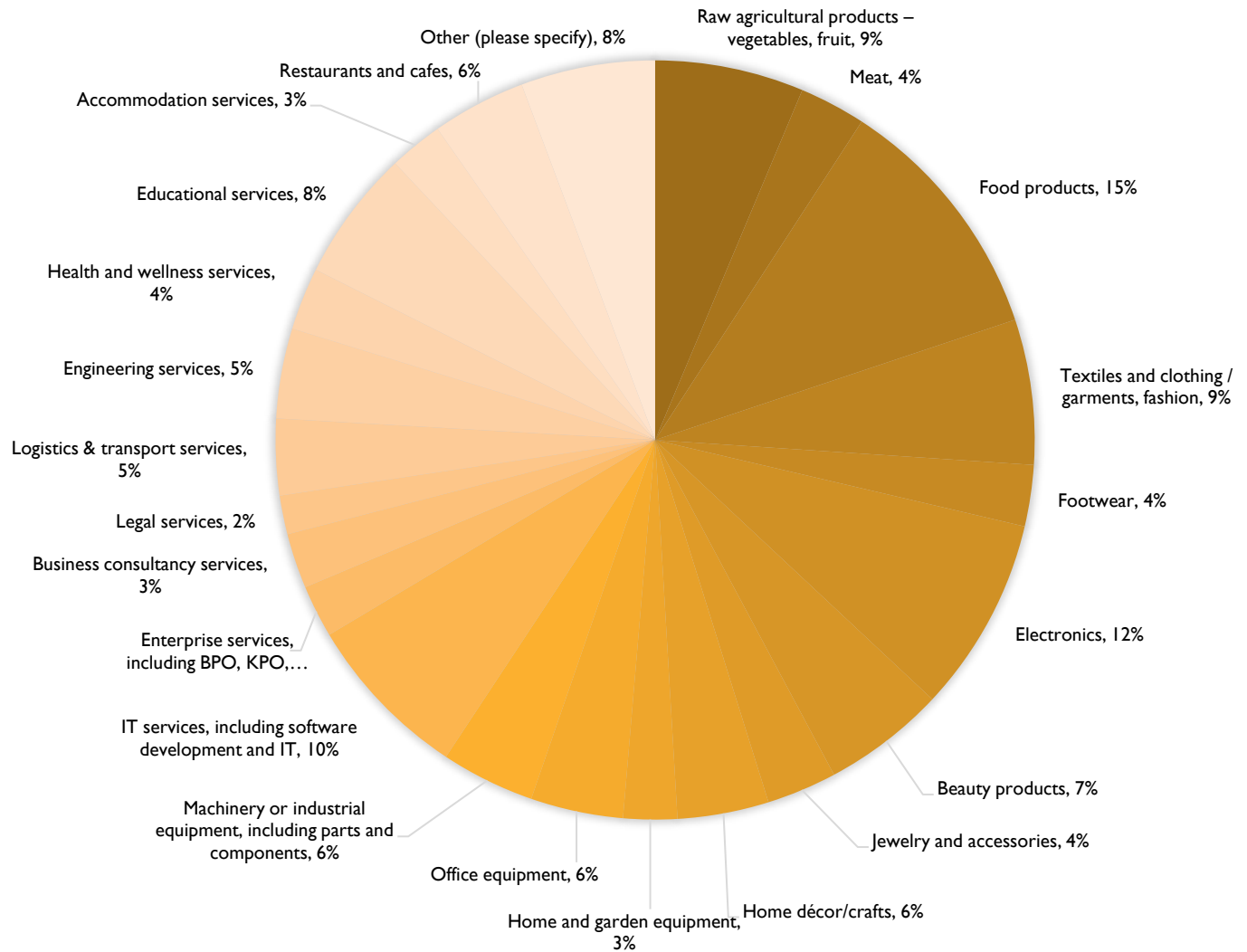


Figure I-2: Surveyed firms, by sector



ANNEX II: VARIABLES FOR BEST PLACE FOR MSME ECOMMERCE INDEX

	Variable	Source
1	% of people connected to Internet	World Bank Data
2	Ratio of people with fixed broadband- subscriptions per 100 people	World Bank Data
3	Internet quality - speed	Fastmetrics
4	Broadband cost	Cable
5	Tariffs on ICT products	WTO
6	Taxes on digital services (VAT/GST on digital sales)	Various
7	PayPal is available	PayPal
8	Hourly labour costs in US dollars (converted using 2011 PPPs), latest year	ILO
9	Notice period for redundancy dismissal for a worker with 1 year (weeks of salary)	ILO
10	Severance pay for redundancy dismissal for a worker with 1 year of tenure (weeks)	ILO
11	Maximum length of a single fixed-term contracts (months)	ILO
12	GDP per person employed (constant 2017 PPP \$)	World Bank
13	Regional trade agreements (number)	WTO Regional Trade Agreements Database
14	Labor skills levels - % of technicians	ILO
15	English proficiency (score) (2019)	EFPI
16	Digital talent - proxy: Patent applications, residents	World Bank
17	Digital talent - proxy: ICT service exports	World Bank
18	Office space cost (unit/month)	CBRE
19	Doing business - ease of doing business (score)	World Bank Doing Business
20	Total tax and contribution rate (% of profit)	World Bank
21	Time spent on tax filings	World Bank
22	Cybersecurity index	ITU Global Cybersecurity Index
23	Paperless trade score	UN Global Survey on Digital and Sustainable Trade Facilitation
24	Crossborder paperless trade score	UN Global Survey on Digital and Sustainable Trade Facilitation
25	Time to export - documents	World Bank Doing Business
26	Time to export - compliance	World Bank Doing Business
27	Commercial air connectivity	World Bank World Development Indicators
28	Logistics performance index: Ease of arranging competitively priced shipments	World Bank Logistics Performance Index
29	Logistics performance index: Ability to track and trace consignments	World Bank Logistics Performance Index
30	Lead time to export, median case	World Bank
31	Logistics performance index: Quality of trade and transport-related infrastructure	World Bank Logistics Performance Index
33	Collateral requirements	World Bank Enterprise Surveys
34	Depth of Fintech ecosystem - National fintech ranking 65 countries	Findexable
35	Doing business - credit bureau coverage (% of adults)	World Bank Doing Business
36	Openness of company data available through government	Open company data index
37	E-government index- online services	UN
38	Companies' digital technology adoption index	World Bank Digital Adoption Index
39	Policy index for MSME ecommerce	eTrade Alliance
40	UPU Postal Development Index	UPU Postal Development Report 2020
41	Crime rate (robberies per 100,000)	UNODC
42	Has Stripe	Stripe
43	Has at least 1 Google Office	Google
44	Has at least 1 Amazon Fulfillment Center	Amazon
45	Has at least 1 Amazon offices	Amazon
46	% of firms with majority female ownership	World Bank Enterprise Surveys
47	% of firms with female top manager	World Bank Enterprise Surveys
48	Made or received digital payments - female (% age 15+)	World Bank FINDEX database
49	Account ownership at a financial institution or with a mobile-money-service provider - female (% age 15+)	World Bank FINDEX database
50	Inclusive Internet Environment	The Economist
51	Made or received digital payments (% age 15+)	World Bank FINDEX database

ANNEX III: VARIABLES AND THEIR CODING IN THE POLICY MAPPING

Digital Infrastructure

Government national broadband plan or initiatives	1 = yes ; 0 = not in place (or not found)
Government initiatives for women-led firms to use and innovate in tech	1 = yes ; 0 = not in place (or not found)
5G strategy published or initiatives announced	1 = yes ; 0 = not in place (or not found)
<i>5G service has been rolled out</i>	<i>1 = yes; 0 = not in place (or not found)</i>
<i>5G spectrum auctioning has happened already</i>	<i>0.5 = spectrum assigned ; 0.25 = auction planned ; 0 = not in place (or not found)</i>
<i>5G piloted/trials have taken place</i>	<i>0.25 = yes; 0 = not in place (or not found)</i>
<i>4.5G rolled out</i>	<i>0.5 = yes; 0.25 = in planning ; 0 = not in place (or not found)</i>
Competition among fixed wireless broadband providers	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition among fixed satellite services	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition among mobile cellular	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition among mobile satellite services	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition among internet services	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition in international gateways	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Competition in wireless local loop	0.2 = full ; 0.1 = partial ; 0 = monopoly, or N/A
Universal access/service policy adopted	0.25 = yes; 0 = no
Caps on FDI in wireless and fixed telecommunications	-0.5 = some limits or caps on FDI found, such as in certain sectors
Information Technology Agreement member	1 = yes ; 0 = no
2018 applied tariffs on cellphones	distance from frontier: 1 = best, 0 = worst or N/A
2018 applied tariffs on laptop computers	distance from frontier: 1 = best, 0 = worst or N/A

Digital regulations on online transactions

Fully digital business registration available	1 = yes; 0.5 = part of process can be done online, or only certain cities provide the service, or only certain kinds of companies can register online; 0 = not online at all, including even if there is a "one stop shop"
Electronic signatures admissible, legal, and enforceable	1 = yes ; 0 = not in place (or not found)
Digital or electronic invoice implemented	1 = yes ; 0 = not in place (or not found)
eID/digital ID in place (including for e-government services)	1 = yes ; 0.5 = in development/piloted ; 0 = not in place (or not found)
National digital corporate ID tested or in place	1 = yes ; 0 = not in place (or not found)
Tax exemptions for new businesses	1 = yes ; 0 = not in place (or not found)

Digital regulations on online behavior

Net neutrality: ISPs barred from limiting Internet content in their networks	1 = yes ; 0 = not in place (or not found)
Liability exemptions/safe harbors for internet intermediaries from copyright infringement	1 = yes ; 0.5 = in draft, or is party to treaty that requires safe harbor regulations though not in place (or not in place (or not found))to have adopted in national legislation yet ; 0 = not in place (or not found), law does not mention internet intermediary liability, or law implies high liability risk i.e. EU directive
Copyright limitations and exceptions - use of "fair use" standard	1 = yes ; 0.5 = not officially but abide by Berne Convention ; 0 = not in place (or not found)
Restrictive OTT regulations affecting Internet services	-1 = yes ; 0 = not in place (or not found)
Caps on FDI by foreign marketplaces	-0.5 = some limits or caps on FDI found, such as in certain sectors
Data transfer allowed (or no law in place)	1 = yes, allows data transfer, whether by law or implicitly because there is no law
<i>Data transfer limits to certain sectors</i>	<i>-0.2 = yes ; 0 = not in place (or not found)</i>
<i>Data transfer always requires jurisdictions to be branded "adequate"</i>	<i>-0.2 = adequacy always required ; -0.1 = adequacy can be required but not always i.e. if there is user consent, or a special exception ; 0 = not in place (or not found)</i>
<i>Data transfer always requires user consent</i>	<i>-0.2 = user consent always required ; -0.1 = user consent can be required but not always i.e. if there is adequacy standard in place, or a special exception ; 0 = not in place (or not found)</i>

Digital regulations on online behavior (cont.)

VAT/GST Tax

distance from frontier: 1 = best, 0 = worst

Digital tax/rate discussed or implemented

-1 = yes ; -0.5 = Proposed ; 0 = not in place (or not found)

Consumer protection regulation in place

1 = yes ; 0.5 = in draft

Consumer protection law explicitly applies to ecommerce

1 = yes ; 0 = not in place (or not found)

Legal/regulatory prohibitions on companies using unfair or deceptive acts

0.25= yes ; 0 = not in place (or not found)

Anti-spam law in place

0.25= yes ; 0 = not in place (or not found)

Online contracts are to be drafted in clear and simple language

0.25= yes ; 0 = not in place (or not found)

Forms of redress - consumer's right to return items purchased

0.25= yes ; 0 = not in place (or not found)

Companies have a Trust certificate or companies / governments certify trusted firms

1 = yes ; 0.5 = Planning ; 0 = not in place (or not found)

Consumer complaints can be filed online

1 = yes ; 0 = not in place (or not found)

Digital / video-based court proceedings for consumer issues

1 = yes ; 0 = not in place (or not found)

Payment regulations

E-payments law in place

1 = yes ; 0 = not in place (or not found)

Risk-based approach (RBA) KYC regime in place

1 = yes ; 0.5 = in process of implementing ; 0 = not in place (or not found)

Regulatory requirements differentiated by type of service and its respective risks

1 = yes ; 0.5 = in process of implementing ; 0 = not in place (or not found)

Demonetization programs to promote digital payments

1 = yes ; 0 = not in place (or not found)

Regulations or programs to fuel interoperability of online payments

1 = yes ; 0 = not in place (or not found)

Trade facilitation for ecommerce

De minimis threshold for entry of goods

distance from frontier: 1 = best, 0 = worst or N/A

Publication of existing import-export regulations on the internet

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Stakeholders' consultation on new draft regulations (prior to their finalization)

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Advance publication of new trade-related regulations before their implementation

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Advance ruling on tariff classification and origin of imported goods

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Risk management

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Pre-arrival processing

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Post-clearance audits

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Independent appeal mechanism

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Separation of release from final determination of duties, taxes, fees and charges

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Establishment and publication of average release times

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Trade facilitation measures for authorized operators

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Expedited shipments

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Acceptance of copies of original documents required for import, export or transit

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Electronic Single Window System

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Alignment of working days and hours with neighboring countries at border crossings

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Alignment of formalities and procedures with neighboring countries at border crossings

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0= No

Provides B2B and/or G2B services as shared trade ecosystem platform

1 = yes ; 0 = not in place (or not found)

Use of blockchain and/or AI in customs

1 = yes ; 0 = not in place (or not found)

Innovative postal services, such as drones, collaboration with ecommerce platforms

1 = yes ; 0 = not in place (or not found)

UPU Postal Development Index

distance from frontier: 1 = best, 0 = worst or N/A

Trade facilitation for ecommerce

De minimis threshold for entry of goods

Publication of existing import-export regulations on the internet

Stakeholders' consultation on new draft regulations (prior to their finalization)

Advance publication of new trade-related regulations before their implementation

Advance ruling on tariff classification and origin of imported goods

Risk management

Pre-arrival processing

Post-clearance audits

Independent appeal mechanism

Separation of release from final determination of duties, taxes, fees and charges

Establishment and publication of average release times

Trade facilitation measures for authorized operators

Expedited shipments

Acceptance of copies of original documents required for import, export or transit

Electronic Single Window System

Alignment of working days and hours with neighboring countries at border crossings

Alignment of formalities and procedures with neighboring countries at border crossings

Provides B2B and/or G2B services as shared trade ecosystem platform

Use of blockchain and/or AI in customs

Innovative postal services, such as drones, collaboration with ecommerce platforms

UPU Postal Development Index

distance from frontier: 1 = best, 0 = worst or N/A

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0 = No

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0 = No

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0 = No

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1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0 = No

1 = Yes ; 0.5 = Partially ; 0.25 = Planning ; 0 = No

1 = yes ; 0 = not in place (or not found)

1 = yes ; 0 = not in place (or not found)

1 = yes ; 0 = not in place (or not found)

distance from frontier: 1 = best, 0 = worst or N/A

MSME capacity-building and export promotion for ecommerce

Export promotion agency programs/guidelines for ecommerce available

Online ecommerce export services, such as channel management platform

Subsidized digital transformation funding for firms to use ecommerce

Public-private collaboration (e.g. with marketplaces) to build SMEs' capacity

Programs for women-led firms to learn to export (ex: e-commerce)

Programs for rural companies to engage in ecommerce

Help with MSME logistics for cross-border ecommerce

1 = yes; 0.5 = planning to implement ; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

MSME finance

Regulatory sandboxes for FinTech

Open banking regulations

Regulatory framework for equity crowdfunding

Government credit guarantees for micro and small working capital loans offered to banks

Government credit guarantees for working capital loans offered to Fintechs

Direct loans from government to small or micro firms

Equity for tech and digital businesses (gov't as GP)

Equity for tech and digital businesses (gov't as LP or fund of funds)

Specific equity programs for exporters (or VC investments expressly for exporting)

Programs to finance/guarantee ecommerce transactions

Financing programs or entities for women-led companies - grants, debt or equity

1 = yes; 0.5 = in development ; 0 = not in place (or not found)

1 = yes; 0.5 = in development ; 0 = not in place (or not found)

1 = yes; 0.5 = in development ; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

Government eprocurement promotion for MSMEs

Procurement tenders and bid documents available online

Procurement bid submission online

Procurement bid process and notices electronic

Online, transparent and/or simple bidding search for low-value procurement contracts

Initiatives to increase SME procurement bids and contracts

Initiatives to increase women-led SME procurement bids and contracts

Complaint mechanism in place, for example about unfair procurement bidding process

Member or observer of plurilateral Agreement on Government Procurement

1 = yes; 0.5 = only tenders or bid docs online; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0.5 = observer status; 0 = no

MSME cybersecurity readiness

National cybersecurity strategy in place

Cybercrime legislation in place

Computer Emergency Response Team (CERT) in place

Educational campaigns to SMEs on cybersecurity/SME focused assistance

Cybersecurity capacity building for governments

Ratified Budapest Convention

1 = yes, including if standalone or part of larger strategy; 0.5 = in draft; 0 = not in place (or not found)

1 = yes, if standalone or part of a law i.e. Criminal Code; 0.5 = in draft; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)

1 = yes, 0 = no

Ecommerce strategy and statistics

Government digital strategy in place

Government ecommerce strategy in place

Ecommerce flow and/or usage statistics collected

1 = yes; 0.5 = in draft/development ; 0 = not in place (or not found)

1 = yes; 0.5 = in draft/development ; 0 = not in place (or not found)

1 = yes; 0 = not in place (or not found)



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