

SECTOR BRIEFING

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# Asean E-Commerce Platforms

Can Asean be the China of this decade?






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# Executive Summary

Can Asean be the China of this decade?

The number of online shoppers in Asean as a percentage of the population stands at around 26% in 2019, putting the Asean region five years behind China. However, with e-commerce sales as a percentage of retail sales at around 4% in 2019, Asean is nine years behind China. Clearly, people in Asean are buying products online but are more cautious in raising their wallet-share of e-commerce purchases. What can explain this?

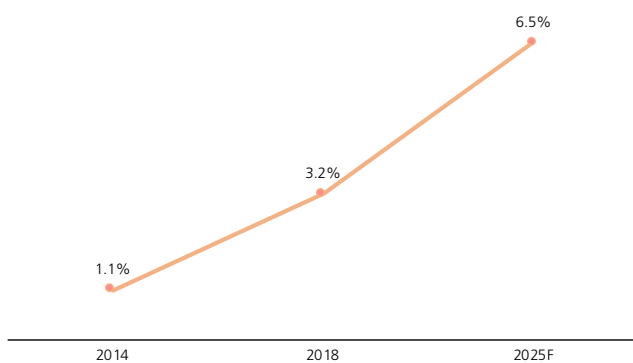
## Number of online shoppers as a percentage of total population in Asean is 5 years behind China

	China 2014	China 2019	Asean 2019
Population (m)	1,370	1,393	576
Number of online shoppers (m)	317	610	150
As a % of total population	23%	44%	26%

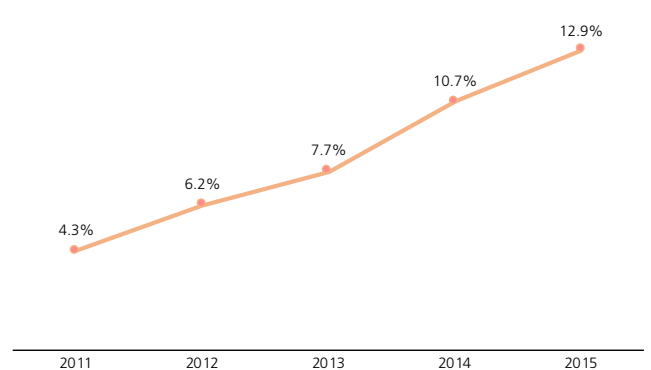
Source: World Bank, Internet Economy Report 2019 by Google and Temasek, DBS Bank

## E-commerce sales as a percentage of retail sales in Asean is 9 years behind China

SEA E-commerce Revenue and Penetration (2014-2025F)



China - E-commerce sales as a percentage of retail sales (2011-2015)

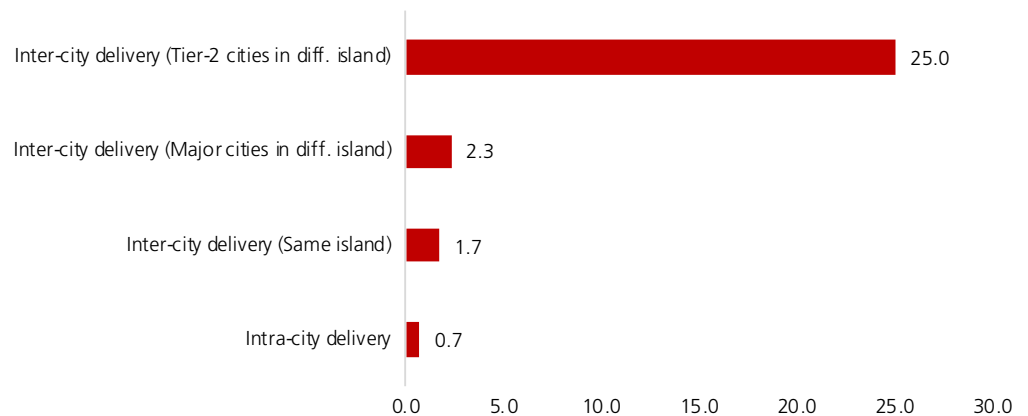


Source: Internet Economy Report 2019 by Google and Temasek, Deloitte, China International Electronic E-commerce Centre, DBS Bank

Logistics and fragmented e-commerce market are major roadblocks.

Buying online often comes with a few days' delay for delivery of goods, with high delivery charges offsetting the price advantage of e-commerce. In addition, the e-commerce market's fragmented nature means the risk of fraud (identity theft and spurious websites) is high, especially with smaller e-commerce players. Product availability and delivery fee are the biggest pain points for Jakarta customers while delivery fee and delivery time are biggest pain points for customers outside Jakarta.

**Parcel delivery costs in Indonesia (US\$)**



Source: INSEAD, DBS Bank

But there is nothing stopping Tier-1 cities from fuelling growth over the next five years.

Parcel delivery costs in major Indonesian cities are significantly lower than delivering to Tier-2 locations. Jakarta alone comprises over 16% of Indonesia's GDP while Java island is about 59%. Similarly, in Vietnam, its two major cities make up 35% of the country's GDP. Besides inhouse logistics infrastructure, e-commerce players also partner various ride-hailing companies to make deliveries in Tier-1 locations. According to Redseer Consulting, almost 64% of deliveries in Indonesia were done within 1-2 days (data taken around mid-2019). Indonesia's bonded logistics centres (PLB) function as mini free-trade zones deployed strategically throughout the country, which might enable importers and exporters to reduce warehousing costs significantly.

E-commerce players are investing in captive logistics infrastructure to resolve challenges.

The lack of captive logistics could put e-commerce players at the mercy of their third-party logistics (3PLs) partners and their delivery standards. According to Redseer Consulting, the captive units tackle the bulk of business-as-usual predictable shipments in high-traffic areas, while 3PLs manage the volume in low-traffic areas, surges around major online events, and specialised needs like on-demand (<2 hour) deliveries.

Take rates in Asean are close to China's but profitability is quite different.

Take rate is the percentage of the transaction value captured by the e-commerce player for a sale they facilitated through their platforms. While take rates in Indonesia are close to China's, the composition is quite different. For Alibaba, 70% of the take rate is from advertising and shopfront fee, which is highly profitable. In Asean, 30-50% of the take rate is from value-

added services (VAS) like warehousing & fulfilment, cross-border logistics, etc. which is close to zero margin. In our estimates, players in Asean will require much higher take rate than China to achieve breakeven.

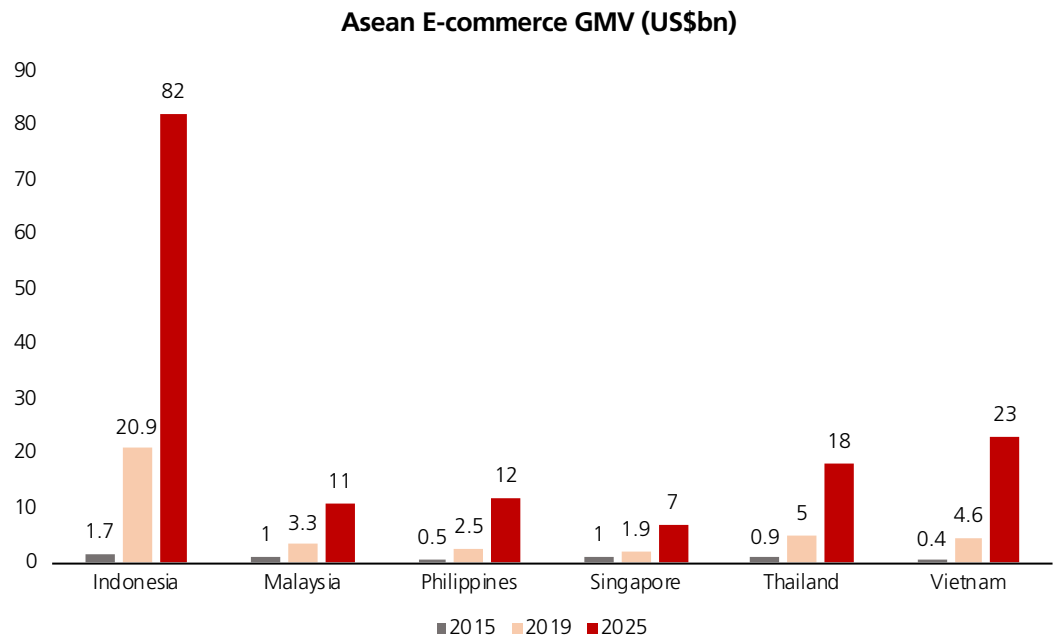
Increasing focus on consumer finance business to plug the hole in profitability.

In Asean, e-commerce players have neither the reach of Alibaba to create a credit scoring matrix, nor any government-backed comprehensive credit scoring system like China's Baihang. But they can potentially benefit from commission income by acting as an intermediary, liaising sellers looking for financing. Sellers on the platform can finance their working capital requirements via consumer financing facilitated by the e-commerce platform. Platforms can take longer time to make payments to the sellers and instead use the cash for customer acquisition. Lazada and Shopee have already entered into an array of partnerships with many local banks and fintechs to provide sellers on their platforms with access to consumer finance.

Smaller e-commerce players may consolidate due to the difficulty of achieving breakeven.

Outside of Indonesia, no other country has critical mass for a single country player to achieve breakeven. Shopee and Lazada are two key regional players with extensive footprint. Shopee dethroned Tokopedia as Indonesia's market leader in 4Q19 according to online shopping aggregator iPrice Group, while it continues to be the market leader in Vietnam and Malaysia. With so much focus on building logistics infrastructure, only well-funded players with regional scale and customer mindshare will emerge as long-term winners.

**Asean e-commerce GMV (in USD billion) – Indonesia is the largest, Vietnam to surpass Thailand soon**



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

Winners to focus on market share growth over profitability at this early growth stage.

We see the share of VAS continuing to rise as key e-commerce players undertake more warehousing and fulfilment services to resolve customer pain points. With gross merchandise value (GMV) in Indonesia and Vietnam expected to quadruple by 2025, players with adequate funding in place can grow their revenue even faster by inching up their take rates.

*GMV in Indonesia and Vietnam  
expected to quadruple by 2025*

# How does e-commerce in Asean stack against China?

Following the footsteps of China, Asean is charting its own path to success in the flourishing e-commerce industry, with ~42%<sup>1</sup> of its internet-using population shopping online in 2019. With rising internet penetration and a relatively fragmented e-commerce market, Asean is just beginning its e-commerce journey.

## Online users in Asean\* in 2019 compared with China in 2014

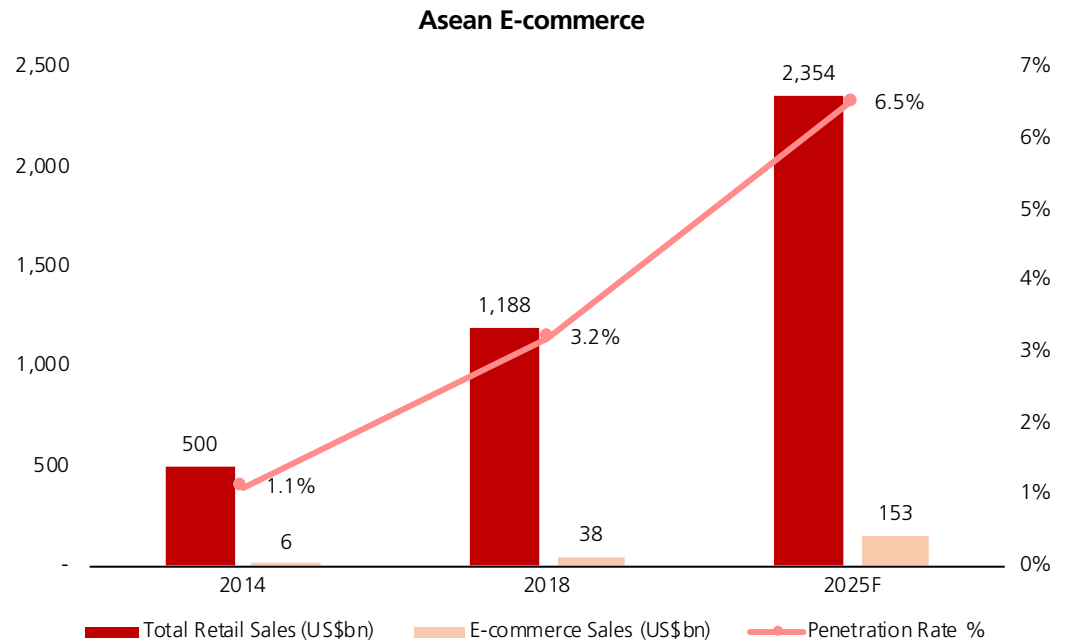
	China 2014/15	China 2019	Asean 2019
<b>Population (m)</b>	<b>1,370</b>	<b>1,393</b>	<b>576</b>
Internet users	649	854	360
As a % of total population	47%	61%	62%
<b>Mobile internet users</b>	<b>557</b>	<b>847</b>	<b>324</b>
As a % of total population	41%	61%	56%
As a % of internet users	86%	99%	90%
<b>Number of online shoppers (m)</b>	<b>317</b>	<b>610</b>	<b>150</b>
As a % of total population	23%	44%	26%
As a % of internet users	49%	71%	42%

\* Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam  
Source: World Bank, Internet Economy Report 2019 by Google and Temasek, DBS Bank

Apart from Singapore, the only developed market in the region where e-commerce is relatively mature, other Asean countries' number of online shoppers is growing at a double-digit rate annually.

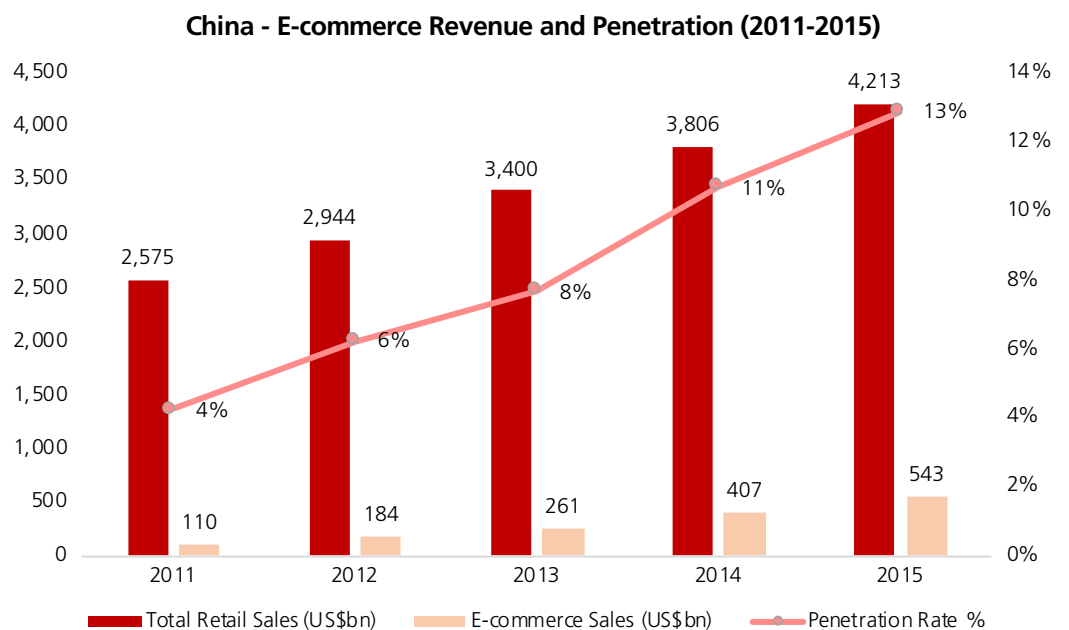


**SEA's e-commerce penetration rate to double by 2025**



Source: Internet Economy Report 2019 by Google and Temasek, Deloitte, Forrester Research, DBS Bank

**Comparatively, pick up in China's e-commerce was much swifter**



Source: China International Electronic e-Commerce Centre, DBS Bank

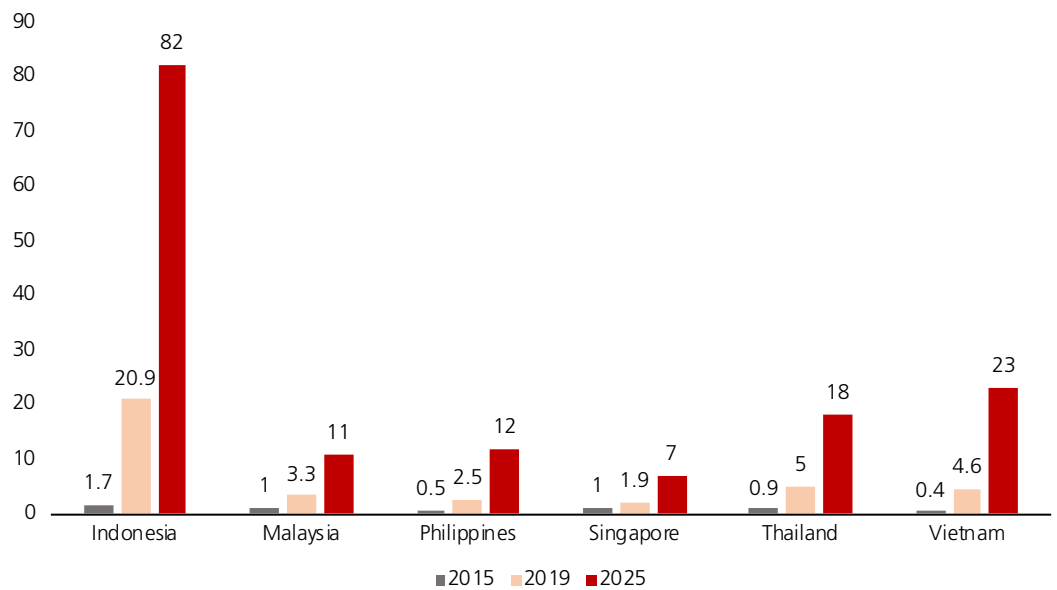
The presence of e-commerce giants such as JD.com and Alibaba perfectly poised China to be an e-commerce powerhouse. China’s total retail sales in 2015 was US\$4.2tn, of which e-commerce contributed 13% or an estimated U\$543bn<sup>2</sup>. By 2020, the total e-commerce sales in China is expected to account for ~25% of total retail sales<sup>3</sup>.

Asean a key target for global e-commerce players

In 2014, e-commerce sales in Asean was US\$5.5bn which represented 1.1% of total retail sales and this improved to US\$38.2bn in 2019, accounting for ~3.2% of the total retail sales<sup>4</sup>. SEA’s US\$590bn<sup>5</sup> retail market is still underdeveloped, and this combined with a young population and high internet and smartphone penetration, makes Asean a key target for global e-commerce players. E-commerce sales in Asean are expected to reach US\$153bn by 2025, contributing 6.5% to the total retail sales<sup>6</sup>. Indonesia remains the largest market with ~US\$20.9bn in e-commerce sales (~55% of regional total) in 2019<sup>7</sup>.

**E-commerce GMV in Indonesia is the largest, Vietnam to overtake Thailand soon**

**Asean E-commerce GMV (US\$bn)**



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

## What are the issues faced by an e-commerce customer in SEA?

### A highly fragmented e-commerce and e-wallet market

SEA is home to more than 100 e-commerce players, comprising several international brands and a large pool of domestic players. Such a fragmented market means most consumers may not have a preferred e-commerce player and would turn to search engines first when looking for a product as opposed to browsing through e-commerce websites. Furthermore, Asean digital consumers demonstrate little allegiance to e-commerce platforms as they prefer shopping on social media.

### Some of the e-commerce players by country

INDONESIA	SINGAPORE
 	 
 	 
 	 
VIETNAM	MALAYSIA
 	 
 	 
 	 
THAILAND	
 	
 	
 	

Source: DBS Bank

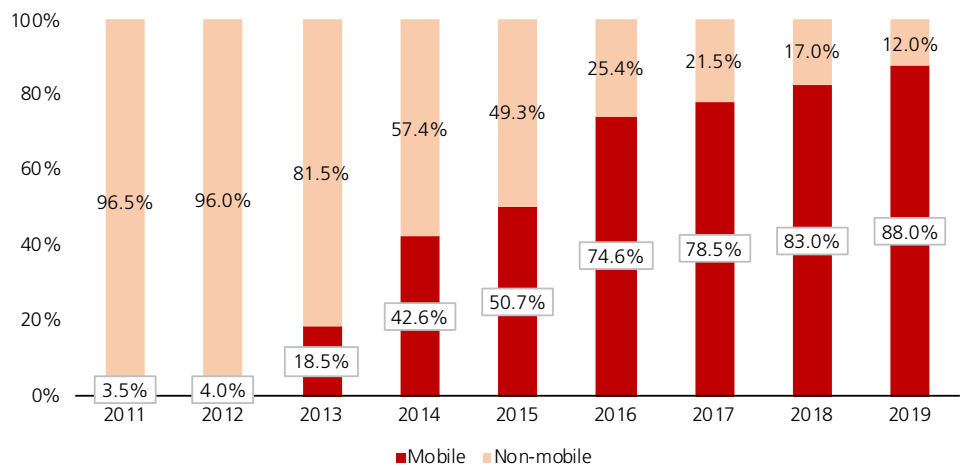
Asean’s e-wallet market is expected to reach US\$109bn by 2025.

Countries with a large unbanked population, such as Indonesia, Vietnam and the Philippines, are markets where alternative payment methods may be favoured. At present, there are dozens of e-wallet players in every Asean country with no clear indication as to who is leading the pack in most of the markets. The region’s e-wallet market is expected to reach US\$109bn by 2025<sup>8</sup>.

There is no doubt that China’s e-wallet market is way ahead of other countries. In 2012, ~96%<sup>9</sup> of payments in China were non-mobile payments, with majority of these being cash transactions due to low credit card penetration. But fast forward to 2019, China leapfrogged the credit card revolution with mobile payment platforms facilitating ~90%<sup>10</sup> of payments.

**China is on its way to becoming the world’s first cashless country**

**Market share of mobile vs. non-mobile payments in China**



Source: Daxue Consulting, DBS Bank

**Popular e-wallets in Asean are offered by players in a diverse set of industries**

	Key Wallet players
China	Alipay™, WeChat Pay
Indonesia	GO JEK, GO PAY, OVO, TELKOMSEL cash, Link Aja!
Vietnam	mo mo, ZaloPay, moca mobile payment, Viettel pay
Philippines	PayMaya, Globe GCASH, BPI EXPRESS Mobile 24/7 BANKING
Malaysia	Boost™, CIMB PAY MALAYSIA, Maybank 2u PAY
Thailand	K+, SCB EASY, rabbit LINE Pay, true money
Singapore	DBS PayLah!, GrabPay, SINGTEL

Source: DBS Bank

Smartphones enabling access to e-wallets for the underbanked or unbanked in Asean

In the case of SEA, cash on delivery accounts for more than two-thirds of digital purchases in the region (except for Singapore)<sup>11</sup>. Backed by a host of market players from a diverse set of industries such as ride-sharers, telecommunications companies, banks, and fintechs, traditionally cash-reliant as well as underbanked or unbanked individuals in Asean are gaining greater access to e-wallets via their smartphones.

While there are dozens of e-wallet players in each of the Asean countries, the dominant spot is yet to be taken in every market apart from Vietnam. Even a small market like Singapore has ~30<sup>12</sup> different e-wallet services with no clear leader in sight. But SEA's fast-growing, yet fragmented digital payment landscape is starting to witness the first signs of market consolidation<sup>13</sup>:

- A. In Vietnam, Vimo merged with payment processor mPOS and rebranded as NextPay. It kicked off a US\$30m fundraising round and an ambitious growth plan.<sup>14</sup>

- B. Grab is in talks to merge its Indonesian digital payments firm, OVO, and Ant Financial-backed Dana, both of which are among Indonesia’s top five e-wallets, to compete against Gojek.<sup>15</sup>
- C. Singtel and Razer entered an alliance to unify cashless payments in Asean with the aim of creating the region’s largest e-wallet network in May 2018.<sup>16</sup> In October 2018, Singtel formed “VIA”, a cross-border e-wallet alliance that allows users of partner e-wallets to be country-agnostic and make purchases outside their home country while travelling abroad. This is expected to create a network of 50m e-wallet users and one million acceptance points in the region.<sup>17</sup>

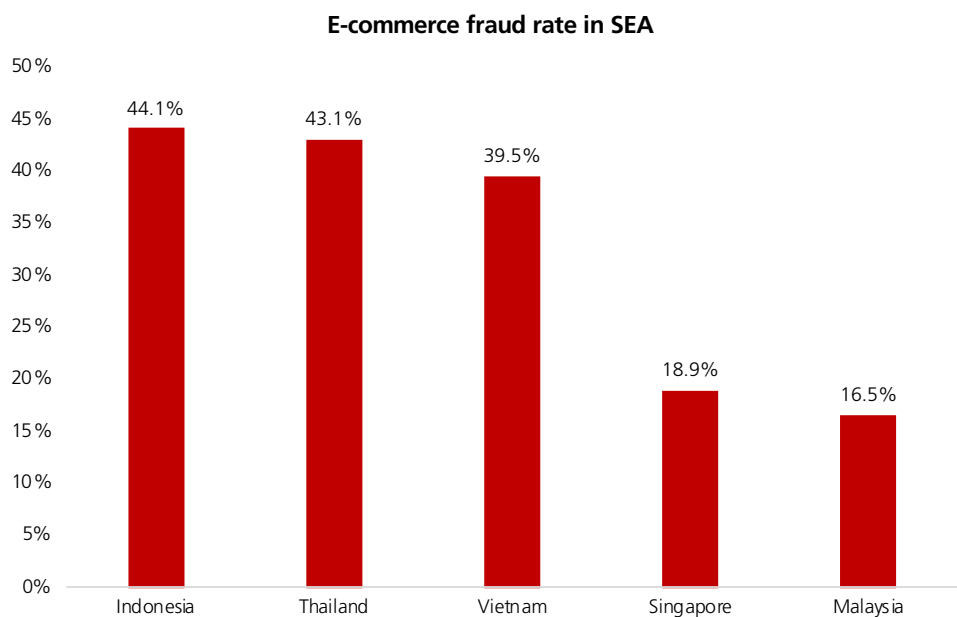
*SEA’s fast-growing, yet fragmented, digital payment landscape seeing the first signs of market consolidation.*

Once the round of consolidation is over, we expect each national market to support only two mass e-wallets like China. One likely play would involve one of the regional SuperApps consolidating e-wallet services across SEA.

### Online fraud a major issue

Asean stands to lose US\$260m<sup>18</sup> p.a. to online fraud, with Indonesia, Thailand and Vietnam expected to be the most heavily affected. In Asean, finance (48.1% prevalence of fraud) and e-commerce (32.2% prevalence of fraud) apps are the most affected, followed by travel apps (29.7% prevalence of fraud).<sup>19</sup> Bots and install hijacking are the primary methods of attack in the region with click flooding and device farms in use too but at a much lower rate.

### Asean region is highly vulnerable to e-commerce fraud, with Indonesia, Thailand and Vietnam heavily affected



Source: AppsFlyer, DBS Bank



### Identity Theft

ID theft typically involves a cybercriminal stealing the personal information of an internet user by hacking their system and using this information to carry out illegal online payment transactions.



### Phishing

Phishing is where the victim is contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data.



### Merchant identity fraud

The cybercriminal replicates the web site of a legitimate business to carry out merchant identity fraud.



### Advanced wire and fee transfer scams

The scammer promising the victim a significantly valuable product in lieu of paying a small down payment fee in advance. The customer will either not receive the product at all or will receive a low-quality product with no provision for returns.



### Pagejacking

E-commerce business sites are sometimes attacked by cyber criminals who attempt to hijack it by directing customers to an untrusted website source to pay for purchases.

Source: DBS Bank

## High logistics cost and significant delays in receiving orders

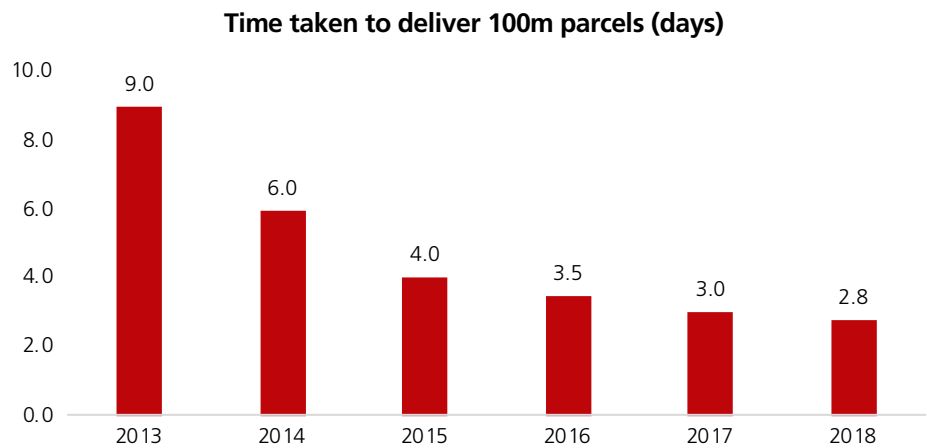
Complex geographical terrains, and poor road and rail infrastructure make last-mile deliveries a significant challenge for e-commerce players in the region. Indonesia's and Vietnam's logistics costs account for 20-25% of their GDP, which is typically single digit for developed countries. In China, logistics costs comprised 14.8% of the country's GDP in 2018.<sup>20</sup> Comparatively, China's logistics network is a decade or more ahead of SEAs.

## China's logistics network is a decade or more ahead of SEA's

Cainiao Smart Logistics Network (Cainiao), Alibaba's logistics arm with 3,000+ partners, 200+ warehouses, and 3m+ connected express personnel has ~81% market penetration in China.<sup>21</sup> In 2018, Cainiao delivered the first 100m parcels from the Singles' Day Global Shopping Festival

(‘Double 11’ shopping event on 11 November) in just 2.6 days<sup>22</sup> – illustrating the e-commerce giant’s logistic prowess is on a whole other level when compared with e-commerce companies in Asean which are overwhelmed by infrastructure challenges.

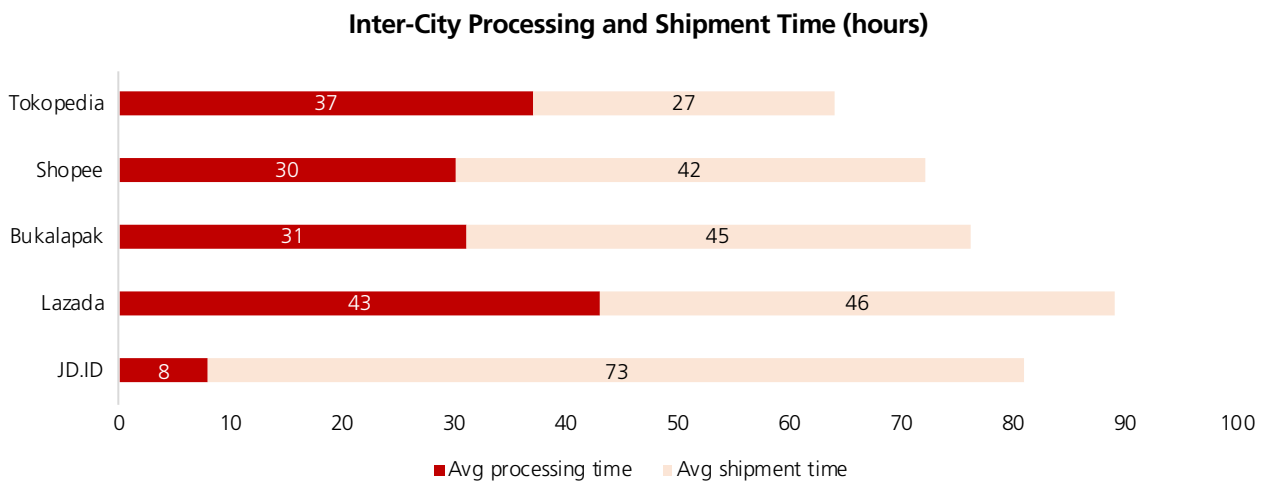
**Cainiao has reduced parcel delivery time by more than 6 days since 2013<sup>23</sup>**



Source: Alibaba, DBS Bank

Apart from Singapore, SEA’s logistics capability is nowhere close to matching Cainiao and its partners in terms of scale, network, and innovation. For example, in Indonesia, which is SEA’s largest e-commerce market, inter-city (within the same island) processing and shipment time average 1.2 and 1.9 days, respectively. Which means a customer will, on average, take more than 3 days to receive an inter-city parcel.

**Inter-city (same-island) parcel processing and delivery take more than 3 days on average in Indonesia**



Source: INSEAD, DBS Bank



In China, logistics cost per order in lower-tier cities is close to that in upper-tier cities. Warehouse rental cost per square metre is ~30% cheaper in lower-tier cities in comparison with higher-tier cities. Labour cost per order might be higher in lower-tier cities compared with higher-tier cities due to lower order density and higher last-mile delivery cost. Population density is ~5-200 people per square kilometre in lower-tier cities vs. ~200-4,000 per square kilometre in higher-tier cities. At the same time, purchase frequency in lower-tier cities is ~30% below that of higher-tier cities. Overall, this results in almost similar overall logistics costs for parcel delivery in all cities in China.

### Logistics costs in lower-tier cities is similar to that of higher-tier cities in China

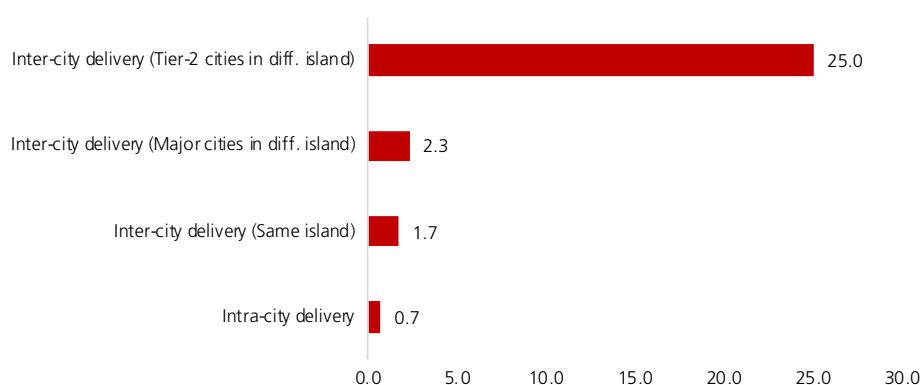
	Higher-tier cities	Lower-tier cities
Warehouse costs (~50% of total logistics cost)	Warehouse costs are mostly rental costs. Rental cost per sqm is 30%+ cheaper in lower-tier cities versus higher-tier cities.	
	Higher warehouse costs	Lower warehouse costs
Delivery costs (~50% of total logistics cost)	Despite per capita disposable income in rural areas being ~60% lower than urban areas, labour cost per order is higher in lower-tier cities due to lower order density (purchasing frequently is ~30% below higher-tier cities) and higher last-mile delivery cost.	
	Lower delivery cost	Higher delivery cost
<b>Total logistics cost</b>	<b>Similar total logistics cost</b>	<b>Similar total logistics cost</b>

Source: DBS HK

However, in the case of Indonesia, the lack of shipping infrastructures (warehouses and distribution networks) in Tier-2 cities lead to extremely high logistics costs there. Tier-2 cities have inadequate roads, railroads, and ports which are a major challenge for the e-commerce segment as the delivery of goods would take significant time, effort, and cost. In addition, unpredictable traffic jams and floods during the rainy season make it difficult to deliver parcels within the promised delivery timeframe.

### E-commerce markets in Tier-2 cities are unprofitable due to high logistics costs in Indonesia

Parcel delivery costs in Indonesia (US\$)



Source: INSEAD, DBS Bank

Logistics in Asean is improving.

Despite the vast geographic challenges, logistics in the region, particularly in Indonesia – SEA’s largest e-commerce market, is improving. Over the last five years, the Indonesian government has taken significant steps to accelerate infrastructure development and solve logistical problems. There have been substantial improvements in the sector, as seen in the Logistics Performance Index (LPI) rankings, a bi-annual report published by the World Bank. Indonesia jumped seven positions to place 46th out of 168 countries covered in the 2018 report. The LPI is based on six aspects, namely customs and border management, quality of trade and transportation infrastructure, ease of international shipping arrangements, competence and quality of logistics services, ability of tracking and tracing, and frequency of timely deliveries. Whilst Indonesia has risen in LPI rankings, the archipelago still has some of the highest logistics costs in the region, accounting for ~24% of the country’s GDP compared with ~13% in Thailand and Malaysia.<sup>24</sup>

**Despite geographic challenges, Indonesia has improved its LPI rankings, placed 46th out of 168 countries**

Logistics Performance Index - Rankings	2014 <sup>25</sup>	2018 <sup>26</sup>
Indonesia	53	46
China	28	26

Source: World Bank

**Possible logistics challenges**

At present, the share of logistics costs account for ~40% of the retail price of goods in Indonesia.<sup>27</sup> But more are being done to lower costs.

- 1. The bonded logistics centre (PLB), a government initiative to reduce warehousing costs.** Indonesia’s bonded logistics centre (PLB) will give the country a much-needed edge over rivals Singapore and Malaysia where logistics costs are roughly half. The PLBs function as mini free-trade zones deployed strategically throughout the country, enabling importers and exporters to reduce storage costs. The initial 11 opened in 2016, then another 50 were deployed in 2017.

This could possibly bring regional warehouses in Asean to Indonesia. The PLBs provide the opportunity for cargo owners to defer duties and taxes until the goods are sold to Indonesian customers. It also enables goods to be re-exported for a period of up to three years later without any tax payments. Importers could possibly save US\$500 per container by storing goods at the PLBs instead of in Singapore. Furthermore, due to the absence of pre-clearance activities, the container can be transported from the port to a PLB in a day’s time, hence the dwell time is reduced in comparison to general imports which takes an average of 3.36 days.<sup>28</sup>

- 2. Logistics start-ups are striving to solve the inefficiencies plaguing the traditional 3PL operations.** Indonesia has over 80<sup>29</sup> logistics start-ups trying to make a difference. These include Gojek, SiCepat, Kargo, Shipper, Eximku, etc. SiCepat Ekspres, for example, offers couriers, warehouses, as well as air and cargo delivery services throughout Indonesia, and caters to tens of thousands of online merchants. It claims to deliver more than 400,000 packages daily. The start-up currently has 600 outlets throughout the country.

The rise in franchising business model in the logistics industry.

To make an entry into the logistics landscape, players have to incur significant capital expenditure since technology and wider coverage are pivotal. Buttressed by the boom in e-commerce in Vietnam, businesses are increasingly adopting franchising model to ease the barriers to entry. The model benefits both parties as the franchiser extends its network and the franchisee inherits the existing network. Franchisees tend to invest US\$21,600 in facilities at each service point besides paying US\$8,600 and US\$7,500 as deposit and franchise fee, respectively.

## Ninja Van, the powerhouse in Asean logistics industry

Launched in 2014, Ninja Van is Asean's fastest-growing last-mile logistics company. It has grown its 3,000+ client base in 2014 to more than 35,000 today, and this includes major e-commerce players in Asean. Ninja Van's delivery volume has also surged, from an average of 15,000 deliveries per day to more than 1,000 parcels every minute across the region now.

The company claims to be profitable in many large cities and close to profitability in other areas. Ninja Van owns and operates a primary fleet in each city and is supported by a reserve fleet comprising of crowdsourced recruits in the likes of taxis, the general public, and other start-ups.

### Catalysts behind Ninja Van's success

The core reason behind Ninja Van's rapid growth is its technology-led model, which allows it to identify and leverage available capacity within vehicle fleets – whether its own or others – to cater to the varying demands of merchants (or clients). Customers can also collect their parcels from Ninja Van distribution points, which are partner retail shops located in high footfall areas.<sup>30</sup>

Ninja Van has disrupted the conventional delivery model by using algorithms for route optimisation, thereby helping its fleet of more than 20,000 drivers (who are permanent staff) to save on fuel and make deliveries on time. The company also offers value-added services such as merchant application programme interface (API) integration and flexible parcel pick-ups, a unique feature identified in Alibaba-owned Cainiao's business model.

Ninja Van's tie-up with Google to implement Horizontal Pod Autoscaler, which can dynamically adjust workload and scale down to reduce cost when resources are no longer required, has given it an edge over its competitors. This technology enables Ninja Van's website to handle 10 times the normal traffic during peak periods. Furthermore, cloud technology is used for data analytics which improves customer experience and operational efficiency.

- 3. E-commerce players are increasingly taking order fulfilment and logistics into their own hands.** Third-party logistics service providers (3PLs) currently fulfil majority of SEA's e-commerce orders. This results in most e-commerce players in Asean consolidating orders, especially orders placed by customers in Tier-2 cities, before sending them to 3PL warehouses in order to save on delivery costs. The consolidation of orders delays shipping further and poses a major problem in maintaining customer satisfaction, let alone loyalty.

But the status quo is changing. Tokopedia and Lazada have started building their own fulfilment centres, while Shopee and Bukalapak are starting to follow suit.



**Lazada** currently has 30 fulfilment centres across 17 cities with ~75% of parcels sorted in-house by Lazada warehouses<sup>31</sup> and 70% of parcels delivered by its in-house delivery team Lazada Express.<sup>32</sup> Lazada is also planning to open additional parcel collection points for customers around Asean. Lazada's fulfilment and logistics operations are currently far from being automated. However, with the help of Alibaba's logistics arm, Cainiao, Lazada has an edge.



**Tokopedia** invested in two logistics companies in June 2019 as part of an effort to speed up delivery and slash shipping costs.<sup>33</sup> This was preceded by Tokopedia launching its own order fulfilment service TokoCabang in May 2019, at a cost of Rp3,000 (US\$0.21) per item for products to be kept in Tokopedia's warehouses for over 60 days.<sup>34</sup>

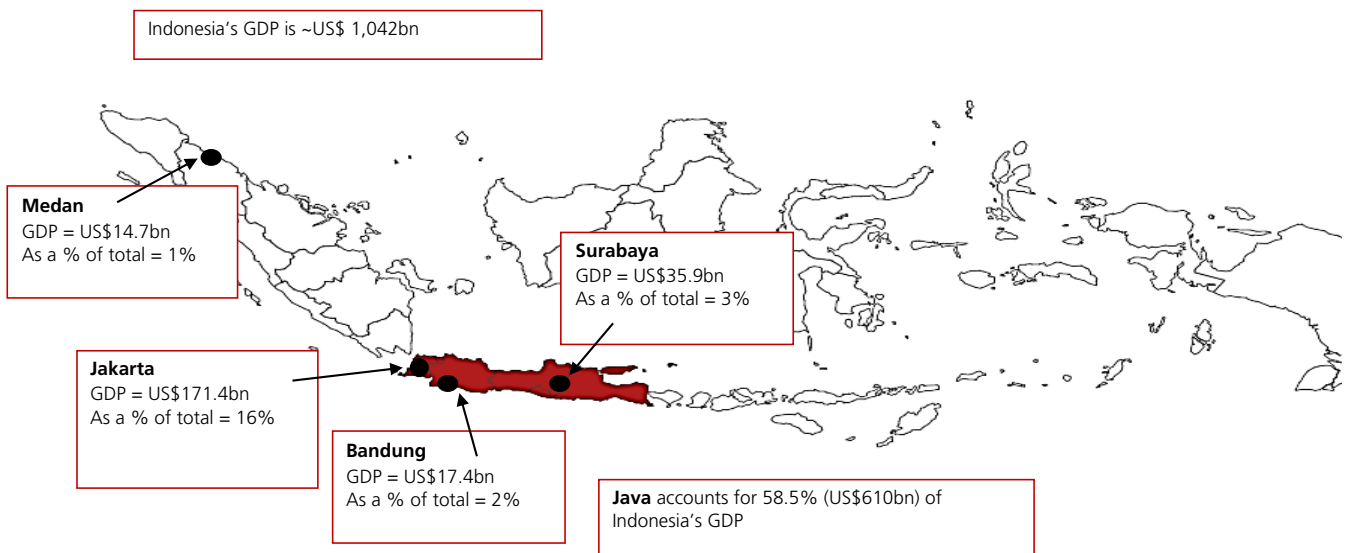


**Shopee** is currently relying on several 3PLs for logistics solutions including J&T Express, which operates across all Asean countries and recently ventured into China. Shopee Logistics Services (SLS) is operational in seven Asean countries and claims to have cut shipping costs by up to 30%.<sup>35</sup> In a bid to further reduce costs and promote reliable delivery, Shopee is focusing on building in-house fulfilment and logistics capabilities. Its in-house fulfilment services, 'Fulfilled By Shopee' (FBS), is currently available to top brands and key sellers on Shopee with high sales volumes.<sup>37</sup>

The race is on! We believe that whoever can come up with a local solution in fulfilment automation and regional logistics hubs similar to China's will enjoy a massive advantage and significant reduction in fulfilment and logistics costs, making e-commerce operations in Asean profitable.

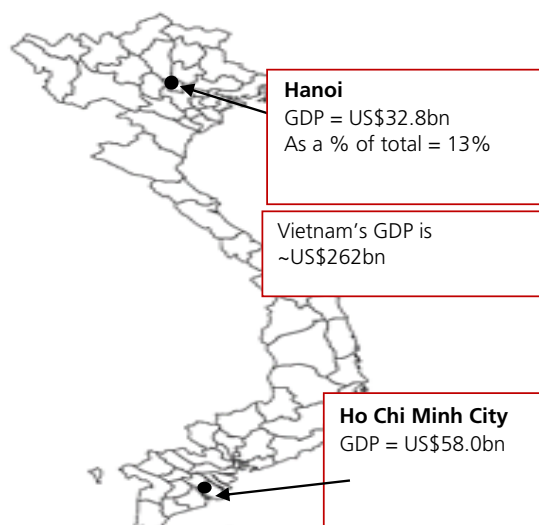
## Major cities to fuel e-commerce growth over the next 5 years

### The island of Java accounts for 59% of Indonesia's GDP



Source: Statistics Indonesia (Badan Pusat Statistik, Indonesia), DBS Bank

### Top two cities in Vietnam represent 35% of the country's GDP



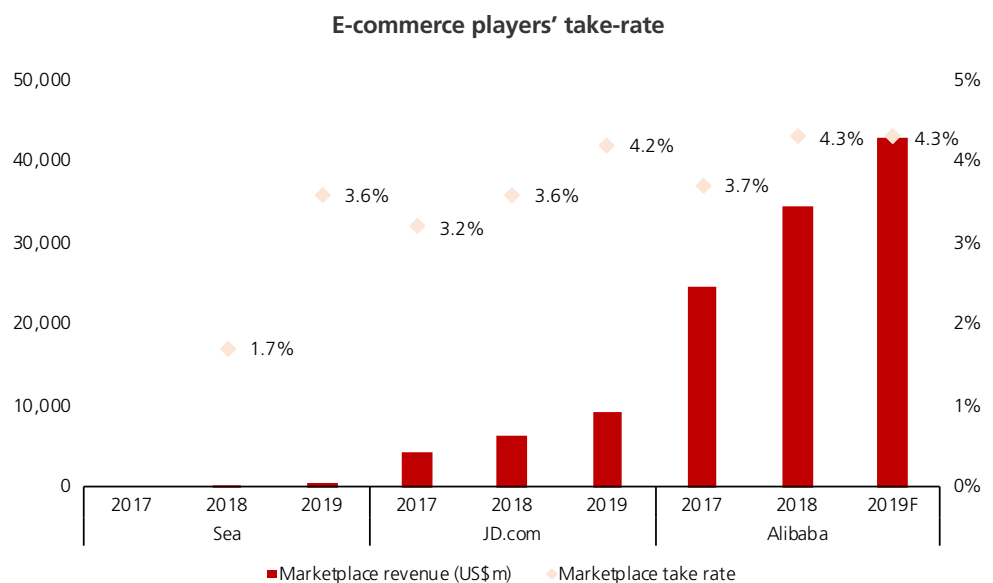
Source: International Monetary Fund, General Statistics Office of Vietnam, DBS Bank

## Take rates of e-commerce players in Asean

The importance of take rate in e-commerce

Take rate is the percentage of the transaction value captured by the e-commerce player for a sale they facilitated through their platforms. They identify this as their revenue. In other words, this can be referred to as the fees and commissions they receive from merchants and sellers in an online marketplace.

**Shopee (Sea Ltd's e-commerce segment) has a relatively lower marketplace take rate in comparison with JD.com and Alibaba**



Source: Companies, DBS Bank

In China, customer management revenue accounts for an overwhelmingly large portion of revenues, leading to higher revenues. For Alibaba, ~70% of revenues are from customer management while commissions only account for 30%.<sup>38</sup> Customer management fee revenues is the key to achieving sustainable revenues even in the face of rising competition.

Alibaba's China retail marketplaces (~65% of total revenues) are Taobao Marketplace (C2C primarily) and Tmall (B2C – only the brand owner or authorised dealer may operate a Tmall store). Alibaba's revenue monetization model for China retail marketplaces involves:

- Customer management revenue: ~70% of China retail marketplace revenue (excludes revenue from supermarkets)
  - ▶ Pay-for-performance (P4P) marketing services – Sellers bid for keywords that match product or service listings appearing in search or browser results on a cost-per-click basis at prices established by the online auction system, which facilitates price discovery through a market-based bidding mechanism. P4P marketing services are provided using data available on Alibaba's marketplaces as well as through third-party marketing affiliates.
  - ▶ Display marketing – Sellers bid for display positions on the relevant marketplaces or through third-party marketing affiliates at fixed prices or prices established by a real-time bidding system on a cost-per-thousand impression basis.

- ▶ Storefront fees – This primarily comprise of monthly subscription fees. The storefront software includes a suite of tools that assist sellers in upgrading, decorating and managing their storefronts.
- Commissions on transaction revenue – ~30% of revenue comes from China’s retail marketplace (excludes revenue from supermarkets). In addition to purchasing online marketing services, sellers also pay a commission based on a percentage of GMV for transactions settled through Alipay in the respective marketplaces. The commission percentages typically range from 0.5% to 5% depending on the product category. However, in SEA, value-added services comprise 30-50% of revenue, which are far-less profitable than customer management revenue.

### Some of the value-added services offered by Asean e-commerce players



**Facilitate cross-border transactions:** Asean continues to focus on regional cross-border e-commerce (this accounts for more than 40% of the total e-commerce market), with Singapore and Malaysia at the vanguard representing 50% of the total cross-border e-commerce in SEA.<sup>39</sup> For example, Lazada is a popular choice for customers looking to purchase foreign goods as it provides affordable logistics solutions for cross-border transactions.<sup>40</sup>



**Inventory management and fulfilment:** E-commerce players hold inventory on behalf of the merchants or sellers. In some cases, this is on a consignment basis where the seller is only paid once goods are sold to customers.



**Workshops to sellers:** Tokopedia, in partnership with logistics firm JNE, have launched a new payment service for individuals who do not have a bank account.<sup>41</sup> Tokopedia conducted a series of workshops to acquaint SMEs with the new service, which would in turn allow them to acquire more customers.



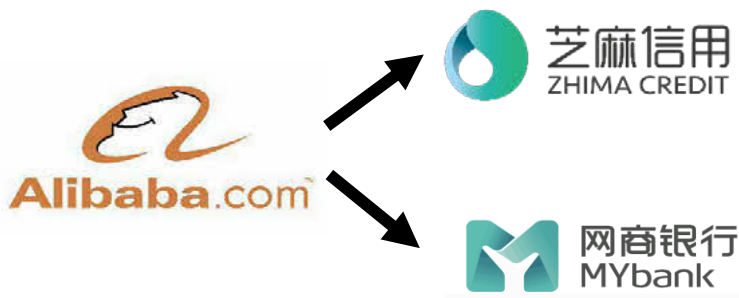
**Tax payment solutions:** Bukalapak, in collaboration with the Indonesian Ministry of Finance, launched a tax payment feature allowing Indonesians to pay their income, value-added and luxury sales taxes through the e-commerce platform.<sup>42</sup>

### Consumer finance is an emerging opportunity for Asean e-commerce players

Alibaba pioneered consumer financing on its e-commerce platform, with credit-scoring done by state-backed consortium.

In January 2015, China’s e-commerce behemoth Alibaba pioneered the move to establish Sesame Credit, China’s first credit agency with the ability to reach a vast majority of the country’s unbanked population.<sup>43</sup> But the increasing scrutiny from the Chinese government led Alibaba, along with Tencent, to pull back from their highly lucrative credit scoring businesses. In 2018, China unveiled Baihang Credit Scoring, a central bank-backed credit agency that was approved as the sole player in the personal credit-scoring market.<sup>44</sup> Baihang was founded by the National Internet Finance Association of China and eight former credit scoring firms, including Tencent Credit and Sesame Credit.<sup>45</sup> At present, Sesame Credit continues to focus on credit reporting with regard to buyers and sellers on Alibaba’s platforms.

**Based on both financial and non-financial data gathered through its platforms, Alibaba provides consumer financing to e-commerce buyers and sellers**



Zhima Credit (Sesame Credit) reports on credit worthiness using an array of online and offline data collected via Alibaba’s platforms.

MYBank uses the credit scores generated by Baihang (previously relied on Sesame Credit) to provide consumer financing via AliPay.

Source: Alibaba, DBS Bank

Asean e-commerce players to focus on consumer finance business to drive profitability.

In Asean, e-commerce players have neither the reach of Alibaba to create a credit scoring matrix, nor any government-backed comprehensive credit scoring system like China’s Baihang. But they can potentially benefit from commission income by acting as an intermediary, liaising sellers looking for financing. Sellers on the platform can finance their working capital requirements via consumer financing facilitated by the e-commerce platform. Platforms can take longer time to make payments to the sellers and instead use the cash for customer acquisition. Lazada and Shopee have already entered into an array of partnerships with many local banks and fintechs to provider sellers on their platforms with access to consumer finance.

	   	      	    8 Banks including CITI	   17 Lenders including CITI and FinAccel (Preditiv)	   8 lenders including CITI	   7 fintechs     
	     	 	   	3 digital lenders, 19 banks (including CITI)	14 banks including CITI and FE Credit 	 

Source: Fintech Singapore



Here are a few examples of collaboration so far:



### 1. Partnership with banks

Shopee partnered with Thailand's Kasikornbank (KBank)<sup>46</sup> and Siam Commercial Bank<sup>47</sup> in September-October 2019 to offer consumer financing to Thai-based sellers on its platform. Shopee acts as an intermediary, liaising the two parties. The partnership with KBank has opened up access to loans of up to Bt600,000 (US\$19,570) for Shopee's sellers.



### 2. Partnership with fintechs

Lazada announced a partnership with Finaxar in August 2018, connecting the fintech with Lazada sellers in Singapore.<sup>48</sup> The credit line provided by Finaxar to eligible sellers can last for up to six months, with up to S\$5,000-1m (US\$3,650-730,000) on offer. The credit scoring process is carried out by clicking on a link embedded in Lazada's seller dashboard. This will direct the seller to Finaxar's website, where a credit assessment is delivered within five minutes of the seller providing the required information.

**The following is an excerpt from a DBS interview with Roshan Raj Behra, Singapore-based partner at Redseer Consulting, who shared his thoughts on SEA's e-commerce landscape:**

## QUESTION 1

Logistics in Asean, especially in Indonesia and Vietnam, are too costly and slow. How are these issues tackled by the region's e-commerce players?

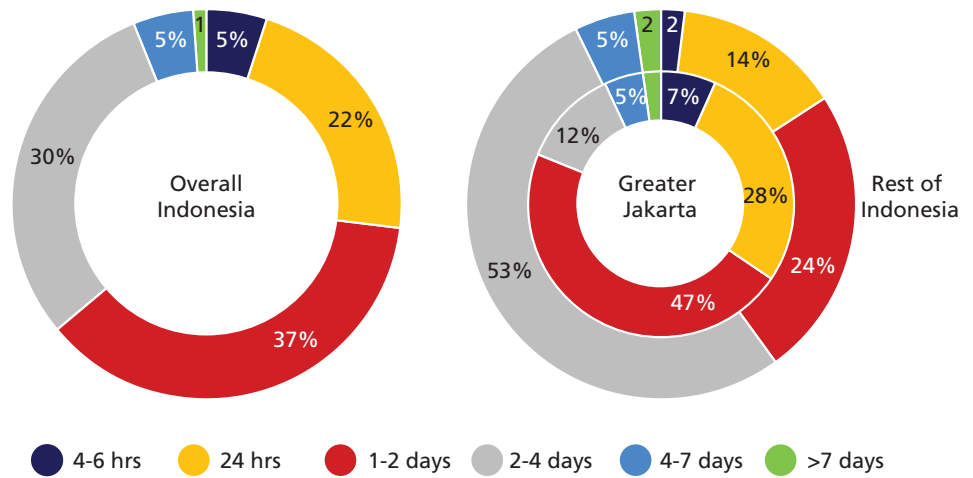
## ANSWER

The e-commerce players are adopting a mix of asset-heavy (own warehousing and transport fleet) and asset-light (partnership with 3PLs, offline retailers) models to address the wide range of logistics needs. Broadly, the captive units tackle a bulk of the business-as-usual (predictable) shipments in high-traffic areas, while 3PLs manage the volume in low-traffic areas, surges around major online events, and specialised needs like on-demand (<2 hour) deliveries.

Logistic costs are high in most of Asean due to geographic challenges, concentration of economic activities in a few pockets and poor connectivity between various parts of the countries. Over time, we expect scale benefits and more efficient logistics models to reduce logistics costs. The recent supply-chain issues created by COVID-19 could provide a fresh impetus to improve e-commerce logistics in general, and captive capabilities in particular.

When it comes to e-commerce deliveries, there has already been a clear reduction in the delivery times in the last few years. As can be seen in the chart below, ~64% of deliveries in Indonesia were done within 1-2 days (data taken around mid-2019). Similarly, a sizeable % of non-Java areas have lower delivery times now as many e-commerce players have extended their network reach into those areas.

**Typical speed of delivery for consumers**



Consumers inside Jakarta receive deliveries typically within 1-2 days while outside Jakarta, consumers receive deliveries in 2-4 days. This is because most of the online seller base resides in Jakarta.

**QUESTION 2**

Wouldn't the profitability of e-commerce players get hurt due to the need to absorb e-commerce logistics cost?

**ANSWER**

The under-penetrated online retail segment provides a structural growth opportunity for logistics players in most of Southeast Asia (SEA). However, logistics costs have continued to remain high till now due 1) to the lack of scale, 2) still-evolving technological capabilities, and 3) geographic challenges. Over time though, logistics costs are likely to trend downwards due to the first two factors turning more favourable, as well as continued pressure from competition.

We expect near-term competitive intensity to remain high in e-commerce logistics as it is the only segment of logistics that will see material growth in the next few years. Hence, most players are likely to prioritise volume share gains over profitability. We estimate e-commerce logistics shipments in SEA (ex Singapore and Malaysia) to grow by 30% or higher levels during CY19-22.

Our assessment suggests that the unit economics of almost all 3PL e-commerce logistics players in SEA remains reasonably weak. While the captive logistics units of e-commerce players are relatively better off due to their assured in-house demand, many of their revenue and cost items are pegged to prevailing market conditions, which is set by the majority, who are 3PL players.

Given this backdrop, we expect logistics to remain a drag on e-commerce players' near-term profitability. However, as e-commerce companies start tweaking their revenue (commissions, advertising, subscription, etc.) and costs (product subsidies, payment charges, sales & marketing, staff, etc.) levers, their overall profitability is likely to improve over time.

### QUESTION 3

Logistics network advantage, does it matter? If yes, which players are investing aggressively in warehousing?

### ANSWER

Captive logistics creates a defensive moat for consumer-facing e-commerce companies and we expect the most serious players to invest. For instance, in the case of Indonesia, we estimate the share of captive logistics to increase from low-double digits share in 2019 to more than a quarter by 2025.

The captive capabilities help to provide better customer delivery experience, reduce cash-on-delivery (COD) handling costs, create flexibility to transition towards B2C (from C2C) and mitigate fraud risks. The complete lack of captive logistics could put the e-commerce players at the mercy of their 3PL partners and their delivery standards. Such a scenario can create material supply-side risks.

Reading across from China, we notice that a very successful player like Alibaba has been tightening its grip on logistics players. It increased its stake in Cainiao in late 2019 and recently, purchased a 2% stake in Yunda Holdings. The company also has a stake in other logistics players like ZTO Express, YTO Express, STO Express, and Best.

We see a similar trend in Asean, where the leading e-commerce players are investing in captive capabilities. We recall that Tokopedia has close partnership with Antareja and has recently invested in SiCepat Ekspres, as per news reports. Similarly, Shopee and Lazada continue to build their captive logistics capabilities.

### QUESTION 4

Do Tier-1 cities have logistics issues?

## ANSWER

A majority of e-commerce volume and value is still driven by Tier-1 locations and hence, logistics networks are geared to service this demand. Having said that, there are gaps in Tier-1 locations as consumer demand is constantly evolving, i.e. a 2-3-day e-commerce delivery in Jakarta might have been well received 3-4 years ago, but is likely to be poorly rated now, when most deliveries are done within 1.5 days.

There is growing demand for on-demand deliveries and e-commerce players have partnered with various ride hailing companies to cater to this demand in Tier-1 locations. Hence, there is likely to be a mix of organic initiatives as well as partnerships to meet the logistic needs of Tier-1 locations.

On a relative basis, logistics issues are more pronounced in Tier-2 and below locations, where network inefficiencies lead to higher delivery costs and times. We expect these issues to be resolved over time, as the e-commerce volumes grow.

*The under-penetrated online retail segment provides a structural growth opportunity for logistics players in most of SEA. – Roshan Raj Behra of Redseer Consulting*

# The competitive landscape of Asean e-commerce players

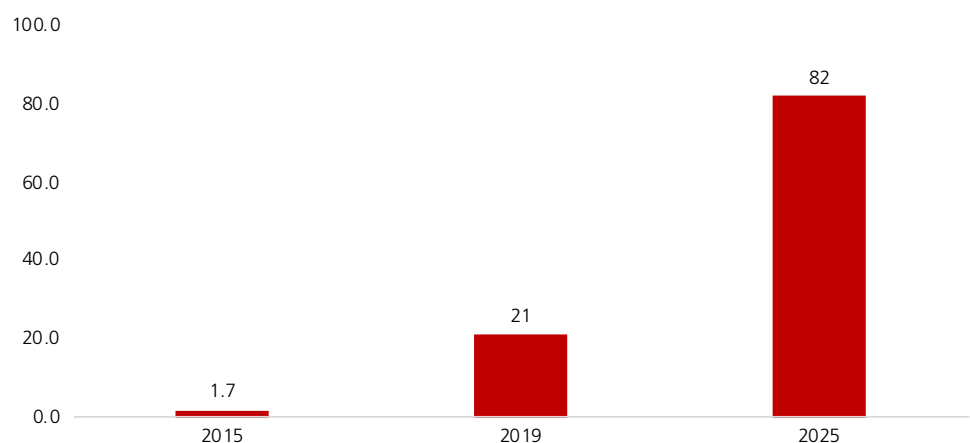
## Indonesia

Indonesia's e-commerce GMV to deliver 25.5% CAGR during 2019-2025F.

The Indonesian e-commerce market has enjoyed dramatic growth over the last five years. According to recent estimates by Google and Temasek, the GMV of Indonesian e-commerce is expected to rise from US\$21bn in 2019 to US\$82bn by 2025, indicating an impressive compounded annual growth rate (CAGR) of 25.5%. Supporting the growth in online transactions are local e-commerce giants (such as Lazada, Tokopedia and Bukalapak) that offer businesses a platform to set-up an online storefront, accept transactions and, in Lazada's case, warehouse and deliver goods to customers. Improvement in smartphone penetration and logistics will catalyse the growth in the customer base of e-commerce giants outside Jakarta.





Over the last five years, e-commerce platforms in Indonesia have made rapid progression and the sophistication of platforms and service offerings have been experiencing a period of dynamic evolution. Apart from the conventional features identified in an e-commerce platform, e-commerce players are increasingly adding new functionalities in the likes of in-house warehousing and logistics, cross-border capabilities and payment mechanisms. The industry expects the launch of new bonded warehouses by 2021 to transform the convenience and reliability of imports for both suppliers and customers.

### Indonesia GMV (US\$bn)



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

### Performance of major e-commerce players in Indonesia

		2Q19	3Q19	4Q19	1Q20
	Overall ranking	2	2	1	1
	Monthly web visits (m)	91	56	73	72
		2Q19	3Q19	4Q19	1Q20
	Overall ranking	1	1	2	2
	Monthly web visits (m)	140	66	68	70
		2Q19	3Q19	4Q19	1Q20
	Overall ranking	3	3	3	3
	Monthly web visits (m)	88	43	39	38
		2Q19	3Q19	4Q19	1Q20
	Overall ranking	4	4	4	4
	Monthly web visits (m)	50	28	28	24

Source: iPrice Group, DBS Bank

#### Shopee overtakes Tokopedia

Shopee officially dethroned Tokopedia as the market leader in Indonesia in 4Q19, further strengthening its foothold in the Asean e-commerce landscape. Tokopedia dominated throughout the initial three quarters while Shopee's peak sale events such as 11.11 and 12.12 were pivotal in pushing it to the top spot by the end of the year. Product content diversity was the widely adopted strategy to heighten user activity on e-commerce platforms. Niche-focused e-commerce players in Indonesia did not really garner market share.

### Seller commission rates charged by leading e-commerce platforms in Indonesia

E-commerce Platform	Commission Rate
Shopee	3-5%
Lazada	10%
Tokopedia	Up to 15%

Source: Companies, Austrade, DBS Bank

### Challenges faced by e-commerce players in Indonesia

- The complexity of local culture and conditions are a huge barrier for certain e-commerce players.
- Internet penetration is much lower than other countries (3%) and the locals are wary of online shopping due to concerns on payment safety, lack of sales support, and unreliable quality.
- Lower adoption of cashless payment as most of the transactions are carried out using direct bank transfer or cash on delivery.

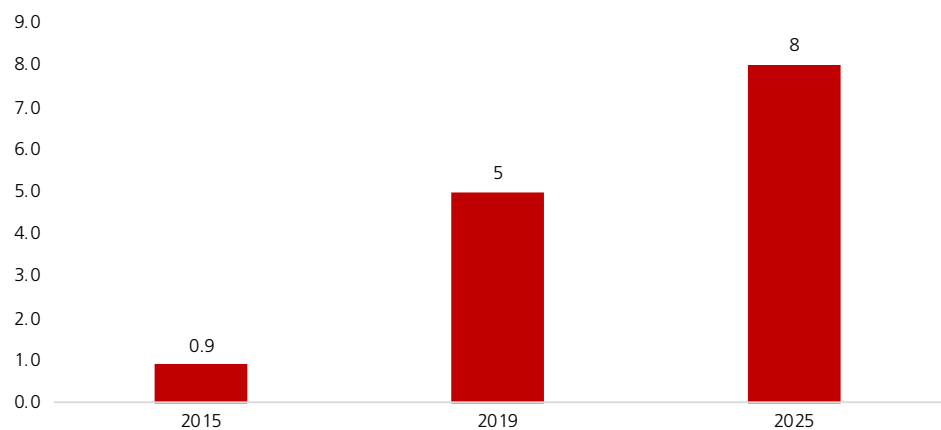
## Thailand

Thailand's e-commerce GMV is projected to hit US\$18bn in 2025 from US\$5bn in 2019.

The e-commerce market in Thailand is witnessing vibrant growth and ranks third in market size following Indonesia and Vietnam. Thailand's e-commerce market value in terms of GMV is projected to reach US\$18bn in 2025 from the US\$5bn recorded in 2019, according to a joint study carried out by Google and Temasek on Asean Digital Economy.





An already well-developed e-commerce market with one of the most engaged populations online, many pure e-commerce players and brick-and-mortar brands are vying for market share in SEA's second-largest economy. Many historic, conventional or specialised brands are already in place; however, they all compete against the dominant leader of Thailand e-commerce, Lazada.

### Thailand GMV (US\$bn)



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

### Performance of major e-commerce players in Thailand

		1Q19	2Q19	3Q19	4Q19
	Overall ranking	1	1	1	1
	Monthly web visits (m)	44	43	42	41
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	2	2	2	2
	Monthly web visits (m)	31	31	28	29
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	11	10	4	3
	Monthly web visits (m)	0.7	1	2	3
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	7	7	10	4
	Monthly web visits (m)	2	1	1	2

Source: iPrice Group, DBS Bank

The performance of domestic e-commerce players has improved since 2018, but Lazada and Shopee continue to retain their rankings. The new kid on the block, JD Central, was able to maintain its position among the top 10 e-commerce platforms. Pomelo was the only fashion-focused e-commerce player that was able to move to the top 10 in 4Q19 from 2Q19.

**Seller commission rates charged by leading e-commerce platforms in Thailand**

E-commerce Platform	Commission Rate
Shopee	0%
JD Central	2%
Lazada	1-10%

Source: Austrade, DBS Bank

**Challenges faced by e-commerce players in Thailand**

- Social commerce continues to gather steam as an alternative channel to reach Thai customers. Facebook, Instagram, and Line are gearing up initiatives to offer shopping convenience on their platforms, including payment channels.
- Thais’ loyalty towards foreign brands is unprecedented and it would be a challenge for any e-commerce players to promote local brands or products sourced from China.

**Singapore**

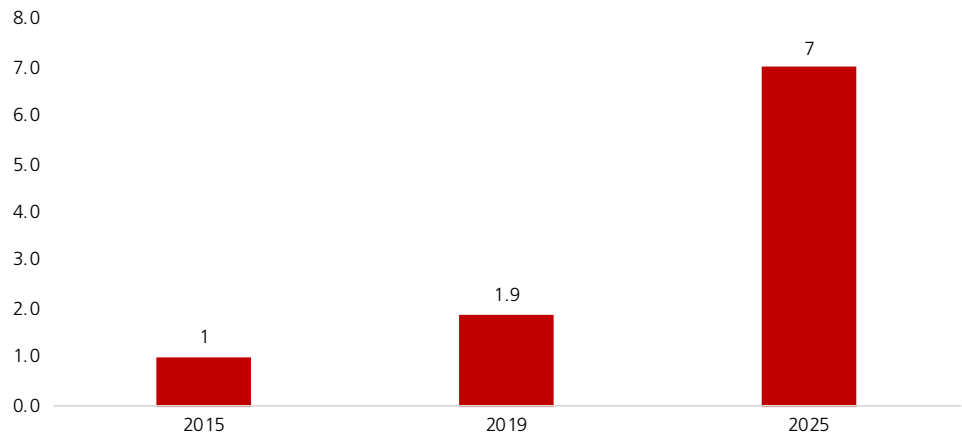
Singapore’s e-commerce value to surge to US\$7bn by 2025 from US\$1.9bn in 2019.

Singapore has the highest online penetration rate (85%) in Asean, a critical element for the success of e-commerce players in the country. The city state’s e-commerce value in 2019 was US\$1.9bn and is projected to increase to US\$7bn by 2025. Its most sought-after categories are travel, fashion and beauty, entertainment and lifestyle, IT and electronics, and general insurance. Catalysts for the growth of e-commerce in Singapore are high internet penetration and smartphone adoption, a strong financial infrastructure, and good logistics facilities. Singapore stands apart from other Asean countries owing to its maturity and the fact that it is a regional hub with high exposure towards international brands.

Singapore possesses the most sophisticated digital economy in Asean and is home to a number of e-commerce players, with several international companies competing for its limited but affluent population. Local start-ups such as HipVan, Carousell, and Ezbuy, along with top international e-commerce platforms, are trying to acquire market share through innovation and the deployment of international celebrities in the country.



### Singapore GMV (US\$bn)



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

### Performance of major e-commerce players in Singapore



	1Q19	2Q19	3Q19	4Q19
<b>Lazada</b>				
Overall ranking	2	1	1	1
Monthly web visits (m)	7	8	8	10
<b>Qoo10</b>				
Overall ranking	1	2	2	2
Monthly web visits (m)	8	7	7	7
<b>Shopee</b>				
Overall ranking	3	3	3	3
Monthly web visits (m)	3	3	4	6
<b>amazon.sg</b>				
Overall ranking	13	14	11	4
Monthly web visits (m)	0.2	0.2	0.3	2

Source: iPrice Group, DBS Bank

Lazada remains No. 1;  
Shopee making big  
gains

Lazada remains the top website in Singapore, garnering an average monthly traffic of over 8m visitors (desktop and mobile web) throughout 2019. Shopee saw a substantial increase in market share, acquiring over 6m visitors in 4Q19 alone. Qoo10 maintained its ranking as the second-best performer in Singapore as the platform acquired almost 30% of the web market share in 2019. Overall, six out of the top 10 e-commerce players retained their rankings, implying increase of each brand's strength and popularity in Singapore.

### Seller commission rates charged by leading e-commerce platforms in Singapore

E-commerce Platform	Commission Rate
Shopee	0%
Lazada	3-9%
Qoo10	12% (regular store) and 5% (QStore)

Source: Companies, Money Smart, DBS Bank

### Key advantages identified in Singapore's e-commerce landscape

- One of the largest cashless societies in the world.
- ~85% internet penetration.
- Ranked amongst the top 10 for logistics in the world; also strategically located in the heart of Asean with access to a network of major shipping lanes.

## Malaysia

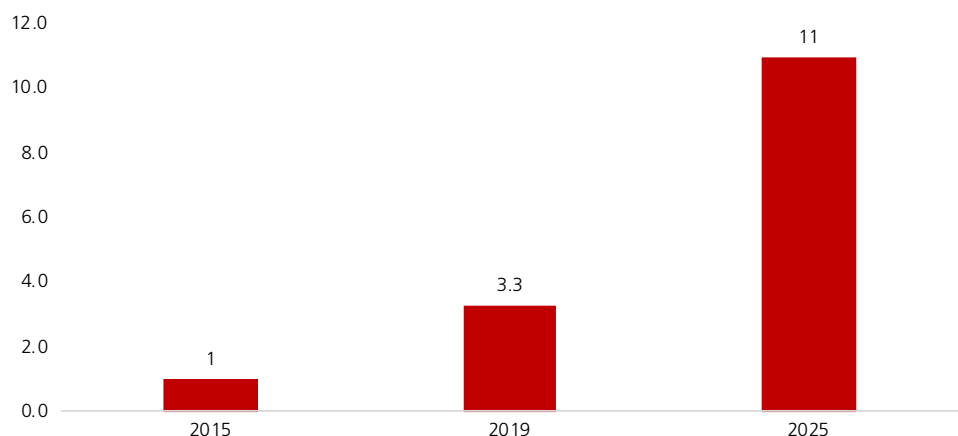
Malaysia's e-commerce GMV to jump to US\$11bn by 2025 from US\$3.3bn in 2019

Trailing Indonesia and Thailand, Malaysia is the third-largest e-commerce market in Asean with an estimated GMV of US\$3.3bn as of 2019. The country is equipped with robust internet and mobile connectivity, and mature infrastructure to buttress online payment and logistics. Rising income levels and increasing smartphone and internet penetration are expected to help the country reach a GMV value of US\$11bn by 2025, according to a joint study carried out by Google and Temasek.

Competitive landscape driving players to explore new methodologies





The leading e-commerce marketplaces identified in the country are Alibaba Group-owned Lazada, Tencent-backed Shopee, and 11Street, which is handled by Celcom. The level of competition in the sector is increasing by the minute, with e-commerce players fighting tooth and nail to keep abreast with trends so as not to risk falling behind. New methodologies are being adopted by e-commerce players, such as the livestream feature, cashback reward programme, and in-app games to enhance user engagement.

### Malaysia GMV (US\$bn)



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

### Performance of major e-commerce players in Malaysia

		1Q19	2Q19	3Q19	4Q19
	Overall ranking	1	1	1	1
	Monthly web visits (m)	21	21	26	29
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	2	2	2	2
	Monthly web visits (m)	20	21	18	19
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	3	3	3	3
	Monthly web visits (m)	4	3	2	2
		1Q19	2Q19	3Q19	4Q19
	Overall ranking	5	4	4	4
	Monthly web visits (m)	2	2	1	1

Source: iPrice Group, DBS Bank

Shopee is the top rated and most visited e-commerce platform in Malaysia, recording an average of 27.7m visits per month in 2019. Lazada, with a market share of 36%, posted an average of 18.5m visitors per month. Zalora remained the most visited fashion-focused platform. Lelong was the most consistent across all four quarters, holding the third spot. Other niche-focused platforms such as GoShop, Sephora, ezbuy, uBuy, and Photobook also witnessed growth in market share.

### Seller commission rates charged by leading e-commerce platforms in Malaysia

E-commerce Platform	Commission Rate
Lelong	0.3-8%
Lazada	0.5-12%
Shopee	0%
11 Street	1-10%

Source: Companies, Money Smart, DBS Bank

### Challenges faced by e-commerce players in Malaysia

- Limited product choice and a lack of trust in online platforms remain key concerns.
- Social commerce is growing, with the number of online transactions being facilitated

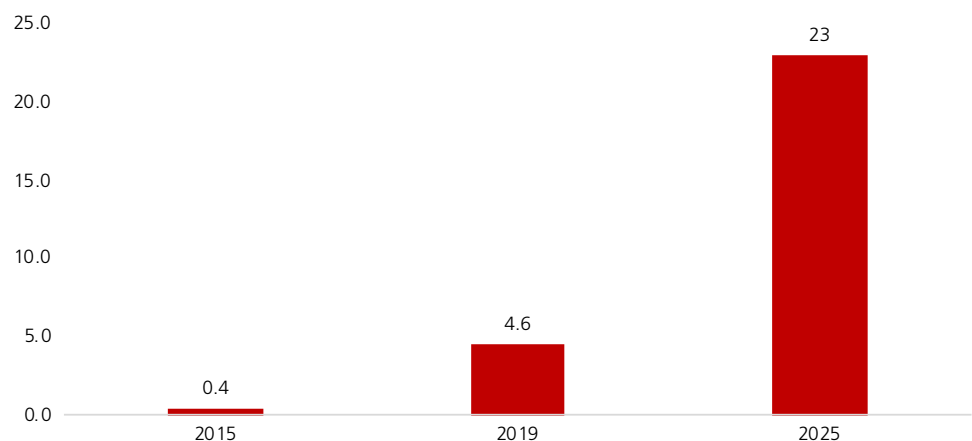
## Vietnam

Vietnam's e-commerce industry estimated to hit US\$23bn by 2025 from US\$4.6bn in 2019.

Vietnam has grown leaps and bounds in the B2C e-commerce space and is well poised to be the second-largest e-commerce market in Asean by 2025. As of 2019, the industry is estimated to be worth US\$4.6bn and is projected to hit US\$23bn by 2025, as cited in a report compiled by Google and Temasek. Vietnam's e-commerce sector has developed predominantly due to three reasons: A rapidly growing online population, the establishment of user-friendly e-commerce platforms, and the surge in online business transactions by small- and medium-sized enterprises (SMEs).

Shopee is the market leader, while The Gioi Di Dong is the leading mobile phone and electronic retailer. The number of licensed e-commerce players have risen in line with the uptick in the number of online shoppers. Direct sales websites hosted by individual brands have been the fastest growing and they currently make out the bulk of e-commerce operators.

### Vietnam GMV (US\$bn)



Source: Internet Economy Report 2019 by Google and Temasek, DBS Bank

### Performance of major e-commerce players in Malaysia



	1Q19	2Q19	3Q19	4Q19
Overall ranking	1	1	1	1
Monthly web visits (m)	41	39	35	38
	1Q19	2Q19	3Q19	4Q19
Overall ranking	4	5	3	2
Monthly web visits (m)	29	25	29	28
	1Q19	2Q19	3Q19	4Q19
Overall ranking	5	4	2	3
Monthly web visits (m)	25	28	31	27
	1Q19	2Q19	3Q19	4Q19
Overall ranking	3	3	5	4
Monthly web visits (m)	29	28	31	27

Source: iPrice Group, DBS Bank

Shopee is the leader in Vietnam while Sendo, a domestic platform, rose to No.2 from No.4 in 2019. On average, web traffic rose by 11% from 1Q to 4Q. Tiki continued to challenge the top players by introducing a live stream feature and aggressively promoting its app. All apps in the top 10 most actively used are from e-commerce marketplaces, portraying demand for strong product variety.

**Seller commission rates charged by leading e-commerce platforms in Vietnam**

E-commerce Platform	Commission Rate
Sendo	0%
Shopee	1-2%
Lazada	10%

Source: Companies, Money Smart, Web Shaper, DBS Bank

**Challenges faced by e-commerce players in Vietnam**

- Traffic congestion is a major concern for transportation of goods.
- Locals prefer standalone shops and retailers located nearby.
- Prevalence and popularity of counterfeit goods.

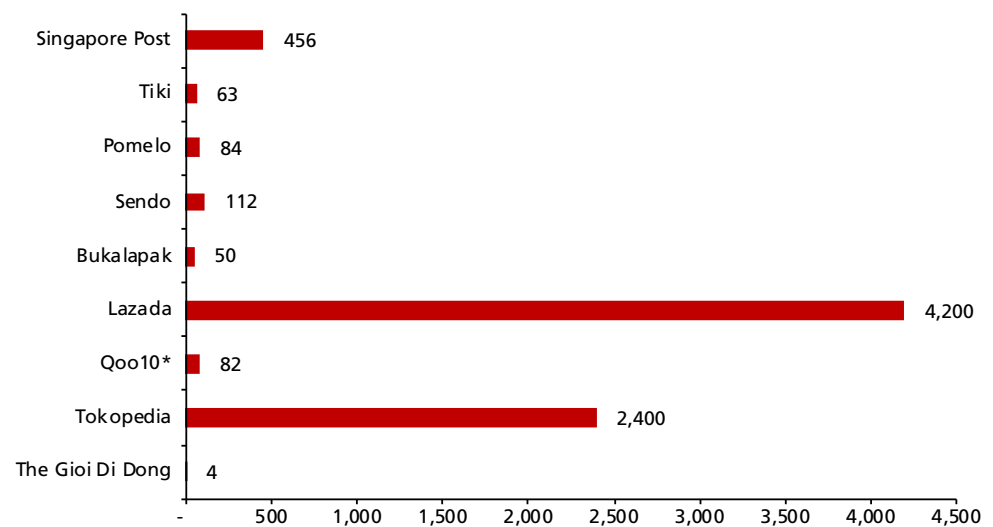
*Vietnam poised to be Asean’s second-largest e-commerce market by 2025, with the industry projected to hit US\$23bn.*

# Investments in Asean e-commerce marketplace

International e-commerce platforms making sizeable investments in Asean online marketplaces.

Over the last few years, several large international e-commerce platforms have made significant investments in local online marketplaces. Moreover, e-commerce giants have received a series of funding from their respective parent/holding companies to continuously seek for market share due to the single-digit level of penetration in the region. These investments have accelerated the growth and development of e-commerce across Asean including funding aggressive marketing campaigns to attract new consumers to their platforms. Some of the well-known investments are Amazon's launch in Singapore, Lazada being acquired by Alibaba, and JD.com's launch of JD.id in Indonesia and JD Central in Thailand, a joint venture with Thailand's Central Group.

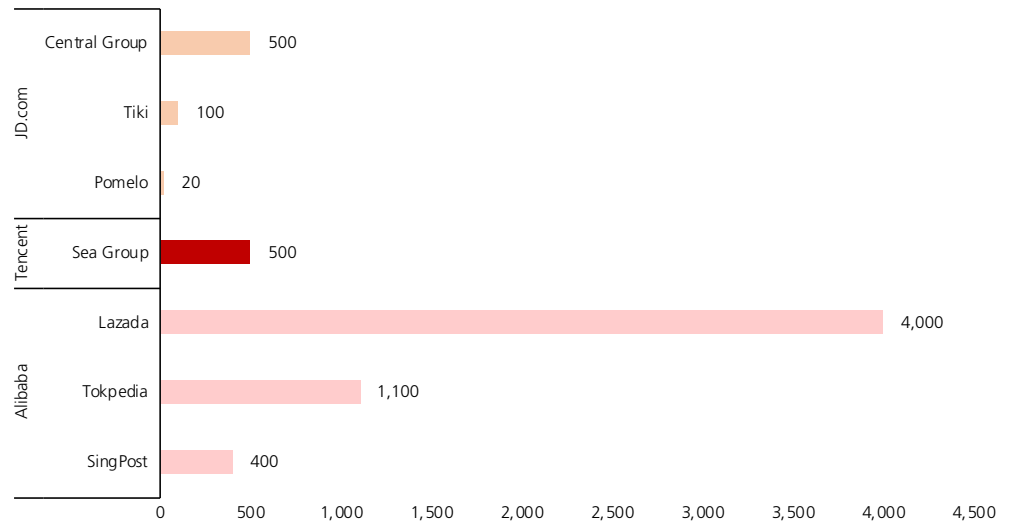
## Investments in Asean E-commerce platforms (US\$m)



\*Includes Japanese operations related investments  
Source: Crunchbase, Owler, PitchBook, DBS Bank

Chinese internet giants Alibaba and Tencent will continue to assertively pump money into Asean e-commerce platforms seeking a slice of the pie. Both firms are expected to gobble up more domestic e-commerce companies across the region.

### Investments by the tech giants in Asean E-commerce (US\$m)



Source: TLG Commerce, DBS Bank

## Industry consolidation on the cards?

Asean’s single-digit level of e-commerce penetration implies ample room for growth and opportunities.

Given the growing competition in the e-commerce arena, it is important for players to be ready for headwinds and adjust appropriately. Local home-grown players, except for in Indonesia, find it challenging to compete with international e-commerce platforms in the region. Presently, dominant e-commerce players will seek to garner market share at the expense of profits predominantly due to the single-digit level of e-commerce penetration in Asean which implies ample room for growth and opportunities to capitalise on.

Due to the less profitable nature of e-commerce in Asean, industry consolidation will take place where dominant players would seek to acquire or merge with niche-focused local players who are conversant with the local culture. Furthermore, small-time players will be forced to exit the market owing to possible funding constraints.



The big e-commerce player in Indonesia is seeking to become a digital ecosystem enabler from a conventional e-commerce player. As of December 2018, the company was valued at US\$7bn and might hover at US\$10bn by 2020 given its projected GMV in 2019 was at US\$15.8bn.



Lazada acquired online supermarket Redmart in November 2016 for an undisclosed sum and made investments in iPrice Group in 2015. The Alibaba-backed e-commerce giant is expected to consider several other acquisitions in the e-commerce landscape to consolidate its position in SEA.



Zalora Group is the largest and most visited e-commerce site for fashion in Asean and has presence in every Asean country following its recent entry into Vietnam.



Qoo10's largest market is in Singapore, having sold its Japanese operations to eBay. Qoo10 offers solutions to merchants and buyers alike, from the handling of the marketing process through to the adoption of Dynamic Search Ads (DSA). This then allows Qoo10 to capture Google search queries, resulting in hyper-targeted ads to consumers which account for about 10% of sales on the platform.



# Appendix

## Profiles of e-commerce platforms in SEA



The incumbent market leader, Shopee, is a Singapore-based e-commerce platform that has a presence in all Asean countries. Pivotal strategies adopted by Shopee at the outset to acquire market share in the region were to offer free shipping and exclude commission. This expensive strategy paid off in 2018 when Shopee reached 50m active users and outnumbered Lazada in terms of GMV. As of 2019, Shopee's GMV value stood at US\$18bn.



Founded in 2012 by European tech conglomerate Rocket Internet, Lazada was tipped to be the "Amazon of Southeast Asia". The company progressed towards its ambitious goal as a standalone company prior to its sale to Alibaba for US\$2bn in 2016. A critical concern identified in the Asean region was payments, which Lazada addressed by introducing Lazada Wallet. Lazada is also renowned for its wide inventory of foreign products and provides affordable logistics solutions for cross-border transactions.



With a mission to democratise commerce through technology, Tokopedia has become the leading e-commerce platform in Indonesia. Tokopedia boasts a large number of sellers, active users, logistics companies, and payment partners. Throughout their success journey, Tokopedia continued to receive funding from Soft Bank and other venture capitalists. Tokopedia's annual run-rate GMV in 2019 was estimated to be at US\$15.8bn, making it the largest e-commerce platform in the archipelago.



Founded in 2004, The Gioi Di Dong is a leading e-commerce platform in Vietnam specialising in the electronics and media segment. The e-commerce platform enjoys over 65-70% market share in Vietnam. Only through electronics and media sales, it is estimated that The Gioi Di Dong has earned a revenue in excess of US\$400m in 2019.<sup>49</sup>



One of the most trusted e-commerce platforms and the pioneer online marketplace in Malaysia, Lelong operates both a B2C and a B2B marketplace model. Although it lost its market leadership to Lazada, it remains among the top five platforms in Malaysia. Lelong charges a commission like other conventional players but it further monetizes by charging sellers an annual listing fee.



A joint venture between Thai retail conglomerate Central Group and JD.com, JD Central is a widely-used and trusted e-commerce platform in Thailand. JD Central also boasts a best-in-class delivery service with their recent partnership with DHL.



A Japanese online shopping platform, Qoo10 has expanded its operations to Singapore and has emerged as one of the top three players in the city state.



Tiki.vn is an e-commerce player based in Vietnam. The e-commerce platform was the first to introduce 2-hour delivery. JD.com invested in the series C fund raising of Tiki which is said to be ~US\$100m.<sup>50</sup>



Thailand's Central Group is a leader in the retail, property development, hospitality and food and beverage industries. The group acquired Zalora Thailand on 25 April 2016 and was one of the investors that helped Pomelo Fashion raise US\$52m in September 2019.<sup>51</sup>



Pomelo Fashion is a Thailand-based, privately held online fashion company. Series C funds of US\$52m were raised in September 2019. Series B funding included JD.com (with three other investors totalled US\$19m). Pomelo Fashion acquired Looksi (another fashion e-commerce platform in Thailand) on January 2020.

## Profiles of e-commerce logistics providers in SEA

### (Used by Lazada)



Lazada Express, the Alibaba-owned in-house logistics business which originated in Singapore, is one of the strategic pillars of Lazada. Running its own network, it handles a large percentage of Lazada's deliveries and offers end-to-end delivery services, covering the first to the last mile. It aims to build the infrastructure to enable e-commerce growth and work with external logistics partners to revolutionise the B2C logistics industry across SEA. In this way, it is easier for Lazada Group to control the whole logistics chain, the transport quality, and it is conducive to the integration of information flow and logistics.



### (Used by Bukalapak, Shopee, and Tokopedia)

J&T Express is an Indonesian courier service provider which operates by using independent agents. To overcome logistics challenges in Indonesia, J&T huddles with SF Express' Chinese management team. Between 2011-2015, J&T completely leveraged the established agent network built through the distribution of Oppo phones. Presently, the company delivers through a network of more than 8,000 people and 1,000 delivery/collection points.



### (Used by Bukalapak)

Part of Lion Air Group, Lion Parcel ventured into the logistics business very recently. A major advantage of Lion Parcel is that it has access to Lion Air's fleet of aircraft and routes, thereby offering high network coverage in Indonesia, priority boarding for Lion Cargo and control over cost of packages. Lion Parcel intends to be a serious contender in the e-commerce

logistics landscape. They have dominance over local air logistics, custom clearance, as well as warehouse services but will need to play catch up very quickly in the last-mile delivery area.



**(Used by Bukalapak and Zalora)**

Launched in 2014, Ninja Van is SEA's fastest-growing last-mile logistics company. Birthed in Singapore as an alternative to local incumbents (e.g. Singapore Post, DHL), it is now a force to be reckoned with. The primary strength of Ninja Van's technology is its ability to identify and leverage available capacity within vehicle fleets — whether its own or others — to cater to the varying demands of merchants (or clients). The company runs its own network, which incurs significant costs in the short term but it will pay off in the long run. Based on the dimensions and weight limit, customers can collect their parcels from Ninja Van distribution points, which are partner retail shops located in high footfall areas.<sup>52</sup>



**(Used by Bukalapak, Shopee, and Tokopedia)**

SiCepat Ekspres is an Indonesian courier service provider founded in 2004, serving mostly customers of Indonesian online marketplaces.



**(Use by Bukalapak)**

Established in 1998, Wahana Express is one of the leading companies in the low-cost shipping service industry. The company currently has 53 branch offices, 3,500+ agent partners, and 2,500+ employees.<sup>53</sup>



**(Use by Bukalapak, Shopee, Tokopedia, Lazada, and Blibli)**

Founded in Indonesia in 1990, JNE Express has first-mover advantage and it expanded quickly to gain market share. The company uses independent agents, allowing it to save costs and achieve superior efficiency gains by covering more remote locations without the need to set up a network. A concern is the quality and reliability of agents, which affects the delivery speed and user experience of the goods. Since 2017, the company has grown organically through debt financing instead of foreign investments.



**(Used by Bukalapak and Blibli)**

GoSend is an Indonesian last-mile delivery service stemming from Gojek's motorcycle-hailing arm, which boasts a strong last-mile delivery capability. Presently, Gojek is only big in the major cities but not so in smaller Tier-2 cities where e-commerce activities are higher. Their strategy in the big cities will differ widely from cities further away from Jakarta. In 2018, the company received a funding of US\$1.2bn from Google, Temasek, and Meituan-Dianping. This will propel development in the near term for the company.



**(Used by Bukalapak and Blibli)**

GrabExpress is a swiftly growing business within Grab's super app ecosystem. It enables consumers, e-commerce platforms, and social commerce sellers to send and receive parcels easily. GrabExpress is presently available in 150 cities across Singapore, Malaysia, Thailand, the Philippines, Vietnam, and Indonesia. From March 2018 to December 2018, GrabExpress grew instant and same-day delivery volumes by more than three-fold. In 2019, Grab partnered with Ninja Van to integrate the latter's logistics services on the Grab app via GrabExpress, Grab's on-demand parcel and courier delivery service



**(Used by Qoo10)**

Qxpress is the logistics subsidiary of Qoo10 which fulfils deliveries through 11 centres across seven markets. Established in 2011 to provide international logistics for Qoo10, it is able to complete 97.5% of its cross-border deliveries to Singapore within four to five days.<sup>54</sup>



Based in Hanoi, ViettelPost is a unit of Military Telecom Corporation (Viettel), specialising in domestic and international logistics services. Viettel Post has been listed on Vietnam's Unlisted Public Company Market or UPCoM to attract investment for the expansion of its delivery services to other foreign countries, enhancing logistics and postal technology.



Vietnam Post boasts a network of extensive service points stretching to the commune level across the country. That, coupled with its experience in delivery postal services, have given the company an edge in service capacity. Vietnam Post has logistics centres in key economic zones nationwide, including a 15,200sqm Southern Logistic and Transportation Hub in Ho Chi Minh City.



**(Used by Sendo)**

DHL eCommerce, a division of Deutsche Post DHL Group, announced its partnership with Sendo, Vietnam's No.1 local e-commerce platform. The successful integration between the two companies means sellers on Sendo are now able to access DHL's excellent domestic delivery network and deliver items to buyers on the same day or the next day in Ho Chi Minh City, Hanoi, and other primary markets.

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