

Travel, Logistics & Infrastructure

# E-commerce is entering a new phase in Southeast Asia. Are logistics players prepared?

Changing consumer and merchant habits are creating opportunities for logistics companies—if they can cater to new needs and meet more exacting standards.

*by Sal Arora, Fox Chu, Stanislav Melnikov, and Lizzie Zhang*



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**While growth of Southeast Asia's** e-commerce market has accelerated since the mid-2010s, the COVID-19 pandemic has propelled it into a new phase. From 2016 to 2021, the total value of e-commerce sales grew fivefold, or 40 percent, annually. And e-commerce's share of all retail sales surged to 20 percent, from 5 percent.

This new stage of Southeast Asia's e-commerce market isn't just a matter of increased value. Across the subcontinent, more people are buying a wider array of products online across more diversified channels. To accommodate this expanded range of fulfillment demands, the region's supply chains are shifting. New logistics capabilities will likely be required, and incumbent logistical players and new entrants who possess them will stand to reap the biggest value from these shifts.

This article provides an overview of Southeast Asia's e-commerce growth trajectory for the next few

years. Using China's experience as a reference point for how Southeast Asia's e-commerce landscape will evolve, we'll delve into the implications of changing customer and merchant behaviors for the logistics sector. Finally, we'll explore key domestic and cross-border opportunities for logistics players to seize.

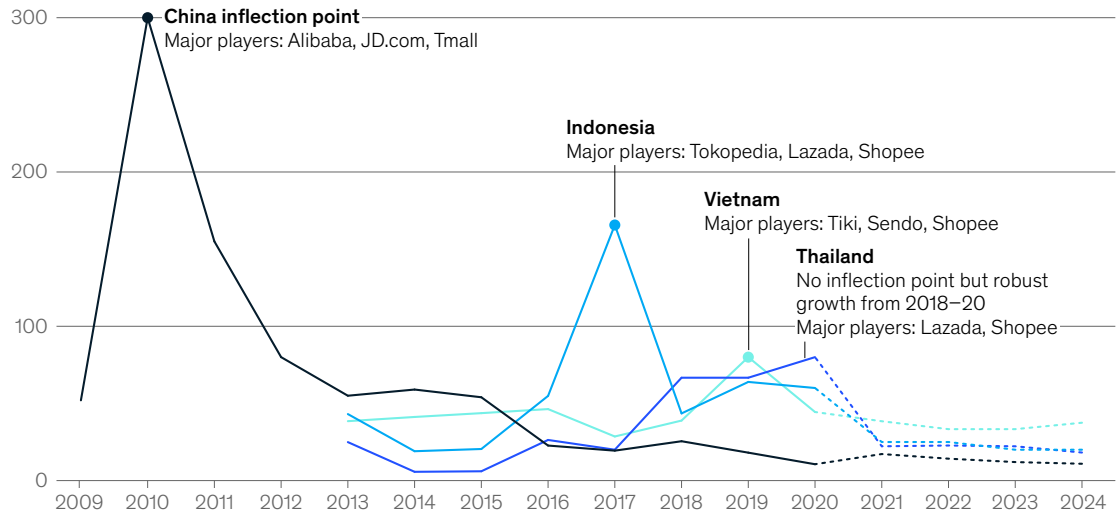
### **E-commerce is rising slowly across Southeast Asia, but there is a long runway for growth**

In the past few years, most e-commerce markets in Southeast Asia passed their inflection points, where big upticks in e-commerce growth were witnessed (Exhibit 1). This surge is powered by the internet becoming more widely accessible as more people in the region acquire smartphones and other digital devices, as well as the proliferation of online marketplaces such as

Exhibit 1

### **E-commerce markets in Southeast Asia have passed their supply-driven 'inflection points,' as they have seen an uptick in growth in the past few years.**

**E-commerce growth year on year, inflection points, and major online marketplaces, %**



Source: eMarketer; Euromonitor; GlobalData; Redseer; Statista; web research

McKinsey & Company

Lazada, Shopee, and Sendo. As macroeconomic conditions worsen and are becoming less predictable, expect more focus on profitability of existing operations and a conservative growth strategy from most e-commerce players. This, however, doesn't affect the long runway for growth of the sector.

Using China as a reference point, Southeast Asian markets could sustain robust double-digit annual growth of between 15 and 25 percent for the next five years (see sidebar, "The e-commerce market in China"). Currently, the average e-commerce penetration rate (excluding food and beverage) in Southeast Asia is 20 percent, which suggests a long growth runway before it matches China's penetration rate of 47 percent. Between now and 2026, the Southeast Asian market is projected to triple at a compound growth rate of 22 percent and will reach around \$230 billion in gross merchandise volume.

Southeast Asia is a mosaic of numerous economies at different stages of development, so it's natural for the e-commerce penetration rate to vary across countries. Leading the region are Indonesia and Singapore, at approximately 30 percent, while the Philippines, Thailand, and Vietnam are trailing: their e-commerce penetration rate is about 15 percent.<sup>1</sup> Southeast Asia's largest economy, Indonesia, is also the biggest driver of growth: its large consumer market contributes 51 percent of the total incremental gross merchandise value (GMV).

After experiencing a wave of inflection points in its economies, Southeast Asia's e-commerce market is at the threshold of its second phase. Right now, transactions are concentrated in apparel and low-value electronics, and most of the activity is happening in consumer-to-consumer marketplaces such as Shopee and Lazada. Finally, the Southeast Asian e-commerce market is heavily reliant on Chinese imports. As the e-commerce market in Southeast Asia marches headfirst into the second

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<sup>1</sup> These e-commerce penetration rates exclude food and beverage categories.

## The e-commerce market in China

**China**, as a global e-commerce leader, provides a useful reference for how Southeast Asia's e-commerce market could evolve. The country's e-commerce market has experienced three key phases.

The first phase, from 2008 to 2010, saw the massive explosion of the Chinese e-commerce market to ¥500 billion, from ¥100 billion. At this stage, most participants were small businesses selling low-value, nonbranded clothing, accessories, and homewares.

As customers got used to shopping online, China's e-commerce market entered the second stage, when bigger domestic and international brands opened up

flagship stores on digital marketplaces, such as Tmall, where only authenticated branded products were sold. It marked the e-commerce transition from a C2C marketplace to a B2C platform. From 2010 to 2015, the market saw 44 percent per annum growth, driven by the apparel, computer, communications, and consumer electronics categories, although all categories enjoyed higher e-commerce demand. In this stage, consumer demand for high-speed delivery emerged.

The third and present stage of China's e-commerce market, from 2015 to now, is marked by greater complexity and more subdued growth to approximately

20 percent annually. There are now more sophisticated uses of online channels, such as the emergence of social commerce and the integrated play across online and offline sales channels, as companies seek to differentiate themselves from the competition. Categories are getting further abundant: more luxury brands are embracing digital channels as opportunities for brand building, not merely as a means to clear out-of-season stocks. Platforms are becoming polarized toward cost-sensitive and high-quality premium platforms. Accordingly, logistics services are also evolving to default—but cheap—delivery and high-quality, fast—even instant—delivery.

stage of its development, these characteristics are likely to undergo fundamental shifts.

### New logistics needs are emerging as customer and merchant behaviors change

As Southeast Asia’s e-commerce market enters the next stage of its development, customers will increase their digital purchases across product categories and channels. They will also demand and be willing to pay for new and more sophisticated logistics services.

Merchants, meanwhile, will rely less on Chinese imports and instead diversify their sourcing channels to include more Southeast Asian countries. This migration of supply chains will

cause them to seek to extend their upstream capabilities to tap into a bigger value pool, which in turn would likely unlock more channels of value for logistics providers.

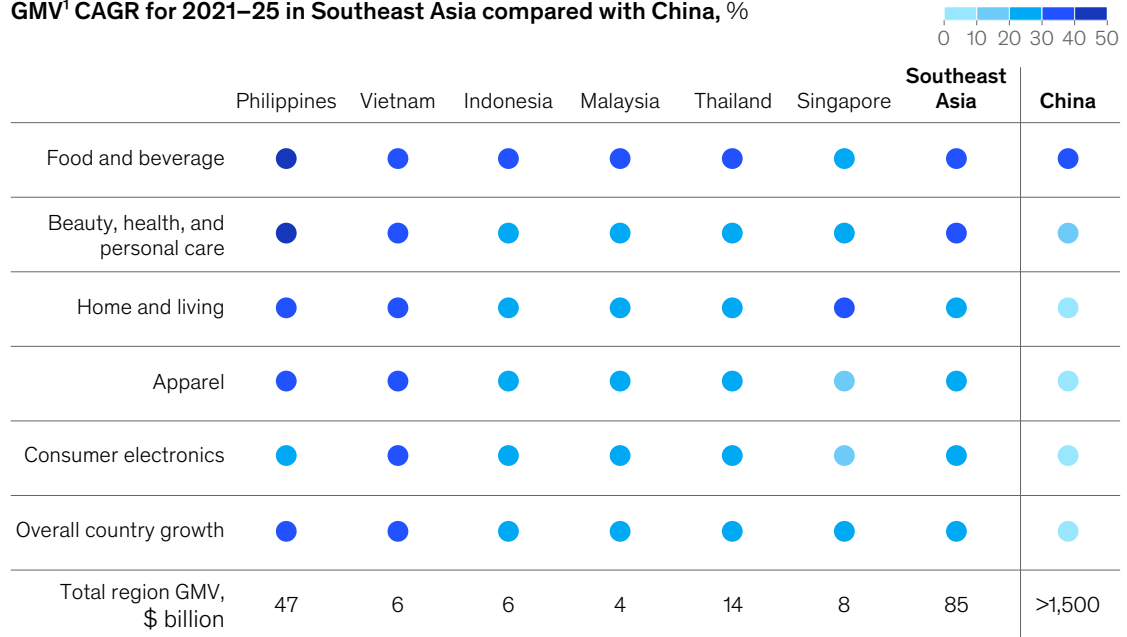
### Customers will buy a broader range of products online and across more digital channels

As customers get more accustomed to shopping online, they’ll likely extend their digital purchases beyond apparel and low-value consumer electronics. Food and beverage, beauty products, and home and living goods are expected to enjoy the strongest growth, although category penetration is expected to deepen across the board (Exhibit 2). Specialized logistics services would be needed to support the increase from products in some of these product categories.

Exhibit 2

## Food and beverage, home and living, and apparel and beauty categories in Southeast Asia show stronger potential for growth.

GMV<sup>1</sup> CAGR for 2021–25 in Southeast Asia compared with China, %



<sup>1</sup>Gross merchandise value.  
Source: Expert interviews; Forrester Research; Statista; McKinsey analysis

Customers will also shop across more digital channels. Just as China’s retail ecosystem evolves toward greater omnichannel complexity, it’s likely that Southeast Asia’s will as well. More businesses could establish their own B2C online channels to engage with Southeast Asian customers directly. This direct access to customers will deepen brands’ understanding of their customers’ preferences and enable them to shorten the design-to-market process.

The diversification of channels is already an emerging trend in Southeast Asia. In Vietnam, social e-commerce platforms—or online stores that leverage users’ social networks—have begun to take off (Exhibit 3). While traditional e-commerce stores such as Shopee still dominate, signs point to social-network platforms gaining momentum. A commonly used social-network platform has become one of the top five e-commerce platforms of choice for Vietnamese customers, and TikTok has launched TikTok Shop in Vietnam this year to accelerate sales through live streams.

For merchants, e-commerce on social media has two advantages over traditional e-commerce

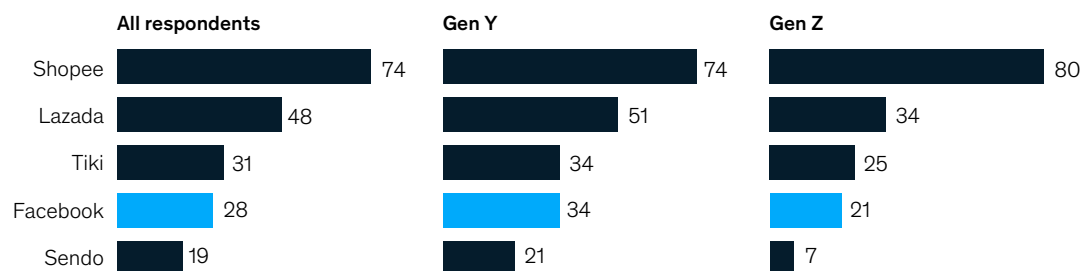
channels. First, influencers, more widely known as key opinion leaders (KOLs) in the region, have proved to be quicker and more effective at promoting new fashion brands and beauty products across their follower networks. Second, price isn’t the most important factor when consumers make buying decisions on social e-commerce; people often make purchases based on how much they like and trust the KOL. Therefore, the rise of social e-commerce means that logistics providers could expect more deliveries of fashion and beauty products. It’s also likely that because products sold via social e-commerce channels are less price elastic, logistics players may be able to charge more for specialized logistics services.

More broadly speaking, as customers migrate more of their shopping online, their expectations for logistics services will become more exacting. In a McKinsey survey of 600 respondents in six Southeast Asian countries, almost half said that their biggest pain point with e-commerce logistics was delays in deliveries. Other common complaints were slow speed, poor customer service, damaged packages, and poor tracking functionality. Only

Exhibit 3

### Social e-commerce platforms have gained momentum in Vietnam, according to a recent survey.

Platforms/apps used in Vietnam for online shopping, Q2 2021,<sup>1</sup> % of respondents



<sup>1</sup>Question: Which platforms/apps do you use for online shopping? Choose all that apply. Total survey sample, n = 1,833; Gen Y, n = 482; Gen Z, n = 1,183. Source: Decision Lab; press search



22 percent were satisfied with the current level of service, and approximately 78 percent said they were willing to pay more for better reliability and service. Logistics providers that can help customers overcome their current delivery woes stand to gain significant value.

**Merchants will seek deeper integration with local markets by adopting a B2B2C approach or migrating supply chain issues**

About 80 percent of e-commerce GMV in 2021 was imported from outside Southeast Asia, with a significant portion coming from China. As e-commerce volumes rise, China-based merchants will try to maximize value for themselves when

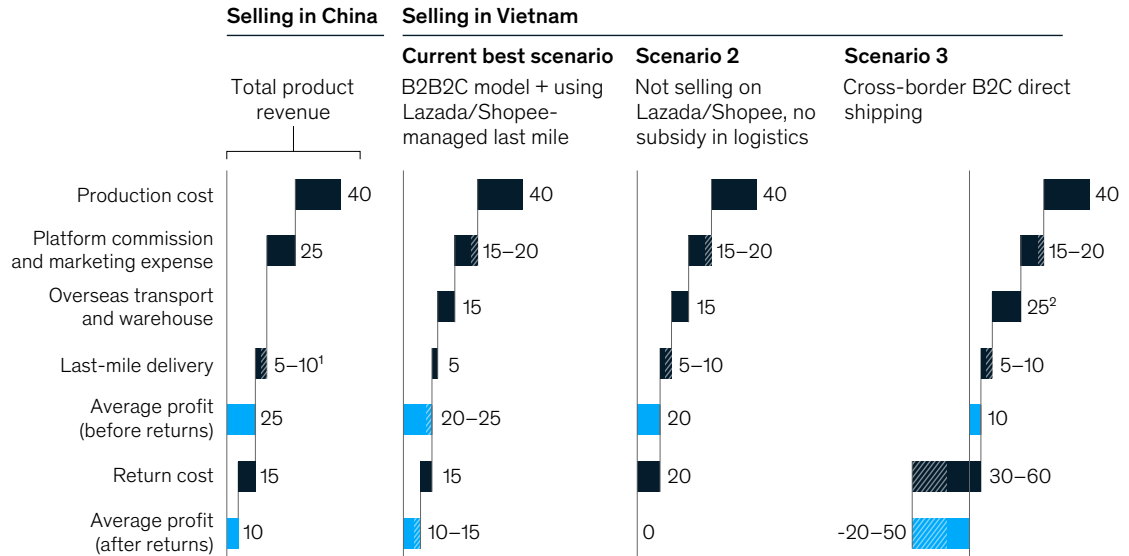
trading in the region. There are two ways they can go about doing this: establish a B2B2C operational model and migrate their supply chains to the region.

Merchants in China may seek to extend their upstream capabilities and deepen integration with local markets, such as Vietnam, to enjoy higher earnings (Exhibit 4). Currently, using a direct B2C model without any logistics capability in the destination country, apparel merchants' average take-home profit when they do business on Chinese platforms is approximately 10 percent. They may be able to enjoy greater profits of about 15 percent when they sell the same product on a Vietnamese platform—if they choose to follow the more efficient B2B2C model. In this approach, Vietnamese

Exhibit 4

**There may be incentive for merchants in China to sell to Vietnam channels, depending on cost-efficiency of cross-border flow.**

**Illustrated cost structure example of merchant selling on an e-commerce platform in China vs Vietnam, % of product revenue**



<sup>1</sup>Includes China domestic warehouse handling fee and last-mile express delivery fee.

<sup>2</sup>In the cross-border B2C direct-shipping model, the shipping cost accounts for ~30–35% including small parcel overseas transport and domestic last-mile delivery but excludes warehouse storage cost. To make the scenarios comparable, we assume the domestic last-mile delivery part in scenario 3 is the same as the market average cost in scenario 2 of 5–10%.

Source: McKinsey analysis

platforms will manage last-mile deliveries and returns, allowing foreign merchants to enjoy cost savings. Many Southeast Asia–based platforms are also offering subsidies to encourage foreign merchants to join their platforms.

Next, manufacturing and supply chains—especially those for apparel, consumer electronics, and home and living products—are likely to migrate to many Southeast Asian countries, including Indonesia, Malaysia, Thailand, and Vietnam. This is driven in part by favorable trade agreements (such as the Regional Comprehensive Economic Partnership), external political factors, and the capability readiness in these countries. Additionally, operational and labor costs in Southeast Asia are becoming relatively cheaper than in China.

Many companies—from apparel brands to consumer electronics companies—have been taking advantage of cheaper operational costs in Southeast Asia for a long time. As e-commerce activity in the subcontinent skyrockets, these foreign companies will likely boost their manufacturing base in the region not just to cater to global demand but also to fulfill the region’s appetite and bypass tightening import tariffs in markets such as Indonesia. This means that the intraregional and domestic flow of goods will rise, which necessitates more differentiated logistical support.

### **Opportunities ahead in Southeast Asia logistics**

Against the current backdrop of change, new value pools across the entire logistics value chain in Southeast Asia will surface in the next five to ten years. Beyond the increased demand for reliable and specialized services, the diversification of consumption channels and product categories will allow logistics companies to reduce the risk of over-relying on traditional e-commerce platforms.

Now is the time for logistics players to make bold moves to secure strongholds in the market. Otherwise, they may find themselves ceding ground to future market leaders, which would

have by then solidified their pricing power and dominance when market consolidation inevitably happens. There are two main engines of value that logistics companies can explore: domestic B2C and cross-border fulfillments.

#### **Domestic B2C: Specialized services**

As purchases are made across a greater diversity of channels, specialized services would be needed to handle the transportation of a growing variety of product types. E-commerce logistics providers that can configure themselves to serve these more diversified needs could draw from more value pools and optimize their fixed-cost investments.

By acquiring more advanced pricing, product development, and network design capabilities—as well as reassessing partnership models to deepen integration—logistics players could carve a niche in one or more of three segments.

*Returns.* When a person buys something at the mall, they have the chance to inspect it for defects or try it on for fit. That isn’t the case with online shopping, so logistics providers can expect returns to rise as e-commerce becomes more prevalent in Southeast Asia. Return rates for e-commerce sales are between 15 and 20 percent, more than twice the median return rate for all sales categories. Among the goods sold online, apparel and consumer electronics (which make up the majority of e-commerce sales) are the most often returned product categories. A fifth of clothing and 10 percent of consumer electronics are sent back.

Failed deliveries are expected to rise too. We’ve found that this happens more frequently for cash on delivery (COD) than for prepaid transactions. Customers who need to pay only when their purchases arrive tend to be more fickle when they shop online and are more likely to make last-minute cancellations when the items are already en route. In countries where COD is the norm, such as in the Philippines and Vietnam, the failed delivery rate is nearly 15 percent.

A better return experience is increasingly seen as a differentiating factor for companies to

# More than 40 percent of customers cited product damage during delivery as a very serious pain point. These grievances present a white space for logistics companies.

attract and retain customers. In a survey of 600 respondents across the six Southeast Asian countries, 83 percent said they would increase their online purchases by at least 30 percent if a smooth return logistics process is available. By 2026, the return logistics market in the six Southeast Asian countries would reach a combined \$21.9 billion in value.

***Bulky-product handling.*** Homeware and furnishing is a fast-growing category in Southeast Asia, expected to exceed \$27 billion in sales in 2025. Indonesia, Vietnam, and Thailand are the top contributors of growth. However, e-commerce furniture sales are subdued by a lack of logistics capability and supply chain inadequacies for handling bulky items.

There's a gap between customer expectations and reality. In many cities, customers' product options are limited by the seller's lack of delivery coverage, or by express companies' lack of vans. When delivery is arranged, it's often not only very expensive but also very unreliable. Poor packaging and handling often result in damaged items—more than 40 percent of customers cited product damage during delivery as a very serious pain point.

These grievances present a white space for logistics companies. Nearly 70 percent of customers who buy furniture are willing to pay for professional

handling of bulky cargo. These services not only include careful handling to minimize damage but also protective packaging, door-to-door delivery, and onsite assembly. Logistics players that develop specialized bulky-cargo-handling capabilities could well seize a first-mover advantage in the market.

***E-groceries.*** Despite its relatively small size, the e-grocery category is rapidly growing and has huge potential. Although e-groceries and traditional brick-and-mortar grocery stores account for more than half of Southeast Asia's total retail spending (more than \$400 billion), e-commerce penetration within the segment is only about 2 percent, or \$9 billion. By 2025, e-commerce sales of groceries are expected to reach \$25 billion, supported by growing mobile penetration in the region and an influx of capital and tech entrepreneurs innovating in this space. A proliferation of digital payments and logistics infrastructure is expected in the near future.

The point-to-point direct-delivery model dominates the last-mile logistics for e-groceries, and many players are already able to execute citywide deliveries within 30 to 60 minutes. It's important for retailers as a core enabler for e-grocery business growth even though it requires huge capital investment, and profits can be difficult to achieve. That's why many retailers are building in-house fleets to execute e-grocery delivery.



With an expected surge in order volumes looming, many retailers may struggle to keep up. An external logistics provider with scale efficiency could find an opportunity to serve as a supplement to or even replacement for these brands' in-house fleets. Despite low profitability, point-to-point delivery could also be a strategic play for express or third-party players, who may want to diversify their logistics offerings. This can be done either through acquisition or by building in-house capabilities organically.

#### **Cross-border plays: B2B2C fulfillments and end-to-end services**

For international transactions, most online sellers now use the cross-border fulfillment solution provided by the platform they're operating on to deliver goods to their customers. The platforms in turn enjoy economies of scale by aggregating demand.

We expect that this approach—known as the direct-injection model—will soon give way to a B2B2C fulfillment model. In this model, overseas sellers register as local sellers in destination countries. They would then ship their goods in bulk to locally based warehouses, from which orders in the respective country would be filled. Local last-mile delivery providers will ensure the product reaches the buyer.

***Advantages and opportunities of the B2B2C model.*** The B2B2C model has several advantages over direct injection. First, some markets are tightening import regulations by adjusting their tax thresholds to lower levels. The majority of e-commerce imports no longer enjoy tax-free status in the B2C direct-shipping model. As such, many retailers may choose to register their businesses within the country and file local orders from there.

Speed is the next advantage. In the B2C direct-shipping model, it took around 15 to 20 days to deliver a product by sea (the average order volume for e-commerce is about \$10, a low price that explains why most deliveries are maritime). Under a B2B2C model, this time would fall to about three to

five days. The fast speed and increasing consumer preference for local products is also expected to trigger even more sales, incentivizing global brands to set up domestic e-stores to serve local markets. It's also more efficient and quicker to optimize delivery flows in a B2B2C model than the direct-injection model, as merchants diversify their sourcing channels and decentralize their supply chains across Southeast Asia.

Finally, as Southeast Asia's e-commerce sector matures and grows, companies will have more complex needs. Brands will likely operate across different platforms and sell more products in more categories. More companies may diversify their sourcing away from China to favor more Southeast Asian markets, which will necessitate reconfigurations of their logistical setup. A B2B2C model offered by third-party logistics players could help fulfill complex logistical needs by aggregating demand for transportation across brands and platforms more efficiently than the direct-injection model.

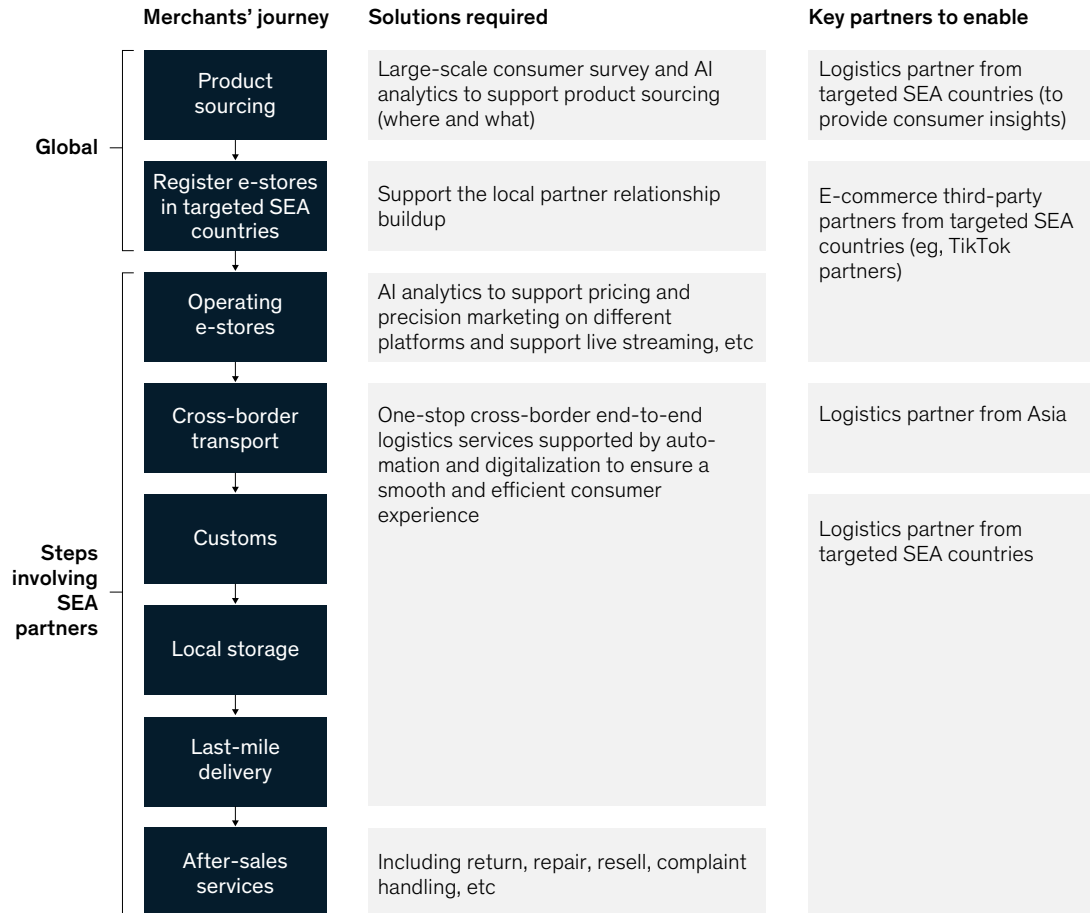
For logistics companies, this move toward the B2B2C model could lead to interesting opportunities. Cross-border third-party logistics players or integrators could expand their warehouse presence to meet the higher demand for storage and processing facilities locally, as well as scale up their last-mile delivery services. In an age where data security is important, logistics players should also shore up their ability to protect seller data confidentiality. Meanwhile, our research suggests that there's still room for start-ups to make a play as B2C fulfillment aggregators specializing in domestic e-commerce, because demand for services is expected to surge.

***End-to-end, cross-border services.*** Facilitating the flow of goods across a region can allow some logistics players to expand their end-to-end, cross-border services. To be more competitive and maximize gains from the value chain, logistics players can consider extending their service line beyond delivery and logistics by collaborating with upstream and downstream players (Exhibit 5).

Exhibit 5

**To be more competitive, logistics players can collaborate with upstream and downstream players to expand end-to-end, cross-border services.**

**How global SME<sup>1</sup> merchants can work with partners from Southeast Asia (SEA)**



<sup>1</sup>Small and medium-size enterprise.  
Source: McKinsey analysis

McKinsey & Company

Companies may choose to leverage AI and advanced data analysis on information about product flows and other logistics activity to produce consumer insights for their clients. With these insights, brands would be better

informed to make more accurate and targeted product-sourcing decisions. Likewise, logistics companies could provide AI-supported analytics to e-store operators to aid in their pricing and marketing decisions.

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Logistics companies may also enter into longer-term partnerships with third-party overseas merchant associations. They could collaborate with local e-store operators to offer small and medium-size merchants a one-stop, cross-border solution for both logistics and e-store operations.

As cross-border activity increases, the need for after-sales services will naturally also rise. Such services include handling returns, which may mean recycling and liquidation instead of shipping the products back to the country of origin to recover

most of the value from the sold products. Logistics providers could open up another channel of value by offering such services.

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As this article has laid out, the logistics landscape in Southeast Asia is in the throes of transition. All logistics players should have a deep understanding of these shifts and set their sights on the opportunities that are opening up. A deep grasp of these shifts is any logistics company's first step toward enhancing its competitiveness for the decade to come.

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