2025

Global Digital
Shopping Index

Singapore edition
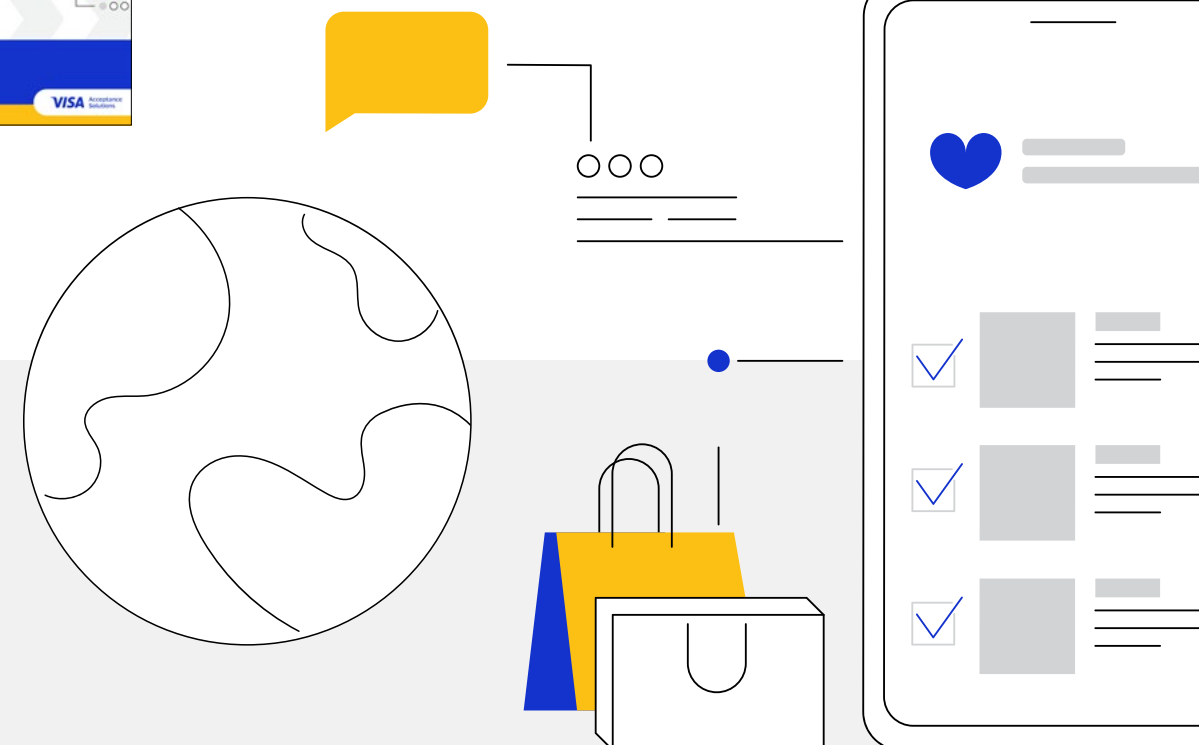
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2025

Global Digital Shopping Index

Singapore edition

Read the full **2025 Global Digital Shopping Index: The rise of the mobile window shopper and what it means for payments**

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What's at stake

In the mobile-first era, shopping and smartphones go hand in hand. Consumers regularly reach for their phones, and not just to make online purchases. Mobile screens are becoming the main way they "window shop," too. Phones increasingly drive physical store experiences as well, with shoppers expecting access to digital features such as rewards programs and inventory information.

In Singapore, consumers have firmly shifted to mobile shopping. They make 65% of their retail transactions using mobile devices, placing near the top of our global survey—which included Australia, Brazil, Mexico, Saudi Arabia, the United Arab Emirates, the U.K. and the U.S. Singaporean shoppers prioritize smooth and secure online transactions, using one-click checkout options and biometric authentication at well above the global average rates.

Merchants in Singapore, meanwhile, lead globally in cross-channel shopping. More than eight in 10 offer their customers this experience—which connects payment transactions across platforms and devices—and most of them want to innovate further. However, small and medium-sized businesses (SMBs) widely express concerns about keeping up with rapid advances in payments technologies, highlighting demand for expertise and solutions from their banking partners or third-party solutions providers.

These are just some of the findings and insights in the 2025 Global Digital Shopping Index: Singapore edition. This report was commissioned by Visa Acceptance Solutions, and PYMNTS Intelligence conducted the research and produced the report. This edition examines the growing role that mobile devices play in consumer behavior in Singapore. It draws on insights from a survey of 1,510 consumers and 425 merchants in the country conducted from October 17, 2024, to December 9, 2024.

This is what we learned.

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Key findings

Mobile-first shoppers

Singapore places near the top globally on mobile shopping.

65% of Singaporean shoppers used their smartphone for their latest retail purchase, regardless of channel.

Cross-channel leaders

Merchants in Singapore lead globally in cross-channel shopping innovation; most want to enhance their capabilities further.

82% of Singaporean merchants already offer cross-channel shopping experiences.

Smooth checkouts

Consumers in Singapore strongly prefer time-saving and secure checkout methods when shopping online.

32% of Singaporean shoppers made their most recent online purchase using a third-party, one-click checkout option.

Payments challenges

Most smaller merchants in Singapore worry about keeping up with rapidly advancing payments technology.

73% of SMBs are concerned that their current payments capabilities will not meet their future needs.

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Singaporean shoppers rank near the top globally on mobile shopping, both online and in-store.

Shoppers in Singapore made 65% of their latest retail purchases, whether online or in-store, using a mobile device. This marks a 42% increase since 2022, significant growth for an up-and-coming region driven mostly by a sharp rise in consumers using the devices for in-store shopping. Singapore stands out as a mobile-first leader, coming just behind the UAE (67%) and Saudi Arabia (66%) at the top of our global survey. For online shopping, Singapore places second among the eight countries, at 35%, while for in-store, it comes in third, at 30%.
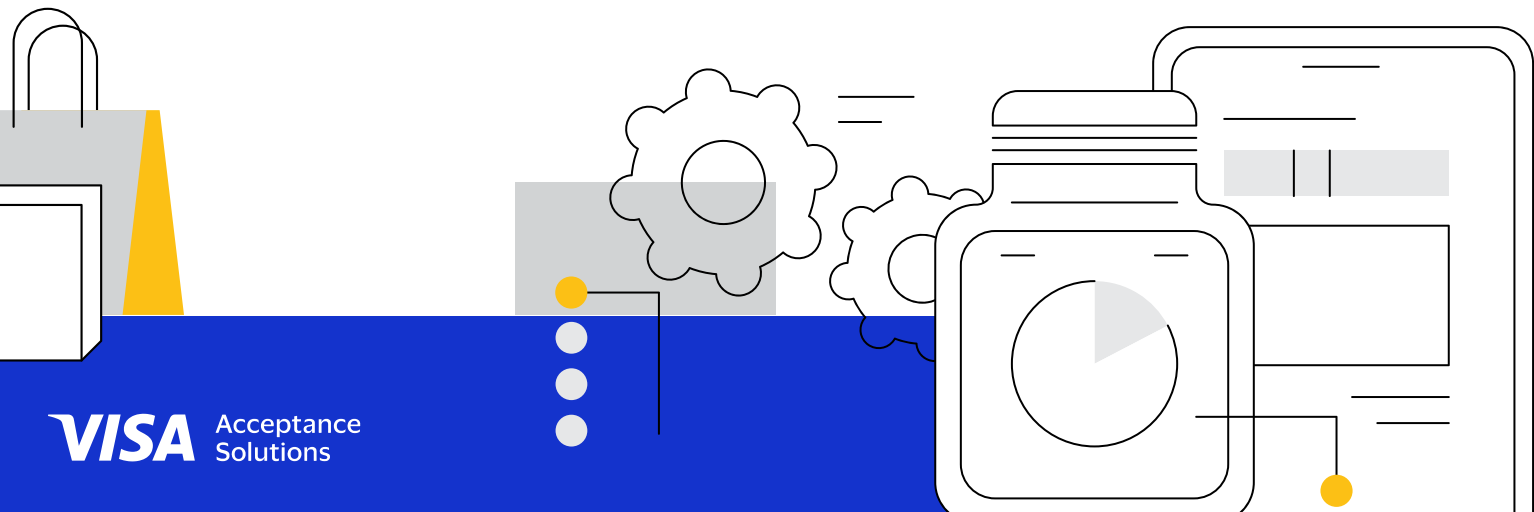
Figure 1:

Mobile devices use in retail purchases
Percentage of consumers who used their mobile device the last time they bought something

	Completed an online purchase with a mobile phone	Shopped in-store with digital assistance from a mobile phone	Total
All countries	**23.7%**	**24.3%**	**48.0%**
Australia	**18.2%**	**24.6%**	**42.8%**
Brazil	**24.4%**	**36.4%**	**60.8%**
Mexico	**20.2%**	**26.4%**	**46.7%**
Saudi Arabia	**32.4%**	**33.8%**	**66.2%**
Singapore	**34.8%**	**30.0%**	**64.9%**
UAE	**37.3%**	**29.4%**	**66.7%**
U.K.	**27.6%**	**21.1%**	**48.7%**
U.S.	**23.2%**	**19.0%**	**42.2%**

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N varies by country and represents complete consumer responses, fielded October 17, 2024, to December 9, 2024

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In every age group and income bracket, at least six in 10 Singaporeans made their latest retail purchase using a mobile device. This highlights just how universal mobile-first shopping has become in the country. Younger Singapore consumers, like their counterparts elsewhere, are the most likely to shop with their phones. Millennials lead, with 71% using a mobile device for their latest purchase, followed closely by bridge millennials and Generation Z, each at 70%.[1] Notably, 61% of baby boomers and seniors used a phone for their latest purchase, edging out Generation X, at 60%. This contrasts with very low rates of mobile shopping by older shoppers in some countries, particularly the UAE, where just 18% of baby boomers and seniors did so.

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1 PYMNTS Intelligence uses the following birth dates and approximate age ranges in 2025 for generational cohorts: baby boomers: born in 1964 or earlier and now aged 61 or older; Generation X: born between 1965 and 1980 and now aged 45–60; millennials: born between 1981 and 1996 and now aged 28–44; bridge millennials: born between 1978 and 1988 and now aged 37–47; zillennials: born between 1991 and 1999 and now aged 25–34; and Generation Z: born in 1997 or later and now aged 28 or younger.
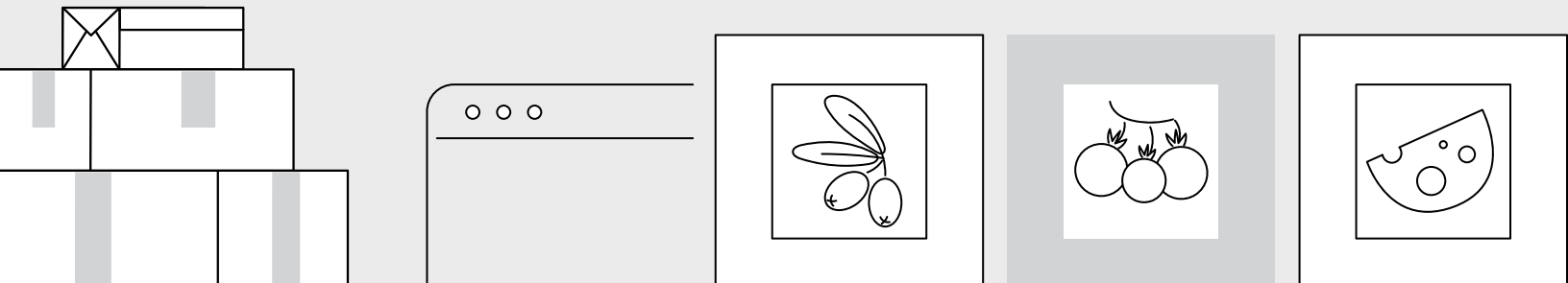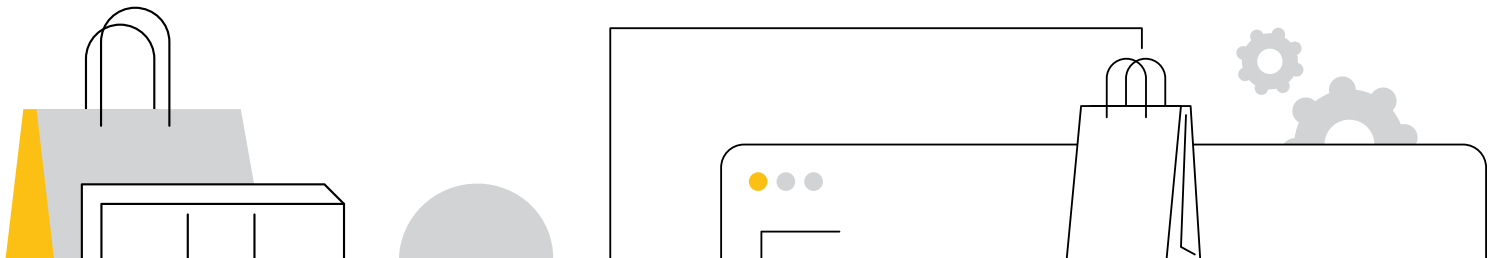
Turning to income levels, Singaporean consumers earning less than 7,000 Singapore dollars (SGD) per month (equivalent to $5,430) have the lowest rate of mobile shopping, at 60%. Shoppers in the middle bracket (SGD 7,000–14,999 per month, equivalent to $5,430–$11,636) use phones for 70% of their retail purchases, slightly more than the 67% seen among the top bracket (over SGD 15,000, equivalent to $11,637 or more per month). Interestingly, online mobile shopping climbs with income, while in-store mobile shopping falls. For example, 43% of high-income consumers made their latest purchase online using a mobile device, compared to 38% for middle-income shoppers and 28% for the low-income segment. This points to a divide in the market that merchants should consider as they position their sales channels and marketing efforts.

Another noteworthy dynamic is the role of parental status. In the three countries with the highest rates of mobile shopping—Saudi Arabia, Singapore, and the UAE—the data shows little difference between parents with children under their care and other consumers. In Singapore's case, the former made 67% of their latest purchases using a phone, compared to 64% for the latter. Conversely, in the other five countries—where overall mobile shopping rates are much lower—parents are much more likely than others to mobile shop, with the study-wide averages at 59% and 41%, respectively. Zooming out, these trends suggest that as mobile shopping becomes more popular, the gap between busy, on-the-go parents and other consumers shrinks.

Figure 2:

Breakdown of mobile-first shoppers
Percentage of Singaporean consumers who used a mobile device for their last retail purchase, by demographic

				Completed an online purchase with a mobile phone	Shopped in-store using digital assistance from a mobile phone
	Sample	**64.9%**	**Sample**	**34.8%**	**30.0%**
Generation	**Generation Z**	**69.6%**	**Generation Z**	42.5%	27.2%
	Millennials	**71.4%**	**Millennials**	42.5%	28.9%
	Bridge millennials	**70.2%**	**Bridge millennials**	43.2%	27.0%
	Generation X	**60.1%**	**Generation X**	36.2%	23.9%
	Baby boomers	**60.8%**	**Baby boomers**	20.3%	40.6%
Income	**Low**	**59.6%**	**Low**	28.0%	31.7%
	Middle	**70.1%**	**Middle**	37.6%	32.5%
	High	**66.6%**	**High**	43.4%	23.1%
Gender	**Female**	**63.1%**	**Female**	34.9%	28.3%
	Male	**66.5%**	**Male**	34.8%	31.7%
Parents with childen under their care	**No**	**63.6%**	**No**	31.0%	32.6%
	Yes	**66.9%**	**Yes**	41.0%	25.9%

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 1,510: Complete Singapore consumer responses, fielded October 17, 2024, to December 9, 2024
Note: Low income = Less than SGD 7,000 per month, Middle: SGD 7,000 to SGD 14,999 per month, High: SGD 15,000 or more per month

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1.7

Average number of mobile shopping activities Singaporean shoppers conduct daily

Consumers in Singapore conduct 1.7 mobile shopping activities per day, on average, based on our digital shopping days metric.[2] This puts them in fifth place among the eight countries and in line with the global average. As seen across the study, mobile phones dominate computers in every digital shopping activity in Singapore. Consumers in the country "window shop"—browse or research products—14 days a month from their mobile devices compared to 8 days from computers. They also use mobile device much more frequently than computers to remote shop for delivery and to buy online for in-store pickup. Singaporeans shop in-store using a mobile device 7 days a month as well.

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2 Our digital shopping days metric measures how frequently a shopper engaged in seven digital shopping activities related to browsing, then purchasing online or in-store within the last month. The Methodology section at the end of this report contains a detailed explanation.

Figure 3:

Frequency of digital shopping activities
Average number of digital shopping days in the last month, per activity

		All countries	Singapore	Rank
Window shopping days	Mobile device	13.7	14.0	5th
	Computer	8.7	8.0	7th
Remote shopping days (online order with home delivery)	Mobile device	8.1	8.0	5th
	Computer	5.1	4.3	7th
Pickup shopping days (online order with in-store pickup)	Mobile device	5.3	5.3	5th
	Computer	3.6	3.4	5th
Digitally assisted in-store shopping days	Mobile device	6.5	7.2	5th
Total digital shopping days per month	Mobile device	33.6	34.5	5th
	Computer	17.3	15.7	7th

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 1,510: Complete Singapore consumer responses, fielded October 17, 2024, to December 9, 2024

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Shoppers in Singapore look for smooth and secure payment experiences.

Merchants in Singapore can drive sales by providing seamless payment and checkout experiences. This begins with accepting a wide range of payment methods: 68% of Singapore shoppers said having access to their preferred option influences where they shop. For online shopping, the most wanted methods are credit card (preferred by 37% of consumers), debit card (22%), and digital wallets (16%), while for in-store purchases, they are credit card (34%), debit card (21%), and cash (8%). Importantly, 41% indicated that access to their preferred payment method is highly influential on their choice of where to shop, by far the highest rate in the global study.

Figure 4:

Consumers want to use their preferred payment methods
Percentage of consumers indicating that the payment methods a merchant accepts will influence where they shop

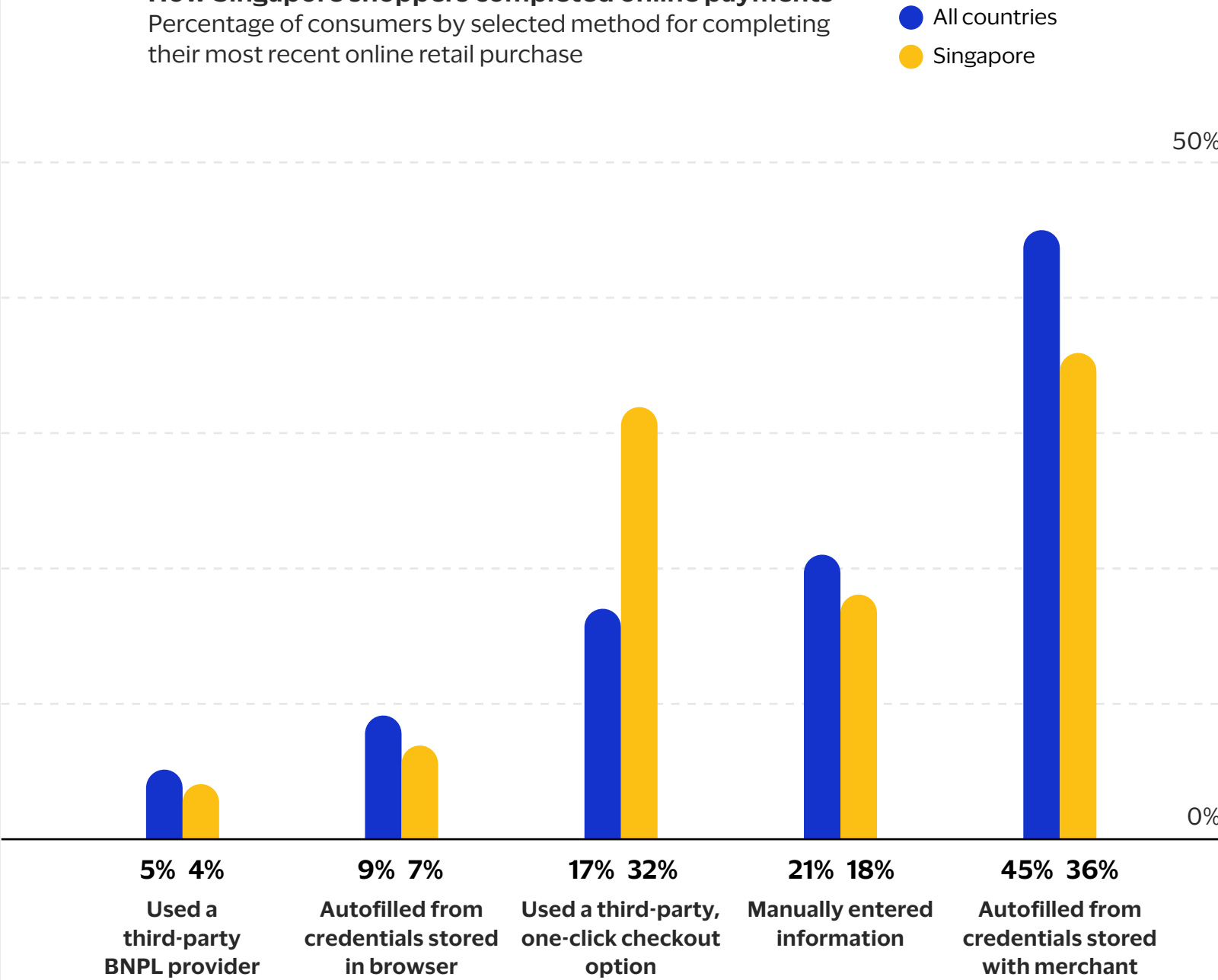|	Highly influential	Somewhat influential	Total
All countries	**37.6%**	**17.4%**	**55.0%**
Australia	**33.0%**	**20.0%**	**53.0%**
Brazil	**44.0%**	**11.4%**	**55.4%**
Mexico	**48.1%**	**15.9%**	**64.0%**
Saudi Arabia	**55.9%**	**16.1%**	**72.0%**
Singapore	**40.6%**	**27.2%**	**67.7%**
United Arab Emirates	**56.8%**	**20.3%**	**77.0%**
U.K.	**32.4%**	**21.9%**	**54.3%**
U.S.	**32.9%**	**19.0%**	**51.9%**

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N varies by country and represents consumers who were aware their preferred payment method was available
fielded October 17, 2024, to December 9, 2024

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32%

of Singaporean consumers checked out using a one-click option in their latest online purchase.

Checkout methods represent another crucial part of the shopping experience. For their most recent online transaction, 36% of shoppers in Singapore completed their purchase using payment credentials stored with the merchant, making it the most popular method, though this is well below the global average of 45%. Nearly as many used a one-click checkout option from a third-party, such as a card network, at 32%, almost twice the global average of 17%. These findings emphasize that merchants should invest in making their own stored credential options as convenient and secure as possible, while also providing the one-click checkout methods so many consumers prefer.

Figure 5:

How Singapore shoppers completed online payments
Percentage of consumers by selected method for completing their most recent online retail purchase

● All countries
● Singapore

| 5% 4%	9% 7%	17% 32%	21% 18%	45% 36%
Used a third-party BNPL provider	**Autofilled from credentials stored in browser**	**Used a third-party, one-click checkout option**	**Manually entered information**	**Autofilled from credentials stored with merchant**

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Figure 6:

Concerns about storing credentials with merchants
Percentage of consumers citing selected concerns about storing payment credentials with a merchant, by reasons cited

	All countries	Singapore
Data concerns	**59.8%**	**61.3%**
Only store payment information with trusted merchants	**30.1%**	**30.3%**
Worried about unexpected recurring charges	**26.4%**	**28.1%**
Autofill issues	**16.3%**	**17.6%**
Unable to remember login information	**11.2%**	**12.7%**
Do not want to update credentials each time cards expire	**9.8%**	**11.8%**
Takes too long to setup	**7.0%**	**7.6%**
Stored payments do not work across all shopping methods	**4.8%**	**4.7%**
Do not have any concerns	**12.3%**	**12.9%**

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 1,510: Complete Singapore consumer responses, fielded October 17, 2024, to December 9, 2024

61%

of shoppers in Singapore cite data security issues as a concern about storing payment credentials with merchants.

Consumers in Singapore identify three primary concerns about storing their payment credentials with merchants. Data security tops the list, named by 61% of shoppers, followed by merchant trust, at 30%, and recurring charges, at 28%. In all three cases, Singaporeans cite these issues at or above the global average rates. Merchants can use these findings as a guidebook to improve their stored credential offerings. They should focus on solutions that ensure customers feel their data is safe, build trust, and give them transparent control of any recurring charges.

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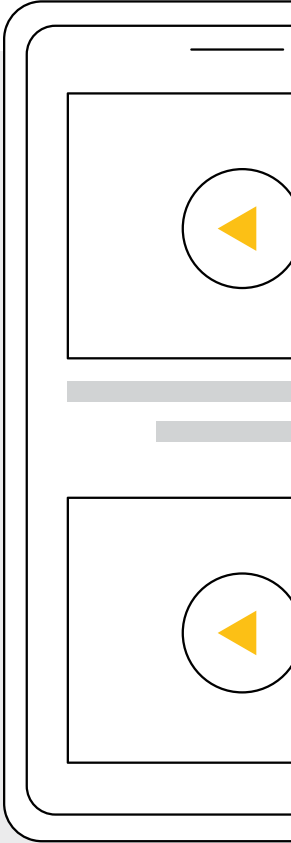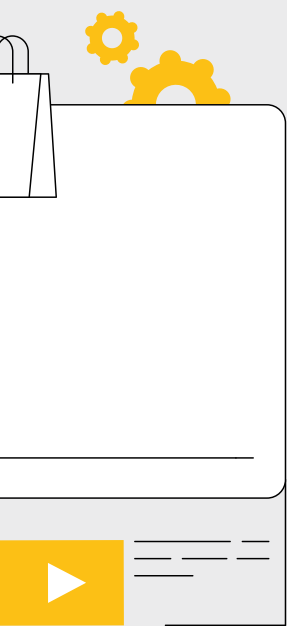
35%

of Singaporeans used biometrics to authenticate their latest online purchase.

Another important part of checkout is authentication. Biometric methods stand out here, with 35% of consumers in Singapore, excluding those who entered their payment information manually, using fingerprint or facial recognition to complete their most recent online purchase. This is the highest level seen in any country and nearly double the global average rate; it is also only slightly behind traditional username and password logins, at 39%.Singaporean shoppers also were much more likely than average to use several other methods, including push notifications, QR codes, and personal identification numbers (PIN), likely due to familiarity with these methods and their ease of use.

Figure 7:

The top authentication methods used by Singapore shoppers
Percentage of consumers by selected authentication method used for their most recent online retail purchase

	All countries	Singapore
Log in via username and password	50.7%	39.4%
Card verification number (CVN)	21.7%	16.7%
Biometrics	18.5%	35.3%
Push notification to an app	9.0%	17.3%
Text or email code from the merchant	13.0%	10.8%
QR code	8.9%	22.2%
Text or email code from card provider	10.5%	12.9%
Personal identification number (PIN)	9.2%	22.9%
Guest checkout	4.9%	7.2%

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 592: Singapore online consumers who did not manually enter payment and billing information responses
fielded October 17, 2024, to December 9, 2024

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Eight in 10 Singaporean merchants already offer cross-channel shopping, leading the global survey.

In Singapore, 52% of consumers used or wanted to use cross-channel shopping features during their latest purchase—the third-highest rate globally. Merchants in the country appear to recognize this demand: 82% already offer cross-channel functionality, the widest adoption seen among the eight countries and far above the 57% study-wide average. Notably, this includes 55% who would like to innovate further in this area. Among the merchants who do not offer cross-channel shopping, 13% want to roll it out, leaving just 5% with no interest in doing so.
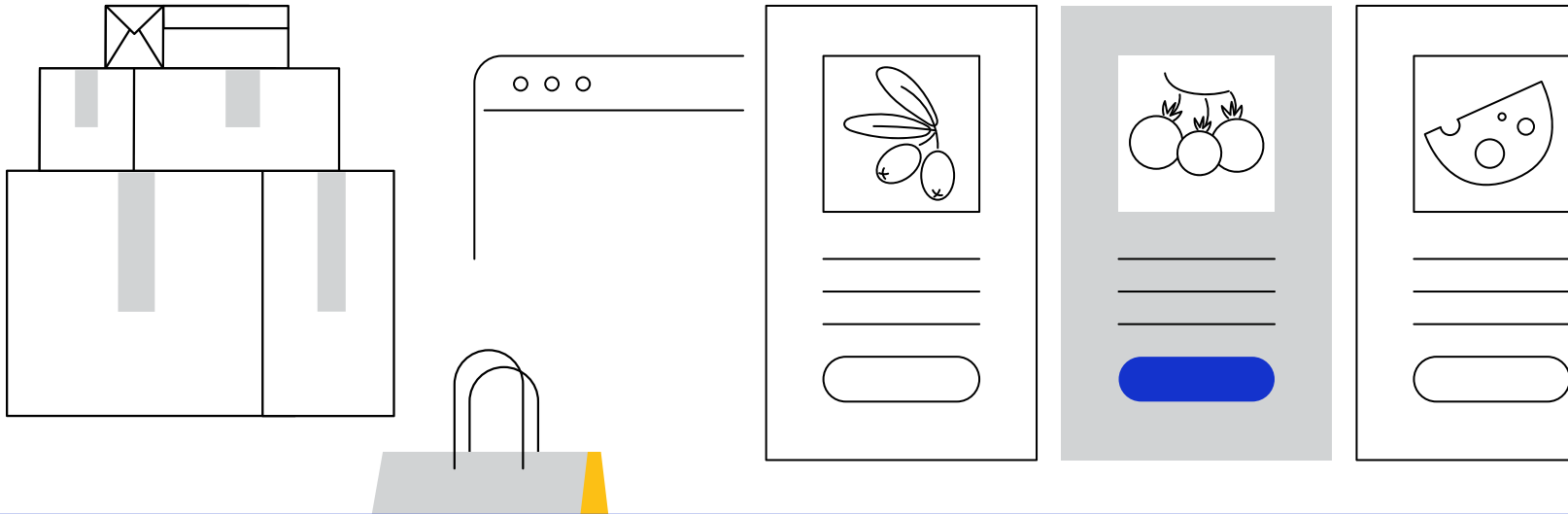
Cross-channel versus unified shopping

Cross-channel shopping refers to the ability to start shopping in one channel and finish in another, all in a connected manner. For example, a customer could use a merchant's mobile app to check product information and availability, then reserve an item for in-store pickup. The reverse is possible, too—a customer could scan an item in-store, save it to a digital wish list, then order it later from home.

Unified shopping goes further. It provides consumers with seamless access to the same digital features— such as rewards, order history, and stored payment methods— across platforms and channels, whether online or in-store.
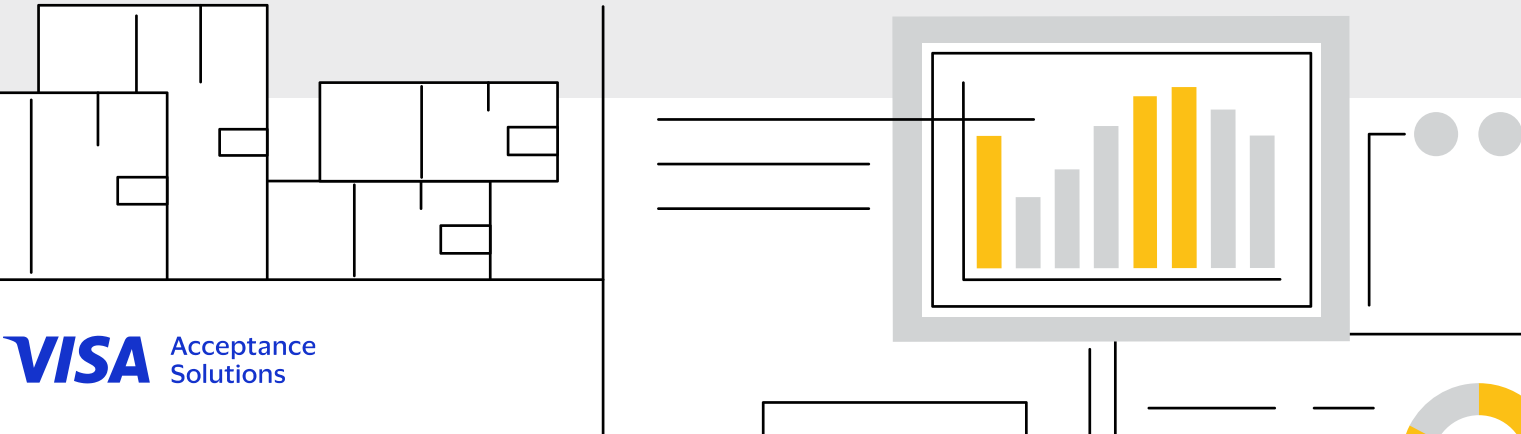
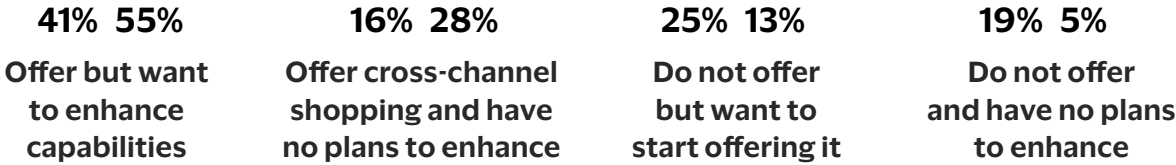**VISA** Acceptance Solutions

Figure 8:

Merchants offering cross-channel shopping
Percentage of merchants that offer cross-channel shopping or plan to begin doing so

● All countries
● Singapore

41% 55%	16% 28%	25% 13%	19% 5%
Offer but want to enhance capabilities	**Offer cross-channel shopping and have no plans to enhance**	**Do not offer but want to start offering it**	**Do not offer and have no plans to enhance**

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 425: Complete merchant responses, fielded October 17, 2024, to December 9, 2024

Figure 9:

Consumer interest in cross-channel shopping
Percentage of consumers who used or would have used cross-channel features

● All countries
● Singapore
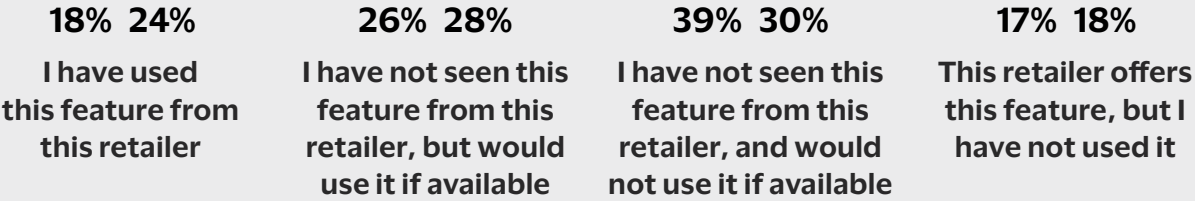
18% 24%	26% 28%	39% 30%	17% 18%
I have used this feature from this retailer	**I have not seen this feature from this retailer, but would use it if available**	**I have not seen this feature from this retailer, and would not use it if available**	**This retailer offers this feature, but I have not used it**

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 1,510: Complete Singapore consumer responses, fielded October 17, 2024, to December 9, 2024

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However, the data reveals that that 28% of consumers in Singapore would have used cross-channel shopping in their latest online transaction but did not see that it was available. Considering the widespread adoption by Singaporean merchants, it is likely that many of these shoppers simply did not realize that cross-channel functionality was in fact being offered. This indicates an opportunity for merchants to get more out of their existing investments in cross-channel features by making sure shoppers know about their availability and benefits.

Merchants in Singapore that do not currently offer cross-channel shopping perceive numerous challenges in doing so. The complexity of multiple sales channels is the most widely cited, by 28% of retailers. Nearly as many merchants cited data security risks (26%) and customer service issues (24%). Other key obstacles include high investment in infrastructure, lack of expertise, and regulatory and tax issues. These responses point to demand by retailers in Singapore for third-party solutions that can help them create quality cross-channel experiences for their customers.

28%

of merchants in Singapore cite managing multiple sales channels as a challenge in offering cross-channel shopping.
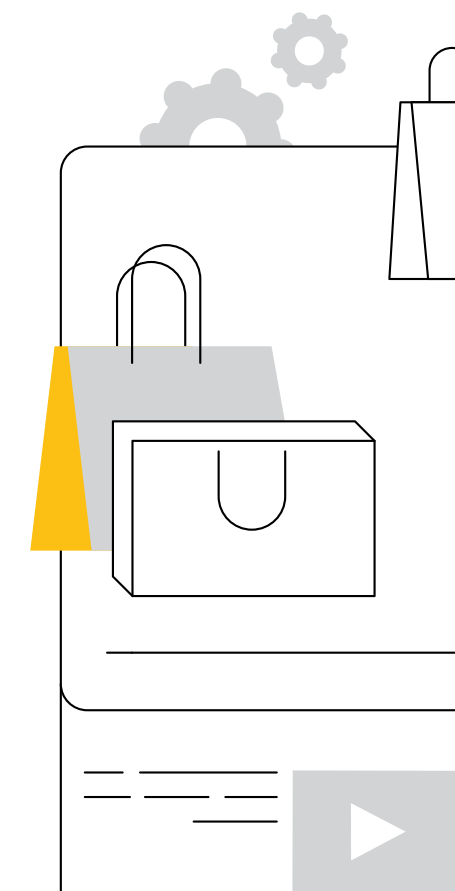
Figure 10:

Challenges merchants face in offering cross-channel shopping
Percentage of merchants not currently offering cross-channel shopping features,
by selected responses

	All countries	Singapore		All countries	Singapore
Customer service challenges	**29.8%**	**23.7%**	**Technological barriers**	**24.7%**	**21.1%**
Complexity managing multiple sales channels	**31.2%**	**27.6%**	**Limited expertise in management multiple sales channels**	**21.7%**	**22.4%**
Challenges in customer engagement	**24.4%**	**18.4%**	**Regulatory and tax complexities**	**17.1%**	**21.1%**
Difficulty integrating different software or systems	**28.4%**	**17.1%**	**Supply chain challenges**	**18.7%**	**19.7%**
Data security risks	**31.0%**	**26.3%**	**High investment in infrastructure**	**19.2%**	**22.4%**
Data management difficulties	**24.3%**	**18.4%**			

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 76: Merchant not currently offering cross-channel shopping functionality, fielded October 17, 2024, to December 9, 2024

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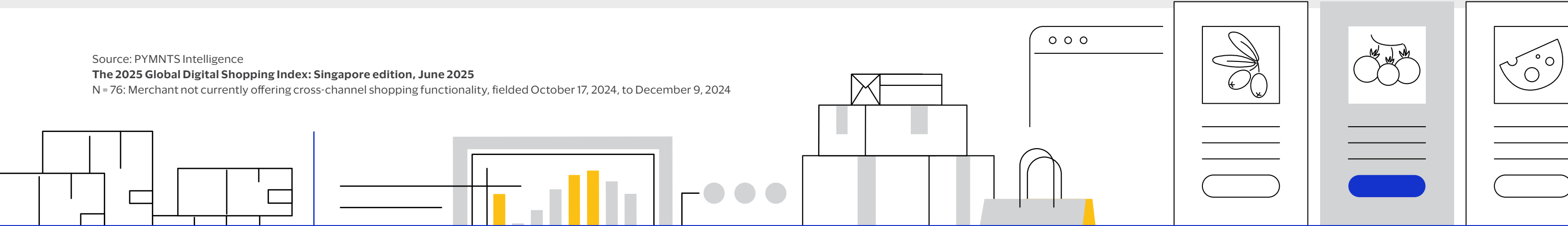
Data focus

The data reveals a wide gap between SMBs and larger merchants, who mostly feel confident about their technical capabilities.
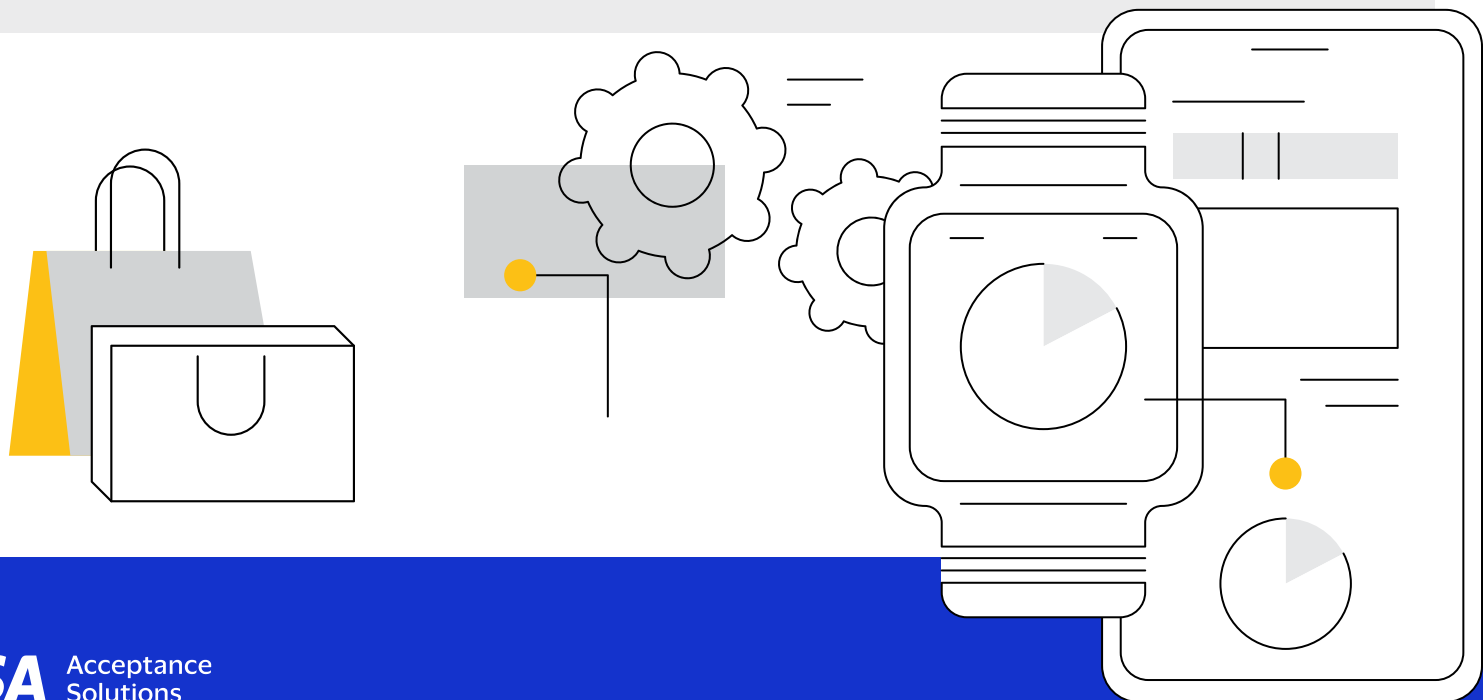
Singaporean merchants we interviewed widely expressed concerns about keeping up with payment technologies as mobile-first shopping evolves. Here are a few examples of what they said.

" As businesses grow, they often need to scale their payment infrastructure to handle larger volumes of transactions, more currencies, and different payment methods. "

— Singapore eCommerce merchant generating between $100 million and $250 million in revenue

" Technology evolves quickly, and what is current today may become outdated tomorrow. "

— Singapore eCommerce merchant generating over $1 billion in revenue

" The current system is unable to adapt to changes...which can lead to customer dissatisfaction and loss of business. "

— Singapore eCommerce merchant generating between $50 million and $100 million in revenue

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Figure 11:

Merchants worry about their payment systems
Percentage of merchants indicating selected levels of concern that their existing payment infrastructure will not meet their and consumers' future needs

	Highly concerned	Somewhat concerned	Unconcerned
All countries	**26.6%**	**31.9%**	**41.5%**
Australia	15.5%	30.0%	54.5%
Brazil	33.8%	35.6%	30.6%
Mexico	34.4%	37.5%	28.2%
Saudi Arabia	33.8%	32.5%	33.8%
Singapore	19.5%	17.2%	63.3%
United Arab Emirates	27.4%	34.7%	38.0%
U.K.	28.1%	36.0%	35.8%
U.S.	20.5%	31.9%	47.5%

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N varies by country and represents the complete merchant sample, fielded October 17, 2024, to December 9, 2024

20%

of merchants in Singapore are highly concerned about keeping up with advances in payments technology.

Over a third of merchants in Singapore worry about keeping up with advancements in payment technologies. Specifically, 37% are at least somewhat concerned that their current technologies will not meet future needs. This is the lowest rate seen globally, perhaps because the country's merchants already lead in cross-channel capabilities among the eight countries. But it still means that over one-third of Singaporean retailers do not feel confident in their payments technology. Moreover, one in five show high levels of concern.

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73%

of SMB retailers in Singapore have at least some concern that their payment systems will not meet future needs.

A closer look at the data shows a crucial split in Singapore between SMBs, defined as having less than $10 million in annual revenue, and larger merchants with more than $10 million. Nearly three-quarters of the SMBs said they worry about keeping up with payments technology, at 73%, and 41% expressed high levels of concern. For larger merchants, these rates drop to just 31% and 16%, respectively. These findings show that banks, card networks, and other third-party providers will find strong demand by SMBs in Singapore for payment solutions that streamline and future-proof their acceptance capabilities.

Figure 12:

Merchants worry about their payment systems
Percentage of merchants indicating selected levels of concern that their existing payment infrastructure will not meet their and consumers' future needs

Business type: SMB

| 40.7% | 32.2% | 27.1% |

Business type: Large

| 16.1% | 14.8% | 69.1% |

Type of product: Groceries

| 15.7% | 7.0% | 77.3% |

Type of product: Retail, excluded groceries

| 22.5% | 25.0% | 52.5% |

● Highly concerned
● Somewhat concerned
● Unconcerned

Source: PYMNTS Intelligence
The 2025 Global Digital Shopping Index: Singapore edition, June 2025
N = 425: Complete Singapore merchant responses, fielded October 17, 2024, to December 9, 2024

Actionable insights
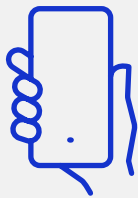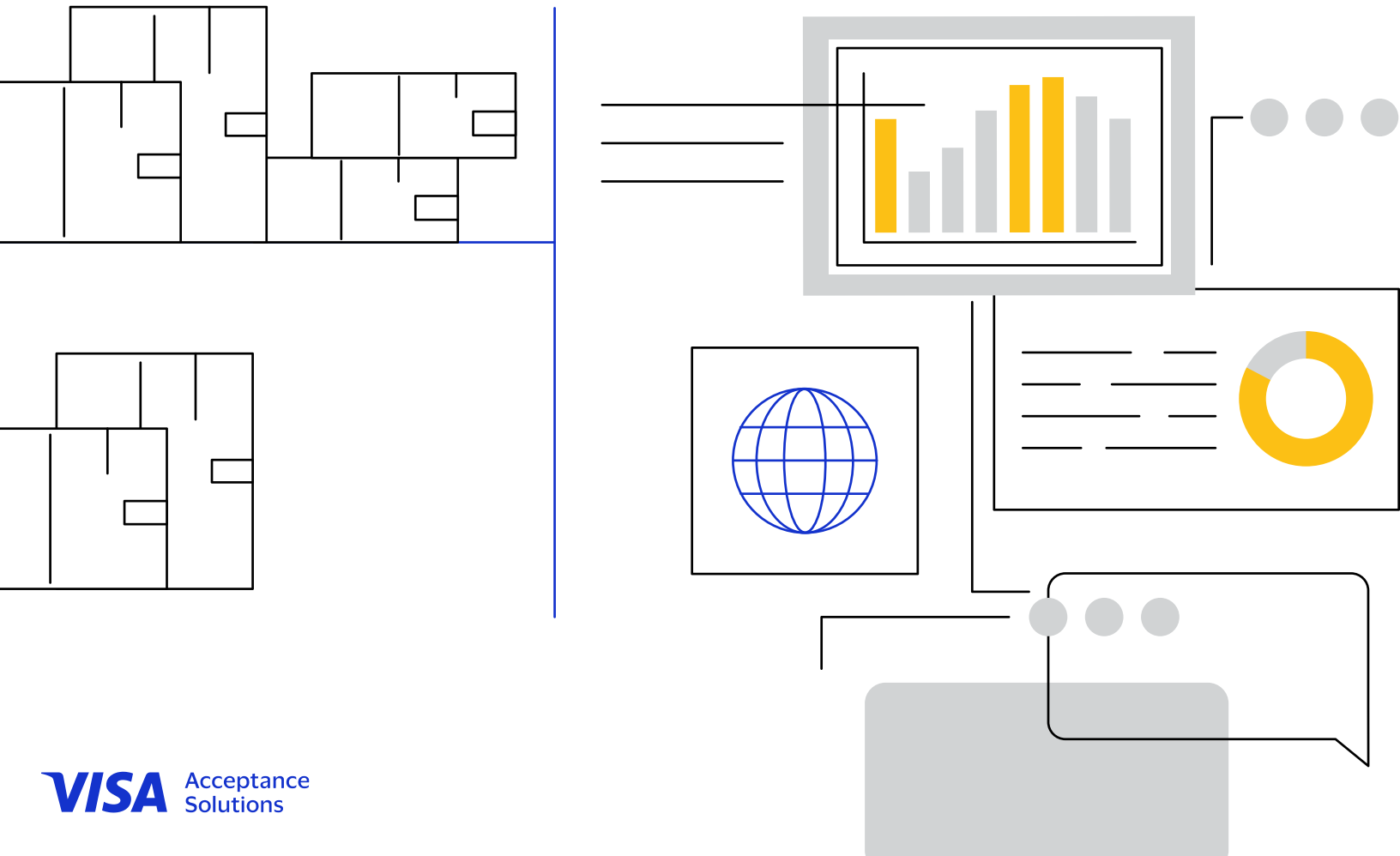
01

Mobile shopping now dominates Singapore's retail landscape. Shoppers in the country are among the most likely globally to use their phones for retail purchases, whether online or in-store. The preference for mobile shopping extends across age groups and income demographic segments, reflecting the depth and breadth of the market's mobile-first shift.

02

Consumers in Singapore look for seamless payment and checkout experiences. To meet these expectations, merchants should accept a wide range of payment methods—particularly credit and debit cards—and ensure that each customer will be able to use their preferred one. Retailers also need to focus on providing smooth and secure checkouts, particularly via stored credentials and one-click options. Authentication methods matter, too, with Singaporean shoppers increasingly using biometrics.

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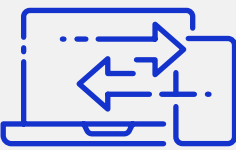
03

Cross-channel shopping is quickly becoming the norm in Singapore. Nearly all merchants have launched this capability and most of the rest want to roll it out. However, many consumers appear unaware of existing cross-channel features or uninterested in cross-channel shopping more generally. This points to a valuable opportunity for merchants who can demonstrate the benefits and convenience of cross-channel shopping experiences.

04

Most SMB merchants in Singapore worry that their payment systems will not meet future needs. Even among larger retailers, concerns about keeping up with payment technologies are prevalent. These findings indicate strong demand in Singapore for payment solutions that simplify payments acceptance challenges, allowing merchants to stay focused on their core business activities and growth.

Methodology

The 2025 Global Digital Shopping Index: Singapore edition, a PYMNTS Intelligence and Visa Acceptance Solutions collaboration, examines the growing importance of mobile devices in consumer shopping behavior across physical and digital channels. It draws on insights from a survey of 18,468 consumers and 3,464 merchants across eight countries that was conducted from October 17, 2024, to December 9, 2024. The weighted balance of our sample varied by country, with Saudi Arabia having the youngest average age of respondents (35.9 years) and the U.K. the oldest average age (50.5 years).
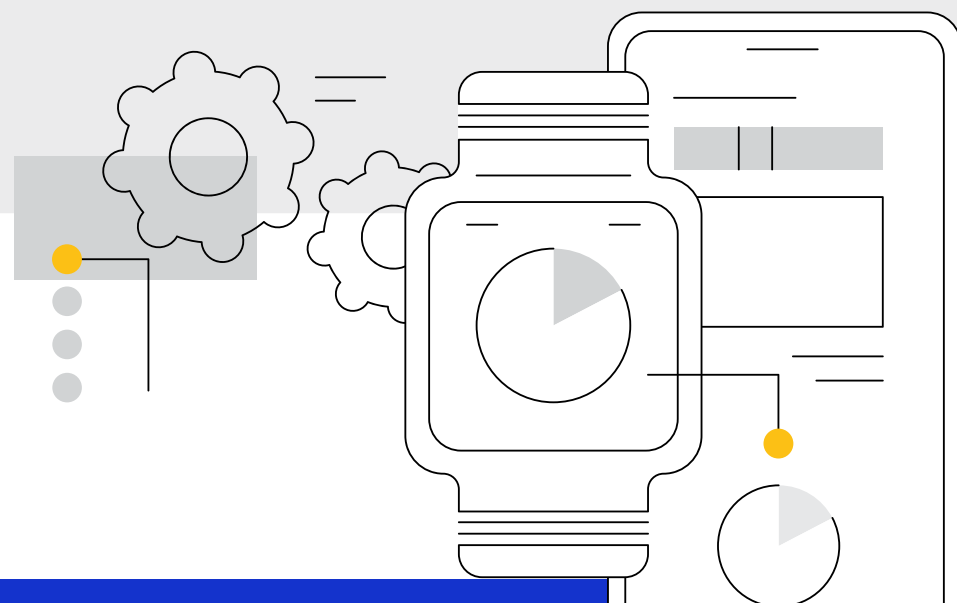
Digital shopping days methodology

To understand the adoption of digital shopping activities, we started with four activities: (a) digital browsing without completing a purchase, (b) completing an online purchase, (c) completing a purchase that started online and ended with an in-store pick up, and (d) using a mobile phone to support an in-store shopping experience. Aside from using a mobile phone in-store, the other three activities were divided into two sub-activities completed either by mobile phone or computer. In total, we measured seven digital shopping activities across two different types of devices. We asked respondents to tell us whether they engaged in the activity (a) daily or almost daily, (b) a few times a week, (c) once a week, (d) once or twice a month, or (e) not at all. The basic response to how frequently a person engages in a digital shopping activity provides detailed information on the extent to which people in the country engage in that activity.

These activity-level responses do not, however, provide a universal metric to summarize the data across digital shopping activities or across countries. Consider an individual who engages in just three activities during the month: activity one daily; activity two weekly, but not daily; and activity three, monthly but not weekly. It is not possible to calculate how often, overall, the consumer engaged in digital activities because the categorical responses are not additive. The same issue arises when trying to compare digital use across pillars or countries.

VISA Acceptance Solutions

To solve this problem, we estimated the average number of days that consumers engaged in a digital shopping activity over a month. To do so, we use the actual number days for daily (roughly 30) and not at all (0). We estimate the number of days for the other two categories by interpolating for for weekly, but not daily, and for monthly, but not weekly; these estimates are reasonably accurate when averaged across large groups of people.[3]

We define a "digital shopping day" as one in which a person engaged in a given digital shopping activity in a given month; they may have engaged in other activities that day as well. To summarize overall digital shopping activity, we add up the estimated number of digital shopping days. Consider an individual who browsed (10 days), online shopped (five days), and shopped in-store with digital assistance (seven days). They had a total of 22 digital shopping days—that is 22 days in which they engaged in one of those activities. We then use the same approach to summarize the total activity for a country.

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3 Assume there are 30 days in a month (the average is 30.4). Consider a consumer who says they did not engage in an activity daily but did so during one to six days a week. Therefore, the maximum number of days during a month they engage in the activity is 29. Therefore, the consumer engages in the activity at least four times and up to an additional 25 days (29 minus 4) a month. Taking the midpoint of 25 gives us 12.5, so the estimated total number of days is 16.5. Now consider monthly but not weekly. The minimum is one day. The maximum is based on a consumer missing at least one week, which gives 23 days (30 minus 7). Therefore, the consumer engages in the activity at least one time and up to an additional 22 days (23 minus 1). Taking the midpoint of 22 gives us 11.5, so the estimated total number of days is 12. Using the midpoint is biased to the extent that the distribution is skewed and not symmetric. We suspect the distribution is skewed with a relatively larger portion at the low end. As an approximate adjustment for this, we use 40% of the midpoint, giving us 14 days for weekly but not daily, and 9.8 days for monthly but not weekly. This method is reasonably reliable as long as there are no substantial differences in how skewed the weekly and monthly responses for activities are.

We can also use the total monthly activity day measure to calculate the average number of digital shopping activities per day. That is simply total activity days divided by 30. In the example, the individual engaged in an average of 0.7 (22 divided by 30) activities a day.. Average total digital shopping days per month and average activities are equivalent ways of summarizing the data, as the total number of activity days is always 30 times the total activities per day. We find it more convenient to compare total activity days, which involves comparison of whole numbers rather than the average per day, where the differences are often after the decimal point.

About

VISA

Visa Inc. (NYSE: V) is the world's leader in digital payments. Our mission is to connect the world through the most innovative, reliable and secure payment network — enabling individuals, businesses and economies to thrive. Our advanced global processing network, VisaNet, provides secure and reliable payments around the world and is capable of handling more than 65,000 transaction messages a second. The company's relentless focus on innovation is a catalyst for the rapid growth of digital commerce on any device, for everyone, everywhere. As the world moves from analog to digital, Visa is applying our brand, products, people, network and scale to reshape the future of commerce. For more information, visit www.visa.com, https://usa.visa.com/solutions/visa-business-solutions.html and Visa Commercial Solutions: Overview | LinkedIn.

PYMNTS INTELLIGENCE

PYMNTS Intelligence is a leading global data and analytics platform that uses proprietary data and methods to provide actionable insights on what's now and what's next in payments, commerce and the digital economy. Its team of data scientists include leading economists, econometricians, survey experts, financial analysts, and marketing scientists with deep experience in the application of data to the issues that define the future of the digital transformation of the global economy. This multi-lingual team has conducted original data collection and analysis in more than three dozen global markets for some of the world's leading publicly traded and privately held firms.

The PYMNTS Intelligence team that produced this report

Karen Webster	Yvonni Markaki, PhD	Lynnley Browning	Daniel Gallucci
CEO	SVP, Data Products	Managing Editor	Senior Writer