



VISA



The Road Ahead

Consumer Payment Trends in Southeast Asia

Contents

Foreword	4
The End of an Era: Cash and Cheques	6
• Growing preference for cards over cash	
Rise of eCommerce and mCommerce	12
• Increasing popularity of online shopping	
• mCommerce is heating up	
• Opportunities ahead	
Get Digital: Mobile Payments and Digital Wallets	18
Looking Forward: Future Payment Trends	25
• A variety of payment platforms	
• Contactless payments faster than cash	
• Mobile wallets will transform the payments experience	
• Wearable devices as a future payments option	

*Figures were obtained from the Visa Consumer Payments Attitude Survey 2015 and the Visa eCommerce Monitor Survey 2015. The Visa Consumer Payments Attitude Survey 2015 was conducted by Acorn Marketing & Research Consultants with 3000 consumers, aged 18 to 60 years and across 6 markets - Singapore, Malaysia, Indonesia, Thailand, Vietnam and the Philippines in June and July 2015. The Visa eCommerce Monitor Survey 2015 was conducted by ORC International Singapore with 11,760 consumers, aged 15 to 55 years and across 13 countries/regions and markets - Australia, Hong Kong, India, Indonesia, Japan, Malaysia, Mainland China, New Zealand, Singapore, South Korea, Taiwan, Thailand and Vietnam in May and June 2015.



Visa accelerates the growth of
commerce through payments
innovation

Foreword

The payments landscape in Southeast Asia has undergone tremendous change in the past 10 years. New technology, expanded internet access and increased mobile device ownership, are just some of the trends having a marked impact on the way commerce is being conducted.



Ng Kong Boon

Visa Country Manager for Malaysia

Mobile technology in particular has blurred the lines between online and offline commerce and given rise to a number of app based on-demand services such as Uber, Go-Jek, and Deliveroo, to name a few.

To help us understand how consumers across Southeast Asia are thinking about some of these changes, we have conducted the *Visa Consumer Payment Attitudes Survey*.

The survey examines consumer attitudes, preferences, and perceptions towards payments today and their appetite for embracing new payment methods

tomorrow. The survey was conducted with 3,000 consumers across Singapore, Malaysia, Thailand, Indonesia, the Philippines and Vietnam, between June and July 2015.

The survey findings show consumers continue to demand secure, fast and seamless payment experiences.

We are seeing increasing consumer preference for card payments over cash payments across the region. On average, more than half of consumers in Southeast Asia prefer using their payment cards over cash to make purchases.

The amount of cash consumers carry in their wallets has also reduced over the past year in countries such as Singapore, Thailand and the Philippines.

Online shopping is becoming increasingly popular in Southeast Asia, with around 70 per cent of survey respondents shopping online at least once a month. Given that active internet users in the region make up only 36 per cent of the population, there is still significant opportunity for growth here.

The rise in mobile penetration has also caused a surge in mobile commerce. Singaporeans are leading this trend with 23 per cent having reported making a purchase online via their mobile phones.

While consumers and businesses across the region are embracing electronic payments, it's important to note economies also benefit from this growth. According to a report by Moody's Analytics, increased use

of electronic payments added US\$296 billion to GDP between 2011 and 2015 globally.

However, across the globe there is still more than US\$16 trillion in cash being used for commerce each year, a reminder of the huge opportunity that lies ahead of us in our quest to displace cash.

At Visa, we are focused on creating new, easier and more secure ways to pay in both the online and offline world. These developments are good for everyone as they will deliver a more efficient, transparent and secure commerce experience for banks, governments, consumers and merchants.

We hope that this report will provide some interesting insights into consumer payment attitudes and will be a useful tool for you as we work together to shape the future of payments.



Ng Kong Boon

Visa Country Manager for Malaysia

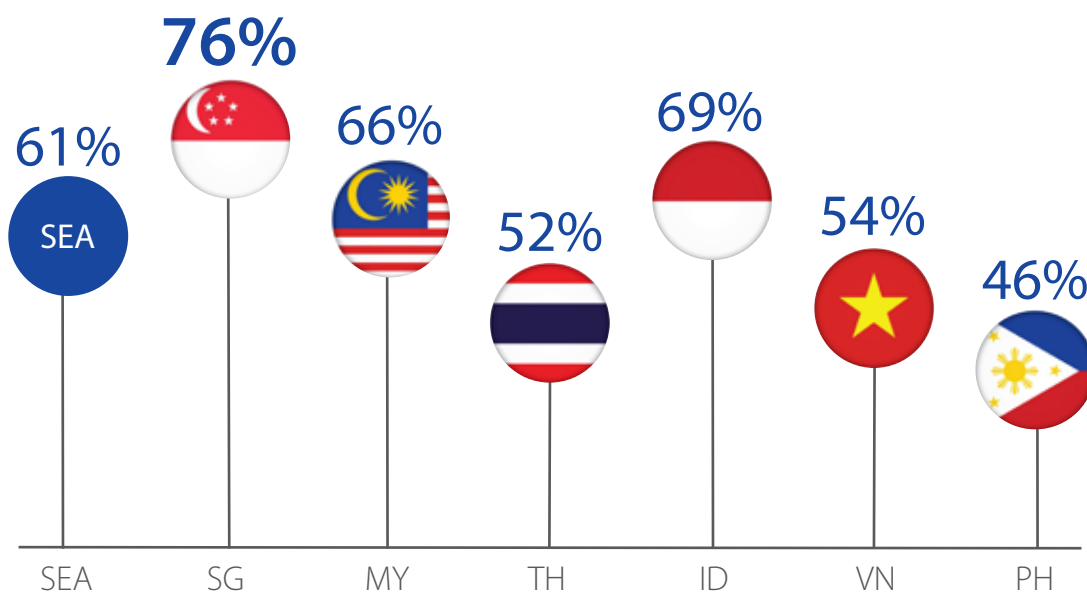


The End of an Era: Cash and Cheques

Moving from a cash-based society to a digital economy

There has been a continuous decline in cash transactions, with more consumers preferring to make payments with cards. Singapore (76 per cent), Indonesia (69 per cent) and Malaysia (66 per cent) lead the way in terms of preference for payment cards over cash.

Consumers who prefer using cards over cash

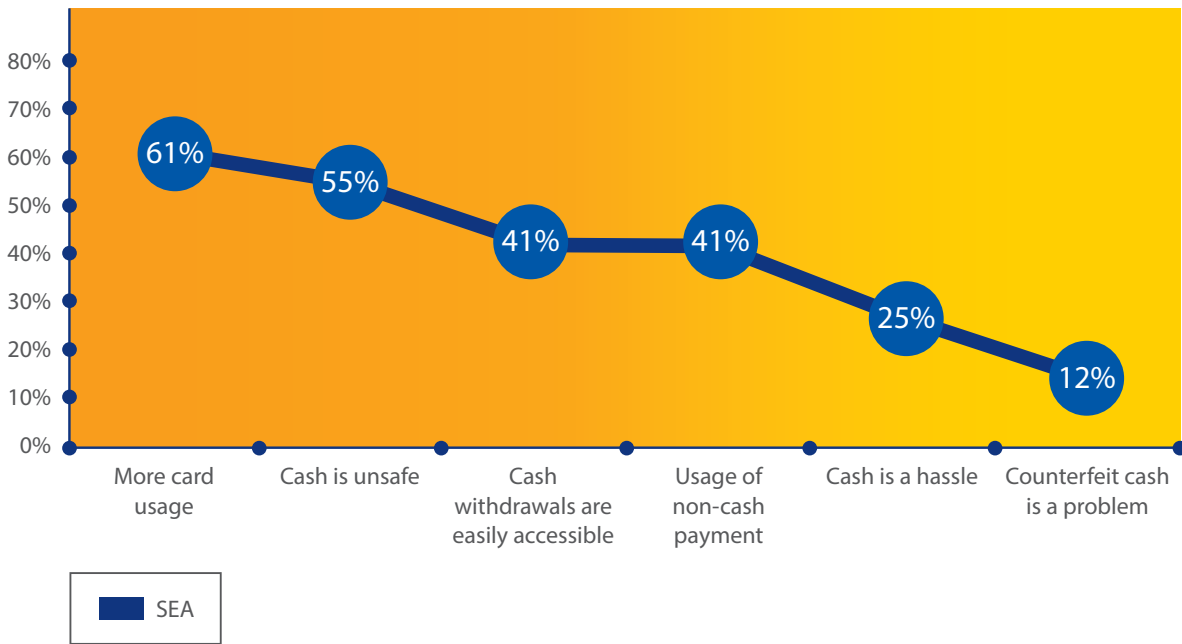


Singapore leads the region in terms of preference for using payment cards over cash and consumers have cited that they would like to use electronic payments more often and move away from cash.

The top reason for consumers in Malaysia, Vietnam and Indonesia wanting to use cards was because they "found cards safer than cash".

Cash Habits

Reasons why consumers are carrying less cash



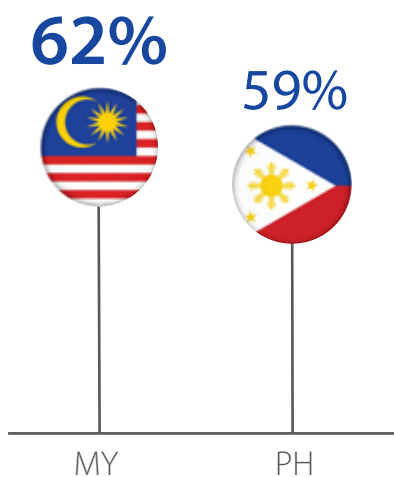
The amount of cash carried by Southeast Asian consumers is also decreasing. This decline is a result of greater card usage, according to the survey respondents.

Across the region, 61 per cent of respondents said that the reason they are carrying less cash is due to greater card usage while 55 per cent said that carrying cash is unsafe. Singapore, in particular, had the greatest proportion of respondents citing “more card usage” as a reason for carrying less cash.

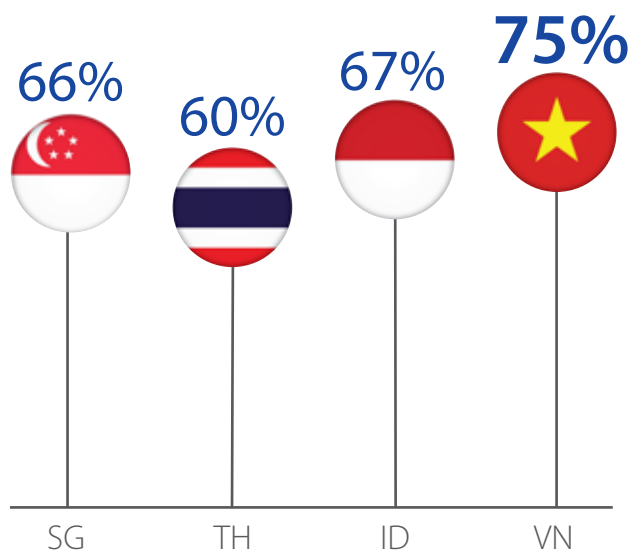
The amount of cash carried by Southeast Asian consumers is also decreasing. This decline is a result of greater card usage, according to survey respondents.

The underlying reasons for the declining preference to use cash are mainly due to security and convenience:

Security –
“carrying cash around is unsafe”

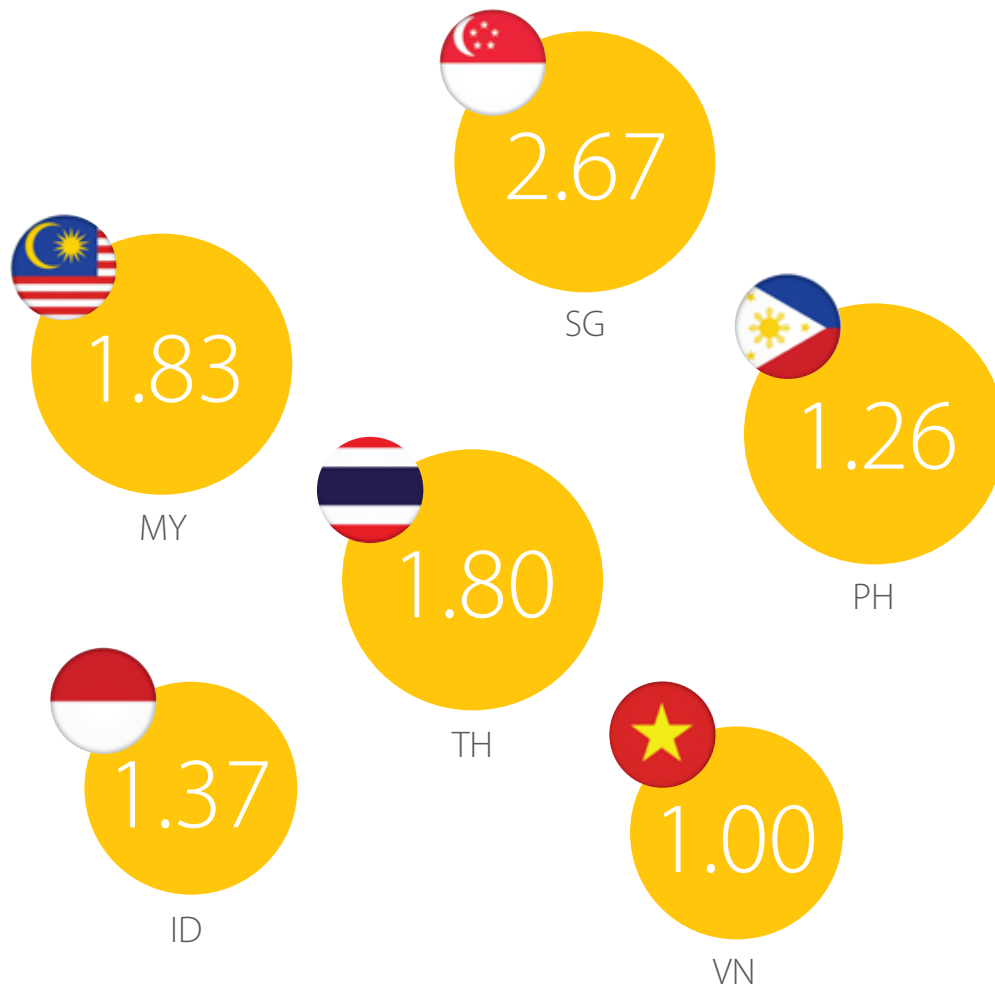


Convenience –
“more usage of non-cash payment”



Respondents across Southeast Asia also cited “hassle of carrying notes and coins” (34 per cent) “having to count cash” and “having to wait for others to count cash” (22 per cent) as reasons for their declining preference to use cash.

Average number of payment cards owned, 2015



The survey also showed that almost half the respondents in Southeast Asia (49 per cent) have more payment cards now compared to five years ago. Consumers in Indonesia lead the region in terms of the most significant growth, with more than half (54 per cent) of respondents reporting that they have more payment cards now than five years ago.

Another factor contributing to the declining use of cash may be consumer preference for digital payments. For example, almost 80 per cent of respondents in Vietnam said that they would “like to use electronic payments more often and move away from cash” – the highest in the region.

Such attitudes highlight how consumer behaviour has changed over the years and this change may signal the end of an era for cash payments.

Significant opportunity to displace cash further

While there is a growing preference for payment card ownership and use of electronic payments across Southeast Asia, current payment data shows that there is still significant potential for displacing cash for everyday spend.

While Singapore remains the region leader in terms of cash displacement (only 26 per cent of current personal expenditure is made via cash or cheques), other markets in Southeast Asia are still heavily reliant on cash.

Currently, the annual domestic Personal Consumption Expenditure (PCE) in Vietnam's six key urban areas is 1,589 trillion Vietnamese Dong and card payments only make up three per cent. There is a large opportunity to displace cash not only in the face-to-face environment but also on eCommerce. Only 50 per cent of eCommerce spend is driven by card payments and the rest is cash-on-delivery.

Similarly, the urban population in key countries such as the Philippines (87 per cent), Indonesia (87 per cent), Thailand (84 per cent) and Malaysia (73 per cent) report a majority of consumer personal expenses paid with cash, despite the high levels of internet and mobile penetration across the region.

Rise of eCommerce & mCommerce

Increasing popularity of
online shopping

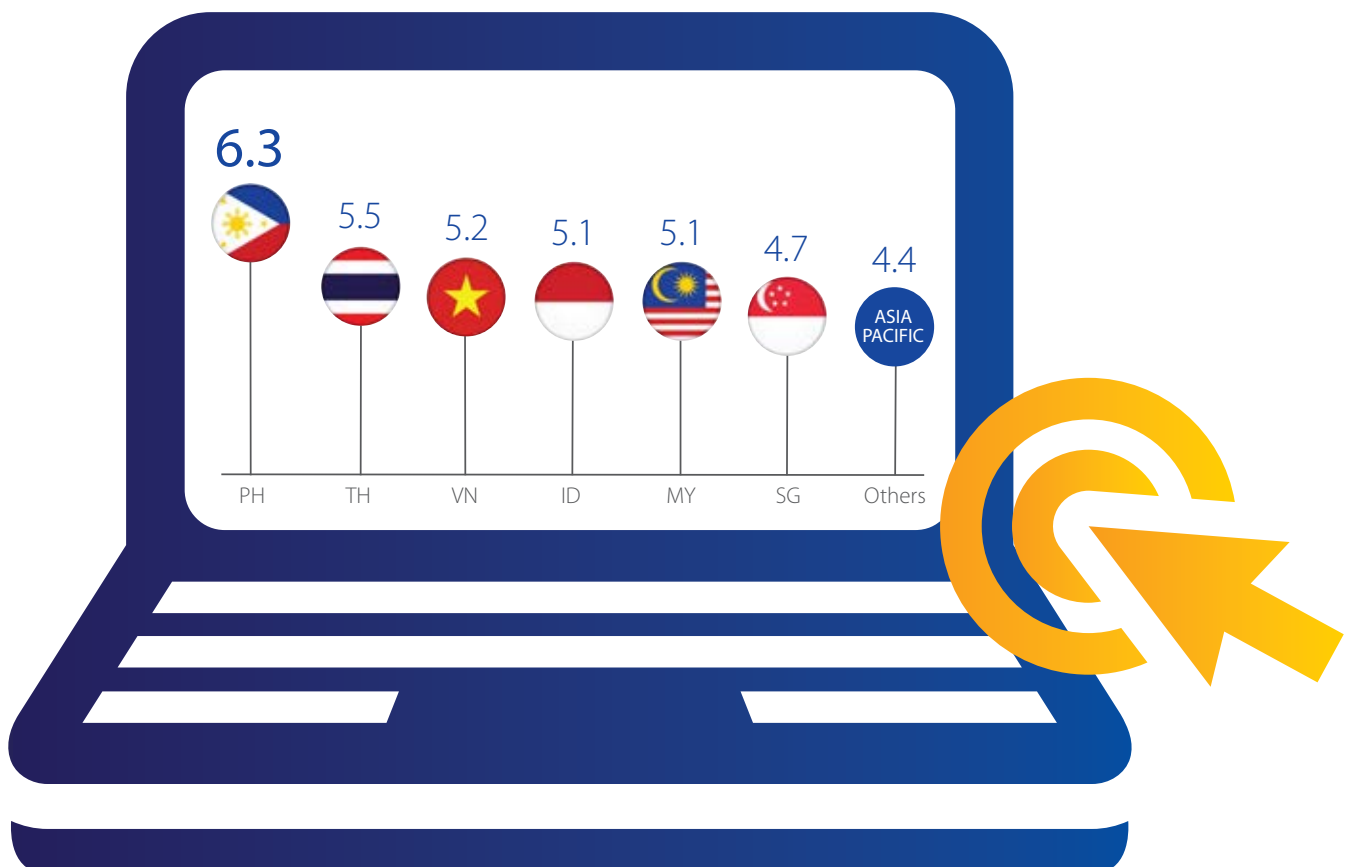


Rise of eCommerce and mCommerce

Southeast Asia's digital population is growing rapidly, with the rate of new internet users growing almost four times faster than the general population. There is a total of 225 million active internet users in this region, representing a penetration rate of 36 per cent.

Singapore comes up top in the region at 81 per cent for internet usage. Thailand in particular has seen the largest growth in the number of internet users as compared to 2014, at 47 per cent. Internet users in Southeast Asia also spend a significant amount of time online, higher than their Asia Pacific counterparts. Average users in the Philippines, Vietnam, Indonesia and Malaysia spend more than five hours each day surfing the internet. Consumers in the Philippines in particular, spend the longest amount of time on the internet at six hours a day. Comparatively, internet users in Japan, South Korea and Hong Kong spend less than three and a half hours a day online.

Average time spent on the internet (hours/day)



According to the 2015 Visa Consumer Payments Attitude Survey, 70 per cent of people in Southeast Asia report shopping online at least once a month.

Online shopping growth is poised to accelerate in the region as eCommerce continues to integrate into our daily lives. The survey results revealed that the average time spent on shopping online in Southeast Asia per day is 46 minutes.

Forty per cent of consumers cited general convenience as the top reason for shopping online, while in Indonesia “delivery to their doorstep” was the top reason. Travel is the most popular online shopping category, except for in Vietnam and Thailand where shopping online for software and apps-related content is the most popular.

The growth in online shopping has also contributed to the rising popularity of shopping events such as Singles Day (11 November), Black Friday/Cyber Monday Sale and 12.12 (12 December) in Asia.

These international events drive cross-border purchases as consumers seek out greater cost savings and access to products that are otherwise not available in local bricks-and-mortar stores.

70%
shop online at least
once a month.



Eighty per cent of respondents from Vietnam who identify themselves as regular cross-border shoppers, cited “access to products” as a key motivation for cross-border purchasing. On the other hand, cost savings from cross-border purchases was the top reason for consumers in Singapore (72 per cent) and Indonesia (73 per cent) for shopping at international websites.

Credit cards are the preferred mode of payment among cross-border shoppers. Cross-border eCommerce shoppers in Singapore top the region with 73 per cent of respondents choosing to pay for their purchases with cards, followed by Malaysia (51 per cent), Thailand (38 per cent), Indonesia (36 per cent) and Vietnam (34 per cent). However, in countries such as the Philippines, eCommerce is largely domestically driven at approximately 77 per cent.

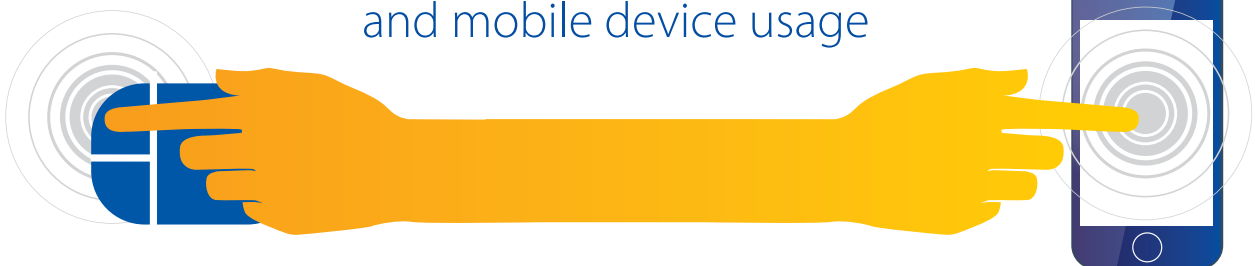
mCommerce is heating up

The surge in internet usage in Southeast Asia is coupled with the dramatic rise of mobile penetration in the region. The average mobile connection rate in Southeast Asia is 119 per cent, surpassing the global average of 98 per cent. This digital access has accelerated uptake in mobile commerce.

Some 23 per cent of respondents from Singapore reported making a purchase online via a mobile phone in the previous month, the highest in Southeast Asia. The countries that followed include Thailand (19 per cent), Malaysia (18 per cent), Vietnam (16 per cent), the Philippines (11 per cent) and Indonesia (9 per cent).

There has been a 22 per cent year-on-year growth from 2014 in mobile platforms across the region. Respondents from Indonesia (36 per cent), Mainland China (34 per cent) and Taiwan (28 per cent) reported the greatest growth in mCommerce uptake, year-on-year.

The closing gap between desktop and mobile device usage



The rising popularity of mCommerce among consumers in Southeast Asia has also contributed to the narrowing gap between mobile channels and traditional eCommerce channels for online purchases (such as laptops or desktop computers).

Based on the 2015 Visa Consumer Payments Attitude Survey, more than 60 per cent of people in Vietnam and the Philippines use their mobile devices for online shopping.

The study also shows that people in the region have started purchasing online for certain categories using their mobile devices only a year ago. For example, in Malaysia, 75 per cent of consumers only started using their mobile devices to purchase groceries from 2014.

mCommerce will fuel greater eCommerce growth for many markets in Southeast Asia. A separate research report published by Frost and Sullivan stated that online and mobile-based purchases in Southeast Asia are expected to surpass US\$25 billion by 2020.



More consumers are shopping online via their mobile phones. This increasing popularity of mCommerce has spurred financial services providers and technology companies to ramp up their mobile payment capabilities in order to stay ahead of the pack and ensure the viability of their businesses.

Opportunities ahead

Despite the high frequency of people shopping online, there is a large percentage of consumers in Southeast Asia who have abandoned an online shopping purchase in the last six months. Aside from Singapore, where two in three users have not completed transactions online, more than 80 per cent of consumers in other parts of Southeast Asia have abandoned online purchases.

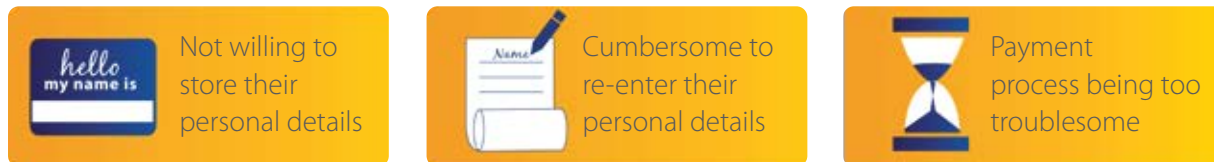
Visa has introduced Visa Checkout in Singapore and Malaysia to simplify the online shopping experience for consumers. Visa Checkout is a streamlined checkout experience that is intuitive to use and saves shoppers' time. Users simply enter a username and password to pay, rather than a 16-digit payment card number and expiry date for every transaction. Online purchases can easily be completed using a smartphone, tablet, laptop or PC.

VISA Checkout



Visa Checkout was launched in 2014 in the United States and a recent study was done to assess the shopping patterns of traditional checkout customers versus Visa Checkout customers. The study showed that Visa Checkout-enrolled customers completed 86 per cent of transactions from the shopping cart compared to traditional checkout customers. In addition, Visa Checkout-enrolled customers have a 51 per cent higher conversion rate and a 7 per cent higher average ticket size compared to traditional checkout customers.

The top three reasons given for abandoning online purchases



Visa Checkout addresses some of the problems faced by online shoppers by reducing the number of steps required for them to complete their online purchases, thus enhancing the entire shopping experience. The solution can be used on any device and this is crucial since abandoned transactions online are more likely to be on mobile devices.

Get Digital

Mobile Payments and Digital Wallets are Changing How Consumers are Paying



Visa is focused on the future and is ready for the age of disruption

Mobile payments and digital wallets are changing how consumers are paying

Visa's contactless payment technology, Visa payWave, was introduced to make electronic payments more convenient and efficient, reducing the hassle for consumers having to carry cash for small ticket items. In Singapore, Visa payWave was introduced in 2007 and today we are seeing more than 6 million Visa payWave transactions per month. Visa payWave penetration is particularly strong in certain categories such as supermarkets, where more than one in two domestic Visa transactions are contactless.

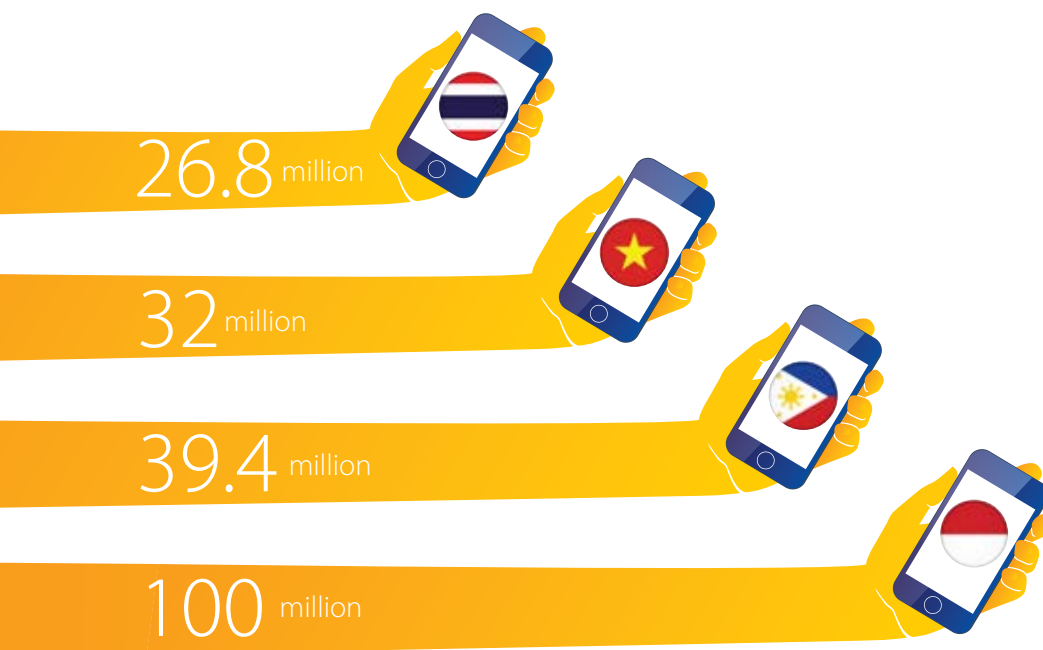
Visa payWave presents a great opportunity to displace cash, particularly for every day spend categories or small ticket transactions. In the Philippines, every day spends constitute nearly 90 per cent of all domestic face-to-face transactions, driving personal consumption expenditure of 1,783 billion Philippine pesos.

As more consumers own and integrate smartphones into their daily lives, adoption of mobile payments will also increase. The introduction of mobile into the payment landscape will play an integral role in shaping the innovations of tomorrow.

The number of smartphone users worldwide is expected to surpass 2 billion by the end of 2016. Indonesia, for example, is predicted to have more than 100 million smartphone users by 2018, becoming the world's fourth largest smartphone user population. Other markets in Southeast Asia are also showing huge growth in smartphone usage over the next two years - the Philippines (39.4 million), Vietnam (32 million) and Thailand (26.8 million).

Across Southeast Asia, consumers are starting to use their mobile devices to make payments. Contactless payments use Near Field Communication (NFC) technology or Magnetic Secure Transmission (MST) to allow consumers to hold a smartphone near a terminal to complete a payment. This capability is becoming increasingly popular in the region. Sixty-eight per cent of consumers in the region said they would prefer to make in-store payments using their mobile device, rather than via cash or cheques.

Based on the Mobile Attitudes Study, 45 per cent of Malaysian respondents said that they either have made mobile payments or would consider making them. In Thailand where the same study was conducted, 58 per cent of respondents highlighted that they would consider making or have made mobile payments. When asked if there is no longer a need for physical cards with the introduction of mobile payments, 61 per cent of the respondents in Thailand agreed compared to 50 per cent of respondents in Malaysia.



Projected number of smartphone users by 2018

NTUC FairPrice Case Study (Singapore)



Visa payWave is a contactless payment technology that is found on Visa cards bearing the Visa payWave symbol. Visa payWave transactions are as secure as other Visa chip card transactions and carry the same multiple layers of security. In addition, with Visa payWave, the card never leaves a cardholder's hand, which reduces the risk of fraud.

With Visa payWave, the payment card does not need to be swiped by the cashier, and no signature or PIN (Personal Identification Number) is required for purchases under SGD\$100, which makes it a faster way to pay while still remaining a secure Visa transaction.



Key Figures

- Visa payWave transaction volumes in Singapore are growing dramatically. There has been over 60 per cent year-on-year growth as of October 2016 and exceeding six million transactions a month
- Studies show that contactless payments:
 - Save time at the register
 - Add benefits to your debit/credit card
 - Eliminate the need for cash
 - Have wide acceptance at many merchants that are popular with Visa cardholders

NTUC FairPrice is Singapore's largest retailer to adopt Visa payWave technology

- **Supermarket spending accounts for more than 50 per cent of Visa payWave transactions as of October 2016**
- **More than 2.4 million Visa payWave transactions at FairPrice as of October 2016, more than 30 per cent of all Visa payWave transactions in Singapore**

Singapore continues to stand out as the payments innovation leader in Southeast Asia with the number of contactless Visa payWave transactions exceeding 6 million as of October 2016, representing over 40 per cent of all Visa face-to-face transactions. This milestone is supported by findings from the 2015 Visa Consumer Payments Attitude Survey, which show that Singapore ranks highest in the region for both awareness (87 per cent) and usage of contactless payments (65 per cent).

The popularity of contactless payments at supermarkets signals that consumers here are comfortable with the technology and it demonstrates the viability of replacing notes and coins in traditional cash-based, high payment volume environments

Security and User Experience are key deliverables for digital wallets

As consumers increasingly shop with connected devices, the need for a seamless and secure digital payment experience becomes crucial. Visa is committed to using advanced technology and anti-fraud measures to protect consumers.

Visa Token Service, a new security technology that replaces sensitive account information, such as the 16-digit account number, with a unique digital identifier called a token, ensures that consumers are able to use their digital wallets securely in the digital commerce environments.



The token allows digital payments to be processed without exposing actual account details that could potentially be compromised. Furthermore, it enhances the overall user experience by enabling a frictionless, card-free payment online.



Digital Wallet

The term digital wallet is broadly used to capture a variety of electronic and mobile payment services, typically through your mobile phone, that give you access to your accounts – just like the different cards you keep in your wallet today, but without the bulky leather holding it together. This concept goes by several other names, including e-wallet and mobile wallet.

A digital wallet allows consumers to make commercial transactions without the use of a physical wallet. It is important to note that money isn't the only thing that can be exchanged via smartphones; coupons, loyalty points and other special offers can also be transacted with smartphones. It can hold personal data, including your payment account numbers, shipping addresses, phone numbers, and email addresses.

On top of being fast and secure, the next generation of wallets may also help:

- Manage your payments and accounts
- Receive offers from merchants you know and trust
- Track and spend reward or loyalty points
- Store digital receipts and warranty information
- Get alerts about your account and spending

How Visa Token Service is utilised



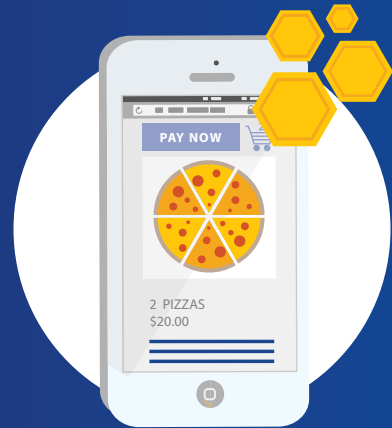
Online

Making eCommerce purchases is becoming commonplace. Tokenisation provides online retailers with an innovative and secure way of handling payments.



In-store

Tokenisation provides a secure way for consumers to make in-store payments by simply waving their device near a payment terminal



In-App

The ability to pay with Visa is increasingly embedded in innovative mobile applications that make it even easier to pay for your transactions on the go

Key benefits of Visa Token Service

Tokens do not carry a consumer's primary account number, so there is less risk in storing tokens on mobile devices, online by eCommerce merchants, or in cloud-based mobile applications

Tokens are based on existing ISO standards and can therefore be processed and routed by merchants, acquirers and issuers like traditional card payments

Tokens tied to lost, or stolen, mobile devices, can be instantly reissued – without the need to change the consumer's primary account number or reissue the physical card

The new service supports issuance of multiple tokens for a single primary account, each tied to a specific mobile device or service

Tokens can be restricted for use with a specific merchant, mobile device, transaction or category of transactions

Looking Forward:

A variety of payment platforms

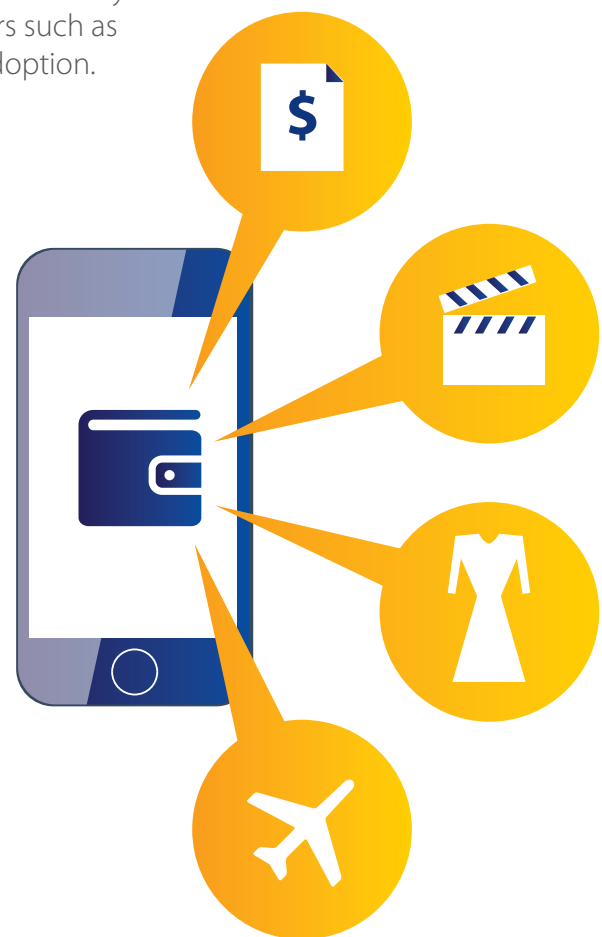
Contactless payments are faster than cash

Contactless payments will continue to rise as consumers seek to reduce their reliance on cash. The success of contactless payments will be driven by an industry wide effort to educate merchants and consumers and promote the technology as a faster and more convenient way to transact. The introduction of new contactless form factors such as wearable devices and mobile payments, will also spur adoption.

Mobile wallets will transform the payments experience

With technology heavyweights entering the mobile payment space, there will be a greater push for acceptance of card-free and wallet-free in-store payments made with smartphones. Visa is at the centre of this transition as these mobile developers are leveraging on our proprietary technology to ensure a secure and hassle-free payments process. Contactless mobile transactions are leading the next wave of digital payments, and Visa Token Service makes them simple and secure.

Digital wallets will become the standard and Visa solutions will continue to deliver greater consumer choice, convenience and security while helping our clients grow their businesses.



Wearable devices as a future payment option

Southeast Asian consumers are interested in using wearable technology such as wristbands and smart watches to make payments. According to surveyed consumers, the top three opportunities in Southeast Asia for wearables are in food and beverage (57 per cent), movie tickets (51 per cent) and groceries (46 per cent).

Similar to contactless cards, payment wearables enable consumers to wave or tap their device over a traditional payment terminal at the point of sale to pay for purchases. These devices can be worn in the form of clothing or accessories such as smartwatches, smart bands and smart glasses.

An estimated 275 million wearable electronic devices will be sold worldwide in 2016, an increase of 18 per cent from the 232 million units in 2015. It is also predicted that from 2015 through 2017, smartwatch adoption will grow by 30 per cent largely due to technology companies popularising wearables as a lifestyle trend. However, consumers may begin to realise that wearable tech can be more than just a lifestyle accessory and can be integrated into their daily activities such as paying for groceries or buying movie tickets.



References:

1. Moody's Analytics Study, "The Impact of Electronic Payments on Economic Growth" looked at the impact of card penetration on the private consumption of 70 countries/regions over five years between 2011 and 2015.
2. The Consumer Payment Landscape for Vietnam was conducted on 4,112 consumers aged 18-54 years of age over an eight-week period starting from May 2015. The study aims to track consumers' transactions by their daily, monthly and annual spends to find out their payment volumes and frequency of transactions for a number of categories. The volumes are also checked against Euromonitor, RBA and other secondary sources.
3. The Consumer Payment Landscape for Philippines was conducted on 4,360 consumers aged 18-54 years of age over an eight-week period starting from May 2015. The study aims to track consumers' transactions by their daily, monthly and annual spends to find out their payment volumes and frequency of transactions for a number of categories. The volumes are also checked against Euromonitor, RBA and other secondary sources.
4. Visa Mobile Payment Attitudes Study 2016. The study was conducted by YouGov on 1,000 Singaporeans to assess their attitudes towards mobile payments.
5. Mobile Attitudes Study 2016. The study was conducted by YouGov on 750 respondents aged 18-55 years of age in Thailand and Malaysia in September 2016.
6. We are Social & IAB Singapore's Compendium of Asia Pacific Digital Statistic: Digital, Social, And Mobile In Apac 2015, <http://wearesocial.sg/blog/2015/03/digital-social-mobile-in-apac-in-2015/>
7. Frost and Sullivan: Southeast Asia's E-Commerce market to surpass US\$25 billion by 2020 despite market challenges
8. Gartner Report: Worldwide Wearable Devices Sales to Grow 18.4 Percent in 2016, <http://www.gartner.com/newsroom/id/3198018>

