Singapore Payments Roadmap

Enabling the future of payments

2020 and beyond

August 2016
The evolution of the payments ecosystem forms a vital component of helping Singapore accomplish the Smart Nation Vision and maintain its position as the financial heart of Asia.
About the report

KPMG in Singapore was commissioned by the Monetary Authority of Singapore to look into the state of the payments ecosystem in Singapore.

More than 2,500 consumers, merchants and other stakeholders were surveyed for the report, with recommendations made on how Singapore can improve the payments systems in support of the Smart Nation Vision and to the greater benefit of all Singaporeans. The contributions of the KPMG staff – Adrian Harkin, Alexander Pariyskiy, Dominick Chillemi and Jenny Murray - are acknowledged in this report.
Payments in the Smart Nation

What we did
We spoke to stakeholders in Singapore’s payment systems and around the world to comprehensively understand the current state and uncover opportunities for the future of payments in Singapore as a Smart Nation.

- 2000 Consumer surveys
- 500 Merchant surveys
- 50 Largest banks
- 16 Merchant focus group
- 16 Consumer focus group

What we found
A payments ecosystem that is safe, sound, and secure with world-class technology, but where consumers and businesses still rely substantially on cash and cheques.

- A strong regulatory framework creating a safe, sound, and secure payments landscape
- The underlying Infrastructure is world-class and provides the backbone to develop effective solutions
- The launch of FAST* supports 24/7 payments in real-time and is amongst the first of its kind in the world
- Limited adoption of electronic and innovative payments due to lack of access to effective solutions
- Reliance on cash & cheques due to entrenched behaviours and inefficient support processes
- The cost of cash and cheques to the economy is at 0.52% of GDP

What we recommend
Build on existing capabilities to enhance the payment systems in line with global best practices and Singapore’s Smart Nation Vision.

- Level the playing field and enhance consumer protection by streamlining and strengthening the regulatory framework
- Promote collaboration by establishing a new governance model
- Support innovation and systems improvement by drawing the blueprint for payments
- Develop interoperable solutions by leveraging on world-class infrastructure
- Simplify card acceptance and improve customer experience by unifying EFTPOS systems
- Enable more convenient FAST payments by adopting a central addressing scheme
- Enhance consumer and business adoption of efficient alternatives by supporting seamless bill payments and collections

*FAST: Fast and Secure Transfers
Payments in the Smart Nation
Payments in the Smart Nation

Accomplishing the Smart Nation Vision will allow Singapore to maintain its position as the financial heart of Asia. Improvements to the payment systems form a vital component in achieving this goal.

Given Singapore’s financial strength and stability, coupled with its strategic location, the country has grown to become a leading global financial centre, with a major role in regional and international payments. Payment flows between individuals and businesses in Singapore are substantial. As a major trading hub, trade finance centre, and gateway for investments in Asia, there is an even larger volume of international payment flows. Companies based in Singapore have an international orientation, so payments by means of cross-border transfers will only gain more importance. Further, Singapore also consistently ranks as a top 5 world travel destination, and its payment systems serve millions of visitors each year, making interoperability and ease of access essential to global travellers.

Accounting for these factors, the accomplishment of the Smart Nation Vision is vital to Singapore’s continued role as a centrepiece of the regional economy. Integrating technological innovations in telecommunications with advanced data and analytics to improve the lives of its citizens and businesses across the country, Singapore is poised to become a leading Smart Nation.

The Monetary Authority of Singapore (MAS) has the opportunity to underpin the realisation of the Smart Nation Vision by engineering the development of a world leading payments ecosystem.

In Singapore, the payment systems of the future are characterised by a transition from paper-based instruments to electronic platforms, infrastructure that promote interoperability, efficiency and security, and a ubiquitous user experience that cuts across market segments and demographics.

In order to achieve this end-state, the MAS is fostering innovation in the payments landscape by facilitating cooperation amongst market participants to create efficient and interoperable solutions that are sustainable and universally accepted, addressing key infrastructure and governance challenges to ensure stability.

By creating payment solutions that are swift, simple, secure, accessible to all and accepted by all, the MAS will help achieve the Smart Nation Vision.

The three pillars of the Smart Nation

Build Technology and Enterprises

Govern Infrastructure and Competition

Deliver a Seamless Experience
Fulfilling the MAS Vision

Addressing challenges will create payment solutions that are Swift, Simple, Secure, Accessible to All and Accepted by All

The MAS vision for payment systems is met with several challenges in the current landscape. These include limited governance and ownership of the infrastructure. These factors contribute to the lack of interoperability, inconsistent user experience, limited adoption of electronic and innovative payments, inhibited accessibility to efficient methods, the continued reliance on paper-based instruments, and higher costs to the economy. While challenges do exist, the strength of the current regulatory framework has helped establish an ecosystem that is safe, sound, and secure.

In order to fulfill the MAS vision and facilitate the evolution of payment systems in Singapore, collaborative actions on behalf of consumers, businesses, and government entities must be taken by the MAS and other market participants. Critically, this includes changing the regulatory framework to provide an increased focus on consumer protection, competition, and innovation.

The goals and initiatives contained herein are designed to address these identified challenges and overcome barriers to best-in-class performance while maintaining the high safety and security standards that the payment systems are built upon today.

Making payments faster

Speed of settlement can be increased by moving to innovative payment methods supported by world-class systems

The aggregate speed of transactions in Singapore, when compared to benchmark jurisdictions, faces several distinct challenges. Acceptance of electronic payments is inconsistent and the reduction of paper-based instrument usage is slow. Corporate adoption of electronic payments is inhibited by lack of access to FAST, the requirements for liquidity / working capital to run day-to-day businesses, and limited pressure from consumers to expand instrument acceptance beyond cash and cheques.

In order to overcome these challenges, broader adoption of FAST is required by both businesses and consumers in addition to utilisation of the system by businesses to accept and make payments. Measures to facilitate this volume shift include the enablement of convenient direct debit through mandate management, opening access to businesses and merchants to FAST, enabling FAST acceptance at the point-of-sale (POS), incentivising system use, and creating public / private alliances aimed at lower-value, daily consumer purchases. These measures should be undertaken by a newly formed governance structure in the form of the Payments Council in addition to enhancing the existing regulatory framework.
Payments in the Smart Nation

Simplifying payments

In its current configuration, the payments ecosystem in Singapore has no centralised body responsible for overseeing and coordinating improvements. This has led to confusion at the POS, excess infrastructure, and limited adoption of more efficient payment methods by consumers, businesses, and government entities. These collectively contribute to higher cost payment systems.

The creation of a single governance structure, the Payments Council, will enable more rapid and complete adoption of payments innovations and foster competition in the landscape through simplification in the regulatory and operational environment. The Payments Council will deliver effective, representative (demand and supply side) decision-making and drive improvements in the payment systems to meet changes in the global landscape. This includes working with the MAS and private enterprise to adapt the regulatory framework to address issues with consumer protection as well as promote competition and innovation in the domestic space. Furthermore, the establishment of the Payments Council to consolidate and streamline a single set of transparent business processes and scheme rules will support access to all centralised clearing and payment services in Singapore.

Keeping payments safe

The regulatory framework in Singapore has been centred on risk reduction and management, resulting in a safe, sound, and secure operating environment. Financial crime rates are low with consumers and businesses reporting satisfaction and trust in the security of the system.

However, similar to experiences in benchmark jurisdictions, the existing model has been challenged by rapid changes and innovations enabled by technology. These include consumer adoption of less secure instruments, movement of users to digital and online platforms to make and receive payments, innovations in clearing and settlement services with the potential to disrupt the long-standing model, and more sophisticated cyber criminals.

A modular approach to regulation provides the MAS the flexibility needed to meet evolving challenges to the security of the system. Streamlining and strengthening the regulatory framework to include provisions that level the playing field could support the further development of innovations that enhance consumer protection. With the establishment of the Payments Council as co-ordinator, adherence to requirements set out by the MAS by service providers and performance of the systems can be evolved in line with international standards.
Unlocking access

Barriers to access and under-utilised systems have led to limited adoption of electronic payments by consumers and businesses as well as excess physical infrastructure in ATMs and self-service kiosks.

Merchant and consumer research points to suboptimal access to FAST as a key contributor to the continued use and slower reduction of cash and cheques in Singapore. This has been driven by the complication of establishing interbank transfers (the process has been described as inconsistent, time-consuming, cumbersome, and manual), lack of motivation and incentives for utilisation, and higher prices for use by businesses. The MAS and the industry should work towards alleviating these issues by ensuring universal and consistent access to FAST; keeping prices low by achieving economies of scale; and introducing programs with the goal of improving the system and increasing utilisation. These programs should be undertaken in partnership with the Payments Council to ensure adoption across segments.

Additionally, while there are 60 ATMs per 100,000 inhabitants in Singapore, the ATM networks are not fully interoperable. This means that consumers may not have ready access to their bank’s ATM network when they need it and are sometimes charged additional fees for service. In order to meet consumer needs, banks are expanding their ATM networks, resulting in an aggregate oversupply of the machines as well as costly estate and cash management for the industry.

Expanding acceptability

Inconsistent acceptance of electronic payments by businesses – specifically for lower-value, daily transactions – leads to confusion at the POS and can result in the continued use of cash by consumers. For higher-value retail transactions, online acceptance of efficient payment instruments, such as payment cards and funds transfer, appears restricted, moving consumers to less efficient and/or more expensive alternatives. When surveyed, merchants and small businesses find the cost of card acceptance prohibitive and cite the slower speed of settlement as primary barriers to wider instrument adoption.

The initiatives developed and led by the Payments Council should contribute to the wider acceptance of electronic payments by businesses in both the physical and online space. Through a series of collaborative initiatives, the Payments Council has the opportunity to address business acceptance of electronic payments. These programs should drive value to both consumers and businesses and can be built upon a platform that is interoperable, cost efficient, and secure.
Consumer and business payments
Consumer payments in Singapore are unique among highly developed economies. Today, consumers rely on cash and cheques on a daily basis with electronic instruments beginning to emerge as attractive alternatives.

2.37 bn consumer and business transactions in 2015

The primary instruments for business payments are cheques and funds transfer. Businesses take advantage of the ease-of-use, ubiquity and universal acceptance of cheques and the speed and transparency of the bank infrastructure to transfer large values in Singapore on a daily basis.
The choice of payment instrument preferred by consumers varies greatly according to circumstance. However, payments can be broadly grouped into paper-based and electronic zones. The chart below shows that consumers use cash in a wide variety of situations, helping make Singapore unique among highly developed economies.

### Breakdown of how consumers make payments in select use cases

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Paper-based payment zone</th>
<th>E-payment zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet market/ hawker centre</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Small shops and neighbourhood stores</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Parents’ allowance</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Domestic helper salary</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Taxis and car hire</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Household repairs</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>24-hour convenience store</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Private tuition</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Paying friends</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Fast food</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Supermarket</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Shopping mall</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Dine-in restaurants</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Medical bills</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>School fees</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Local online shops</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Government bills</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Credit card bills</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Household bills</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Recurring monthly lifestyle bills</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Overseas online shops</td>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Payment Methods**

- **Cash**
- **Cheque**
- **Kiosk**
- **Credit & debit cards**
- **NETS cards**
- **eNETS and funds transfer**
- **Electronic / mobile wallet**
- **Others (SVF*, vouchers etc.)**

*Stored value facility*
How consumers pay in Singapore

Consumer payments in Singapore are unique among highly developed economies. The predominance of SVFs and cash points to opportunities to improve the landscape bolstered by consumer preferences for electronic payments, the existing infrastructure, and the high penetration of smartphones domestically.

**60%**

**Cash**

Cash is used in 60% of non-SVF transactions with 1.4 billion consumer cash payments in 2015 alone.

**18%**

**Payment card**

Usage has increased 18% since 2010. Use of electronic payment cards continues to grow as consumers respond to the instruments’ incentives for use and convenience.

**26%**

**Cheque**

Cheque usage has declined 26% since 2010. Consumer initiated cheque payments have been steadily declining from 28 million in 2010 to 20 million in 2015.

**59%**

**SVFs**

SVFs account for 59% total transaction volume and are used mostly for public transportation.

### Cash

Cash is the second most widely used instrument. It is generally used for small-value transactions such as dining out at one of Singapore’s 6100 hawker centres. Consumers also use cash for higher-value payments such as obtaining domestic help, private tuition or reimbursing family or friends. Despite having an advanced payment infrastructure, cash remains prevalent for various reasons such as consumer spending habits and merchant barriers to adoption of electronic payments. In the near and long-term, reducing the use of cash by consumers will be a focus.

### Cheques

Cheques are still used by consumers, mostly for high-value transactions, with approximately 20 million cheques issued annually, although usage is gradually declining. Cheques are preferred by more mature Singaporeans for higher-value payments as they report being very comfortable and used to this instrument for these types of transactions. Cheques also have a benefit that payers do not have to know the payees’ account details.

### Stored Value Facilities (SVFs)

The majority of consumer transactions are performed using SVFs (around 59%, predominantly in transportation). Reducing SVF payments could be driven by the development of Account Based Ticketing (ABT) for transport payments, where payments are charged direct to users through debit/credit cards transactions, removing the need to top-up.

### Payment cards

Finally, credit and debit cards are widely accepted and used for day-to-day transactions and are favoured due to various incentives offered island wide. In the near-term, consumer use of these instruments will continue to rise.

### Funds transfer

Matching global trends, the majority of payments values are moving to electronic platforms through direct debit and credit transfers. With the rollout of FAST in 2014, there is an opportunity to expand use of this method in the near-term. Increasing its utilisation by consumers for daily and recurring payments is a potential win for everyone. Compared to cash and cheque, payments made in this method can be faster, more secure, and lower costs to the economy.
The future of consumer payments is electronic

Consumers in Singapore demonstrate increased acceptance of electronic payments and are moving towards adopting more innovative solutions. Their primary concerns when selecting a payment instrument are security, convenience, and incentives for use.

Payment cards

The majority of consumers expect to increase their use of debit and credit cards

60%

of payment cards are now contactless. When surveyed, consumers prefer contactless cards due to their convenience (93%), speed (92%) and wide acceptance (88%)

51%

Faster payments

Significant growth is expected in the coming years

Increasing the utilisation of FAST by consumers can be a tremendous gain for the economy

Singapore is ready for Mobile payments

149%

Mobile penetration

186%

Wireless Internet saturation

96%

Have a bank account

From paper to plastic

In the near-term, it is expected that the utilisation of payment cards – especially credit cards – will continue to rise and slowly replace cash for daily transactions. Surveyed consumers indicate a preference for these types of payments as they are convenient and offer incentives for use. This is in line with global trends.

Moving to account-based ticketing

This could lead to replacing the use of SVF’s for transport payments with account-based alternatives that could increase the efficiency and visibility of transport costs to consumers.

Rise of mobile devices

With the highest banked population, access to smartphones, and wireless broadband rates in Southeast Asia, Singapore demonstrates technological readiness for mobile payments.

While the utilisation of mobile devices for payments remains relatively small, it is a growing market with a reported increase of 42% in use between 2013 and 2016 and expanding acceptance by merchants. When surveyed, the majority of consumers see physical payment cards being replaced by smartphones, mobile devices and wearables as ‘quite likely’ in the future.

Getting FASTer

Matching global trends, the majority of payments values (in terms of dollars) are moving to electronic platforms through direct debit and credit transfers.

In the coming years as consumer familiarity with FAST increases and programs are undertaken to make these transfers more convenient and easier to use, there is an opportunity to move more consumer payments onto the system, including at the point-of-sale. With payment security as a key consumer consideration preventing further adoption of contactless cards, FAST could offer an alternative for in-person and online transactions.
Business payments at-a-glance

Businesses accept cash more than any other instrument due to consumer demand and supplier acceptance. For most retail transactions, businesses prefer cash due to perceptions around its convenience and security.

We asked Businesses: “What challenges do you face with accepting payments?”

- 20% Slow settlement speed
- 18% Cost
- 13% Fraud
- 13% Security
- 13% Time/effort required to manage
- 7% Low transaction volume
- 5% Other
- 5% Longer processing time
- 4% Requires staff training
- 2% No mobile collection options

Business acceptance of cash is nearly universal

- 84% Cash
- 49% NETS debit
- 47% Scheme credit/debit
- 31% Cheque
- 31% Funds transfer
- 18% Contactless payment cards

Retail businesses overwhelmingly prefer cash, but are moving to adoption of electronic payments*

Business payment acceptance preferences

*Figures are rounded and do not include eNets, SVFs, and mobile top-up; a total of less than 2%
How businesses pay in Singapore

The primary instruments for payments between businesses are cheques and bank-to-bank transfer. Businesses take advantage of the ease-of-use, ubiquity and universal acceptance of cheques and the speed and transparency of the bank infrastructure to transfer large values in Singapore on a daily basis.

Cheques

51mn transactions

Businesses use cheques as a primary means to make payments for a total of S$524 billion in 2015, but volumes are shifting to funds transfer: direct debit, credit transfer, and FAST.

Cash

In the next year, surveyed businesses report plans to increase their acceptance of electronic payments. Because of this trend, it is expected that cash use by businesses will decline.

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<tbody>
<tr>
<td>Contactless cards</td>
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<td></td>
<td>33%</td>
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<tr>
<td>Mobile payments</td>
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<td></td>
<td>29%</td>
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<tr>
<td>Electronic / mobile wallet</td>
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<td>28%</td>
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<tr>
<td>e-NETS</td>
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<td></td>
<td>22%</td>
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<tr>
<td>SVF</td>
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<td></td>
<td>21%</td>
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<tr>
<td>NETS card</td>
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<td></td>
<td>19%</td>
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<tr>
<td>Credit &amp; debit cards</td>
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<td></td>
<td></td>
<td>19%</td>
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<tr>
<td>Cheque</td>
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<td></td>
<td>7%</td>
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<tr>
<td>Cash</td>
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<td></td>
<td>5%</td>
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<tr>
<td>Funds transfer</td>
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<td></td>
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<td>3%</td>
</tr>
</tbody>
</table>

Funds transfer

S$2,168 bn

With 56 million transactions in 2015, businesses are moving to funds transfer to take advantage of efficient and more secure payments.

Cheques

Cheque usage remains significant with around 51 million cheques issued by businesses and the government in 2015 alone. While their overall use is decreasing annually, the rate of decline is relatively gradual when compared to benchmark jurisdictions, which suggests a slower adoption of electronic payment methods. If adoption of funds transfer continues to increase, the decline of cheques will speed up as businesses switch to more efficient payment methods.

Funds transfer

In terms of overall value, credit transfer is the dominant instrument for business payments in Singapore; however, mirroring the consumer space, FAST adoption remains relatively low (approximately 8% of bank transfers in 2015 for business payments). Experiences in benchmark jurisdictions suggest that a combination of incentives for use and disincentives for continued utilisation of cheques can drive rapid adoption of FAST.

Cash

For small and medium enterprises (SMEs), business usage of cash to make payments is much higher as most of their customers pay in cash, transaction values are lower, and SME owners report a high trust in the instrument. The use of cash for business payments could decline in the coming years, however. This is due to a rise in consumer demand for acceptance of electronic payments and the introduction of incentives for business utilisation of bank-to-bank transfer.
Consumer demand, security, and speed of settlement are critical to businesses

The acceptance or utilisation of a particular method of payment varies greatly across the landscape. Business are challenged to meet consumer demand while maintaining low costs and high levels of security.

"Which of the following factors drive your decision to accept certain payment instruments?"

<table>
<thead>
<tr>
<th>Factor</th>
<th>B2B</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Costs (i.e. fees and charges)</td>
<td>11%</td>
<td>3%</td>
</tr>
<tr>
<td>Time and effort required to handle payments</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Simple and easy to understand</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Better for accounting and record keeping</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Shorter processing time at cashier / Point of Sale</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Faster settlement of payments (better for business cash flow)</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>Security</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>High demand for a payment method by our customers</td>
<td>44%</td>
<td>32%</td>
</tr>
</tbody>
</table>

The business perspective

The majority of businesses feedback that the top factor driving their company’s decision to offer a certain payment method is high demand for that particular payment method by customers. During the focus groups, some merchants mentioned that they were willing to pay fees or charges of up to 3-5% to accept a payment method if it is widely used by their target market.

The other two important factors are security and speed of settlement. More rapid settlement of payments is particularly important to small and medium-sized businesses as they may have thinner working capital and need to pay specific attention to cash flows in order to meet financial obligations and to ensure the smooth continuation of operations.

Unifying payments

Despite the move towards new payment methods, more than 70% of those surveyed and interviewed agree that there are simply too many payment methods to deal with as a business. When asked about an ideal payment method, all respondents preferred something that is widely used across customer segments and can be used to settle their own obligations.

More support from banks?

Citing high acquiring rates and other costs as barriers towards accepting payment cards, three in four respondents also felt that banks in Singapore could do more to help them optimise their payment systems. This concern was also highlighted in the focus group discussions by merchants who felt that banks only communicate with them during the acquisition stage.
Opportunities to improve the landscape
Challenges in the landscape

KPMG’s analysis of the payments ecosystem in Singapore has revealed several challenges that inhibit its evolution and efficiency. Our recommendations are based on addressing these challenges and improving the performance of the systems for consumers, businesses, and the government.

How do we incubate, develop and foster innovation?  
How do we move away from paper-based instruments?  
How do we lower costs to the economy?

Identifying and overcoming barriers on the journey to improving the payment systems

The payments ecosystem in Singapore is characterised by:
- Entrenched habits, behaviours, and attitudes of consumers and businesses
- A regulatory framework oriented around risk mitigation that has created a payments ecosystem that is safe, sound, and secure
- De-centralised governance and coordination of infrastructure initiatives

Which has led to the following issues:
- Inefficient processes and limited trust and reliance on certain electronic payment instruments
- A regulatory framework in need of enhanced focus on consumer protection, competition & innovation, and standardisation
- Systems which are not fully interoperable resulting in inconsistent user experiences

Collectively, these result in challenges for the national economy:
- Limited adoption of electronic and innovative payments
- Sub-optimal business processes owing to the continued reliance on cash and cheques by consumers and businesses
- Relatively high cost of payments to the economy
Drive the successful completion of strategic projects

There exist many opportunities to enhance the consumer electronic payments experience in Singapore. These strategic infrastructure projects can completely transform the payments landscape for recurring, retail, and peer-to-peer payments, while ensuring that cash withdrawals are still readily available for those that need it.

89% In the UK, the majority of consumers have at least one account on the Direct Debit scheme

1 In Sweden, a single ATM network operator helped reduce consumer reliance on cash and eliminate expensive fees for convenience

20,000 Businesses in the UK that collect payments on the Direct Debit scheme today

SWISH Links mobiles to a central switch making P2P payments in Sweden faster, easier, and safer

Direct debit schemes & systems interoperability can make payments faster and less expensive

Unified point-of-sale

Catalyse development and deployment of Unified point-of-sale terminals at physical businesses to create a seamless experience for consumers.

Central addressing scheme

Build a central addressing scheme to enable FAST payments to recipients’ mobile numbers and other proxies such as NRIC number, unique entity number (UEN), email addresses, and social media handles. Ensure that security and privacy protection are built into the system.

Seamless bill payments and collections

Enhance the existing paper-based application to enable electronic authorisation for recurring direct debit mandates. Integrate Billing Organisation directories maintained by banks to enable seamless bill payments, regardless of which bank the customer or merchant uses. Enable new services such as requests for payment as an alternative for consumers who desire greater control over their bill payments.

ATM Interoperability

Review the ATM landscape in Singapore to ascertain the merits of merging the existing ATM networks into a single national ATM network.
Streamline & strengthen the regulatory framework to level the playing field & enhance transparency

A single modular regulatory framework that is technology-neutral and activity based will allow payment service providers to access the Singapore market with legal certainty and greater flexibility to provide a wider spectrum of payment activities.

Regulators in select benchmark nations are shifting focus to meet the demands of the changing global payments landscape

| Risk Reduction | ✓ | ✓ | ✓ |
| Standardisation | ✓ | ✓ | ✓ |
| Competition & Innovation | ✓ | ✓ | ✓ |
| Consumer Protection | ✓ | ✓ |

Adapting the regulatory framework for the future

An omnibus framework can encourage synergies in regulating new retail payment service providers together with payment systems and payments infrastructure via the amalgamation of the existing acts relating to payments such as the Payment Systems (Oversight) Act and Money-Changing and Remittance Businesses Act.

Regulating payment activities

The regulation of payment services offered by retail payment service providers should be technology-neutral and based on payment activities rather than payment products. Payment activities should cover the full payments value chain, and include operation of payment gateways, business acquiring, remittance, and issuance of payment instruments.

Creating a level playing field

Enhance the regulatory framework, including licensing requirements, to expand access to the payment systems and to facilitate private-sector innovations and improvements.

Maintaining security and enhancing consumer protection

The new regulatory framework should enhance consumer protection, introduce cyber security requirements, and create a level playing field for payment service providers as well as set more rapid payment execution standards (i.e. D+1; next-day settlement) relating to customer initiated electronic payments.
Establish a new governance model for payments

The establishment of a new governance model via the set up of a national Payments Council should provide for outcomes that are aligned to wider government and social policy and a migration away from paper-based instruments and processes.

Creating partnerships across industries to make payments easier, faster, and more secure

Globally, payment councils are working to foster collaboration among market participants to drive and sustain systems evolution

Construct of the Payments Council

The Payments Council will serve as the execution arm for spearheading projects relating to retail payments. The existing roles and responsibilities of the Singapore Clearing House Association, the body responsible for providing, facilitating, and overseeing cheque and debit & credit clearing services on behalf of member organisations, may also be subsumed under the Payments Council.

Composition of the Payments Council represents the voice of the industry

The Payments Council should comprise a nearly equal representation from both the supply and demand side of the retail payments ecosystem to promote fair and balanced viewpoints. To ensure that the payments initiatives are aligned with national strategies, the MAS should chair the Payments Council.

Functioning of the Payments Council

The Payments Council will be organised into various divisions to ensure its sustainability as a project management unit for retail payments development projects that cut across industry players and public agencies.

Reinforcing the governance of Singapore’s retail payments landscape

The mandate of the Payments Council will establish the objectives and roles and responsibilities to drive Singapore’s payments strategy and to develop initiatives to promote competition and innovation in the retail payments landscape.
Enhance the adoption of electronic payments

Under the authority of the Payments Council, embark on a series of measures to drive improvements in the payments landscape. These collaborative efforts are aimed at further reducing reliance on paper-based instruments and facilitating the movement to more efficient and transparent electronic methods in the near-term across market segments.

### MAXIMISE POTENTIAL

- **$150 mn**
  - Potential annual savings to the economy by making payments cashless at hawker centres and in taxis

### REDUCE COSTS

- **0.52%**
  - Cost of cash and cheques to GDP

### LOWER BARRIERS

- **#1**
  - The #1 barrier to consumers using payment cards for taxis is surcharging

Eliminating cash & cheques can be a gain for the economy

- **Drive up the utilisation of FAST across market segments**
  - While utilisation of FAST is relatively low, its world-class performance and success in benchmark nations demonstrate its high potential. Increasing its use in the near and long-term is underpinned by expanding access to consumers and businesses through usability, pricing, and incentives as well as cooperation between public and private sector entities to create and communicate a value proposition across segments.

- **Reduce cash and cheque usage**
  - After good alternatives become available, reduce the usage of cash and cheques by passing marginal cost savings on to users. This should help accelerate the transition to more efficient and secure electronic payment methods. Other countries, such as Sweden, have succeeded in their cashless journey through similar measures, while providing for a smooth transition for all users.

- **Eliminate surcharging for payment card use**
  - Consumers reference higher prices as their primary impediment to card usage in this space and are not likely to shift fully to electronic payments as long as prices remain higher. By eliminating surcharging on a national level, the movement to higher electronic payments adoption should occur rapidly.

- **Continue to monitor the impact of interchange caps**
  - Regulators and central banks in benchmark jurisdictions, including the EU, Australia, and the US, have taken action to cap card interchange to reduce merchant discount rate and extend cost-savings to consumers in the form of lower prices. However, long-term impact and success of these interventions are not yet fully visible. The MAS should continue to monitor and analyse the impact of interchange caps.
The payments landscape in Singapore has all the major components needed to become a best-in-class jurisdiction with the opportunity to drive enhancements and foster collaborations that will support a faster transition to a world-leading ecosystem.

**Universal adoption**
of electronic and innovative payments

**Reduced reliance**
on cash and cheques by consumers and businesses

**Lowered cost**
of payment systems to the economy

Enacting the initiatives outlined in this report today...

- Leverage world-class infrastructure to develop effective solutions
- Streamline and strengthen the regulatory framework to level the playing field and enhance consumer protection
- Establish a new governance model to promote collaboration

...can improve the future landscape and benefit all of Singapore

- Systems that are fully interoperable, easily accessible, and maximally efficient
- Regulations that provide for private sector led innovations and promote security for banks and non-banks
- Business-ready payment initiatives designed to improve the landscape and enhance user experience across segments
Contact Us

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