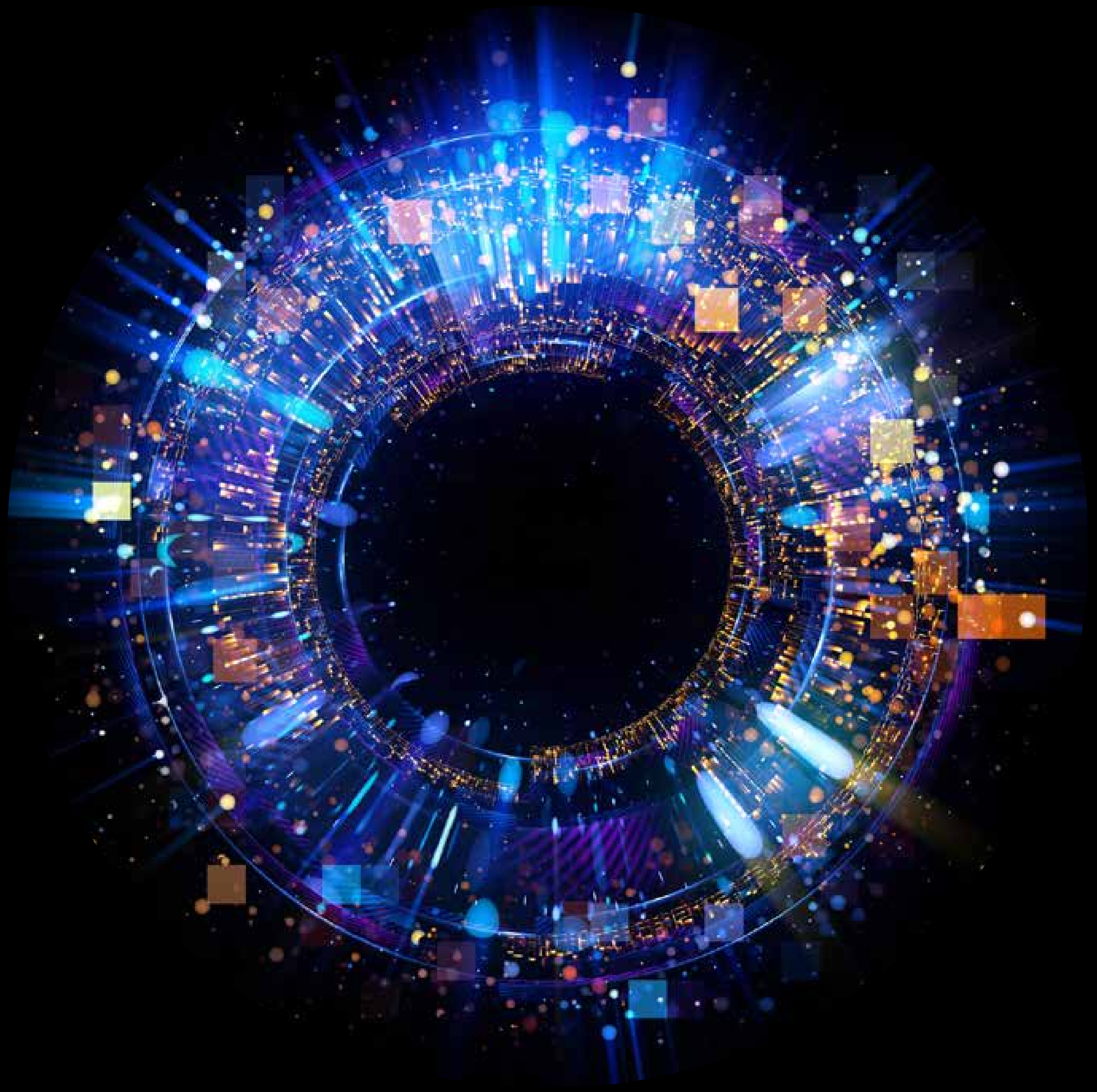


# The future of digital payments
Choices to consider for a new ecosystem

# Contents



**Methodology**
In July 2019, Deloitte Southeast Asia's Financial Services industry practice hosted an event on the future of digital payments, where a poll was held with over 70 executives from different players across the payments value chain – including banks (16%), non-bank eWallet operators (20%), other payment service providers (19%), FinTech companies (30%), and others (15%) – to learn more about the elements that they consider to be essential for a conducive and vibrant payments ecosystem in Singapore.

Insights from two panel discussions held with various regional Southeast Asian industry players and regulators contributed to the development of the insights presented in this report. Panellists at the event included industry representatives from the following organisations:

- **Grab Financial Group**, a unit of Southeast Asian ride-hailing player Grab, offering a mobile financial services platform
- **MatchMove Pay**, a Singapore-based FinTech company specialising in digital payments and next generation banking
- **Revolut**, a UK-based FinTech offering users a multi-currency stored value facility, currently conducting a beta launch in Singapore as its Asia Pacific headquarters

# Getting real with digital payments

Customers are used to seamless payments for most daily transactions – with ever-increasing expectations for integrated and secure ways to pay for any product or service. For players in the digital payments ecosystem across Southeast Asia, that means a set of real choices to consider.

Leading retailers and technology companies have set a high bar for the financial services industry to create better experiences and simple, seamless integrations that can make traditional banking, digital payments, and other related activities easier to accomplish.

This represents a marked shift from the previous model, in which payments were offered only by banks. Indeed, digital payments are increasingly offered by non-bank, technology companies, which have found Southeast Asia's unique combination of high mobile penetration rates and significant unbanked or underbanked populations conducive for customer acquisition.

These players typically offer a variety of differentiated services backed by technological innovation, such as food delivery or ride-hailing, in an ecosystem designed to function with their proprietary e-wallets or other digital payment methods. But while their ability to provide superior customer experiences is undeniable, the ecosystems that many of the players have built with their collaboration partners have resulted in fragmentation across the payments landscape in Southeast Asia, and interoperability between the different payment systems is quickly becoming an issue that needs to be addressed.

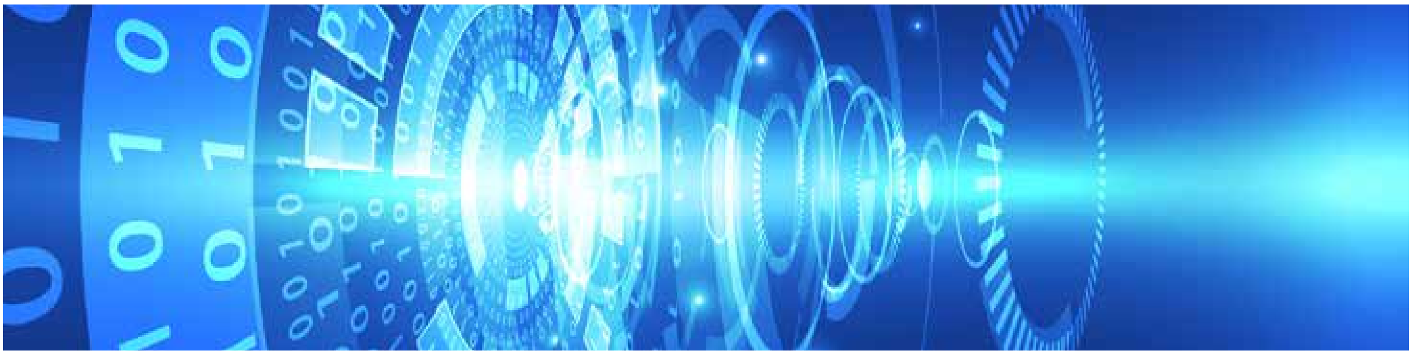
At the same time, the increasing volume of digital payments done outside the formal banking system may not be subjected to the same level of regulatory oversight as banks under the current structure.

Consequently, authorities face challenges in mitigating the increased risks, such as money laundering and financing of terrorism (ML/FT), cyber attacks, and personal data breaches, that such activities could pose to the overall financial system.

In this report, we examine several hygiene factors that regulators and industry players should collaborate to put in place to encourage the development of the digital payments industry in Southeast Asia. As authorities across Southeast Asia examine a variety of different options to introduce the necessary safeguards while promoting the growth of the digital payments industry, we also take a look at Singapore's Payment Services Act, which aims to strike a balance between these competing priorities.

Later, we explore four possible scenarios for the future digital payments industry – spoilt for choice; price war; loss leadership, and winner takes all – designed to help industry players envision their future roles in the payments value chain. Throughout our analysis, we take into account the opinions expressed by executives who have provided their inputs to better understand the opportunities and critical success factors for players to be successful in this rapidly changing ecosystem.

# The future of digital payments



Players in Southeast Asia's digital payments value chain require a variety of new capabilities to compete successfully: differentiated products and service offerings, cost efficiencies, economies of scale, and close collaborations with ecosystem partners to leverage the full power of the network effect.

### Existing industry challenges

Discussions with industry panellists revealed three overarching hurdles that remain barriers to greater digital payments adoption across Southeast Asia:

- **Regulation**
  For regional players with operations across multiple geographies, Southeast Asia's fragmented regional regulatory landscape is one of the key challenges that they have to grapple with. For example, licencing procedures may vary significantly across markets. Without greater harmonisation, the different local regulatory requirements may result in increased costs and lengthen the amount of time required for players to roll out their regional expansion plans.

- **Infrastructure**
  In addition, there is also the need to level the playing field between incumbents and new entrants, as the latter may not have the same level of access to the necessary infrastructure and shared utilities that they require to compete effectively.

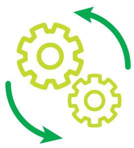
- **Talent**
  Hiring the right talent is another challenge that industry players face in Southeast Asia. As many of these roles require very specific skillsets, they can be very hard to fill, even in more developed talent markets such as Singapore, with the challenge becoming particularly acute in other regional markets.

"Applying for licences is not an easy process because there is a need to localise for the different Southeast Asian markets. But this can give you a competitive advantage if you do it right."

**Grab Financial Group executive**

"Having different regulatory regimes across Southeast Asia affects speed-to-market. This is because players have to understand the different regulatory requirements and then figure out how they can apply the learnings from one market to another. Our hope is that markets in the Asia Pacific region can become more harmonised in terms of regulatory standards."

**Revolut executive**



"New players need access to the same infrastructure that banks have access to, such as credit bureau information. There is also the need to level the playing field, and one way to do this is to focus on interoperability."

**MatchMove Pay executive**

"The difficulty with hiring talent is finding individuals who possess expertise in both the finance and technology domains. We need people who are able to understand finance, and also operate in a fast-paced environment."

**Revolut executive**

### Necessary hygiene conditions

To enable value chain players to overcome their existing industry challenges and maximise their potential in the regional marketplace, regulators and industry players alike must collaborate to put in place several hygiene conditions to promote the growth of the industry. Ultimately, these conditions will determine the growth trajectory of the digital payments market across Southeast Asia:

- **Structural incentives:** Structural incentives are required to build confidence among small merchants and customers and encourage them to adopt digital payments en masse. There are several ways to achieve this, for example, by integrating national identity application programming interfaces in merchant systems to help bolster customer confidence, as well as greater consumer education and transparency.
- **Risk controls:** The necessary risk controls need to be in place, including measures to encrypt data, and comply with stringent security standards. However, this needs to be balanced by the growing demand for frictionless payments.
- **Access to shared utilities:** Access to shared utilities can help to level the playing field between entrenched incumbents and new entrants. This includes access to infrastructure, such as the credit bureau, that are currently only available only to large players. Such shared access would enable interoperability to become a design choice in new product development. To enable this, governments and industry players will need to work together to understand how they can better integrate systems for information sharing and seamless operations.

### How Singapore is preparing for the future of payments

Authorities across Southeast Asia are considering the implementation of a range of different policies to stimulate the development of their local payments markets. One example is the Monetary Authority of Singapore (MAS), which is currently conducting consultations on the regulations to implement the Payment Services Act (PSA). The PSA aims to promote broader adoption of e-payments by providing a forward-looking and flexible framework for the regulation of payment systems and payment service providers in Singapore.

"The new regulatory regime under the Payment Services Act lays down a risk-focused designation and modular licensing framework for Singapore. The new licencing framework for payment service providers focuses on players with a clear retail payments nexus, with risk mitigation measures for specific risk types."

**Wong Nai Seng, Southeast Asia Leader, Deloitte Asia Pacific Centre for Regulatory Strategy**

### Objectives of the PSA

There are four key objectives for the PSA: Safeguard the funds owed to customers and/or merchants; strengthen key technology and cyber standards; reduce fragmentation and limitations to interoperability; and build adequate controls against ML/FT risks. It seeks to achieve these through:

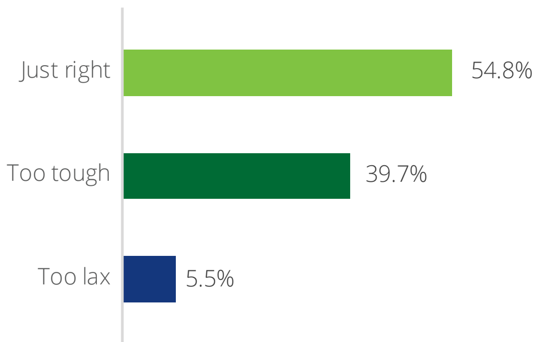
- Broadening the scope of regulated activities to a wider range of payment services and activities, including domestic money transfers, inward remittances, merchant acquisition, and digital payment token services
- Calibrating regulations to specific risks posed by activities through the use of a modular licencing approach
- Increasing competition by promoting interoperability

### Industry reactions to the PSA

Overall, the Deloitte poll found that the majority of executives felt that the new regulations are 'just right', although a significant minority found them 'too tough' (see Figure 1). In terms of hygiene conditions, the poll found that access to shared utilities was considered to the most important factor in order for the objectives of the new PSA to be met (see Figure 2).

**Figure 1: Majority of executives felt the new regulations are 'just right'**

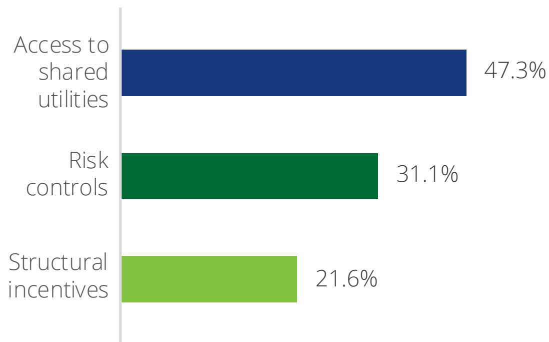
Question: What is your view of MAS' regulations for e-wallets?
Respondents chose 1 out of 3 options (n=73)




Source: Deloitte poll conducted in July 2019.

**Figure 2: Executives view access to shared utilities as most important**

Question: What needs to be true to ensure a market where the objectives of MAS are met?
Respondents chose 1 out of 3 options (n=74)




Source: Deloitte poll conducted in July 2019.

"The PSA makes it easier to comply with Know Your Customer requirements, as customers become more aware of the requirements through the PSA and therefore are more likely to comply on their end."

**Grab Financial Group executive**

"In terms of cyber security, we have already taken measures to mitigate such risks, including data encryption and complying with stringent security standards."

**MatchMove Pay executive**

"Happy that the rules are set. It is harder to operate without regulation."

**Revolut executive**

# Shaping the future

Innovations developed by incumbents and FinTech players alike are reshaping the payments landscape, boosting customer expectations, and intensifying competition globally. However, in order to make strategic choices about bringing value to their customers, these players will need to consider what the future of digital payments may look like, and shape their future role in the payments value chain.

### The payments value chain

With today's shopping and bill-paying, there is a great deal going on behind the scenes. A smartphone user might rely on one-touch payment apps, but underneath that clean interface lies a shifting, complex payments value chain, consisting of five key players that are building an ecosystem by partnering in new ways (see Figure 3):

- **Customer**: The customer is the end-user or sender who initiates the payment.
- **Merchant**: The merchant is the receiver who receives the payments from the customer, and pays fees to the acquirer in exchange for its services.
- **Issuer**: The issuer is typically a bank or financial institution that issues payment solutions to the customer, provides underwriting for the credit issue, and holds overall responsibility for end-user acquisition and engagement.
- **Acquirer**: The acquirer is typically a financial institution or aggregator that acquires merchants, provides them with the means to accept digital payments, and underwrites credit solutions.
- **Network provider**: The network provider connects all parties in the network, provides clearing and settlement functions, and manages risk in exchange for fees from both the issuer and acquirer.

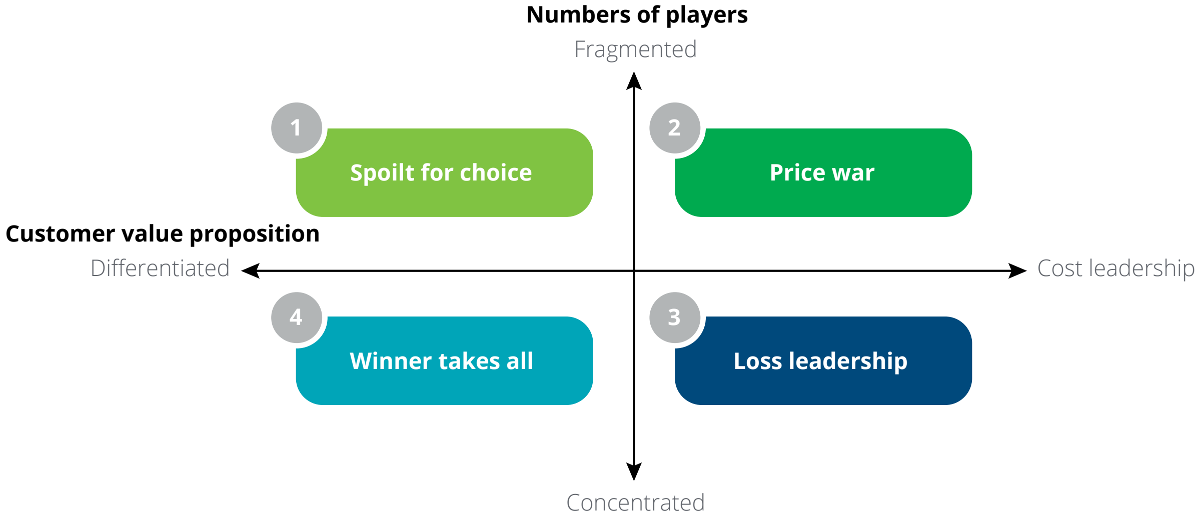
**Figure 3: Impact of technological innovation on different players in the payments value chain**

| Customer | Issuer | Network | Acquirer | Merchant |
|---|---|---|---|---|
| **Increased adoption**<br>• More customers will adopt e-payments and leverage new technology (e.g. wearables)<br>• Adoption will go beyond products to services, such as spend tracking, offline loyalty | **Decreased risk**<br>• With the introduction of newer sources of credit data, issuers will be able to expand their customer base<br>• The higher level of security that e-wallets offer will help issuers to reduce costs | **Interoperability**<br>• The emergence of a centralised infrastructure and the interoperability it enables will reduce margins, but increase transaction volumes | **Beyond PoS**<br>• Merchants will face reduced barriers to switching<br>• Differentiators, such as value-added services and consumer insights, will drive acquisition | **Value beyond transactions**<br>• Democratisation of infrastructure will reduce fees for merchants<br>• Benefits beyond transaction volume, such as access to customer data, and loyalty programmes, will drive revenue growth |

## Four possible scenarios

The uncertainties impacting the future of payments have been evaluated across two key parameters – number of players, and customer value proposition – creating four distinct scenarios that could characterise the future of payments in Southeast Asia (see Figure 4).

**Figure 4: Four possible scenarios for the future of payments**




**Scenario 1: Spoilt for choice**

In this scenario, the market will offer a diverse and wide variety of products through multiple players. Customers will benefit from the availability of an array of different options catering to broad and niche requirements, higher service quality, and perks from loyalty programmes that seek to increase the stickiness between providers and end users.

To reach their focus segments, issuers will employ targeted marketing, leverage ecosystem plays to lock in their customers, and operate larger suites of products, which may entail higher overall costs. Network players will benefit from the development of a sustainable foundation, while acquirers will need to ramp up capabilities across a range of areas to serve diverse customer needs at different price points. On the other hand, merchants will be able to choose from a larger selection of acquirers, who in turn will need to grapple with higher expectations for customer service.

**Scenario 2: Price war**

In this scenario, low pricing becomes the new normal as all market players undercut one another. Although customers benefit from lower prices and a large variety of providers to choose from, the low level of differentiation between the different providers restricts the fulfilment of niche customer needs.

Issuers will experience intense competition, and are likely to invest heavily in marketing expenditures to attract customers as the cost to manage churn rates increases. Greater emphasis will be placed on loyalty and discounts, but product offerings will be limited. In the same vein, network players will feel increased pressure to lower prices, with lower margins resulting in the availability of fewer players.

Acquirers, too, will face more competition as the different players seek to offer higher discounts for merchants. While this means that merchants benefit from lower transaction fees, it also reduces the service quality, innovation, and number of value-added services that they offer.

**Scenario 3: Loss leadership**
In this scenario, low-cost utilities are driven by scale efficiencies and delivered only by players who are able to afford such scale. Although customers benefit from lower prices, they face limited choices in terms of service providers and have to contend with products that offer limited differentiation.

With competition driven by scale, issuers face lower competition. However, as products are commoditised, there is limited or no innovation, and the emphasis turns to loyalty programmes, discounts, and efforts to manage the churn rate.

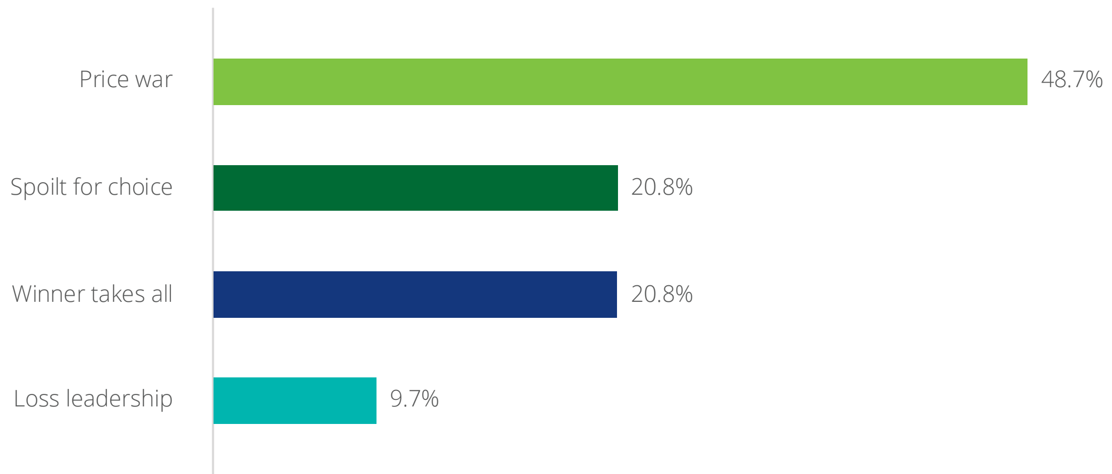
Network players, on the other hand, will feel pressure to lower interchange prices as they face direct competition from national payments networks. In the face of intense competition and commoditised products, merchants benefit from lower transaction fees due to the higher discounts offered by acquirers. They will, however, face limited choices in terms of players and product differentiation.

**Scenario 4: Winner takes all**
In this scenario, large players will dominate the market as they provide holistic, end-to-end product and service offerings to cover a wide range of customer needs. Customers will benefit from the availability of a variety of options that will also cater to niche needs. However, they are likely to have fewer switching options, and will need to contend with sub-optimal pricing.

Issuers will benefit from restricted competition and lower marketing costs, as it becomes difficult for new players to enter the market. Correspondingly, network players are likely to face increased pressure as fewer partners will dominate the market. In the face of competition from other large peers, acquirers are compelled to provide value-added services as the norm, and while merchants enjoy a wide variety of these products, they do so at sub-optimal prices and service levels.

**The future of digital payments in Singapore**
The results of Deloitte's poll showed that executives considered the price war scenario to be the most likely in Singapore (see Figure 5).

**Figure 5: Executives believe price war scenario to be the most likely**
Question: Which of the four scenarios is most likely for Singapore in 2-3 years' time?
Respondents chose 1 out of 4 options (n=72)




Source: Deloitte poll conducted in July 2019.

# A new ecosystem

Developing strategies with foresight and agility is difficult in itself, but can be acutely challenging in an age of disruption and a constantly evolving payments landscape. To overcome this, companies will first need to understand their roles in the payments value chain, and then envision how these will evolve with technological innovation in the future.

Several constants, however, are likely to be present in the new payments ecosystem, regardless which future scenario plays out. Firstly, companies will witness the increased adoption of e-payment technologies by customers that will enable the growth of new networks and ecosystems. Adoption will move beyond the purchase or sale of products to encompass the provision of value-added services, such as spend tracking and other offline loyalty programmes. Such activity will in turn drive new revenue opportunities beyond payment transactions as access to customer data provides new avenues for monetisation, for example, in the form of loyalty programmes.

Secondly, there is likely to be greater democratisation of infrastructure. The emergence of a centralised infrastructure will facilitate increased interoperability – and therefore higher transaction volumes – between the different value chain players. Although network providers are likely to face increased pressure on their margins, merchants will benefit from reduced fees and lower switching barriers. As a result, differentiators, such as value-added services and consumer insights, will become the key drivers of acquisition for network providers and acquirers alike.

Finally, the payments landscape is likely to become more secure and less risky for companies. The higher levels of security that e-wallets offer, for example, can enable companies to reduce their compliance costs, while the introduction of newer sources of credit data will enable issuers not only to better assess their risk, but also profitably expand their customer base.

Ultimately, in the new payments ecosystem, the ability to collaborate closely with other value chain players – and even new industry entrants – could be one of the most defining features of a successful company. Depending on how they leverage their network effects, leading players are likely to be those who have found a way to capitalise on the abundant data that exists in distinct and disparate places along the value chain to create and own standards, and to design platforms for an improved overall customer experience.

"Technological innovations are disrupting all aspects of the payments value chain, creating a set of four distinct future scenarios that could become the reality for markets across Southeast Asia. The extent to which regulators and industry players collaborate to put in place the three hygiene factors – structural incentives, risk controls, and access to shared utilities – will determine the number of players and variety of customer value propositions that we will witness in the future."

**Mohit Mehrotra, Monitor Deloitte Leader, Deloitte Asia Pacific**

# Contact us

For more information, please contact

**Mohit Mehrotra**
momehrotra@deloitte.com
+65 6232 7216

**Wong Nai Seng**
nawong@deloitte.com
+65 6800 2025

## Southeast Asia Financial Services industry practice

### Southeast Asia & Singapore Financial Services Leader
**Ho Kok Yong**
kho@deloitte.com

### Guam
**Tung Wei-Li**
wtung@deloitte.com

### Indonesia
**Rosita Sinaga**
rsinaga@deloitte.com

### Malaysia
**Anthony Tai**
yktai@deloitte.com

### Philippines
**Bonifacio Lumacang**
blumacang@deloitte.com

### Thailand
**Somkrit Krishnamra**
somkrishnamra@deloitte.com

### Vietnam
**Thinh Pham**
thpham@deloitte.com

### Audit & Assurance
**Tay Boon Suan**
bstay@deloitte.com

### Consulting
**Lim Eng Hong**
englim@deloitte.com

### Financial Advisory
**Jeff Pirie**
jpirie@deloitte.com

**Radish Singh**
radishsingh@deloitte.com

### Risk Advisory
**Thio Tse Gan**
tgthio@deloitte.com

### Tax & Legal
**Michael Velten**
mvelten@deloitte.com

Deloitte.