

A photograph showing a person's hand holding a smartphone and using it to make a payment through a card reader. The card reader is placed on a wooden surface, and a small receipt or card is visible next to it.

# 2019: a year of payments innovation and transformation

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Payments innovation in 2019 is set to continue to transform the landscape both in Hong Kong and globally, with new entrants, increasing customer expectations for a better experience and enhanced connectivity enabling real-time and cross-border payments.

The proliferation of smartphones, e-wallets and new innovative payment providers is also having a significant impact on the current and future state of traditional banking and is threatening to displace the bank branch and ATMs over time.

At the annual Sibos conference held in Sydney in October last year, more than 40 KPMG professionals from 10 countries took part in wide-ranging discussions about where payments technologies and systems worldwide are heading. The key message was clear: 2019 will be another year of significant transformation worldwide.<sup>1</sup> This is also true in Hong Kong, where the launch of the Faster Payment System (FPS), the rise of innovative payment players and the march of Chinese tech giants such as Alibaba and Tencent into the city are revolutionising the payments landscape.

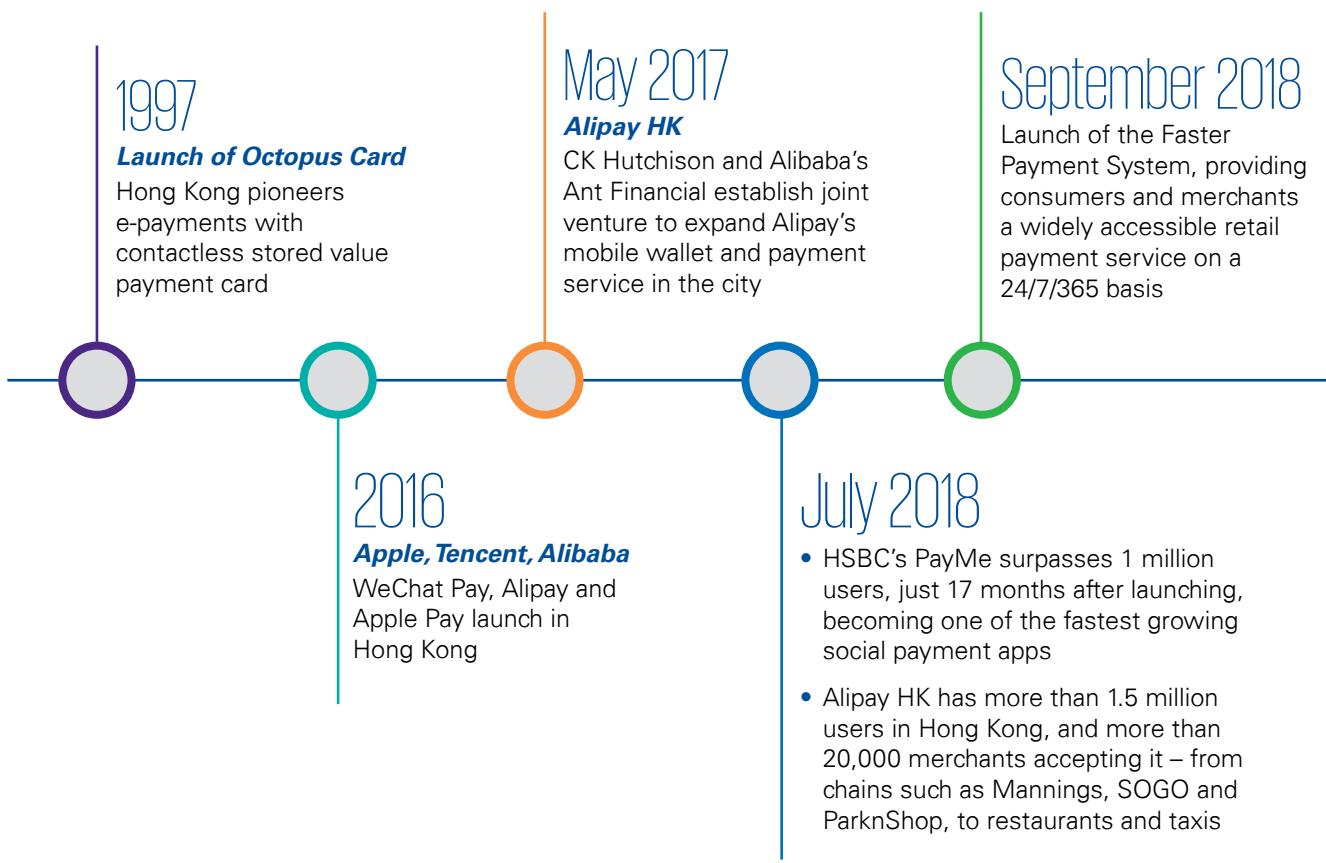
It is clear that the transformation of the payments industry is putting the traditional bank-based payment system under pressure. To better compete with new industry entrants and maturing payments providers, traditional banks need to leverage new technology capabilities, enrich existing data and offer payment methods that meet customer expectations. They also need to enhance measures to combat the cybersecurity and financial crime risks that come with the increase in electronic and real-time payments. We believe that banks that put their customers first and strike the right balance between providing convenience and efficiency and ensuring trust and security will gain a competitive edge in the market.

In the first of a series of articles exploring the evolving payments landscape in Hong Kong, we lay out some key payments trends for 2019 and beyond, and discuss how they might impact the banking sector. Many of these trends will be explored in more detail in upcoming articles later in the year.

<sup>1</sup> 'The future is open. Are you ready?', KPMG International, December 2018, [https://f.datasrvr.com/fr1/418/90903/CRT107046-The\\_future\\_is\\_open\\_V6.pdf](https://f.datasrvr.com/fr1/418/90903/CRT107046-The_future_is_open_V6.pdf)



# Hong Kong's real-time payment journey



## 1

### A greater focus on cross-border real-time payments

There is a growing global ambition to connect domestic payment systems to deliver cross-border real-time payments (RTP), enabling the rapid transfer of money online or on a mobile device, and offering greater access and choice to consumers, businesses and governments.

For example, SWIFT's global payments innovation (gpi) service is an emerging model for delivering cross-border RTP, enabling the fast, secure and transparent settlement of transactions while enhancing customer experience for all bank customers in the region. For businesses and governments, the ability to connect goods and services to real-time, affordable payments anywhere and at any time promises to be hugely transformative for trade and reducing friction in supply chains. SWIFT has also joined forces with banks from Australia, China, Singapore and Thailand to develop a cross-border real-time service for the Asia-Pacific region.

Joining up regional faster payment schemes represents an alternative model for cross-border payments. For example, the link between PayNow in Singapore and PromptPay in Thailand provides real-time payment functionality between banks in both countries. Regional banks provide customers making a cross-border payment with a gateway into their networks, with these networks then developing the connections required to facilitate the cross-border transfer.

Looking at this region, the ongoing development of the Greater Bay Area (GBA) – which aims to promote close cooperation between Hong Kong, Macau and nine cities in Guangdong to create a world-class city cluster – will create significant opportunities for the financial services and technology industries, and promote the seamless transfer of payments across the region. Indeed, businesses and consumers would benefit significantly from the ability to use electronic payment systems such as Alibaba's Alipay and Tencent's WeChat Pay across the entire GBA. Tencent recently launched a first-of-its-kind cross-border mobile payment service, allowing WeChat Pay HK users to conduct RMB-denominated transactions with Hong Kong dollars in mainland China.<sup>2</sup> It is expected that Alipay and other e-wallets and mobile payment apps will follow suit.

However, the lack of standardisation that still exists between financial institutions and jurisdictions worldwide increases cost and complexity for the entire ecosystem. Greater collaboration between financial institutions, the development of common standards in areas such as data models and message structures, and enhanced cross-border connectivity would accelerate the accessibility and efficiency of payments.

## 2 Hong Kong's Faster Payment System gathers steam

The Hong Kong Monetary Authority (HKMA) launched FPS in September 2018, connecting banks and stored value facility (SVF) operators on a single platform, and enabling individuals and businesses to conduct real-time fund transfers in both Hong Kong dollars and Renminbi.

Initial signs have been encouraging in the months since the launch of FPS (as of February, the platform had recorded a total of 2.4 million registrations<sup>3</sup>), with both transaction value and volume increasing. In the first month of operations, FPS processed a total of 1.58 million transactions, including 1.56 million transactions denominated in Hong Kong dollars, which amounted to HKD 33.3 billion.<sup>4</sup> In comparison, as at the end of January, these figures had increased to 2.05 million transactions, including 2.02 million Hong Kong dollar-denominated transactions totalling HKD 42.92 billion.

While the numbers indicate that FPS is an increasingly popular platform, it is worth noting that cash is still increasing in Hong Kong. Total currency in circulation as a percentage of GDP in Hong Kong amounted to 7.9 percent in 2000 and 13.3 percent in 2010.<sup>5</sup> That figure rose to 17.5 percent in 2018, compared to 10.1 percent in Singapore.<sup>6</sup> It will be interesting to see to what extent the development of FPS shifts Hong Kong towards a more cashless society over time, and whether it opens the door to faster payments to and from mainland China.

In addition, the HKMA has also introduced a common QR code standard for retail payments to promote the adoption of QR code payments in the city and to enable merchants to use a single QR code to accept payments from different SVFs.

<sup>2</sup> Tencent, <http://www.tencent.com/en-us/articles/15000741542193966.pdf>

<sup>3</sup> Hong Kong Interbank Clearing Limited, [https://fps.hkicl.com.hk/eng/fps/about\\_fps/statistics.php](https://fps.hkicl.com.hk/eng/fps/about_fps/statistics.php)

<sup>4</sup> Hong Kong Monetary Authority, <https://www.hkma.gov.hk/eng/key-information/press-releases/2018/20181106-4.shtml>

<sup>5</sup> Hong Kong Monetary Authority, <https://www.hkma.gov.hk/eng/market-data-and-statistics/monthly-statistical-bulletin/table.shtml> ; Census and Statistics Department, The Government of the Hong Kong Special Administrative Region, <https://www.censtatd.gov.hk/hkstat/sub/sp250.jsp?tableID=030&ID=0&productType=8>

<sup>6</sup> The Singapore Department of Statistics, <https://www.singstat.gov.sg/find-data>

## 3

## Fintech firms are levelling the playing field

The business model for financial institutions is rapidly transforming, partly driven by an evolving regulatory environment and by changing consumer preferences for more personalised and digitalised services. Many of the fintech companies entering the market have these attributes hard-wired into their value propositions. A recent KPMG publication<sup>7</sup> notes that this is the start of a rebalancing of the financial services ecosystem, with successful fintech firms sharing several key characteristics:

- Customised and personalised products and services, using advanced data analytics to curate products that are more relevant to each individual customer.
- A focus on platforms and ecosystems, engaging with a networked ecosystem of customer-focused value propositions.
- An embrace of partnership, focusing as much on collaboration as competition, offering incumbents an opportunity to develop an ecosystem of partnerships.
- Technological agility, using a modular, micro-services architecture that enables them to use data to drive actionable customer insight. They have much greater transparency over what, how and where customers are buying; customers' financial posture, credit scores and serviceability; and customers' preferences and their propensity to spend.

Collaboration between financial and non-financial organisations holds the key to an expanded payments ecosystem. Fintech companies recognise the advantage of having financial industry partners that understand the regulatory framework, have longstanding customer relationships and large volumes of customer data. Meanwhile, traditional banks are increasingly looking at fintech partnerships as a cost-effective and accelerated method to bring new capabilities and experiences to market.

Furthermore, the building of partnerships between financial services through Application Programming Interfaces (APIs) and digital technologies will provide enhanced payment experiences for consumers. The HKMA's introduction of an Open API Framework last July, for example, opens the door for third-party service providers (TSPs) to collaborate with traditional banks to improve the customer experience for retail and corporate banking clients. For example, through the aggregation of pricing and product information on a single platform, consumers will be able to easily compare products and services, which will help customers find the right product and at the right price.

The implementation of the Open API Framework is to be carried out in four stages, with the final phase looking at banking transactions and payment or scheduled payments/transfers initiated by authenticated customers. While a firm timeline is yet to be announced for this, in the near future as TSPs are able to communicate customers' payment instructions to banks, we expect to see the emergence of proper aggregators – or even banks – that will help to aggregate data across accounts and platforms.

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<sup>7</sup> 'The future is open. Are you ready?', KPMG International, December 2018, [https://f.datasrvr.com/fr1/418/90903/CRT107046-The\\_future\\_is\\_open\\_V6.pdf](https://f.datasrvr.com/fr1/418/90903/CRT107046-The_future_is_open_V6.pdf)



## 4 Rise of the tech giants

Concurrent to the growth of fintech startups in Hong Kong is the foray into the payments space by Chinese tech giants Alibaba and Tencent, who are actively seeking to replicate their mainland China success in Hong Kong. The growth and reach of these two dominant platforms are significant. Tencent's WeChat had 1.08 billion monthly active users as of the third quarter of 2018, while Alipay and its affiliates have more than 1 billion annual active users globally.<sup>8</sup> The volumes its systems handle are staggering; on China's Singles' Day shopping event last November alone, Alipay processed USD 30.8 billion in transactions, an increase of 27 percent compared to 2017.

Despite an increasing number of vendors and merchants now accepting Alipay and WeChat Pay in Hong Kong, the market remains fiercely competitive due to the high penetration of the Octopus card and credit cards in the city.

Where Alipay and WeChat Pay differ from many of their competitors is in their ability to seamlessly integrate and immerse their platforms into a number of daily activities such as shopping, booking travel and hotels, hailing rides, ordering food and scheduling doctors' appointments. It is this ability to meet consumer demands for greater speed, flexibility and personalisation that is seeing these technology players filling the customer experience gaps the traditional banks have left.

The data that travels with the payment is emerging as the true catalyst for an enhanced transaction experience. It is this crucial resource that the likes of Alibaba and Tencent are able to leverage – at an unparalleled scale and level of granularity – to build compelling services and stay ahead of the competition. China's consumers are also more prepared to entrust their information to tech companies than any other group of consumers worldwide, according to a recent KPMG report on global customer insights.<sup>9</sup>

Banks also have a wealth of payments data at their fingertips from cardholders. With the competition from technology players and other non-banks, we expect a greater focus on real-time predictive analytics by financial institutions to boost profitability and enhance the customer experience.

<sup>8</sup> Alibaba Group, [https://www.alibaba.com/en/news/press\\_pdf/p190130.pdf](https://www.alibaba.com/en/news/press_pdf/p190130.pdf)

<sup>9</sup> 'Me, my life, my wallet', KPMG International, November 2018, <https://home.kpmg/content/dam/kpmg/xx/pdf/2018/11/me-my-life-my-wallet.pdf>

## 5

## Less talk and more action on blockchain

In parallel to developments in cross-border payments systems such as SWIFT's gpi, we are also seeing the application of blockchain solutions in the payments space. We are now moving past the early buzz around blockchain and focusing on genuine applications of the technology. Last year's annual Sibos conference provided more evidence of mature distributed ledger technology (DLT) propositions. For example, the Australian Stock Exchange is moving closer to migrating equities settlement to a DLT solution, while Synechron showcased its KYC solution.

There have also been notable developments in Hong Kong. For example, Alipay and GCash launched a cross-border real-time remittance service between Hong Kong and the Philippines last year, which applies blockchain technology to streamline the remittance process.<sup>10</sup>

Blockchain is also being applied to trade finance, evidenced by the launch of eTradeConnect by the HKMA last October. The blockchain-based platform aims to improve trade efficiency, reduce risks and strengthen trust among trade participants. The HKMA has been actively looking for opportunities to connect eTradeConnect with trade platforms in other regions to facilitate cross-border trades. One such development is the signing of a Memorandum of Understanding between the operators of eTradeConnect and we.trade in Europe to conduct a proof of concept on connecting the two platforms.<sup>11</sup>

## 6

## Payments innovation is leading to enhanced cybersecurity, financial crime compliance

While faster payment systems and RTP are creating opportunities for financial institutions and their partners, there is also a growing threat of cyber-attacks, data breaches and fraudulent activity.

Data protection and privacy will continue to be at the centre of the technological evolution – including in payments – in the years to come. As companies invest in new technologies and innovate with new payment platforms, they must seek to strike the right balance between providing convenience to customers and safeguarding their data. Even technology considered to be very secure like blockchain may have inherent security-related weaknesses that could be exposed in the future. Regulators, providers and consumers must understand this.

In light of this, we are seeing some banks and payments providers partnering with security companies to find new ways to protect data and provide convenience to customers. For example, more organisations are using new technologies such as adaptive authentication, biometrics and mobile authentication, and employing tamper-proof methods to protect applications on the mobile devices themselves.

As the payments landscape evolves, so too must the sophistication of financial institutions' approach to managing anti-money laundering (AML) and other regulatory risk. Without simultaneous innovation in the detection of financial crime, it will become even more challenging for banks in Hong Kong to comply with AML regulation and sanctions regimes, especially as FPS continues to grow at a significant pace. We expect to see a continued focus on deep KYC functionality and dynamic real-time transaction monitoring systems, which will help financial institutions develop financial crime controls for better functioning sanctions screening systems, even in a real-time payments environment.

<sup>10</sup> Ant Financial, <https://www.antfin.com/newsDetail.html?id=5b30bc676fa27e09f91391f6>

<sup>11</sup> Hong Kong Monetary Authority, <https://www.hkma.gov.hk/eng/key-information/press-releases/2018/20181031-4.shtml>