

Norman T L Chan: A new era of smart banking

Opening keynote speech by Mr Norman T L Chan, Chief Executive of the Hong Kong Monetary Authority, at HKIB (The Hong Kong Institute of Bankers) Annual Banking Conference 2017, Hong Kong, 29 September 2017.

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Dr Patrick Fung, Ms Carrie Leung, Vice President Pan Guangwei, distinguished guests, ladies and gentlemen, good morning to all of you!

The theme of my speech is “A New Era of Smart Banking”, “**智慧銀行新紀元**” in Chinese. In the last few years, we have frequently come across two comments amongst the fintech community. The first comment is that Hong Kong is very backward in fintech, quoting mobile payment developments in Mainland China as the evidence. The second is that fintech will disrupt or displace traditional banking. I must say I don’t agree with these two comments for two main reasons.

First, Hong Kong has not been slow in developing and adopting fintech. It is not entirely appropriate to use mobile payment as the only benchmark for measuring the state of development in fintech. There are many other important aspects of developments that define the maturity of fintech developments, such as the use of digital or internet banking and the robustness of cybersecurity. Even in the field of mobile payments, we should appreciate that Hong Kong already has a well-developed electronic payment ecosystem. In 2015, each Hong Kong citizen had on average 2.6 credit cards, compared to 0.3 credit cards per person in Mainland China. And there are now some 1.7 million credit card transactions involving HK\$1.7 billion every day. It is also noteworthy that for a small city of just over seven million people, Hong Kong has around 34 million Octopus cards in circulation, with an average of 14 million transactions per day. This means on average each person in Hong Kong makes two transactions by Octopus cards daily. Anyway, there are many new developments in the mobile payment market since we granted 13 stored value facility (SVF) licences in 2016. Second, I believe it unlikely that fintech firms will displace or replace traditional banks because, in addition to speed and convenience, customers also need protection of their life savings or investments.

I have previously stated my view on the future landscape of banking and finance. I’ll say it again here. On the one hand, we will see more and more tech companies venturing into finance by riding on the highly successful and popular e-commerce, payment or social media platforms that they have developed. The paradigm of these newly emerged platforms is that it is highly “customer-centric”, meaning they design everything to provide what the customers want, taking care of many practical and life-style needs of customers. However, when it comes to finance, tech companies need to realise and accept that they have to earn the trust and confidence of customers if they wish to handle their savings and investments. On the other hand, banks need to appreciate and accept that they must revamp the way they offer financial services to their customers. It is true that, compared with unregulated entities, there is a high degree of public trust in banks, but customers now demand much faster and convenient services, not just in payments but also over a wide range of financial services, many of which are now made possible by the advancement in technology. Banks must become more “customer-centric” by offering highly personalised services to meet what the customers actually want rather than pushing out products or services that the firms think the customers should have.

So what does it mean on the ground? I believe that in a couple of years’ time, there will be a high degree of convergence in the way in which banks and tech firms conduct their businesses and compete in the arena of finance. This means that the landscape of banking and finance will undergo a profound change during this process of convergence between banking and technology. So how does Hong Kong move from here to there and what role will the HKMA, as

bank supervisor, play in preparing the banking sector for the change?

First of all, let's take stock of where we stand at present on electronic or digital banking. Hong Kong is the premier international financial centre in Asia, and has been at the forefront of smart banking in terms of digital or internet banking. We now have 12 million internet bank accounts and over HK\$7 trillion worth of banking transactions are conducted on the internet each month. By and large, banks in Hong Kong are offering safe and efficient banking services to customers, both through the conventional branches and through digital or internet banking. However, in view of the explosive advancement in technology in the last few years, we believe that conditions now exist for banking in Hong Kong to rise to the next higher level. I would highlight a couple of technological developments that form the building blocks for the new era of Smart Banking:

(a)	First is the substantial increase in mobile bandwidth and data speed. Mobile data speed has grown over 50 times since 2010, allowing massive volume of data transmission from the handheld devices to take place at high speed and low cost that were unthinkable previously.
(b)	Next comes the unprecedented growth in computing speed and storage capacity. This allows financial transactions to take place, be processed and stored in the digital form, again at very high speed and low cost.
(c)	The third development is the breakthrough in customer authentication and telecom security. New authentication technologies such as fingerprint, voice, and facial recognition have significantly increased the robustness and reliability in remote digital banking using smartphones or handheld devices.
(d)	And fourthly, there is the Open Application Programming Interface (API). The adoption of Open API has facilitated very rapid innovations that help provide personalised services and much better customer experience.

Recognising these technological innovations and rising aspirations of customers for more personalised and integrated services, Hong Kong must proactively embrace the trend and seize the opportunity to upgrade our banking system. To prepare us to move to the new Smart Banking era, I am pleased to announce that the HKMA will take the lead and launch the following seven initiatives:

(a)	full connectivity of digital retail payments through the Faster Payment System;
(b)	upgrading of our existing Fintech Supervisory Sandbox 1.0 to Version 2.0;
(c)	facilitating the introduction of virtual banking in Hong Kong;
(d)	a new Banking Made Easy initiative to reduce regulatory frictions and improve customer experience;
(e)	development of an Open API framework;
(f)	stepping up cross-border cooperation in fintech; and
(g)	enhancing research and talent development.

I will now explain these seven initiatives in turn.

(A) Full Connectivity of Digital Retail Payments through Faster Payment System

The centerpiece of an efficient retail payment system will be our Faster Payment System (FPS), scheduled for implementation in September 2018. FPS will provide the necessary infrastructure for full person-to-person and person-to-business connectivity not only amongst retail customers but also between businesses and between banks and non-bank payment service providers.

FPS operates 24 x 7, which means that users can initiate or receive a payment or fund transfer any time throughout the year. It will be very user-friendly as mobile phone numbers or email addresses can be used for receiving HKD or RMB funds.

Settlement between banks is real-time, and Hong Kong is one of the few jurisdictions achieving real-time settlement in a retail payment infrastructure. Both banks and SVFs can participate in FPS. This creates a retail payment ecosystem that facilitates money transfers among users of banks and SVFs. The full interconnectivity of all payment participants is, again, likely to be one of first in the world.

In addition to FPS, the HKMA is leading a working group to work on a common QR code standard for retail payments. A common QR code standard will facilitate merchants, especially SMEs, in using one single QR code to accept different payment schemes. This would certainly help promote the wider use of mobile retail payments in Hong Kong.

(B) *Supervisory Sandbox 2.0*

The HKMA will upgrade the existing Fintech Supervisory Sandbox to Sandbox 2.0. There will be three new features in this enhanced version. First, we will set up a Fintech Supervisory Chatroom that would engage the stakeholders at a much earlier stage of project development. The Chatroom will be manned by experts from our Fintech Facilitation Office and Banking Supervision Department. The Chatroom will provide speedy and timely feedback when new technology or solution is being contemplated, thereby reducing the risk of abortive work by the parties concerned and expediting the rollout of new fintech applications.

Second, tech firms may have direct access to the Sandbox. Tech firms may test out their innovation by seeking feedback from the Chatroom without necessarily going through a bank.

Third, we understand that our fellow regulators in Hong Kong, the Securities and Futures Commission (SFC) and the Insurance Authority (IA), will shortly be launching their own sandboxes. Following discussion among the HKMA, SFC and IA, we have agreed to link up the three sandboxes through a common interface so that there can be a single point of access by the stakeholders for fintech solutions covering more than one sector.

(C) *Facilitating Virtual Banking*

We believe that the time is ripe for Hong Kong to try out virtual banks. In some jurisdictions, it has proved to be technically feasible and commercially viable for virtual or branchless banks to operate. A virtual bank operates on a different model of service delivery and may help promote financial inclusion as they normally target small customers, be they individuals or SMEs. Our view is that the emergence of virtual banks in Hong Kong would also provide additional impetus to the application of fintech in Hong Kong and offer a new kind of customer experience in mobile and digital banking. Given the recent developments in fintech and the evolution of digital banking, we will shortly be consulting the industry and the fintech community on whether and if so how the Guide to Authorization of Virtual Banks promulgated in 2000 should be amended to suit the present day circumstances.

(D) *Banking Made Easy*

Another component of the new Smart Banking era is our “Banking Made Easy” initiative. We will set up a new task force within the HKMA and work with the banking industry to identify and, where appropriate, modify or streamline those regulatory requirements or processes that may hinder technological innovations. We will seek to clarify regulatory expectations, review our own guidance and rules to make them more user friendly, thereby facilitating innovations in products and services for better customer experience. Remote onboarding of customers and account maintenance are two such examples in which the use of new technology may lower operating costs and improve customer experience. We will also initiate legislative changes in our anti-money laundering laws and regulations so that a more risk-sensitive approach to remote customer onboarding can be undertaken. We and the Hong Kong Association of Banks are now studying how to use know-your-customer (KYC) utility to conduct customer due diligence processes more efficiently. The HKMA is also considering the introduction of multiple tiers of bank accounts so that the process required for opening accounts for the low risk banking services can be simplified. In addition to customer onboarding and account maintenance, Banking Made Easy would seek to facilitate the use of technology in the areas of online finance, online wealth management and robo advisers.

(E) *Open API*

The HKMA is currently consulting the banking industry to formulate a framework for facilitating the development of Open API. In the context of banks, Open API refers to a set of publicly available coding that enables recognised third-party service providers, with the consent of the customers

concerned where appropriate, to connect to, and conduct data exchange with, the IT systems of the banks. Open API can serve many purposes. For example, it may allow users of online discussion forums and social media platforms to obtain information about products and services of banks for comparison and analysis. Many lifestyle websites and mobile apps may make use of Open API to integrate banks' foreign exchange and payment services to offer end-to-end holiday or health-care packages. A bank customer may benefit from Open API by using third-party applications to consolidate for analysis purposes his cash flow and investments kept in several bank accounts. However, the key benefits of Open API can be reaped only if it is widely adopted in the banking sector. And this is precisely the reason why some jurisdictions are taking steps to encourage or, in the case of the EU including the UK, even mandate through legislation financial institutions to subscribe to Open API. We aim to finalise our policy on Open API for the banking sector around the end of the year. We believe that the wide adoption of an Open API framework would promote collaboration between banks and tech firms, a crucial element for stimulating innovations and improved services for customers in Hong Kong.

(F) *Cross-border Collaboration in Fintech*

As an international banking and funding centre, Hong Kong must promote the use of fintech in managing cross border financial flows. The HKMA is in close dialogue with several authorities in other jurisdictions to collaborate in this area. As the first step of strengthening our cooperation within the Guangdong-Hong Kong-Macao Bay Area, we are partnering with Shenzhen to promote fintech and talent developments. We are also discussing with other centres in the Bay Area to strengthen collaboration in fintech. More details will be announced later.

Separately, the HKMA is working with the banking industry to develop a Distributed Ledger Technology (DLT) platform for digital trade finance. We also hope to be able to announce soon the details of our collaboration with Singapore in linking up our respective trade platforms. This DLT initiative, if implemented, should bring significant benefits to financiers, importers and exporters by enhancing the transparency of cross-border trade finance processes, improving operational efficiency and reducing the risk of frauds.

(G) *Enhancing Research and Talent Development*

The HKMA, together with our anchor partners, Hong Kong Applied Science and Technology Research Institute, Science Park and Cyberport, will step up our already close collaboration in research and talent development. Of course, we will also make good use of our cooperation frameworks with authorities and partners in other jurisdictions to achieve a win-win outcome in this area.

Ladies and Gentlemen, the upgrading of our banking system to a new and higher level of Smart Banking is not just something nice to have. It is a must! To meet the rising aspirations and demands of customers, banking and technology must converge sooner rather than later. Unlike the social media world, which deals with messages and life style amenities, it is not enough for tech firms just to offer speed and convenience when it comes to banking and finance. Tech firms wishing to venture into finance must recognise and accept the need for regulation, which is essential in the provision of appropriate protection to consumers and investors. The element of trust cannot be earned by speed and convenience alone. For the banking industry, it is not realistic or sustainable to rest on the laurels of public trust they presently enjoy and refuse to adopt new technologies that can offer more efficient and personalised services demanded by the customers. In the new era of Smart Banking, the industry, the fintech community and the HKMA must work together to transform the financial ecosystem of Hong Kong. Smart Banking is a platform that offers full interconnectivity amongst retail and corporate customers and allows more personalised financial services and transactions to be undertaken with great mobility, speed, ease and safety! At the same time, under our risk-based supervisory regime, the right balance will need to be struck between promoting financial innovations on the one hand and

according appropriate customer and investor protection on the other.

In conclusion, it is not a question of whether the tech firms will disrupt the banks or the banks can resist the intrusion of tech firms. It is a question of whether we make the best out of banking and technology by marrying the two. The answer to this question is crystal clear to me. We must move into the new era of Smart Banking by embracing technology and safe banking. Indeed it is most encouraging to see many banks in Hong Kong are already taking the initiative to ride on the wave and making impressive progress in this direction. Ladies and gentlemen, I feel very excited by the prospects that lie ahead because Hong Kong, by virtue of its status as an IFC and technology hub in Asia, is uniquely well positioned to advance and excel.

Thank you very much.