

Eddie Yue: Join us and be part of the change

Keynote speech by Mr Eddie Yue, Chief Executive of the Hong Kong Monetary Authority, at Hong Kong Fintech Week 2019, Hong Kong, 6 November 2019.

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1. Good morning everyone, a very warm welcome to the Hong Kong Fintech Week. For those of you visiting from outside Hong Kong – a special welcome to our city.
2. This is the fourth year we are hosting Fintech Week. I guess many of you were at previous ones. If you came to the first in 2016, you might have noticed how this event has evolved in just a few years.
3. Back then, the HKMA had just set up the Fintech Facilitation Office, or FFO. We hosted the first Hong Kong Fintech Week – basically as an “experiment” – at the relaxing PMQ heritage site in Central. We weren’t sure at that time whether people like you would be interested in coming along! Frankly, there wasn’t much talk about Fintech in Hong Kong at that time. Certain people in the industry did tell us, to our faces, that the HKMA was a big hindrance to Fintech development because our regulatory approach was too conservative!
4. But that’s fine! We always value your feedback.
5. That Fintech Week three years ago turned out to be a great first step. It genuinely started a dynamic and constructive dialogue between everyone involved in Fintech development in our region. This event now brings together tech companies, banks, venture investors and regulators. The response from the industry gave us the confidence to move to a much bigger venue – the Hong Kong Convention and Exhibition Centre – in 2017. The following year, we used an even bigger venue there. And this year, we have outgrown the Convention and Exhibition Centre and moved here, to the Asia World Expo.
6. I’m really very encouraged by the impressive turnout of thousands of visitors from 60 economies at this year’s Fintech Week, despite what has been going on in Hong Kong in the last few months.
7. So we move to a bigger venue every year. And that’s because this industry is moving on to bigger ideas. Working together, all of us in this hall today are imagining and creating new services for consumers and businesses. And we are jointly creating a more vibrant Fintech ecosystem for Hong Kong.
8. We have achieved quite a lot together in Hong Kong in these three short years: the launch of the Faster Payment System (FPS); the granting of eight virtual bank licences; the adoption of the open API framework by the banks; and the creation of a blockchain-based trade finance platform. These are major milestones so far on our Fintech journey. And this is just the start. I am sure you are as confident as I am that more exciting things lie ahead.
9. Having come this far, this is a good time to ask some questions. Are we headed in the right direction? Have we made any wrong turns – and what have we learned from them? This is a new journey for everyone, and after riding on this super highway for the last few years, I have three reflections that I would like to share with you.

Technology adoption is a bumpy road

10. First, we must bear in mind that **technology adoption is a bumpy road**. It is definitely not a smooth and straight path. To innovate, we have to do things that others have not done before – or have attempted, but failed at. We have to go through processes of trial and error, and make adjustments along the way. We might run into dead ends at times, because some really exciting ideas may simply be unfeasible. We might run into problems even when adopting mature technologies, whether from a programme glitch or a clash with established work processes.

11. This is certainly our experience. Soon after the launch of the FPS in September last year, we started to see a few fraud cases coming in. These have nothing to do with the security design of the FPS itself – it's about creative fraudsters exploiting the speed and convenience of the system. They stole money from bank accounts using fake e-wallets opened with stolen identity documents of victims. So we had to take immediate action to stop certain FPS functions, to allow time for the e-wallet operators and banks to enhance their security measures.
12. This was a setback to a new system trying to gain acceptance and trust from the public – and this unpleasant surprise came along. But thanks to the cooperation of banks and e-wallet operators, we found the cause of the problem quickly and fixed it. We also communicated with the public – quickly and openly – in order to rebuild confidence in the FPS.
13. Understandably, this led to a brief drop in FPS usage when the news first came out. But thanks to the quick fix and transparent communication, we saw customer confidence bouncing back quickly and strongly. Since then, we have seen strong growth in the number of FPS registrations. Right now, there are over 3.6 million registrations out of a population of just over 7 million. The penetration rate of our FPS is likely among the highest in the world. Transaction volume has been growing by nearly 10% per month, and last month there was an average of more than 140,000 transactions per day.
14. In all fields of innovation, many good ideas do not catch on at first. This is going to be the case with Fintech. Experience tells us that every good technological innovation needs good, and probably flexible, execution in order to win trust and acceptance.

Importance of a change agent

15. This brings me to my second point, which is **change management**. When we look at successful examples of technology adoption, it's not just about state-of-the-art technology. It's about how you manage the change – especially changes to mindsets. It takes time and effort to convince people that a new technology is worth the cost, the effort or the potential risk.
16. This is often the case with larger organisations, especially official institutions like the HKMA. We set up the FFO in early 2016 precisely to serve as a dedicated agent to drive changes and take practical steps to turn ideas into reality.
17. The FFO has contributed to a number of Fintech initiatives in the past three years – from cybersecurity to supervisory sandbox, open API, the FPS, and the rest of the seven Smart Banking initiatives. But I must stress that the FFO is not working in isolation. Other parts of the HKMA must work alongside it, and of course it must work with the banking, technology and even legal sectors.
18. The FFO has essentially served as the coordination point of this collective effort. This has enabled a “change” mindset to spread throughout our organisation and among our partners. And the result is the impressive Fintech developments we have seen in the last few years.
19. A change agent does not have to come from within. Sometimes, competition is an effective driver for innovation. One good example is the imminent entry of virtual banks in Hong Kong. As virtual banks are not allowed to operate physical branches, they will have to come up with innovative ways to offer attractive and competitive banking services. This is likely to force existing banks to consider how to further upgrade their services, and better make use of technology in their offerings. The result, I hope, will be a more innovative and globally competitive banking sector in Hong Kong, offering customers more diversified and efficient services.

Technology use is a means to an end

20. Last but not least, we should bear in mind that **the use of technology is a means to an**

end, and not an end by itself. Most people appreciate new technology for what it can do to improve their lives. They don't really care whether the algorithms or the chips are amazingly innovative. To achieve wide adoption, any innovation has to offer users a "unique value proposition". In plain language, the consumer wants to know "what can it do for me?"

21. Take mobile payment as an example. This has rapidly taken off for retail payment in Mainland China and some other places. In Hong Kong and other markets, people already use credit cards and e-payment systems like Octopus, so mobile payments will grow more slowly. The point is that mobile payment technology is only the means to an end. The Hong Kong consumer will ask: "what can it do for me?". Mobile payment operators will need to give them an answer to that question – in addition to what current payment means like Octopus can do, are they adding further value through new services like cross-border remittances or enhancing customer value through loyalty programmes.

Looking ahead

22. I hope you can see that we have moved ahead since three years ago, when some of you were telling us that the HKMA was a big hindrance to Fintech development. I am happy to say that the HKMA is widely recognised locally and internationally for our proactive stance in Fintech adoption. More importantly, Hong Kong is recognised for its much more mature Fintech ecosystem, thanks to the adoption of technologies by banks, asset managers, insurers and other financial institutions here. So, what's next?
23. To the general public, Fintech has already brought significant changes to payments, banking and financial management. These new products and services will continue to improve and evolve. At the same time, technology adoption by financial institutions and regulators is likely going to bring another wave of changes. At first, this will probably be about efficiency gains in their internal operations. But in the long-run it may lead to profound changes in the way they do business. For us at the HKMA, this raises important questions about balancing risks and rewards.
24. One example is the greater use of artificial intelligence (AI) in areas like credit assessment or transaction monitoring. This can offer improved efficiency and accuracy. But we have to ask what sort of operational risks might be involved. What sort of governance framework will banks need to ensure proper accountability? Could it lead to new ethical or other issues? For example, could the use of AI in credit scoring result in unfair treatment for certain groups of customers? Will AI output require additional "human" perceptive oversight?
25. To help banks, the HKMA recently issued two circulars, one on high-level risk management principles on the use of AI, and the other on the related consumer protection issues. We tried not to make these overly prescriptive, as this is a new area. The fact is that banks and ourselves are learning together. We all still need to explore exactly how technology should be implemented and overseen in practice.
26. The HKMA is conducting research in AI applications to help everyone. We are publishing some results today, in the form of an information sheet of facts and figures from an industry-wide survey. One key finding is that almost 90% of our retail banks have already implemented, or are planning to implement, AI in their business applications. We will publish a series of reports in the coming months to provide more insights into the application of AI in the financial services industry.
27. We also want to work more with banks and the technology sector on developing regulatory technology, or RegTech. We all know that data analytics and machine learning can help the industry perform compliance work more accurately and more cost-effectively. As a start, the HKMA will organise an "AML RegTech Forum" later this month to bring together the banking industry, technology firms and other experts to explore technological collaboration on AML/CFT issues. We hope this will give everyone more understanding of the critical pain points in banks' AML/CFT work.

28. Meanwhile, the HKMA has embarked on its own digitalisation programme. This cuts across multiple functions, including banking supervision, anti-money laundering, financial stability surveillance, research and investment.
29. Where supervision is concerned, we have started a pilot to collect more granular data from banks. Such data will enable us to have a fuller and more up-to-date picture of banks' business. The upshot for banks is that in time, this could have the potential of replacing many template-based regulatory reports and lessening the reporting burden on banks.
30. The HKMA's digitalisation programme is a multi-year project that will fundamentally overhaul our IT and data infrastructure. We are working closely with technology consultants and service providers to explore new technologies, including Supervisory Technology, or SupTech.
31. In the background, we have strong support for innovation from the Hong Kong Government. The Government plans to roll out its electronic ID initiative, "iAM Smart", in the fourth quarter of next year. Registered Hong Kong citizens will be able to use this service to authenticate their identity using their own mobile phone. And many financial institutions have already expressed strong interest in this for customer authentication for accessing financial services.
32. The Government has launched a variety of technology initiatives. It set up a HK\$2 billion dedicated Innovation and Technology Venture Fund. It injected HK\$20 billion into the Research Endowment Fund of the Research Grants Council. And it is funding the Hong Kong|Shenzhen Innovation and Technology Park, which will enable Hong Kong to tap the supply chain capabilities and talent pool across the border.
33. The administration has boosted incentives for the Fintech industry by increasing the tax deduction for R&D expenditure. And government support has also helped seven local universities launch Fintech undergraduate and postgraduate programmes.
34. In particular, I would like to mention that in collaboration with the HKMA, the Hong Kong Science and Technology Parks will set up a new Fin+Tech platform to organise accelerator programmes and hackathons. There will also be a new Innovation Hub at the government-funded InnoCentre, where the HKMA will host its latest proof-of-concept studies. These two initiatives will provide open platforms for different stakeholders to collaborate on Fintech development.

Bracing for New Trends

35. I hope I have outlined what all of us in different sectors in Hong Kong have achieved in developing Fintech in Hong Kong, under the joint effort as "Hong Kong Inc.". I would like to wrap it up with you some thoughts about three macro trends that I believe will influence the future of Fintech.
36. First, financial services will increasingly integrate with social platforms and other lifestyle channels. In the past 10 years, customers have become accustomed to accessing financial services through websites or mobile apps of banks and other institutions. In future, instead of waiting for customers to come to their platforms, institutions must reach out to customers in cyberspace. The technologies are there, such as open APIs. But as I mentioned before, the technology has to be a means to an end that the consumer finds useful. And of course it must be secure and stable.
37. The second trend is that financial services will become increasingly real-time. Gone are the days when we were able to handle everything with batch mode operations. Customers are already expecting real-time execution in payment services, remittances, investment advice, and insurance applications – and this list will grow. This will require not only faster data connections or more computing power, but a whole range of new processes for assessment, risk controls and regulatory compliance. As banks upgrade their analytics and procedures to provide speedier customer services, regulators like the HKMA will need to

work with them to adopt new SupTech and RegTech solutions to better meet these new challenges.

38. The third trend is the rising importance of cross-border applications of Fintech solutions. Technology offers ways to overcome some of the long-standing inefficiencies in financial services, like cross-border payments or trade finance. The use of blockchain technologies comes to mind. We have conducted pilot schemes with our peers in the region to try out blockchain solutions. For example, we have started a joint research project with the Bank of Thailand on implementing central bank digital currency in cross-border payments. We have also completed a proof-of-concept test with the we.trade platform to connect the digital trade finance platforms of Hong Kong and Europe. So far, it looks quite promising, and we have engaged Mainland China and Singapore on similar connections.
39. A lot of future Fintech development will involve cross-border collaboration. In recognition of this, the Bank for International Settlements (BIS) decided to establish an Innovation Hub to explore macro issues that cut across jurisdictions. And I am delighted to say that the first Innovation Hub Centre of the BIS has recently commenced its operation here in Hong Kong, and we look forward to close collaboration with the hub.

Concluding Remarks

40. Fintech in Hong Kong has come a long way since we first held this event in 2016. Many of you here have contributed to this progress. We now all look forward to building on our experience with exciting new initiatives and trends. The Government, the financial regulators and the industry bodies all recognise that we need a holistic “Hong Kong Inc.” approach in developing Fintech. This will be about making the most of synergy and collaboration to drive the Hong Kong platform forward.
41. As we continue this journey, we need your participation. Whether you are a technology service provider, a technology user in a financial institution, or an investor who funds these Fintech innovations, we invite you all to join us. This is going to be an exciting transformation, and we intend to make sure Hong Kong is at the leading edge of it.
42. Join us and be part of the change!