

Consultation Paper on Open API  
Framework for the Hong Kong  
Banking Sector  
– FTAHK response, March 2018



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The FinTech Association of Hong Kong (FTAHK) is a **member-driven, independent, not-for-profit, and diverse** organisation that is the voice of the FinTech community in Hong Kong. It is organised and led by the community, for the community through a series of committees.

Our objective is to promote Advocacy, Collaboration and Education in the wider FinTech ecosystem.

**Build the community.**

**Be the connector.**

## FOREWORD

### **FTAHK welcomes the HKMA's consultation on an Open API Framework for the Hong Kong Banking Sector.**

The FinTech Association of Hong Kong ("FTAHK") welcomes the Hong Kong Monetary Authority's ("HKMA"'s) New Era of Smart Banking initiative, including the consultation on an Open API Framework for the Hong Kong Banking Sector published in January 2018.

The HKMA plans to implement multiple initiatives to support innovation in the banking sector and embrace the opportunities brought about by the convergence of financial services and technology. This memo focuses on the proposals for an Open Application Programming Interfaces (Open APIs) Framework for the retail<sup>1</sup> banking sector. As the HKMA has highlighted, Open APIs are an essential technology component of how modern digitally-enabled businesses operate. There are special considerations for their wide-spread adoption in the banking sector.

## FTAHK OBSERVATIONS

The following have been prepared in consultation with members representing a broad range of experience from fintech start-ups to established banks.

The observations will cover:

1. General Observations on Open APIs for the Banking Sector in Hong Kong
2. Specific comments to the questions raised in the HKMA's Consultation Paper

## SECTION 1: GENERAL OBSERVATIONS ON OPEN APIS FOR THE BANKING SECTOR IN HONG KONG

### 1.1 EASE OF DOING DIGITAL BUSINESS

Hong Kong SAR's success has been built on the physical meeting and co-location of manufacturers, traders, entrepreneurs and financiers collaborating and competing in a close-knit environment. The territory has long prided itself on the ease of doing business and in the last decade has not been outside the top 5 globally<sup>2</sup>. Open APIs are the modern enabler of the ease of doing digital business and can facilitate rapid innovation, collaboration and competition. These will enable innovations and improvements in existing services for Hong Kong's retail banking sector.

### 1.2 OPEN APIS ENABLING CO-OPETITION

Banking is an industry that has succeeded from cooperation between competitors (co-opetition), for example domestic and global payment schemes.

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<sup>1</sup> HKMA Consultation Paper - Scope - paragraph 42

<sup>2</sup> <https://tradingeconomics.com/hong-kong/ease-of-doing-business>

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This model has enabled rapid expansion of accessible services (for approved eligible parties) built on cost efficient, effective, robust and secure infrastructure.

The most familiar examples are the payment card schemes, whether international (e.g. UnionPay, Visa, MasterCard) or domestic (e.g. EPSCO, JetCo). Eligible parties may become an issuer of cards and/or an acquirer of merchants based on a standard set of collaborative business practices and technology specifications (cooperation). However at the same time as cooperating these parties compete aggressively for customers and can innovate on the offerings, pricing, and other features provided the inter-operability standards and operating rules are followed.

Open APIs are the modern, online equivalent of this co-opetition approach. An API is a standard technical means for the digital part of businesses to connect and operate safely and securely. APIs are already widely used by banks and their service providers either within or between proprietary systems. The 'Open'-ness is a business enabling self-service approach where parties can complete the process of investigating, experimenting, being vetted, contracting, testing and launching, all whilst operating online, remotely and without physically meeting or exchanging paper documents.

In simple terms Open APIs extend previously proprietary digital experiences (e.g. a bank's mobile app or internet banking, all within the bank's environment or 'on-us' from the bank's perspective) to a third party digital experience (off-us from the bank's perspective). Checking an account balance through a messaging app or as part of a shopping experience would be good examples of what might be called 'Banking-As-A-Service' – 'BaaS'.

### 1.3 GOVERNANCE IS IMPORTANT

Whilst Open APIs allow for greater innovation of products and services, special attention should be given to the formation of appropriate governance frameworks that allow trust to be maintained and liability / penalties to be properly attributed and enforced if something goes wrong. Examples include, but are not limited to, cases of fraud, misuse or theft of data.

Existing financial regulatory frameworks may not cover the protections required for access to and the sharing of personalised banking data, without a transaction of some kind (whether deposit, payment or lending). This is an area being addressed in other markets, particularly the EU and the UK. In common with successful co-opetition schemes, there are both speed to market and economic benefits of an industry-led initiative and a central party responsible for establishing and maintaining common criteria to reduce the complexity, time and costs of a network of bilaterals.

The payment card industry offers an existing working model that already addresses many of the issues surrounding the access, usage and storage of sensitive data via the PCI DSS framework (an accreditation framework supported by a liability framework) as well as clear processes for managing liability under the four party model. A similar approach may be effective at managing these risks in an Open API economy.

### 1.4 GOVERNMENT OPEN APIS ENABLING NEW ERA SMART BANKS

Banks and financial institutions are themselves dependent on other parties, including Hong Kong Government departments such as Immigration, Inland Revenue, Company Registry etc. to conduct a number of risk management, regulatory reporting and compliance checks.

A consolidated effort from the Government's other public services to provide Open APIs (safely and securely) to banks and financial institutions will enable important opportunities, such as those within the 'banking made easy' initiative, and enable financial services innovations to develop.

### **1.5 SUSTAINABILITY AND SCALABILITY OF OPEN APIS DEPEND ON FIT-FOR-PURPOSE COMMERCIALS**

The opportunities the HKMA has highlighted from the convergence of banking and technology, also present a number of new or expanded challenges for banks to manage in their role of protecting the customer and maintaining confidence in a robust and reliable retail financial system.

Banking systems have developed, over a number of decades, in response to gradually increasing remote electronic / digital interactions but are constrained by their legacy core systems and infrastructure.

In contrast, new digitally-native businesses are architected to scale rapidly and seamlessly – increasingly utilising flexible, virtual computing from 'cloud' providers. These businesses have also achieved unprecedented levels of frequent interaction and growth of customers, particularly the mass market digital platforms.

Opening an API from a traditionally architected bank to a modern digitally-scaled business (WeChat or Facebook Messenger for instance) could rapidly and suddenly increase the load on these 'legacy' systems, which without investment in scalable infrastructure would be unlikely to operate with the required robustness and resilience.

A sustainable commercial pricing and operating model for Open APIs is necessary to support sufficient investment in scaling and availability. Open APIs support scalable, sustainable commercial models (e.g. paid-for Amazon web services) and are very different from open source (which are freely available non-commercial collaborations).

A phased approach to providing APIs, as suggested by the HKMA<sup>3</sup>, permits industry-led structuring and refinement of the commercial models over time. The approach developed by payment schemes in support of co-opetition is a useful reference. These are designed to reflect the long term sustainable investment and costs of operations for all parties as well as incentives at times of infrastructure change (migration to chip cards for instance).

### **1.6 CUSTOMER EDUCATION AND PROTECTION**

Customers will need support and education in order to make an informed decision to grant access to their banking data (e.g. balance, transaction history) or the capability to originate online transactions direct to a bank account.

Education and clear explanation of the risks, rights and obligations will be important to avoid unintended exposure of personal information or malicious targeting (for identity theft or payment fraud). Transparency of the cost, even if this is not monetary, of modern digital businesses 'monetising' a consumer's data should be an area of focus. Bank customers currently trust financial services companies to protect their data. In this sense banks are one of the few remaining protected domains from data-driven digital advertising businesses, such as Facebook and Google.

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<sup>3</sup> HKMA Consultation Paper – Phased Approach, paragraph 52

The design of any framework, therefore, should take into account the controls that the customer would need in order to effectively give consent for third parties to access their data, and importantly, the tools to restrict, manage or revoke that consent. The customer should remain in control of their data.

### 1.7 LOGICAL SEQUENCE OF 'OPENING' OF OPEN APIS

A phased approach for opening APIs as the HKMA proposes, logically starts with low risk publically available information (e.g. ATM or Branch locations), product feature and fee formation.

This allows preparation of the complexities of the next stage of customers' confidential but 'low risk' services such as balance and transaction history enquiry.

The final stage<sup>4</sup> of Open APIs will be the distribution of 'high-risk' transactions (originating direct to account debits to third parties). This will require further preparation, especially with respect to customer protection, liabilities and dispute resolution. For example, it should be clear which parties are regulated within a multi-party complex chain of access/process/present.

A key aspect of co-opetition is to establish 'the line' above which parties fiercely compete and below which they cooperate and collaborate. The 'below the line' collaboration ensures interoperability, maintains trust and confidence in a secure, robust and reliable system. The banking industry has a history of an emerging commonality, at a technical and operational level, quickly becoming a de-facto standard that increases utility, reduces costs and ensures minimum standards of security, integrity and efficiency.

### 1.8 SUMMARY OF GENERAL OBSERVATIONS

Open APIs are an essential technology component of how modern software enabled businesses operate and there are special considerations for their wide-spread adoption in the banking sector.

The co-opetition model adopted by banking and payments industries is a notable example where customers have benefited from fierce competition 'above the line' and collaboration and cooperation 'below the line' to maintain confidence in a robust and reliable financial system.

Sustainable commercial models and customer education will be as important as the number of the technical considerations that seek to maximise innovation and benefits for consumers and businesses through Open APIs from not only regulated entities, but also new and existing businesses and the Government itself.

The Board and members of the FinTech Association of Hong Kong (FTAHK) welcomes HKMA's formulation of a policy on Open APIs for the banking sector within its New Era of Smart Banking initiatives and encourages Hong Kong in its aspiration to rank as one of the world's easiest locations for doing digital business.

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<sup>4</sup> HKMA Consultation Paper – Phased Approach Stage 4 – paragraph 52

## SECTION 2: SPECIFIC OBSERVATIONS ON CONSULTATION PAPER REQUESTS FOR COMMENT

### PARAGRAPH 59 – PROPOSED TIMELINES

Further consideration of both the proposed scope (see comments below relating to paragraph 70 and Annex A) and the appropriate timeline appears to be required to reflect very recent learnings from the UK (background is paragraph 29) which, despite many years of preparation and investment into both PSD2 and Open Banking, has not achieved the desired deadlines for 7 of the 9 major banks. The impact on the launch of new services by FinTech start-ups (such as Challenger Banks) in the UK is potentially significant especially if these start-ups are cashflow negative.

Hong Kong will have a higher likelihood of success if the scope is focussed and staggered, with timelines developed based on the feedback from the banks, taking into consideration the budget cycles, other priority initiatives including those required or proposed by the HKMA.

Adopting lean start-up practices (which the HKMA has detailed in the guiding principles in paragraphs 44 & 45) would conduct research with the aim of focusing on a very small number of frequently used services that are most valuable to retail customers, for example personal loans or credit card product information, followed by deposit account information. Complex and infrequently used information, such as investment funds, maybe considered by the appropriate regulator after research of its customers.

### PARAGRAPH 64 – LOCAL STANDARDS

The recognition of the challenges of a specific local standard and its inappropriateness for regional/global digital, FinTech firms and banks is supported.

### PARAGRAPH 70 – SCOPE

The Open API Framework is recommended to focus on basic everyday banking information and services in order to achieve the highest likelihood of timely and successful implementation. As indicated above, the guiding principles in paragraphs 44 and 45 are supported as these are the principles followed by both banks and FinTech start-ups that form the membership of FTAHK.

### PARAGRAPH 76 – INDUSTRY LED STANDARDS REFERENCING BEST PRACTICE

A common baseline of best practice and standards is considered to be better developed by, as the HKMA suggests in paragraph 88, an industry body, such as the suggested working group set-up under the Hong Kong Association of Banks, with the addition of representative experts from the FinTech community. Reference to maturing regional (UK and EU) or international standards is strongly supported rather than specifying a standard (OFX) at such an early stage.

### **PARAGRAPH 78 – TSP COMMON BASELINES**

Development of common baselines, even if non-binding, is supported to avoid the delays and inefficiencies of bespoke bilateral commercial and technical agreements. The HKMA suggestion of a HKAB industry led working sub-group (as proposed in paragraph 88) with representatives from FinTech sectors, would appear to be the most appropriate party to progress the establishment of the common baselines.

### **PARAGRAPH 84 – INDUSTRY LED COMMON BASELINE CRITERIA**

A common baseline of best practice and standards is considered to be better developed by an industry body, such as the suggested working group set-up under the Hong Kong Association of Banks (as proposed in paragraph 88). However FTAHK consider that there is also a need for representative experts from the wider FinTech community. Reference to maturing regional (UK and EU) or international standards is strongly supported rather than specifying standards at this stage.

### **PARAGRAPH 85.1 – PROMOTION AND DIRECTORY OF OPEN APIS**

The ease of discovery of Open APIs should be the decision of the industry-led working group and reflect the expected locations of such information (following the UK example, both a new location as well as each of the participating banks). It appears premature to propose a site unassociated with the banking sector for such a role.

### **PARAGRAPH 88 – EXTENDING HKAB WORKING GROUP INVITATIONS TO REPRESENTATIVE FINTECHS**

As noted in the comments related to paragraphs 76 and 84, the suggested HKAB working group is supported as a representative industry body provided invitations are extended to gain from the knowledge and perspective of representative FinTechs, who a key customer stakeholder group.

### **ANNEX A**

The selection of a small number of frequently-used retail banking services based on their potential benefits (see Paragraphs 42 Scope & 44 & 45 Guiding Principles) does not appear to have been reflected in Annex A's list of Open API functions. The UK's Open Banking initiative has, despite restricting selected services and with years of preparation, only launched with 2 of the 9 major banks within its expected timeframe.

The inclusion of services outside of the HKMA's regulatory regime (such as Investments and Insurance) should be out of scope given the complexities, especially in relation to investments.

### **CONCLUSION**

The FTAHK thanks the HKMA for inviting broad and representative participation and looks forward to continued involvement in shaping the future of our collective banking and wider financial services industry.

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