FINTECH ASSOCIATION OF HONG KONG

Opening Banking: Time to Accelerate

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A.FOREWORD

Open-banking models have the potential to make financial services more competitive, innovative, and more accessible to consumers and small businesses. They also can empower customers by giving them control over when, how, and why their data is shared. This control helps ensure users receive better financial services and products.

To that end, the Hong Kong Monetary Authority has included open banking as part of its Fintech Roadmap 2025, and it has made important updates to the regime it is attempting to foster.

The HKMA seeks to rely on market forces rather than overly prescriptive regulation to support an open-banking regime. Regulation-driven attempts at open banking in other markets have mixed success. A market-driven process is in keeping with Hong Kong's market practice and economic traditions.
There are drawbacks to this approach, however, in particular the lack of universal standards for applied programming interfaces (APIs), the software that connects applications and enables real-time transfer of data.

These limitations are impacting the pace and cadence of introducing an open-banking regime in Hong Kong. This uneven pace will impact the utility of open banking, because it allows for incomplete data sets or inconsistent parameters, which in turn limit the immediate use cases available to banks. This in turn can lead to skepticism among financial institutions that open banking will deliver them benefits commensurate with the resources it requires.

This paper sets out FTAHK's observations and offers recommendations to regulators, fintechs, and banks to ensure the final stages of introducing an open-banking framework results in benefits for the industry and for users.

B. WHAT IS OPEN BANKING

Open banking is a system allowing financial data to be shared between banks and third-party service providers (TSPs) through APIs (application programming interfaces) based on customer consent.

Traditionally, banks have kept customer financial data to themselves. This business model may be described as 'closed loop', in which data only circulates in a controlled internal environment. They regard this data as a proprietary asset that enhances their competitive offering. They are also obliged to protect data. Over the past decade, banks and fintechs have developed screen scraping techniques to aggregate customer information across accounts and institutions. Even with permissions, screen scraping was inefficient, time consuming, and could only capture occasional snapshots from websites.

Open banking uses APIs to establish a continuous, real-time flow of data as permissioned by the customer. This is a step improvement on screen scraping, and opens new possibilities. In theory, open banking enables the creation of new or more customizable financial products and services, thus promoting more competition among financial services providers. Open banking is also meant to give banks new models of customer acquisition.

Transparency is at the heart of such 'open loop' systems: both in terms of providing better visibility to customers regarding their financial situation, and in terms of their control over their data.

Open banking comes with risks, however. Sharing data, particularly sensitive customer information, opens it to new vulnerabilities to cyberattack or breaches of privacy. There are also risks of a customer base that is poorly informed about open banking. This can lead to people being exploited for their data if they have not understood the underlying terms for sharing it. Conversely lack of awareness or understanding can lead to customers refusing to share their data. The third risk is that banks and fintechs do not profit from open banking, thereby limiting their willingness to promulgate use cases.

A healthy open-banking ecosystem therefore requires two things. First, it needs use cases for data sharing that benefit users and banks. Second, it requires a proactive and healthy ecosystem of participants advancing open-banking norms, including regulators, banks, TSPs, and customers.

C. OPEN BANKING SO FAR

Governments and regulators around the world have taken different approaches to open banking. Some, such as Hong Kong, the United Kingdom, the European Union, and Australia, are driven by regulation. Others leave it to market forces, including the United States and much of Southeast Asia.

An important distinction among regulation-first regimes is the original motivation behind them. In the EU and UK, open banking began as a competition policy, to introduce new competitive pressures in banking and finance. This has the effect of blurring the lines between finance and non-financial activities, so it has led authorities to address data regulation.

The EU's GDPR is considered a bellwether in data protection. However, it was developed independently of the EU's Payments Services Directive; an updated version of this, PSD2, came into effect in 2019 to promote data sharing in the context of facilitating transactions.
Australia enacted open-banking provisions that led with data regulation. Its Consumer Data Right Act allows consumers to share their data with any authorized entity. While this began with financial institutions, it can extend to energy, telecommunications, and other sectors.
In both cases, the issue of reciprocity has become important: a bank that is told by its customer to share their data with a third party, such as a technology company, can expect to receive data in return.

The UK's open banking regime is the most prescriptive, setting out an eligibility process for TSPs and mandating standardized APIs. It is the oldest such program, launched in 2017. The results have been poor: only about 10 percent of UK consumers participate in the scheme. Capital requirements make it difficult for challenger banks to participate. Banks complain of the high cost of API connectivity and maintenance. Fintechs complain that the lack of users makes it impossible to roll out new services. Consumers are confused about the value of open-banking services versus the experience of permissioning their data to be shared.

Hong Kong's open-banking regime has sought to avoid the negative outcomes of overly prescriptive regulation. Its motivation is based on financial inclusion, and a strategy to ensure the territory's banking sector is digitally enabled and globally competitive. This makes Hong Kong's experience distinct, with its own set of advantages and challenges.

D. The HKMA's Blueprint

The Hong Kong Monetary Authority introduced its Open API Framework in 2018. This laid out a Four Phase timetable, which by now is mostly completed. Banks have developed the API functionality to share product information, to onboard customers, share account information, and to transact payments via FPS.
The framework was introduced as part of a broader fintech agenda, which included the creation of the Faster Payments System and the licensing of virtual banks.At the time, the HKMA envisaged use cases including personal or business financial management, know-your-customer (KYC) and authentication, enhanced credit profiles, and e-commerce payments.

Although the HKMA provided guidance regarding API standards (called the common baseline), the specifics were left to banks and fintechs to work out. One crucial aspect left to the market was how to assess and approve TSPs.
Facing potential legal and regulatory liability and reputational risk should a data breach occur, banks were cautious and lacked consensus on how to assess TSPs; fintechs complained banks were dragging their feet on opening APIs, and banks complained that fintechs failed to present them with compelling business cases.
The Covid pandemic further dampened activity in advancing the Open API Framework. Some of this was due to the overall negative affect of the pandemic on business. But the HKMA also adjusted its fintech agenda. For example, in 2021 it said it would build the Commercial Data Interchange, a repository for government data that banks and businesses can access for facilitating loans.

This year, however, the HKMA has affirmed its desire to see open banking implemented, but with some important twists. Earlier this year, HKMA informed banks that it wished to see them pilot use cases for SMEs using account information by October. It subsequently mandated banks to be ready to do the same for consumers by the end of this year. On the other hand, HKMA also decided to remove KYC as an open-banking use case. It judged that after the Covid lockdowns, banks were already capable of performing KYC for remote customer applications.

The most important development has been the HKMA's creating a banks-only taskforce to accelerate the adoption of open APIs: the Interbank Account Data Sharing (IADS) Initiative. Announced in August 2023, IADS is meant to enable customers to share deposit- and savings-account information with other participating banks.
IADS is designed to ensure banks meet the end-2023 deadlines for a basic level of sharing account data. It was conceived by the Fintech Facilitation Office of the HKMA, with the understanding that, in the absence of mandated standards or procedures, at least IADS members are all regulated the same, and so they can devise ways for data sharing, consent management and customer onboarding.

This remains, however, different from a mandated approach. The successful implementation of an open-banking system depends on participants' willingness to support it, and the extent to which they are incentivized to do so. It will still be left to banks to express how they aggregate and deliver third-party customer data. Banks will still be liable for data breaches or other mishaps. Banks remain loathe to open their databanks if they don't perceive a commercial benefit.
The biggest immediate challenge, however, is the cost and pace of implementing open APIs.

E. IMPLEMENTATION CHALLENGES

There are two big challenges that banks now face with implementing open APIs: institutional constraints and consent management.
Banks are complex institutions. They set IT budgets based on internal rhythms or cycles that may not sync with implementation deadlines mandated by regulators. A related issue is conflation of client segments. The HKMA envisages open banking will apply to consumers and to businesses (both corporations and small- and medium-sized businesses). However, these client segments are served by separate business units within banking groups, which have their own budgets and business priorities that may not align with open-banking requirements and timelines.

Specific to the Open API Framework, the hardest part for banks to implement is consent management for SMEs. This is important because SMEs or other proprietary businesses and partnerships comprise 98 percent of employers in Hong Kong.
A small business may have multiple proprietors, each with his or her own personal bank account. When a small business wishes to open a business bank account or apply for a financial product such as a loan, the business bank will want to review the proprietors' personal bank accounts as part of its credit assessment.

Open banking can facilitate this, if the proprietors can request their personal banks share their data with the business's commercial bank.
However, as banks begin to build their consent-management processes, they are discovering complexities when multiple proprietors with multiple bank accounts are involved. This requires multiple consent requests for each proprietor and connecting with each bank. It also requires the business's commercial bank that receives this data to have the governance and systems to source, track, integrate and safeguard data from multiple sources that relate to a single product or service.

Because API standards in Hong Kong are loosely defined and inconsistently implemented, each integration is bilateral. Therefore, exponential complexity for consent is matched by exponential variation in API coding and procedures (for example, recovery times if an API malfunctions).

The problem isn't feasibility, but speed and cost of getting this done – for use cases that banks see as marginal. Although to the HKMA, the goal of open APIs is financial inclusion, for banks, the outcome must also be commercially attractive.

F. USE CASES

The crux of the debate about open banking is whether it delivers benefits to users and to providers that justifies the cost.

IADS is helpful in that it gives banks confidence to share data among each other. But the exclusion of fintechs and other TSPs limits the use cases. For the time being, banks in Hong Kong are building for only two: account aggregation and improved credit assessment.

Skeptics argue that account aggregation is not a high-value feature.

In Hong Kong, the average person has 2.3 bank accounts and more than three credit cards. Combining these accounts in one view could help users understand their spending and help banks or fintechs suggest better ways for them to manage their finances.

But many banks say people use different banks for different purposes; the thesis that they want aggregated views is untested. Some point to personal financial-management apps that place user assets in 'buckets' or 'jars' and say this shows people want to segregate their money. Companies often prefer their banks do not see the entirety of their cashflow or income. For consumers, the rise of mobile apps makes it simple to log in and out. Open API might let someone view her aggregate accounts, but it doesn't reconcile them into a single statement.

Another reason many banks are skeptical of open banking is that IADS only covers current account and savings accounts. It does not extend to brokerage or investments. This is an obvious limit on use cases. Nor does regulation touch on the quality of the data banks share, so this could impact the scheme's efficacy. The other use case, for now, is credit assessment. Banks could ask for someone's consent to share data from other banks to get a more accurate picture of their financial situation. Banks could use this insight to offer, price or structure a loan. It is not clear, however, that banks will derive significant benefits if they can find other sources of data, such as the alternative data that is meant to populate the HKMA's Commercial Data Interchange.

Customers may not see the value of open APIs for credit assessment either. SMEs that do have access to credit may fear too much transparency may harm them. Banks therefore need to develop incentives to get customers to agree to share their data.

G. DELIVERING VALUE

Although these challenges are real, they are also short term. Account aggregation by itself is of limited value, but it can be an important building block to better services.
Retail users can benefit from help with making better financial decisions, getting access to loans, and making it easier to do things in the world of money (that is, a better user experience).
Financial products are commodities, so retail banking is very much about customer experience. Personal financial management (PFM) and predictive insights on spending and investments can be improved. There are also marketing opportunities, such as offering carbon-imprint insights to customers that are environmentally sensitive. Banks can offer more targeted and tailored wealth-management solutions to individual customers.

While some users may resist sharing their data to obtain a loan, open APIs combined with good marketing the right incentives can lead to a better outcome. The question is the cost of the incentive versus the extra lending activity a bank can generate.
What are these incentives? They could be transactional, such as a better interest rate or loyalty points, a proven formula for credit cards. The incentives for SMEs will be different. Hong Kong banking is today transactional, but what small businesses also need is help with auditing, accounting and tax. An open API platform combined with these administrative support services provided by TSPs could convince many SMEs to share their data. In turn, once banks have access to SME accounts, it becomes fast and easy to provide them with financial products.

There is a longer-term goal for account aggregation and credit assessment. Today many people and SMEs rely on non-bank financial institutions (NBFIs) for credit. These non-bank lenders may not offer completive rates and comparable services; because they don't take deposits, their funding models are more expensive. They exist because people and SMEs are underserved by banks.
With open APIs, better credit decisioning can 'grow the pie' and make credit more widely available. This should gradually lead to lower interest rates to borrowers, higher quality loans, and the crowding out of NBFIs. It will help formalize more consumers and small businesses into the banking system. This is

an outcome that is hard for a bank manager to measure for returns on investment, but it would be a great outcome for the market.

Once banks enable users to share broker and investment information, the use cases should multiply. Singapore offers a clear example on the retail side: the government's Singapore Financial Data Exchange, a public data infrastructure, allows consumers to share this kind of data. (Arguably this is not 'open API' as the data is one month old, not real time.)

Banks were initially wary of SGFinDex as a threat to their customer base, but they learned to use it to tailor better advisory services. The key insight from this is that 'financial inclusion' is not just about improving access to credit. It's also about improving people's access to financial advice and knowhow.

Although it's feasible for banks to focus on use cases that are tangible, they also can look beyond the next budget cycle. Open banking requires a change in mindset.

For example, it's probably true that aggregating accounts is not a very compelling use case, especially now that users can access mobile apps so easily. But this was the same argument when Apple introduced mobile payments in the US. With so many people using a credit card, wasn't it easier to take a card from a wallet or purse, than to fumble with a mobile app? That thinking turned out to be wrong: given the choice, most people pay with their phone, which in turn makes it easier to connect mobile payments to other services.

Imagining new forms of value should account for other innovations taking place in financial services. From the outset, the Open API Framework was just one part of a multi-pronged fintech blueprint. For example, this year the HKMA has also conducted 16 pilot use cases for a retail central-bank digital currency, from payments to asset tokenization. The introduction of programmable sovereign money could herald another wave of products and services, in which real-time data sharing will be an important component.

With open APIs, what seems like a marginal use case could turn out to be the beginning of the next wave of consumer and corporate banking.

H. RECOMMENDATIONS

To get there, however, requires getting the industry past the initial pain points. In Hong Kong, the HKMA has been trying to push banks to reach minimum connectivity; IADS is a useful start.

The HKMA's approach has avoided the overly proscriptive approach of the EU and UK, which turned open APIs into a compliance-oriented, box-ticking exercise. It has sought to get the industry to come up with its own way of

implementing the broad open-banking agenda, which forces banks and fintechs to develop use cases instead of the government telling them what to do. However, the high cost, lack of immediate utility, and lack of standards have made the rollout slow and uneven. The industry has come to the point where it must make many bespoke API connections and consent processes. The longer this drags out, the less compelling the use cases, and therefore the less likely consumers will opt to share data.

The FTAHK recommends the following actions to accelerate open banking:

First, we recommend the HKMA lead an effort to develop API standards for open banking.
The lack of an API standard is becoming increasingly painful to banks within IADS. It will become worse when TSPs are introduced. The HKMA may have considered the development of API standards as too time-consuming, given each bank would want to push its own version. Banks that have already developed their own open-API systems may also find it too expensive to switch.
But we are at a junction in which the lack of standards is putting the scheme at risk: by the time sufficient participants are fully connected, schemes that are not well thought through may turn people off sharing their data. The extra time to bang out a standard means removing a degree of risk from introducing open banking.
Instead of leaving this to individual banks to agree on a standard, the HKMA could turn to an existing cross-bank entity. One possibility is to mandate the Hong Kong Interbank Clearing Limited (HKICL) to come up with the standard. HKICL is owned by the HKMA and the Hong Kong Association of Banks. It was created in 1995 to serve as the territory's clearing house bank for payments and debt securities. It also handles IT operations and interbank clearing-related services. It played a critical behind-the-scenes roll in enabling the real-time FPS. HKICL has its own mandate and business, so it would need to be given the necessary resources to get involved with the Open API Framework. But as a utility owned by HKMA and the banks, it is well positioned to take on this role.

The FTAHK's second recommendation is for the industry, including the HKMA, banks, and fintechs, to develop a marketing strategy for open banking.
For example, the scheme could be given a user-friendly brand, which will help educate the market.
Use cases are at the heart of open banking, but the benefits need to be communicated so people and businesses are receptive to open-API initiatives. After all, the data belongs to the customers, and it's their consent that makes everything work.
Today, however, consumers are likely to not want to share anything. They fear they will get a more expensive loan. A small business might fear getting cut off from financing. There is also fear of data breaches.
Recently, the authorities and banks have taken the lead on communicating with the public about fraud, scams, and how to protect personal data. This is a good,

industry-wide starting point. Educating people about sharing data with fraudsters can be positioned as educating them about how to judge a true offer. Banks' branding will be their biggest asset.

But that asset is also why banks are hesitant about open banking: if there is any mistake or any trouble, their reputation is at risk. This paper has outlined the ultimate value of open banking, but that is not an easy sell for harried bank executives with limited budgets and competing business priorities.

The FTAHK's third recommendation is for the HKMA to share its vision for open banking in Hong Kong.

More than five years have passed since the HKMA announced its original Open API Framework. Since then, the Covid pandemic has reshaped the industry. It has accelerated digitalization among banks and users, but it has also changed priorities among all parties.

With IADS helping advance pilot programs, now is the time to reaffirm the benefits of data sharing for financial inclusion, innovation and competitiveness. This should help spur fintechs and banks to collaborate on more use cases and user incentives.

In October 2023.

The FinTech Association of Hong Kong Ltd.