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February 11, 2019

The Advisory Committee to the Open Banking Review

The Financial Sector Policy Branch
Department of Finance Canada,
90 Elgin Street, Ottawa, ON K1A 0G5

Subject: Comments on the consultation paper “A Review into the Merits of Open Banking”

Respected Advisory Committee,

FIME would like to submit a response in the context of public consultation regarding the report “A Review into the Merits of Open Banking” issued by the Canadian Finance Department.

FIME feels qualified to share its point of view on the benefits of an Open Banking Systems for Canadians by leveraging our in-depth knowledge in implementing Open API Consulting and Testing solutions, and based on the experience we have gained supporting financial institutions in their effort to comply with Open banking Regulations.

In particular, we believe that payment solution providers must enhance consumer protection against fraud across the payment ecosystems with the implementation of existing security solutions like Strong Customer Authentication combined with a Secure and Functional validation approach (compliance process) to ensure a smooth roll out of these services for Canadians.

Thank you for giving us this opportunity to share our views on the Canadian Open Banking consultation paper.

Sincerely,

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FIME comments on the consultation paper

Would open banking provide meaningful benefits to and improve outcomes for Canadians? In what ways?

An Open Banking system has the power to bring substantial benefits to Canadian consumers by aggregating their financial products in one place, providing new insights about spending habits, making recommendations about new financial services, and as such, making it possible to save money and even have new ways to pay. We have attempted to detail those advantages in the following sections.

Good value services and wide financial services choices

Despite the high accessibility of financial services in Canada (99% of adult Canadians have a payment account¹), there are still 45%¹ of Canadians pay up to \$15 per month as account management fee. For instance, the Price-Comparison application enables consumers to compare all sorts of financial products and reduces the customer's effort to choose between large choices of services. Furthermore, as a consumer bank account contains quite a bit of information regarding consumer spending patterns as well as the related financial charges, Account Aggregator Service Providers could efficiently advise Canadians on how to optimize the expenses related to having and using bank accounts.

Financial inclusions

Canada has a wonderful opportunity, through the appropriate use of technology and regulation, to offer affordable and tailored financial products and services to financially excluded consumers (unbanked consumers). Financial exclusion affects between 1 and 5%² of Canadian adults. This means that between 0.36 million to 1.53 million adults do not have a bank account. One of the barriers for these unbanked consumers is the price of the payment account services which could be minimized or even eliminated with the healthy competition landscape created by the Canadian open banking systems.

Moreover, financially excluded people get all or some of their banking services from unconventional banks including payday lenders, pawnshops and other similar entities. Generally speaking, these pseudo banks are weakly or not at all regulated and have some unsafe products and services, and charge excessive interest rates. By regulating such non-bank, non-regulated institutions, which currently engage in bank-like activities, the Canadian government may be able to better protect the low-income customers.

¹ Affordable banking services, <https://cba.ca/banks-and-consumers>

² Statistics Canada 2017, "Canada at a glance 2017: Population"



Convenience and accessibility

Consumers seeking innovative banking services want the ability to track their online payment account and use multi-channel payment instruments everywhere and across any number of networks. It appears that 51%³ of Canadians already use online banking services, and another 17% primarily use their mobile banking. On one hand, the appetite for online and mobile services has increased substantially; on the other hand, the banks do not seem to have implemented tremendous improvements in terms of digital channels. In an open banking system, composed of fully-digital banks, FinTechs and other non-traditional players, we can expect to see the emergence of better designs and ergonomic features in payment options, money management tools, automated customized advice, automated account opening or other means of enhancing the user authentication without impairing the user experience.

In order for Canadians to feel confident in an open banking system, how should risks related to consumer protection, privacy, cyber security and financial stability be managed?

Within an open banking system, banks must make their customers' personal or business current-account information accessible to external entities. This means opening up communication portals or ports giving access to customer account details to third-party providers (TPPs) such as account aggregators, other banks, Fintechs to name a few. In an open banking system data-sharing is almost always accomplished through an application programming interface (API), which enables the flow of data between payment systems in a secure and controlled environment. "Screen scraping" is an alternative method but it doesn't provide the same level of security.

In Europe, the European Union revised the Payment Services Directive (PSD2), which has to be transposed into national law or regulations in each Member Country, requires all payment service providers to establish and implement security measures to prevent the unauthorized access, use and disclosure of their logical and physical assets. Indeed, the integrity of consumers' personal data is at stake.

Therefore, payment solution providers must enhance consumer protection against fraud across the payment ecosystems with the implementation of:

- A Strong Customer Authentication solutions (2FA- Two Factor Authentication – PIN + Transaction Risk Based analysis) or as the Open Banking UK has adopted a common authentication protocol: OAuth 2.0⁴
- A secure on-line sharing of financial data and consumer data (e.g – Strong Customer Authentication and Common and Secure communication - PSD2/Regulatory Technical Standards⁵)

³ Convenience of banking, <https://cba.ca/banks-and-consumers>

⁴ OAuth 2.0 is the industry-standard protocol for authorization - <https://oauth.net/2/>

⁵ <https://www.ca.com/content/dam/ca/us/files/executive-brief/ca-viewpoint-interpreting-the-rts-on-sca-and-csc-for-psd2.pdf>



- The guarantee data compliance (e.g GDPR⁶, data privacy regulation in Europe)

To create a sustainable open banking environment financial institutions shall implement above measures compliant with industrial standards, like the

- Strong information security management framework such as ISO27001,
- Payment Card Industry Data Security Standard (PCI-DSS),
- Multi-layer security approach for e-commerce business (Email security and archiving, Antivirus software, Data encryption etc.),
- Qualified Digital Certificates for Electronic signature like the eIDAS⁷ issued by a qualified trusted service provider,
- Proactive and real-time Cyber Threat Detection Capability that actively hunts for potential vulnerabilities or emerging attacks.

Achieving compliance of new financial products or services in an open banking system, without proper certification process might lead to post roll-out misconceptions and security issues in financial services.

In addition to the benefit brought by a certification process, the security measures should be constantly monitored, with the

- Implementation of periodic reviews and effective reporting mechanisms,
- Continuous monitoring of compliance with the bank's policies and procedures.

It is up to the open banking value chain stakeholders to define the security policy to protect consumers' sensitive information, avoiding the trap of discriminating against new entrants and thus guaranteeing a level of confidence in the banking system equivalent to that which exists today.

Moreover, we would recommend that Canada study the implementations being rolled out in Europe to identify the "best practices" for ensuring consumer protection in an open banking environment.

⁶ <https://eugdpr.org/>

⁷ <https://ec.europa.eu/digital-single-market/en/trust-services-and-eid>



If you are of the view that Canada should move forward with implementing an open banking system, what role and steps are appropriate for the federal government to take in the implementation of open banking?

If Canada decides to move forward with implementing an Open Banking System, it will fundamentally change the payments value chain and possibly increase the risk that a customer may face when making payments via third party payment services.

That is why a regulatory framework is required to reinforce consumer protection and to improve the security of payment transactions and account access within Canadian financial networks.

A study of worldwide initiatives for Open Banking reveals that most regulatory systems cover the legal, operational, functional and technical aspect of the open banking.

In order to accelerate the adoption of a common technology and promote an interoperability of banking infrastructures, this regulatory initiative should aim to stipulate:

- Common Open API Technical standards,
- Common test framework and certifications process,
- Guidelines and recommendations for implementation.

The Canadian government can make use of three primary levers to create the required environment:

- **Legal lever:** implement a legal framework for consumer protection and support for new players,
- **Community lever:** facilitate the emergence of an economic interest group backed by an initiative to standardize the technical interfaces (API),
- **Financial Lever:** promote the implementation of a Fintech incubation program and thus accelerate the digital transformation of the Canadian financial system.

These levers can be used as follows:

1. Enable the economic development of new players without penalizing the incumbents (regulatory & financial levers)

The implementation of an open banking system must avoid creating conditions of unfair competition against the incumbent banks. The latter are already suffering from unfavorable economic conditions (low interest rates), high structural costs and costly regulatory compliance.

The Canadian government should also ensure:

- The sustainability of banks' services,
- The development of their offers,
- The conditions for access to rates close to current ones,
- To continue to promote banking inclusion.



At the same time, the Canadian government must foster the emergence of a new economic model by:

- Reassuring banks about losing their customers to FinTechs, which have lighter structures that could offer more attractive and cheaper competing offers. New entrants should not compete with incumbents on traditional financial services but encourage them to offer new and innovative functionalities.
- Allow new players to enter the market without dissuasive investments or maintenance costs,
- Allow users to benefit from lower rates on certain offers.

The Canadian government will probably have to anticipate a structural transformation of the entire banking ecosystem driven by a regulatory context (retail, merchant acquiring, issuing etc.) according to 4 models as listed below:

- Partnership model between banks and Fintechs (which may take the form of direct investment) in order to capitalize on banking expertise,
- In-house development with a strong brand but give up their distribution,
- Financial products and service market place.

2. Facilitate the emergence of an economic interest group or backed by an initiative to standardize the technical interfaces known as APIs (community lever)

The Canadian government should encourage banks and more globally, financial institutions in Canada to agree upon the creation of a standardization group to ensure interoperability of an interconnected financial systems.

The main focus of such organization is to establish:

- A pure technical standardization body, focusing on detailed technical and organizational requirements to achieve the Canadian's open API standards,
- An aligned initiative with international standardization,
- An implementation task force open for implementers of the Canadian's Open API standards.



3. Protecting users and giving them confidence (regulatory lever)

The implementation of open banking raises legal questions that the Canadian government must anticipate. Some questions will arise according to specific use cases and will lead to adaptation of the regulations.

Regulation of Fintechs

- Which authorizations must FinTechs apply for depending on the country of practice? To whom (cross border operations)?

Regulation of the relationship between Banks and Fintechs

- What liability in the event of an API failure?
- What technical standards should be chosen?

Data regulation

- What use is made of the data collected by Fintechs?
- Who must obtain the customer's consent to provide the data?
- Who is responsible if customer data is published or stolen?
- What about identity theft?
- What happens to the data of the beneficiaries

On this last point, the Canadian government could potentially follow the European example in which Fintechs:

- do not store sensitive payment data concerning the payment service user or;
- do not request data from the payment service user other than that necessary to provide the payment initiation service or do not request sensitive payment data related to payment accounts,
- use, access or store data for purposes other than the provision of the account information service expressly requested by the payment service user, in accordance with data protection rules

Practical applications (1): What if the user finds that the data was likely to have been used for commercial purposes without the user's prior consent?

Practical applications (2): What if an API is not accessible by the TPPs or is under performing by slowing down the TPPs services?



In conclusion, we hope that these very high-level comments will prove of use to the Canadian Finance Ministry and we are of course available to provide further information on any of the Open Banking topics.

About FIME: *FIME is a leader in secure payment transaction testing and consulting, with more than 20 years of experience in managing risk, accelerating time to market and ensuring the quality and security of its customers' payment and transport products and services.*

FIME's global reach combines with expert teams to give customers the tailored consultancy, solution engineering, automated test platforms and certification services they need throughout every stage of digital transformation projects.

Our experts collaborate with the entire ecosystem - from the payment networks and industry bodies, right through to vendors - enabling customers to understand and overcome technical and commercial challenges. For more information, please visit: www.fime.com

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