

Ferst Capital Partners

Submission to Finance Canada's Review of the Federal Financial Sector Framework

We consent to the full disclosure of this document

Context

- On August 26th, 2016 Finance Canada invited the Canadian public to submit to its Review of the Federal Financial Sector Framework
- Ferst Capital Partners & Ferst Digital are deeply embedded in the Canadian FinTech community and have been talking to both Provincial and Federal regulators about financial sector regulation for nearly a year
- As such, both of our organizations are delighted to submit this document for your review

User guide

- This document is based on a set of facilitation materials we have been using for in-person discussions with regulators and government
- We have adjusted the content for your consultation questions, but have left the content in it's original slide format as a matter of practicality
- We have provided the context and narrative for each slide to ensure we provide you with enough detail where needed
 - As such, you'll find the slides at the top of each page, as well as the context and narrative in long form below
 - On occasion, we felt that some slides were self-explanatory and left them without any context or narrative
- If we can provide any additional detail, please do not hesitate to reach out our contact information is at the end of the document

Who we are





Dominique Ferst

Managing Partner Ferst Capital Partners

FERST DIGITAL



Eytan Bensoussan

CEO & Co-Founder, Ferst Digital

Entrepreneur-in-Residence, Ferst Capital Partners

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Dominique Ferst

- Dominique Ferst is a Managing Partner with Ferst Capital Partners (FCP),- a Canada-focused early- stage FinTech venture capital firm. Mr. Ferst is an experienced entrepreneur, operator and investor who has successfully founded, operated and exited companies in the Canadian Internet and financial services industries over the last 20 years.
- Notable history includes co--founding TradeFreedom Securities, which was successfully acquired by ScotiaBank in October 2007 and Odyssey Internet, one of Canada's first major Internet Service Providers, which was successfully acquired in 1997 and was amongst the first cohort of Canadian tech startups.

Ferst Capital Partners: Ferst Capital Partners provides early-stage venture capital and operates Canada's first FinTech Startup Studio, which provides support to local FinTech companies through access to a team of passionate FinTech developers, designers, digital marketers, growth hackers and entrepreneurs.

Eytan Bensoussan

- Eytan is the Co-founder and CEO of Ferst Digital and an Entrepreneur-in-Residence at Ferst Capital Partners.
- He was most recently a Sr. Engagement Manager with McKinsey & Company where he worked on customer-facing digital transformations in the financial services sector across North America. Prior to McKinsey, he worked in corporate law and completed his law/MBA degrees at McGill University. He was called to the New York Bar in 2010.

Ferst Digital: Ferst Digital is an early stage startup whose mission is to eliminate the pain small businesses feel when they bank and manage their finances. To achieve this, Ferst Digital is building a fully mobile banking experience designed around the needs of the modern Canadian small business.

FinTech is a reinvention of the business models underpinning Financial Services - and Canada must be leading this revolution



Case study: Monzo Bank

Open banking has created more choice for UK consumers than ever before

Mondo has created an open bank through which customers can connect to any financial service provider they desire

- No bank/client conflict of interest
- Encourages competition by ensuring all players (old or new) fight for customer
- Consumers remain protected thanks to regulatory and technological safeguards

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FinTech represents an opportunity for business model innovation in financial services

- FinTech has moved beyond better user experience and quicker service
- A number of leading FinTech companies are using technology to change the economic model underlying the delivery of financial services, which will have profound effects on consumers for many years

Case example: Monzo

- Monzo is an example of this type of transformative innovation: Monzo is a
 deposit-taking bank that does not sell proprietary products (e.g., loans, credit
 cards) to its customers. Rather, it allows customers to connect their bank
 accounts to an ecosystem of 3rd party products in which they can shop
 around. By consequence, Monzo is, by design, eliminating the possibility of a
 conflict of interest with its customers.
- By contrast, the inherent conflict of interest within the current banking system can be seen in examples such as the Wells Fargo cross-selling scandal, or the need for CRM2. The selling of a closed system of proprietary products, coupled with aggressive sales targets creates an incentive system whereby a customer is sold a product because it is in the best interests of the supplier and not the customer. Monzo, by contrast, only earns revenue by connecting customers to the financial services ecosystem, not by selling additional products to them.

The impact of current regulation on startups in Canada is stunting the growth of a local FinTech ecosystem

Canadian FinTech context

- Canadian FinTech startup economics are treacherous: Small market size, a small number of massive incumbents make FinTech daunting
- FinTech startups are staying away from important verticals in Canada: Little oxygen for FinTech to flourish (e.g., No new deposit-taking or insurance carrier startups due to burdensome licensing requirements)

Implications

- Canadians do not enjoy benefits created by FinTech value propositions (i.e., lower costs, more customization)
- Canada may be forced to import FinTech innovation, rather than be able to create it
- Large Canadian FI's will determine the success of FinTech startups, rather than consumers

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We believe 4 levers are crucial to innovation-based competition in the Financial Services space

Access to data

Licensing requirements

Know Your Customer (KYC) & AML compliance

Regulatory certainty

These levers are currently constrained, and the local Canadian FinTech community suffers as a result

| Priority concerns | Current Canadian context | Implications |
|--|---|---|
| Access to data | No direct access to customer financial transaction data | No data, no innovation |
| Licensing requirements | Few new licenses being granted Cost and process to obtain license are onerous | Almost impossible to enter certain markets |
| Know Your Customer (KYC) & AML/ATF compliance | Digital natives are used to being served immediately and conveniently but current KYC processes impose friction, e.g., In-person verification Phone call to the end customers | Consumer won't try solutions that could help them because of friction |
| Regulatory certainty | Regulatory ambiguity around many promising technologies (e.g., money service businesses, data scraping) | Little confidence for investors or entrepreneurs to invest |

• We believe that four regulatory levers are critical to fostering FinTech innovation

Access to data:

- Financial transaction data is at the core of the FinTech revolution as it provides the basis for consumer-focused innovation (e.g., predicting product/service needs, financial health insights, alternative credit scoring)
- Currently, despite belonging to consumers, this data resides within banks and has no way to be shared in real time with whomever the consumer wishes
- The implication is that data-based innovation cannot emerge in Canada as it has elsewhere (i.e., New Zealand, Australia, UK, Europe)

• Licensing requirements:

- FinTech innovation cannot happen in areas where the licensing is cost-prohibitive for startup economics
- Cost is not only determined by fees, by also by the length of the process as well as the ambiguity surrounding the final outcome
- In Canada (unlike the UK, for example), the licensing requirements to become a deposit-taking institution or an insurance carrier are too burdensome for startups to emerge

KYC/AML/ATF:

- Proper KYC/AML/ATF compliance as well as frictionless experiences are both critical to FinTech success
- Consumers are accustomed to an Apple-like onboarding experience, and make no exceptions
- Many current KYC processes, while necessary, create burdensome steps for consumers that make FinTech value propositions untenable
- Regulatory certainty: Lack of clarity (or at the very least, dialogue) by regulators around the treatment of certain business models or technologies chills investment and entrepreneurial enthusiasm

Solutions: How we could improve consent-based access to financial transaction data

Solutions:

Wishlist for Canada

- Access granted by consent of customer
- Secure sharing enabled (e.g., APIs)
- Shared aggregate data (i.e., improved risk modelling)
- Financial data passport / Universal bank account numbers

Examples from abroad

- Government-imposed:
 - o UK (Open Banking Standard)
 - o EU (PSD2/XS2A)
 - o Australia (tbd)
- Commercially-created: Wells Fargo

Potential impact on:

Competition: Improvement

- Access to data creates an open ecosystem upon which providers compete for business (e.g., Fidor, Xero ecosystem)
- Customers can compare and shop easily

Consumer protection: Improvement

• Customers can shut off access to providers in real time

Systemic risk: Improvement

- National anonymised data can be used to detect early signals of borrower default
- Reduces moral hazard by allowing customers to easily move across service providers thereby preventing any from being too big to fail

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Consent-based access to financial transaction data is fundamental to financial services innovation

- Unlocking transaction data from bank silos has been a major driver of FinTech innovation in Europe and the UK
- The consent-based nature of this form of data access ensures consumers are empowered to share their financial transaction data in a secure way and only when they choose to do so
- Consumer data can be shared in a secure, read-only, and time limited fashion thanks to the advent of API technology (see next page for additional detail)
 - The UK and the EU have recognized how crucial this was to competition, consumer empowerment, and innovation and as such have mandated this form of access through the Open Banking Standard and the PSD2/X2SA directive, respectively
 - In Canada, it is not currently possible to easily, cheaply, and securely export financial transaction data from one's bank

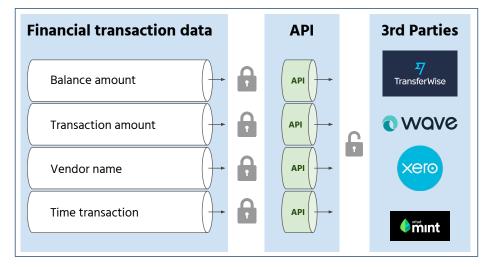
Exciting use case: The emergence of universal bank account numbers / Financial data passports

 One of the most compelling concepts that has emerged through the UK and European experience has been the creation of "universal bank account numbers" or "financial data passports", which allow consumers and businesses to keep their bank account numbers and financial transaction history with them, no matter which institution they use as a bank (akin to

- Canada's experience with the telecom industry which resulted in consumers being able to keep their mobile phone numbers, even when they switched providers)
 - This reduces the hassle, costs, and fears consumers face when shopping around for better banking services
 - This also ensures a healthier competitive environment in the banking system, which was a primary driver the UK's financial regulatory reform

Illustrative example

Introduction to APIs (Application Programmable Interfaces) : The Internet's Middlemen



Common API Characteristics

- Universal format
- Permission granted only by consent
- Access cut at any time

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APIs are the technological equivalent of a 1 way gatekeeper, and are a game changer for FinTech

- When applied to the context of financial transaction data, they act as an interface between the data and third parties who can use the data
 - Each category of data (e.g., balance amount, transaction amount) can be individually gated
 - The only way data is shared is when the owner of that data authorizes a 3rd party recipient to receive data, and that authorization can be revoked at any time
 - The technology is structured such that it is not possible for a 3rd party provider to do anything else than receive data (i.e., akin to watching a movie)
- The typical example is of accounting software receiving financial transaction data directly from a bank (vs a bookkeeper manually entering each transaction)
- However, more creative uses are emerging every day such as lenders scanning account data to give instant quotes on lending rates, or data analytics providers delivering real time insights to consumers about their spending habits
- This is not currently possible in Canada, as our banks do not provide API
 access to accounts. As a counterexample, the UK government has mandated
 it's banks to offer API access to accounts within the next 2 years.

Solutions: How we could improve licensing requirements

Solutions:

Wishlist for Canada

- Cheaper, faster, predictable approval process
- Provisional licenses / sandboxes
- Severity of capital requirements a function of size (i.e., FinTech charter)

Examples from abroad

- UK bank license regulations
 - o £50 \rightarrow £8
 - o $2 \text{ yrs} \rightarrow 6 \text{ mths}$
 - o 9.5% Tier 1 \rightarrow 4.5% (for 5 years)
- Swiss FinTech charter and sandbox (bank license, no lending)

Potential impact on:

Competition: Improvement

 UK example has increased choice for UK customers dramatically (e.g., 14 new banks in the UK since 2008, 20 new banks in pipeline)

Consumer protection: Improvement

 Customer-focused challenger banks compete through transparent and simple pricing

Systemic risk: Neutral

- Layered application of capital requirements enables banking innovation without impact on systemic risk
- More players lower systemic risk

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New business models may create a compelling use case for adjusted licensing requirements

- Many FinTech startups have a business model predicated on better experience, better features, at a lower cost
- These models become unfeasible when licensing requirements (e.g., paid-in-capital requirements, approval time, early stage capital requirements) are too onerous in their earliest stages
- The FinTech startups hit hardest by such requirements are deposit-taking and insurance carrying startups
 - For example, a new class of non-lending banks has emerged around the world. These banks acts as custodians of deposits, but do not lend their clients' funds. The impact on systemic risk is notably different than their peers. Switzerland is creating a new "FinTech charter" that lowers the burdens for licensing and capital requirements for these types of entities.

The special case of tiered capital requirements

- An emerging solution has been to foster innovation at the startup stage by alleviating capital requirements on deposit-taking startups during their early years
- As the startups age or as they accumulate meaningful amounts of deposits, they graduate into the same capital requirements as the rest of their incumbent peers

Solutions: How we could improve KYC & AML compliance

Solutions:

Wishlist for Canada

- KYC treated as a shared utility (e.g., national database of KYC approved customers)
- Canada to encourage digitization and automation of compliance procedures (e.g. biometrics used for AML)

Examples from abroad

- No global leader on Compliance / KYC / AML issues
- Swiss regulator (FINMA) allows establishment of business relationships (onboarding) via digital channels (e.g., video)

Potential impact on:

Competition: Improvement

Reduces the cost and friction of onboarding

Consumer protection: Improvement

- Prevents sensitive consumer data from having to be transmitted through insecure channels (e.g., mail, faxes, print-outs brought in person)
- Technology can be used to more accurately identify risk appetite and knowledge-level of customers (i.e., suitability requirements)

Impact on systemic risk: Neutral

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Current KYC practices create friction for consumers

- The new normal is that consumers expect seamless, instant, and easy onboarding for any product they use
- Onboarding KYC/AML/ATF procedures often impose friction on this process which is the death-knell for any new company trying to get off the ground because customers simple will not make the effort to try the service

The migration to digital/automated KYC/AML/ATF procedures reduces friction

 Regulators can help encourage the migration to new digitals/automated procedures through engagement with RegTech suppliers

A national KYC database would be a competitive advantage for Canadian companies

- The same clients are being re-onboarded to financial service providers around the country
- This creates a significant source of waste in the industry
- Creating a national database of KYC/AML/ATF approved businesses and people would reduce the costs of onboarding tremendously

Not exhaustive

Canada's regulatory quilt is already difficult and expensive to navigate, and innovative models add another layer of complexity

| | FinTech vertical | | | | | | |
|-----------------------------------|------------------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|--------------------------|--------------|
| Type of regulation | Banking | Lending | Insurance (carrier) | Insurance (distribution) | Investing & Crowdfunding | Money service businesses | Data science |
| Systemic protection | OSFI | | OSFI | | | | |
| Depositor/investor protection | CDIC | Prov. regs (HNW only) | Assuris (life) PCICC (P&C) | | CIPF | | |
| Consumer protection | FCAC | FCAC, Prov. regs | FCAC | FCAC | FCAC | FCAC | |
| International crime and terrorism | FINTRAC | | | | FINTRAC | FINTRAC | |
| Privacy | OPC | OPC | OPC | OPC | OPC | OPC | OPC |
| Sector business conduct | Prov. regs | Prov. regs Criminal code | Prov. regs | Prov. regs IBAC | Prov. regs IIROC | Prov. regs | Prov. regs |
| Licensing | OSFI | | OSFI | Prov. regs | Prov. regs | FINTRAC | |
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Solutions: How we could minimize regulatory uncertainty

Solutions:

Wishlist for Canada

- A mechanism for safe, small-scale regulatory experimentation as a means of informing broader policy
- A deeper bench of specialized technical skills capable of interpreting the impact of FinTech technology for the needs of regulators
- Reciprocity agreements with other safe FinTech jurisdictions

Examples from abroad

- OSC Launchpad: Uses small scale experiments to inform broader regulatory policy
- UK FCA/Australian Securities & Investment Commission Co-operation agreement: Enables FinTech companies to more easily work within both jurisdictions
- UK Current Account Switching Service

Potential impact on:

Competition: Improvement

- Increases choice for consumers
- Increases the probability that next-generation financial service companies emerge from Canada, designed for Canadians

Consumer protection: Neutral

 Ensures bad actors don't slip through cracks of regulatory ambiguity and offer their services to consumers

Impact on systemic risk: Improvement

 More competition may decrease risk of moral hazard by preventing incumbents from being too big to fail



Illustrative

We want our regulators to be leading the world, and we want to give them whatever firepower they need to get there

THE WALL STREET JOURNAL

"Canada leads the world in smart, innovative, inclusive and fair financial services regulation"

The New York Times

"Canada is securing a global leadership role in Financial Services regulation for the next 50 years"

THE GLOBE AND MAIL*

"Canada has shown it can make regulatory change in financial services happen 2X faster than any of its peers"

How to get started: Some potential next steps (1 of 2)

Wish list items to consider Longer term (~18 months) along the way

Short term (~6 months)

Access to data

- Mandate an interdepartmental Open
 Banking Standards Committee to
 develop plan on access to
 permissioned-customer data
- Consult with UK, Swiss, and EU regulators currently on this journey to understand best practices and roadblocks
- Position Canada for global leadership by creating Canadian standards compatible with the UK's Open Banking Standard and the EU's Access to Accounts (PSD2/X2SA)
- Creation of a portable universal bank account number for Canadians

standards

- Access granted by consent
- ✓ Secure sharing enabled (e.g., APIs)
- ✓ Shared aggregate data (i.e., improved risk modelling)
- Financial data passport / Universal bank account numbers

Licensing

- Convene necessary stakeholders and develop a framework for licensing FinTech entities (e.g., digital banks, insurance) at Federal level including policy goals, non-negotiables, monitoring, etc.
- Create closely monitored, fully revocable pilots for new licensing models, ensuring learnings inform recommended policy changes
- Creation of Federal FinTech licensing regimes (e.g., digital banking, insurance) that are economically accessible to new ventures
- Cheaper, faster, predictable approval process
- ✓ Provisional licenses / sandboxes
- Severity of capital requirements a function of size (i.e., FinTech charter)

How to get started: Some potential next steps (2 of 2)

as much clarity to market as possible

| | Short term (~6 months) | Longer term (~18 months) | Wish list items to consider along the way | | |
|-------------------------|--|---|--|--|--|
| KYC/AML | Identify and empower a Federal KYC champion to lead development of national digitization standards for KYC compliance and a national KYC database Convene industry participants to provide regular feedback for efforts (e.g., working group) | Create timeline and implementation plan for digital KYC compliance standards and national KYC database | KYC treated as a shared utility (e.g., national database of KYC approved customers) Canada to encourage digitization and automation of compliance procedures | | |
| Regulatory certainty | 1 stop FinTech regulation concierge providing access to Federal & Provincial regulatory expertise for early stage startups Rapid creation of regulatory position papers on ambiguous areas of FinTech regulation (e.g. blockchain) to provide | Creation of a regulatory pilot system whereby regulators and FinTech startups can test new models together Establishment of regulatory reciprocity with other FinTech-friendly jurisdictions | ✓ A mechanism for safe, small-scale regulatory experimentation as a means of informing broader policy ✓ A deeper bench of specialized tech skills within regulator organizations ✓ Reciprocity agreements with | | |

other FinTech jurisdictions

Thank you





Dominique Ferst

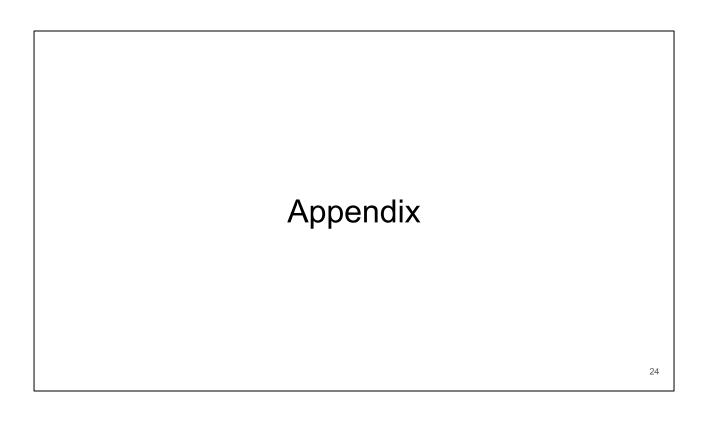
Managing Partner Ferst Capital Partners FERST DIGITAL



Eytan Bensoussan

Entrepreneur-In-Residence CEO & Co-Founder, Ferst Digital

- We would like to be helpful to your process in any way possible.
- Please consider us as thought partners and knowledge resources at your disposal moving forward.

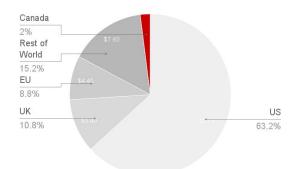


Canada is falling behind on FinTech innovation in a serious way



This share is not proportional to Canada's global economic clout

Global investment in FinTech since January 2010 \$Billion (USD)



- UK GDP is 0.8X larger than Canada's, yet FinTech investment is 5X larger
- US GDP is 10X larger than Canada, yet FinTech investment is 30X larger

Sources: Wolfram Alpha Knowledge Base; "London is Europe's Booming Billion Dollar FinTech Capital", The Memo, 2015; OMERS Ventures

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Friendlier regulation could be a competitive advantage to help Canada catch up to its peers

- Many factors at play (e.g., brain drain, lack of scale) are difficult to control
- However, regulation is entirely within our country's control

Innovation-friendly regulation can have rapid impact on the startup ecosystem

- The UK, for example, had never been historically considered as an innovation hub
- Thanks to important regulatory changes over the last 10 years, the UK leads the world in FinTech innovation
- The FinTech startups emerging from the UK are already being exported across the world (e.g. Transferwise now in US, Canada)

Dispelling common myths: "Canada has the safest banking system in the world, regulation is doing its job"

Clarification

Description

New risks have emerged beyond systemic risk, and our country is not ready

Systemic risk has decreased:

- Canada's regulators did a great job at protecting Canada's financial system during the 2008 crisis
- Canada's comfort with the regulatory status quo has made it vulnerable

Innovation risk has increased:

- We are safe from the last financial crisis, but not the next one which will be our innovation base hollowing out
- As other countries move faster to nurture FinTech innovation Canada's GDP, job creation potential, etc. is at risk

There is still potential to reduce systemic risk

Fintech innovation is an opportunity to reduce systemic risk

- P2P marketplaces could have been another source of SMB lending when banks stopped the flow of credit during the 2008 crisis
- National anonymized customer data can help lenders improve their risk models

Dispelling common myths: "Canada's financial service institutions are investing in innovation"

Clarification

Description

Most incumbent innovation is not truly innovative

Incumbents are not bold innovators, they are digitizing and automating formerly manual processes and improving user design

- Large financial service institutions have been investing in improving their current business model, not finding ways to disrupt them
- Business model innovation has not come from the innovation labs of large institutions, but rather from nascent startups (e.g., Transferwise)

When incumbents don't innovate, regulation is often needed to ensure consumers don't lose out

 Canada's CRM2 regulation is forcing large financial service institutions to create transparency into their pricing - they did not proactively create transparent pricing structures like robo-advisors did

Dispelling common myths: "Significant progress is being made in the country, no need to change course"

Clarification

Canada is at risk of being subject to innovation theatre, where everybody seems busy, but no

innovation emerges

Description

Fintech innovation is moving quickly

- Financial service institutions in Canada move slowly and cautiously, whereas FinTech innovation is moving extremely quickly around the world
- Large financial service institutions have set up exploratory "labs" that make symbolic investments, but have not demonstrated any capability to create game-changing innovation

The government is headed in the right direction, but is not moving quickly enough

 Exploratory committees in the government are not moving the needle yet, and Canada is already a few years behind its peers (e.g., PSD2 proposed in 2013, UK Project Innovate conceived in 2013)

Dispelling common myths: "Banks are keeping consumer data secure by not sharing it"

Clarification

with choice is not

keeping their data safe

Empowering consumers mutually exclusive from

Description

Choice and safety are not mutually exclusive

• It is not insecure to allow consumers to do what they please with their data if companies have the right standards and security in place

Regulators could improve the status quo, which is far from perfect

- Consumers are demanding that their data be shareable and as such have been using less-safe band-aid solutions to share it (e.g., data scrapers, manual transmission of files)
- Regulator-based requirements to share data and to do so through rigorous standards would improve consumer security (e.g., EU, UK)