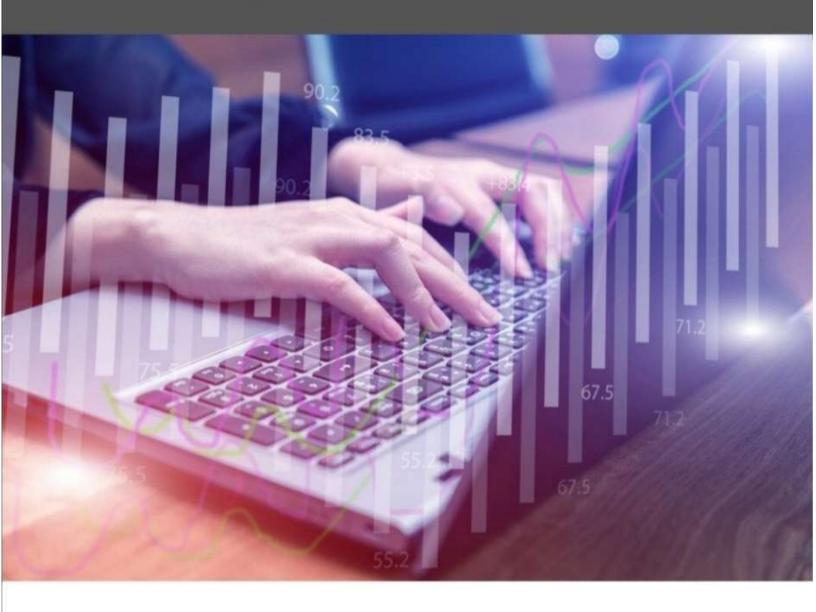
OPEN BANKING:

A PANACEA FOR CONSUMERS?



FINAL REPORT OF THE RESEARCH PROJECT
PRESENTED BY UNION DES CONSOMMATEURS
TO THE OFFICE OF CONSUMER AFFAIRS
OF INNOVATION, SCIENCE AND ECONOMIC
DEVELOPMENT CANADA



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The Report

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The masculine is used generically in this report.

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Union des consommateurs, Strength through Networking

Union des consommateurs is a non-profit organization comprised of 13 consumer rights groups.

UC's mission is to represent and defend the rights of consumers, with special emphasis on the interests of low-income households. Its activities are based on values cherished by its members: solidarity, equity and social justice, and improving consumers' economic, social, political and environmental living conditions.

UC's structure enables it to maintain a broad vision of consumer issues while developing in-depth expertise in certain programming sectors, particularly via its research efforts on the emerging issues confronting consumers. Its activities, which are nation-wide in scope, are enriched and legitimated by its field work and the deep roots of its member associations in their communities.

UC acts mainly at the national level, by representing the interests of consumers before political or regulatory authorities, in public forums or through class actions. Its priority issues, in terms of research, action and advocacy, include the following: household finances and money management, energy, issues related to telephone services, broadcasting, cable television and the Internet, public health, financial products and services, and social and fiscal policies.

Introduction

Imagine a world in which, with a few swipes on a smartphone, you could find a better mortgage, compare household bills, cancel unwanted subscriptions, control direct debits and track payments across each of your accounts¹.

Lucy Warwick-Ching

Financial and technology companies and corporations (fintechs) continually innovate to offer consumers new services and applications. With the adoption of open banking systems, which involve new portability and interoperability rules, those offers can be expanded. From Europe — where the PSD2 Directive, in effect since January 2018, requires banks to give financial technology corporations access to their customer information — to the United States, and to Asia, open banking is spreading rapidly and opening the door to a wide variety of new financial applications. Canada has also begun to show interest in this development. The new applications offered to consumers could certainly enrich and facilitate the management of their personal finances, but could also pose risks, particularly with regard to the protection and use of personal information, to the exclusion of certain consumers, and to privacy protection.

Open banking is and will remain for many years a subject of major financial interest, and its diverse applications will inevitably become part of Canadians' lives in the coming years. Accordingly, our study aims mainly to assess the benefits, risks and drawbacks of open banking for consumers and, taking foreign regulatory frameworks as examples, to determine what adequate regulatory framework, benefiting consumers, should be adopted in Canada.

In the first part of our report, we define open banking and present its history and the context in which it has developed.

In the second part, we focus on the benefits, risks and drawbacks that open banking poses for consumers.

To draw a more complete portrait of open banking systems, we conducted surveys, the results of which are integrated into our study's chapters. In the second chapter, we report the results of a survey conducted to verify, in particular, consumers' knowledge and perceptions.

The third part consists of an examination of regulatory frameworks that have been or will be adopted abroad. We present an overview of open banking regulatory models established in foreign jurisdictions and more advanced than in Canada. We report the positions taken by certain consumer rights organizations in those jurisdictions with regard to those frameworks.

¹ Lucy WARWICK-CHING, *Open banking: the quiet digital revolution one year on*, Financial Times [Online] https://www.ft.com/content/a5f0af78-133e-11e9-a581-4ff78404524e (page consulted on August 7, 2019).

The fourth part of our report examines the current situation in Canada regarding open banking. We present the results of various consultations held in the country in recent months, and the positions of participating stakeholders, Canadian consumer rights organizations and experts we consulted on the matter.

The fifth part of our report analyses Bill C-11, tabled in 2020, and relevant articles on the establishment of open banking in the country. We describe the latest developments for regulating open banking in Canada and identify the best practices that should serve as models for establishing its framework.

The summary and conclusions of our research are followed by our recommendations.

1. Open Banking Systems

The rise of the fourth industrial revolution has been marked by the emergence of companies that leverage data to deliver value. The rising importance of data has bolstered the value customers, businesses, and governments assign to data and in turn has sparked deeper contemplation on who ultimately has the right to control it².

Deloitte

The new technologies' introduction and implementation have made traditional banking and financial services evolve, more or less rapidly, toward open banking services. Before examining how that evolution has occurred, it's important to define open banking.

What Is Open Banking?

Open Banking is an umbrella term that includes legislative changes, open data, enabling technology, and new innovation poised to disrupt the financial services industry³.

More specifically, open banking involves:

[...] the opening of internal bank customer data and processes to other parties through digital channels. It can include the secure sharing of customer-authorized financial data with third parties or the distribution of partner-based products, such as those created by technology companies like Apple Inc., to bank customers. Open banking offers many possibilities to improve financial services and the customer experience, ranging from more straightforward uses like account aggregation and facilitating client identification to a host of creative products and services to solve customer pain points⁴.

The novelty thus consists of enabling consumers to easily and securely share the data held by their financial institution with third parties – financial institutions or financial technology

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² DELOITTE, Creating an open banking framework for Canada, [Online], https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/financial-services/ca-open-banking-aoda-en.pdf

³ Isa GOKSU, TELFORD, Kevin. "Why open banking and where to begin," in *ThoughtWorks*, June 11, 2018, [Online], https://www.thoughtworks.com/insights/blog/why-open-banking-and-where-begin (page consulted on September 12, 2019)

⁴ PRICEWATERHOUSÉCOOPERS, "Open banking is coming," in PwC, 2019, [Online], https://www.pwc.com/ca/en/industries/banking-capital-markets/canadian-banks-2019.html (page consulted on September 16, 2019)

companies – which can then aggregate the data and combine them with others in order to offer new services⁵.

According to Deloitte, open banking would imply more than simply making it easier to share financial data; consumers would take control over their own data.

Open banking is a global movement that promotes a customer's right to share financial information with third parties.

While many global jurisdictions have legislated open banking policies, open banking is broader than just policy—it's a movement comprised of technical, competitive, and regulatory shifts to help customers regain control of their own data and make it more portable between institutions⁶.

History and Context

The use of the term "open banking" in the field of financial services and technologies is relatively recent. It began in Europe with the European Parliament's adoption, in 2015, of European Payment Services Directive 2 (PSD2 or DSP2), which replaced the 2007 Directive (Payment Services Directive 1 (PSD1))⁷. The new rules aimed particularly to promote by means of open banking services the development and use of innovative online and mobile payment methods. In 2016, the Global Banking & Finance Review magazine ran the following headline: "PSD2: One of the Biggest Disruptions in Banking for Decades⁸." Indeed, the Directive's implementation in the European Union in January 2018 signalled the opening of banks to third-party service providers, given the obligation to practice open banking.

This evolution toward open banking systems is part of what is called the fourth industrial revolution, or Industry 4.0, characterized, according to the ministère québécois de l'Économie, de la Science et de l'Innovation, by the following:

[...] une automatisation intelligente et par une intégration de nouvelles technologies à la chaîne de valeur de l'entreprise. [...] La connectivité des données et des objets est la composante déterminante de l'industrie 4.0. Connectivité des logiciels, des équipements, des données, données massives à

⁵ L. SHIELDS, "Why all Canadians should care about Open Banking," *The Globe and mail*, December 30, 2018, [Online], https://www.theglobeandmail.com/business/commentary/article-why-all-canadians-should-care-about-open-banking/. (page consulted on September 16, 2019)

⁶ DELOITTE, Creating an open banking framework for Canada, op. cit. 2.

⁷ Respectively, Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC. EUR_LEX, [Online], https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2366 (page consulted on September 16, 2019) and Directive 2007/64/EC Of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC, OFFICIAL JOURNAL OF THE EUEOPEAN UNION, December 5, 2017, [Online], https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32007L0064&from=EN (page consulted on September 16, 2019)

⁶ T. VIRDI, "PSD2: One of the Biggest Disruptions in Banking for Decades," *Global Banking & Finance Review*, June 2016, [Online], https://www.globalbankingandfinance.com/psd2-one-of-the-biggest-disruptions-in-banking-for-decades/ (page consulted on September 9, 2019).

traiter et cybersécurité deviennent des éléments essentiels qui permettent de créer de l'intelligence dans un système manufacturier capable d'une plus grande adaptabilité dans la production et d'une allocation plus efficace des ressources⁹.

In addition to the evolution of societies and technologies, several other factors have contributed to the transition of traditional banking systems to open banking systems, as illustrated in Figure 1.



Figure 1: Factors at the origin of open banking¹⁰

Consumers wanted greater ease in navigating from one financial service provider to another, and the availability of products and applications developed by fintechs was increasing, thus favouring the competition that consumers wanted between financial institutions. In fact, based on the necessity of greater competition between traditional financial institutions, the Competition Bureau of Canada advocates the adoption of open banking in the country.

Those transformations have forced banks to evolve. From secure entities that consumers relied on to obtain credit and debit services, the banks are slowly transforming into entities that consumers choose according to the services offered, and tomorrow's banking systems will incorporate the new fintechs.

⁹ LEDUC, G., "Vers la quatrième révolution industrielle," *Le Soleil*, December 5, 2016, [Online], https://www.lesoleil.com/affaires/techno/vers-la-quatrieme-revolution-industrielle-c9f3a0cc37a287b51873b9fef2d3384b (page consulted on September 20, 2019).

¹⁰ EY, *Quels modèles d'affaires peuvent être créés par le Système Bancaire Ouvert?*, 2019, Canada, [Online], https://www.ey.com/Publication/vwLUAssets/Symposium-des-services-financiers-d-EY-Le-systeme-bancaire-ouvert.pdf (document consulted on September 16, 2019).

Figure 2: Evolution of banking systems¹¹



Due to those developments, governments are no longer at the stage of evaluating whether or not to adopt open banking, but rather of considering how they must regulate those systems whose development is inevitable, in order to ensure they are secure for everyone.

Building on the principles of customer control and portability of their personal data, many global or industry-led open banking data access models over the past five years to address the shortcomings of current data access models and accelerate data-driven innovations¹².

Data Transfer and Open Banking

While open banking introduces a new way to share consumers' financial data, it would be erroneous to believe no financial data sharing technique currently exists other than the one offered by open banking. For several years, financial data sharing has been possible, particularly through CSV file downloading¹³ and screen scraping.

CSV FILE DOWNLOADING

Since the appearance of online banking services, a majority of financial institutions have given their customers the option to download, through online portals, operational data in easily analysable CSV files making it possible to share the data with other providers. But that technique has problems: It's complex for consumers, doesn't facilitate recurrent data sharing, is not uniform from one financial institution to another, and is often limited to communicating operational data. In addition, downloading CSV files is not sufficiently secure, and that format makes it possible to manipulate data¹⁴.

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¹¹ A., GONZÁLEZ, *et al.*, "Open banking: The beginning of a new era," *Arthur D Little*, November 2018, [Online], https://www.adlittle.com/en/insights/viewpoints/open-banking-beginning-new-era (page consulted on September 23, 2019)

¹² DELOITTE, Creating an open banking framework for Canada, op. cit. 2.

¹³ Comma-separated values, known by the acronym CSV, are an open text format [as opposed to "binary" formats] representing banking data as values separated by commas. Wikipedia, August 2019, [Online], https://en.wikipedia.org/wiki/Comma-separated_values (page consulted on October 30, 2019).

¹⁴ DELOITTE, Creating an open banking framework for Canada, op. cit. 2.

SCREEN DATA CAPTURE (SCREEN SCRAPING)

Service providers that want to obtain a customer's data more efficiently automate access to banking information; to that effect, they request from that customer the necessary identifiers for opening a session on his financial institution's website. They are then able to extract data or perform all the tasks that the customer would normally perform manually on the institution's website. Given that this screen scraping method uses the consumer's connection identifiers, it doesn't require the financial institution's collaboration, but it also implies that available data will only be those directly accessible to the financial institution's customer, and in the format used for presenting the data to that customer.

The Department of finance Canada estimates that in 2019, almost four million Canadians allowed access to their financial data by means of smartphone applications using screen scraping, and that number is reportedly increasing rapidly. But this way of disclosing banking information online is not without risk¹⁵.

In March 2018, the Financial Consumer Agency of Canada (FCAC) cautioned Canadians:

During Fraud Prevention Month, the Financial Consumer Agency of Canada (FCAC) reminds Canadians of the risks of disclosing their online banking and credit card information to anyone, including third-party financial mobile applications and online services. [...] Consumers are normally protected from unauthorized credit card and banking transactions made using their financial institution's online banking service. However, by disclosing their online banking user IDs and passwords to a third party, consumers may breach their financial institutions' user agreements and be held liable for any losses resulting from unauthorized transactions despite any security measures the third party service may have in place¹⁶.

In July 2018, the United States Treasury Department published the *White Paper on Nonbank Financials, Fintech and Innovation*, which describes the documented cybersecurity and fraud risks related to screen scraping. The white paper concludes that access to financial data through application programming interfaces (APIs) would be more secure than through screen scraping¹⁷.

The Senate's Standing Committee on Banking, Trade and Commerce also reported, in June 2019, the risks posed by screen scraping:

Concerns noted by witnesses with respect to the use of screen scraping include: an increased risk of identity theft and fraud, cybersecurity risks, the resource

¹⁵ PORTAG3, Submission in response to the Department of Finance Canada's Consultation Document entitled "A Review into the Merits of Open Banking" of the Department of Finance Canada, Portag3, 2019, [Online], https://portagevc.com/news/public-submission-open-banking-2019/ (page consulted on November 11, 2019) and SENATE CANADA, Open banking: What it means for you, June 2019, [Online], https://sencanada.ca/content/sen/committee/421/BANC/reports/BANC_SS-11_Report_Final_E.pdf (page consulted on November 11, 2019)

¹⁶ FINANCIAL CONSUMER AGENCY OF CANADA (FCAC), Consumer Alert: FCAC reminds consumers of the risks in giving banking information to third-party online, News release, March 13, 2018, [Online], https://www.canada.ca/en/financial-consumer-agency/news/2018/03/consumer-alert-fcac-reminds-consumers-of-the-risks-in-giving-banking-information-to-third-party-online-services.html (page consulted on September 22, 2019)

¹⁷ PORTAG3, Submission in response to the Department of Finance Canada's Consultation Document entitled "A Review into the Merits of Open Banking" of the Department of Finance Canada, *op. cit.* 15.

intensiveness of the process, and the inability for the customer to control the scope or duration of access to the data by the app¹⁸.

DATA SHARING IN OPEN BANKING

The various techniques currently used for sharing consumers' financial data have shortcomings, particularly in terms of security. Data sharing through application programming interfaces (APIs), as part of open banking, would avoid a number of problems:

A more secure way to allow fintechs to access consumer financial data would be through application programming interfaces (APIs). An API is a software intermediary that allows two apps to talk to each other. It acts as a universal access point by which information is retrieved from a database. By using APIs to provide fintechs with access to personal financial information, consumers maintain the security of their login credentials and could potentially control which information to provide to fintechs and how long they would have access to it. APIs are a central element in open banking¹⁹.

Figure 3 details the security and control advantages of APIs over screen scraping for sharing banking data.

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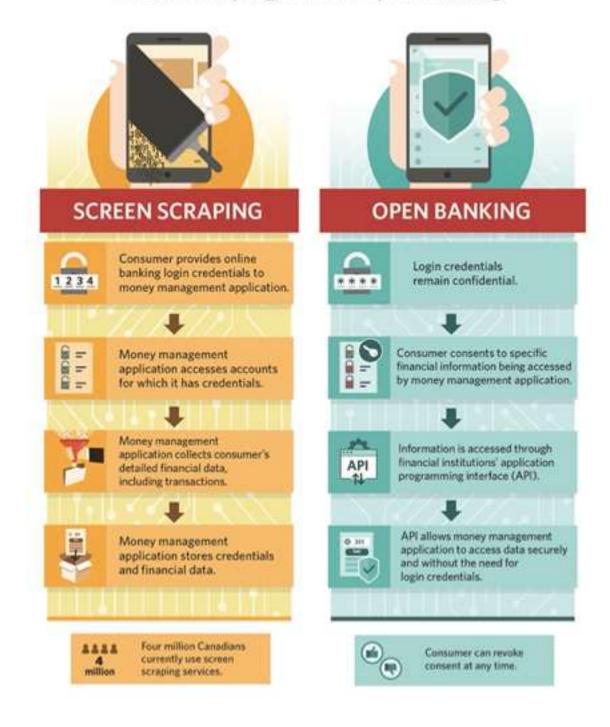
¹⁸ SENATE CANADA, Open banking: What it means for you, op. cit. 15.

¹⁹ Brett STUCKEY and YONG, Adriane, "Open Banking," Library of Parliament, Research publications, October 28, 2019, [Online],

https://bdp.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/201942E? (page consulted on October 3, 2019)

Figure 3: Data sharing by screen scraping and by API²⁰

Money Management Under Screen Scraping Versus Open Banking



²⁰ SENATE CANADA, Open banking: What it means for you, op. cit. 15.

Operation of Open Banking Systems

Open banking systems are not all equivalent. Essentially, they can take three forms, depending on what the API allows.

- *Open data*: The API allows third parties to access customers' data. Customers decide what they accept to share or not. This process is called the "read" privilege.
- *Open process*: The API accesses banking systems to make payments on a customer's behalf. This process is called the "write" privilege.
- *Open products:* The API allows a customer's accounts or products to move between providers or financial institutions²¹. This process is called the "move" privilege.

Figure 4 indicates with concrete applications the operation of each of those processes.

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²¹ PwC, "Open banking is coming," 2019 report on the Canadian banking sector, Canada, op. cit. 4.

What could open banking look like for customers? Open data In this scenario, a customer has authorized a third-party provider to read the transactions in her chequing accounts as well as investments held at other banks and asset management providers. Based on that information, the third party can aggregate the information, through its online platform, and is able to give the customer financial advice. Open process In this scenario, the customer has authorized a third-party payments management platform to initiate payments on her behalf. The platform takes funds from the customer's bank account to pay her various bills on the date they're due. Open products In this scenario, the customer has gone to Bank B to switch her account from BANK A Bank A. Through open banking, the customer can initiate the switch without being physically present at Bank A. Her account at Bank A will be closed and the funds in it, along with all electronic funds transfer information, will be transferred to Bank B.

Figure 4: Possibilities opened to customers by open banking²²

The choice of the form that open banking will take in Canada will depend on the market and on the regulatory framework that will be put in place. For example, Canada must choose if it wants to allow banks the choice of participating or not in the open banking

²² Ibid.

system or if it wants to coerce them to do so. Moreover, not all products are necessarily included in open banking: The system put in place may apply to all products (bank accounts, credit cards, mortgages, etc.) or only to a few products. The technical standards that will apply may be uniform or decided on by individual financial institutions; applying those standards may be voluntary or mandatory; the government may choose to establish only a general framework for guidelines to protect consumers and personal information, or may get involved more deeply in developing the guidelines themselves. Canada will also identify how financial technology companies will participate in the system, and what framework they will be subject to (accreditation, monitoring entity, etc.). Lastly, Canada will have to examine how consumers will be able to subscribe to an open banking system or withdraw from it²³.

If open banking were established in Canada, would Canadian consumers obtain significant benefits? Or should they distrust it?

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²³ Brett STUCKEY and YONG, Adriane, Open Banking, op. cit. 19.

2. Consumer Perceptions, Benefits, Risks and Issues Regarding Open Banking

Today's digitally savvy consumer – used to the convenience and bespoke service of platforms such as Amazon, Netflix, and Uber – now expects the same level of performance from all service providers – including banks and financial institutions²⁴.

Global Banking & Financial Review

Canadians' Perceptions of Open Banking

In March 2019, Ernst & Young published a report presenting an index of the capacity of ten different markets, across the world, to prosper in an open banking environment. That index measures notably the potential of open banking adoption by citizens of the countries analysed, including Canada, where open banking reportedly raises less interest than elsewhere:

Given this background, it is not surprising that Canada ranked 10th in the Index for consumer adoption potential: only 18% of its digitally active population are using two or more FinTech services, and only 44% of smartphone users have adopted mobile banking. However, those are averages. Consumer behavior differs by demographic segment. Many baby boomers and older senior citizens still prefer visiting branches and talking to customer service staff face-to-face. Canada's demographic skews toward these age groups. [...]

Consumer sentiment remains a hurdle

In general, open banking is generating less buzz among consumers in Canada than in the US. However, Canadian consumers are becoming more enthused about the possibilities of open banking.

According to the Index, Canada placed eighth in terms of consumer sentiment among global peers. The consumer sentiment analysis in our Index was derived from social media, blogs and forums. Overall, 31% of consumer social media posts and comments were positive and 9% were negative, for a net positive score of 22%²⁵.

A month after publication of the Ernst & Young report, the results of an Accenture survey revealed that Canadians would be reticent to the establishment of open banking, but that

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²⁴ CHOUDHRY, Moorad, "The Moorad Choudhry Anthology Past, Present and Future Principles of Banking and Finance," *Global Banking and Finance*, April 4, 2018, [Online], https://www.globalbankingandfinance.com/the-moorad-choudhry-anthology-past-present-and-future-principles-of-banking-and-finance/ (page consulted on September 10, 2019)

²⁵ Sinha ABHISHEK and Anthony RJEILY, *EY Open Banking Opportunity Index research*, EY, March 2019, [Online], https://www.ey.com/en_gl/banking-capital-markets/how-new-open-banking-opportunities-can-thrive-in-canada (page consulted on August 8, 2019). The report still takes care to mention that "Open banking in Canada does not yet exist as it does in the other markets in the Index," which may influence Canadians' opinion compared with that of citizens of other countries, where in some cases open banking has already been in place for several months.

they might be interested in it if, in particular, security measures were put in place. 75% of survey respondents expressed distrust of open banking. The main concerns raised by the 1,500 respondents pertained to the private nature and the security of financial data (62% of respondents), to distrust of large technology companies regarding access to financial data (51% of respondents) and to doubt about significant benefits of open banking (44% of respondents). However, slightly more than 30% of respondents indicated they might be more interested in open banking if additional security measures were taken (additional access authentication measures or real-time analysis of their payments to verify if the latter correspond to their purchasing habits, for example). While almost 20% of respondents stated their readiness to share their banking data in exchange for various potential benefits, 40% have an understanding of open banking's benefits that is insufficient to authorize a third party to access their financial data. The survey revealed that 21% of Quebecers are interested in the concept, as opposed to only 16% of respondents in the rest of Canada²⁶.

CONSUMER SURVEY

We mandated a specialized firm to conduct a survey in order to draw a portrait of consumers' views about open banking, and of the fears or concerns they feel regarding such a system. Open banking systems are constantly evolving and articles about them are multiplying, so we thought it interesting to conduct a new survey slightly more than a year after those cited previously, in order to discern whether the situation had evolved since then.

Survey Methodology

We mandated the firm Passage Marketing to conduct an online survey of 2,000 Canadian residents 18 years of age and over. The survey lasted from April 23 to May 2, 2020. The respondents resided in the western provinces (32%), Ontario (38%), Québec (23%) and the Atlantic provinces (7%). Men and women as well as age groups were almost equally represented. The survey's statistical margin of error is +/- 2.2% (19 times out of 20).

Survey Highlights

Poor Knowledge of Open Banking

Above all, we wanted to learn what proportion of Canadians know what open banking is. The survey's results show that open banking remains at this time very poorly known to the Canadian population. Figure 5 presents the answers to the question: Before today, had you ever heard of "open banking" or "open banking system"?

²⁶ ACCENTURE, Canadians would warm to open banking with assurance of increased security and greater awareness of benefits, Accenture survey suggest, April 17, 2019, [Online], https://www.accenture.com/ca-en/company-news-release-canadians-open-banking-security-concerns (page consulted on December 12, 2019).

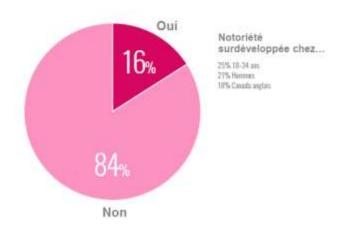


Figure 5: Canadians' knowledge of open banking

While a wide majority of respondents had never heard of open banking before answering the survey, certain population groups had, particularly men and young people, likely because young people are more inclined to be interested in the new technologies and to use a variety of new applications.

To those who said they knew about open banking, we asked how they would describe it in their own words. Figure 6 presents the main answers obtained.

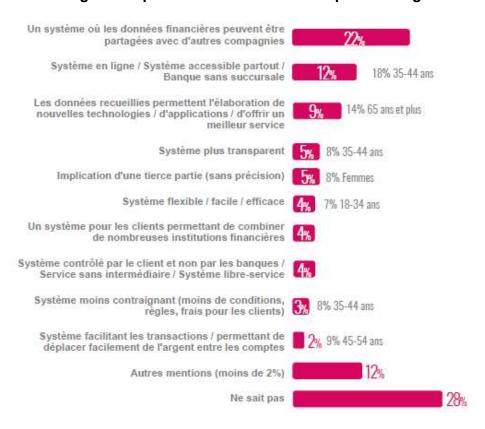


Figure 6: Spontaneous definitions of open banking

Not surprisingly, some respondents who said they had heard of open banking still can't find the terms to define it. That percentage of respondents is particularly high.

However, it should be noted that while a small number define quite accurately the concept of open banking (22%), another 6% associate related elements with the concept (link between numerous financial institutions, facilitation of transactions, and money transfers between accounts).

Although they had heard about the concept, several respondents can't define it (28%) or view it erroneously (more transparent system, less coercive, flexible/easy/efficient).

Before asking respondents the following survey questions, we gave them a summary definition of open banking, to inform them about the concept and have them answer the following questions with the same basic information in hand:

Un système bancaire ouvert désigne un système dans lequel les banques partagent les données financières qu'elles ont à leur disposition avec d'autres services bancaires ou avec des entreprises de technologie financière.

Dans un système bancaire ouvert, les consommateurs pourront plus facilement permettre le partage de leurs données financières avec des tierces parties qui offrent diverses applications financières.

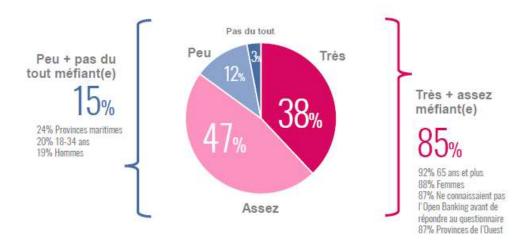
Par exemple: des applications pourront permettre à un consommateur de visualiser à un même endroit l'ensemble de ses comptes et placements, d'autres pourront accéder à l'ensemble des données financières d'un consommateur afin de communiquer des conseils de gestion personnalisés, des services de gestion

des actifs, d'autres encore pourront faciliter le changement d'institution financière, etc.

Distrust of Open Banking

We asked respondents to indicate, on the basis of that definition, their level of distrust regarding the arrival of open banking in Canada.

Figure 7: Level of distrust regarding the arrival of open banking in Canada



The results are eloquent: The level of distrust is very high and appears to rise with age. The reason may be that open banking involves the use of technological tools that older people are less familiar and comfortable with.

The same goes for access to financial and banking data by financial technology companies so that they can offer their services – an idea that respondents feel uneasy about.

22% Anglophones

Très Assez Pas du Peu + pas du tout à l'aise tout Très + assez à l'aise 93% 65 ans et + 89% Francophones 87% Québec 86% Femmes 44% Connaissaient l'Open 85% Ne connaissaient pas l'Open Banking 32% 18-34 ans Peu 30% Provinces maritimes 26% Hommes 23% Ontario

Figure 8: Level of comfort with financial technology companies' access to financial and banking data

What concerns provoke this malaise among respondents? We offered them answer options.

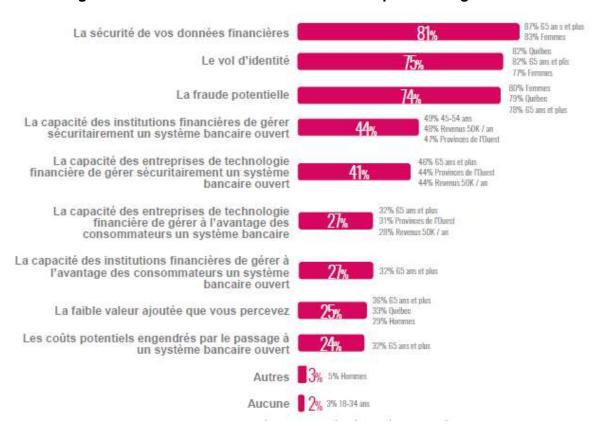


Figure 9: Main concerns about the arrival of open banking in Canada

Data and asset security concerns far exceed those about the added value or good management of open banking.

The most prevalent fears are likely related to current issues, given the recent (at the time of the survey) data thefts at Desjardins, Equifax and Capital One, to name only those companies. Respondents identified 4.2 concerns on average, which appears to confirm that open banking worries most Canadians, for a variety of reasons.

To examine whether the adoption of various measures would ease Canadians' concerns, we asked respondents the extent to which, if open banking arrived in Canada, certain measures we asked them about would reassure them. Figure 10 presents the proposed measures and their effects on respondents' level of concern.

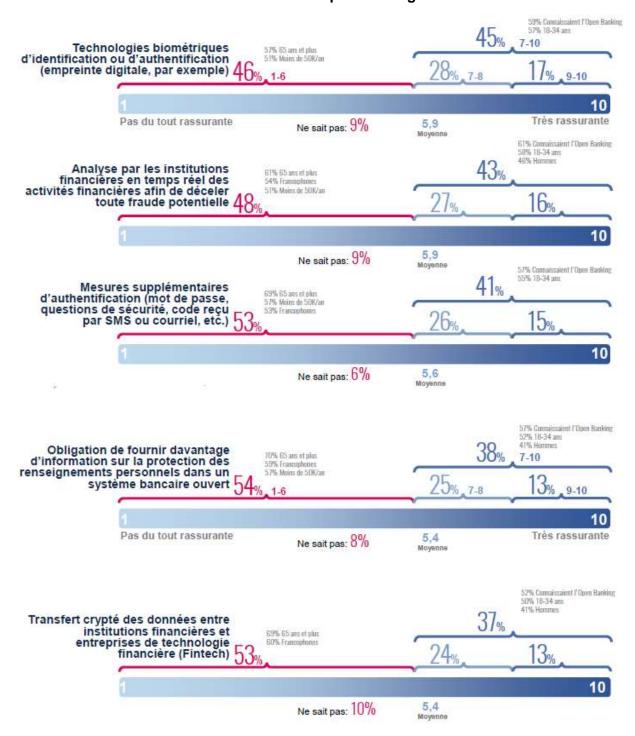


Figure 10: Level of reassurance provided by various measures after the establishment of open banking

It appears at first sight that none of the solutions we proposed to respondents would reassure a majority of them. Unsurprisingly, the respondents most interested in the concept also tend to be reassured by the measures we proposed. But the results suggest that Canadians will remain distrustful, whatever measures might be implemented to appease their fears. A combination of measures will likely have to be put in place in order to foster massive adoption.

Little Enthusiasm for Applications That Might Be Available in an Open Banking System

Lastly, to make the concept of open banking more concrete for respondents, we presented to them various applications that any open banking system could likely make possible, and we asked respondents to what extent they would be interested in using them.

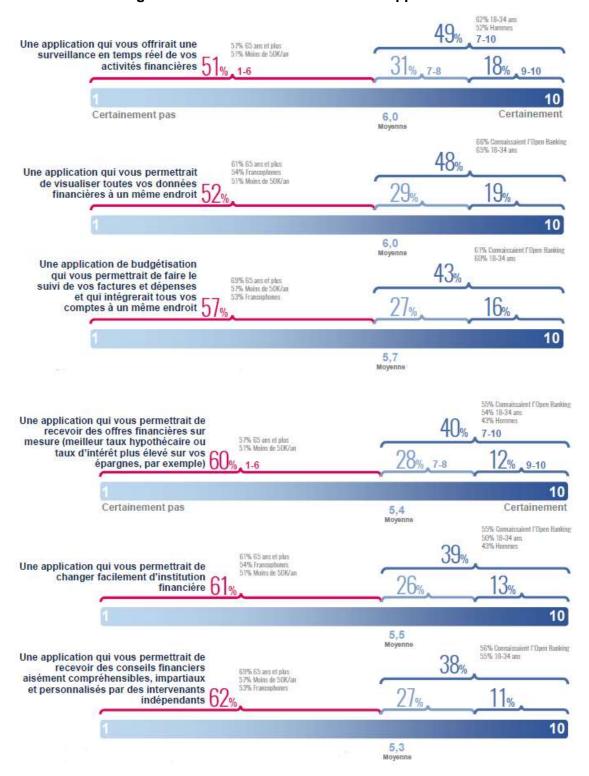


Figure 11: Level of interest in various applications

Once again, no consensus or majority emerges. The respondents' distrust appears to supersede the potentially practical aspects of the various applications presented to them; younger respondents and those who know about open banking showed more interest.

The results would probably have been different if the applications had been presented with colourful ads and slogans. None of the applications raised much enthusiasm among the respondents – including the application overcoming well known barriers, like those for changing financial institution.

Conclusion

The survey's results are unequivocal: Canadians know little or nothing about open banking, they distrust it enormously, and currently it appears that neither additional security measures nor applications offering new banking services could induce them to adopt any open banking services. That reluctance may be due to the fact that there is currently no open banking system in Canada, so that Canadians don't have full access to the possibilities that could be offered to them.

Open banking benefits and opportunities

According to several stakeholders and authors, the arrival of open banking could offer various benefits to consumers, whatever they may think about it: better control over their banking data, greater data transfer security, and generally more varied and better banking and/or financial services. Certain indirect benefits are also attributed to open banking.

CONTROL OVER BANKING DATA AND THEIR TRANSFER SECURITY

In February 2019, before the Senate of Canada's Standing Committee on Banking, Trade and Commerce, which met to examine the financial service benefits and challenges of open banking for Canadian consumers, stakeholders explained that open banking gives users better control over their banking data. Todd Roberts, a payment expert at Deloitte, stated:

Open banking, at its core, is the beginning of a more general movement towards greater customer rights over their data and to empower customers to obtain stronger and more meaningful control over their data²⁷.

The more comprehensive view of what open banking makes possible is that the latter also gives consumers greater control over their finances:

For consumers, Open Banking changes will mean customers have a holistic view of all their financial behavior for the first time, making it easier to manage and

²⁷ SENATE OF CANADA, *The Standing Senate Committee on Banking, Trade and Commerce – Evidence*, February 28, 2019, [Online], https://sencanada.ca/en/Content/Sen/Committee/421/BANC/54585-e (page consulted on August 2, 2019)

control their finances. New apps can collate and analyze data for people, providing them with the know how of when and where cutting back on expenses is needed. Being able to pay through single-clicks and contactless cards means it is otherwise hard for consumers to keep on top of spending²⁸.

Currently, when consumers want to exchange their financial data, financial technology companies and financial institutions use screen scraping. Open banking would introduce a better process. In that regard, Mr. Roberts indicated the following to the Senate Standing Committee on Banking, Trade and Commerce:

This model [screen scraping] presents a number of material risks both for Canadians as well as for financial institutions, from the storage of online banking credentials all the way through to lacking proper consent and protocols for the ongoing management and verification of that information. Open banking can create a safer and more reliable model for customers to share their data with trusted organizations²⁹.

In short, open banking would make consumers the true owners of their financial data, which in theory they could share without danger. That could, among other things, make life easier for taxpayers when tax returns are filed:

Gabrielle Loren looks forward to a day when her accounting team no longer has to cajole clients into handing over myriad financial statements to help properly balance their books. Once open banking becomes available in Canada, she says, accountants can get a client's permission to access financial information directly from the bank³⁰.

BETTER BANKING SERVICES/BETTER CUSTOMER SERVICES

Many praise the new services and possibilities that open banking could offer consumers. For example, money transfers between accounts from different financial institutions could be greatly facilitated and resemble consulting an account balance or transferring money between accounts from the same financial institution³¹. An application enabling consumers to receive promotional offers from different financial institutions could make it possible for consumers to better inform themselves and to change financial institutions quickly and easily as they receive new offers.

For example, consumers who don't have a credit history and thus have difficulty obtaining a loan might benefit from open banking; a lender could examine a consumer's inflows and outflows of funds to help it make a decision about granting a loan.

[...] Historically, traditional lenders have had a restrictive view on how to assess risk, which meant that many people, including small business owners, were either turned down or charged a higher interest rate. By taking a broader view of

²⁸ MARRIA, Vishal, "How Open Banking Has Changed Financial Services So Far," *Forbes*, December 10, 2018, [Online], https://www.forbes.com/sites/vishalmarria/2018/12/10/how-open-banking-has-changed-financial-services-so-far/#77d2e0453e07 (page consulted on August 2, 2019)

²⁹ SENATE OF CANADA, The Standing Senate Committee on Banking, Trade and Commerce – Evidence, op. cit. 27.

³⁰ Brenda BOUW, "How open banking could change the accounting world," *Pivot Magazine*, May 3, 2019, [Online], https://www.cpacanada.ca/en/news/pivot-magazine/2019-05-03-fintech-revolution (page consulted on July 31, 2019)

³¹ Lisa SHIELDS, "Why all Canadians should care about Open Banking," op. cit. 5.

financial data, and leveraging the technology required to assess risk properly, FinTechs can include factors that traditional lenders have never considered and provide more people with access to capital 62 .

Accordingly, despite risks of exclusion posed for some consumers due to their poor knowledge or their fear of the new technologies, open banking could also correct certain exclusion problems experienced by some consumers, particularly those who don't have a credit history.

Some also suggest that Open Banking will be a benefit to the unbanked or the underbanked – those who do not have existing relationships with financial institutions or have only limited relationships because of poverty, immigration status, or other issues. Using the tools of Open Banking, consumer advocacy groups and the fintech services sector could – in theory at least – assist underbanked consumers to gain access to these services – for example, by building data on creditworthiness based on spending and payment data³³. [references omitted]

A concrete application of that potential benefit of open banking is already available in the United Kingdom:

In the United Kingdom, for example, one provider uses access to customer bank transaction data to help creditors confirm income and calculate disposable income. The service can also determine a customer's payday schedule to help set repayment dates³⁴.

However, caution is appropriate regarding this type of application and its potential benefits. Indeed, while it may be beneficial for a consumer without a credit history to be able to access credit or have regular monthly instalment dates for repaying a loan, it would clearly be less beneficial for that type of application to facilitate payday loan offers³⁵.

Banking services would also be improved by greater flexibility in personal financial management. That flexibility could enable a consumer to monitor his credit in real time and confirm his eligibility for better mortgage rates, or to monitor banking offers in real time and change banks easily and quickly as offers are received³⁶.

You could temporarily grant anonymized visibility to your assets, liabilities, tax and employment information when applying for a loan or mortgage, and pick the right product and lender for you³⁷.

The Standing Committee on banks, trade and commerce reported that:

[...] witnesses argued that open banking would provide direct benefits for Canadian consumers by increasing competition in the financial sector and

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³² FDATA NORTH AMERICA, *Opportunities in Open Banking*, 2019, [Online], https://sencanada.ca/content/sen/committee/421/BANC/Briefs/BANC_StevenBomsFDATA_e.pdf (document consulted on October 3, 2019)

³³ Teresa SCASSA, *Open Banking in Canada - A Primer*, July 2019. [Online], http://www.teresascassa.ca/index.php?option=com_k2&view=item&id=311:open-banking-in-canada-a-primer&Itemid=83 (document consulted on August 13, 2019)

³⁴ PwC, "Open banking is coming," 2019 report on the Canadian banking sector, Canada, op. cit. 4.

³⁵ See for example the SafetyNet application on this subject: https://www.safetynet.credit/

³⁶ FDATA NORTH AMERICA, Opportunities in Open Banking, op. cit. 32.

³⁷ Lisa SHIELDS, "Why all Canadians should care about Open Banking," op. cit. 5.

providing them with additional tools with which to better manage their personal finances³⁸.

In addition to better banking services, financial institutions could offer better customer service, according to a report by FDATA North America:

Customer service and satisfaction should improve with greater transparency and choice, while frustration with linking or switching providers should decrease³⁹.

That association also claims that open banking would enable consumers to better understand where their money is going:

A well-regulated and standardized open banking regime will provide tools that help consumers understand their financial habits and the full range of available services, identify ways to predict when an individual might struggle financially, and improve access to lower cost services and financial advice. These benefits will ultimately have a positive impact on the financial literacy and outcomes of many Americans⁴⁰. [references omitted]

EY, the global organization of Ernst & Young Global Limited member companies, presents the various potential benefits of open banking by focusing on service optimization rather than on control over financial data and on data transfer security.

INDIRECT BENEFITS

Gains for the Canadian Economy and Job Creation

Open banking could enable the Canadian economy to generate gains, notably due to the growth of the financial technology sector and the appearance of many fintechs, which could contribute to job creation in the country:

Du fait de l'accroissement de l'activité commerciale et de l'activité des consommateurs, un système bancaire ouvert est susceptible d'avoir une incidence positive sur le secteur des services financiers et sur le PIB global.

Par exemple, selon une étude menée par le Centre of Economics and Business Research au Royaume-Uni. le système bancaire ouvert apporte à l'économie du Royaume-Uni plus de 1 milliard £ chaque année, en plus de soutenir la creation de 17 000 emplois⁴¹.

Reduction of Unfair Practices

As a by-product of better banking services, Canadians would likely see a reduction in the unfair practices of certain financial institutions. Indeed, if their customers can change financial institutions more easily, the latter will be motivated to reduce unfair or dubious practices in order to retain their customers:

³⁸ SENATE CANADA, Open banking: What it means for you, op. cit. 15.

³⁹ FDATA NORTH AMERICA, Opportunities in Open Banking, op. cit. 32.

⁴¹ EY, Quels modèles d'affaires peuvent être créés par le Système Bancaire Ouvert?, op. cit. 10.

Due to the lack of choice, nearly 65 percent of Canadians have been with their current bank for at least a decade, which is higher than other markets – in the U.S., the 10-year retention ratio is 40 percent. In retail banking, the lack of competition also has contributed to an increase of predatory sales practices. The Financial Consumer Agency of Canada reported increased risks of mis-selling and breaching market conduct obligations and indicated that the controls put in place to monitor, identify and mitigate these risks are insufficient⁴². [references omitted]

Open banking risks and issues

Establishing open banking in Canada may provide Canadian consumers with various benefits, but also involves a number of risks and issues that must be taken into account to ensure that consumers are protected adequately.

The key to adequate regulation to protect consumers will rest on establishing rules and practices that will as a priority ensure respect for: consumers' right to access data held by third parties; consumers' informed consent to the sharing of their financial data; and the protection and security of consumers' financial data and privacy.

RIGHTS OF CONSUMERS TO CONTROL ACCESS TO AND USE OF THEIR DATA

The first issue of open banking is consumer control over access and use of financial data.

Currently, although a consumer's financial data are eminently personal, since they concern his individual situation, he can't freely and securely share his financial data held by a financial institution. Some think that open banking regulation must begin with an assertion of consumers' right to access and share their financial data.

CONSENT TO DATA SHARING

Whereas open banking regulation must first regulate consumers' right to control their data, it must also imperatively and judiciously circumscribe the issue of consent to data sharing. Currently, a consumer cannot freely and securely share the financial data held by financial institutions.

Given the facility with which data can be shared in open banking, consent is a major issue and its regulation will be crucial.

In the current context, consumers already consent to their financial data being shared between service providers, but no clear regulatory provision protects the data in case of problems. Giving a financial company access to one's data by communicating one's account identifiers, for example, could leave a consumer without any protection in the event of a security breach at that third party, or simply because he has shared his account identifiers while his contract with his financial institution prohibits that.

⁴² FDATA NORTH AMERICA, Opportunities in Open Banking, op. cit. 32.

Establishing clear legislation is not only important, but necessary to stop current risky practices for sharing access to financial data. According to the Financial Data and Technology Association, eventual legislation should be based on four principles:

- 1. Consent must be affirmative and explicit;
- 2. Consumers should be able to amend their consent, including to 'opt-out' of using a service (and revoke access to their data) at any time;
- 3. All parties seeking consent should be appropriately regulated;
- 4. No financial institution should restrict a consumer's ability to share data with third party providers absent a clear and objective risk factor which should be part of the regulation⁴³.

To protect consumers by ensuring its customers' explicit consent, any company offering an open banking service should, for example, draw their attention to clear mentions indicating:

- What data they are consenting to share (and how it will be accessed)
- How long access is permitted (defined terms)
- How to opt-out
- Who will hold the records (and for how long)⁴⁴

DATA TRANSFER SECURITY / PERSONAL INFORMATION PROTECTION / CYBERSECURITY

All the surveys of Canadians arrive at similar conclusions: Canadians are very concerned about the security and protection of their data in an eventual open banking system. All consumers agree – as do many actors in the field – that if such a system is introduced in Canada, a law should protect their personal information:

However, widening access to the sensitive data without proper safeguards can also introduce new risks to the financial system, eroding the new value generated⁴⁵.

Consumers are thus not alone in worrying about the security of open banking: "48% of negative discussions worldwide around Open Banking centered on consumers' data protection and cybersecurity concerns⁴⁶."

The Canadian Bankers Association (CBA) also worries about possible cyber attacks and notes that:

If a TPP has insufficient controls, there is a greater chance that cyber attacks will be successful, potentially resulting in fraud and losses to customers. Further, as financial institutions do not have a clear line of sight into the number of customers

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⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ DELOITTE, Creating an open banking framework for Canada, op. cit. 2.

⁴⁶ THOMAS, Hamish, EY Open Banking Opportunity Index: where open banking is set to thrive, EY, August 31, 2020, [Online], https://www.ey.com/en_gl/banking-capital-markets/ey-open-banking-opportunity-index-where-open-banking-is-set-to-thrive (page consulted on September 15, 2020).

that have shared their online credentials with TPPs, a cyber attack on the TPP would be difficult to detect, contain, and manage⁴⁷.

Consumers' fears are not baseless. Data transfer security in open banking, personal information protection and cybersecurity are potentially the riskiest aspects of open banking. Figure 12 identifies the main risks of open banking and their mitigation methods.

Figure 12: Potential risks of open banking⁴⁸



Financial institutions that process sensitive personal information as part of their daily activities, which are already regulated, have established appropriate security and personal information protection measures⁴⁹. That isn't necessarily the situation for new third-party companies that will also have access to data in open banking. The risks of frauds and leaks of personal information will necessarily increase with the greater number of transfers and of companies that will have access to data.

As customer data is distributed across a larger number of industry players (with potentially different standards (for data security), organizations will become more vulnerable to malicious third parties as well as mistakes, increasing the likelihood of cyberattacks and inadvertent data leaks⁵⁰.

The issue of different data security standards according on the types of companies must be addressed directly. Open banking regulation must of course ensure that third-party companies will apply rigorous security measures. The proliferation of data exchanged and

⁵⁰ DELOITTE, Creating an open banking framework for Canada, op. cit. 2.

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⁴⁷ ABC, *Open Banking*, November 2, 2019, [Online], https://cba.ca/Assets/CBA/Documents/Files/Article%20Category/PDF/CBA%20Submission%20to%20Finance%20Canada%20Consultation%20Paper%20on%20Review%20into%20Merits%20of%20Open%20Banking

⁴⁸ EY, Quels modèles d'affaires peuvent être créés par le Système Bancaire Ouvert?, op. cit. 10.

⁴⁹ FCAC, "Open banking review: FCAC submission to the Advisory Committee on Open Banking," Government of Canada, June 2021, [Online], https://www.canada.ca/en/financial-consumer-agency/corporate/publications/open-banking-fcac-comments.html (page consulted on March 23, 2020).

of players involved may also require tightening the rules applied by financial institutions, which, even without those new threats, have not proven infallible to date.

To guarantee, in particular, that third-party companies apply strict security measures, lawmakers, as suggested by FCAC, will likely have to provide a form of accreditation that alone will allow access to open banking and to data held by financial institutions⁵¹.

Would the Personal Information Protection and Electronic Documents Act (PIPEDA) in its current state adequately protect consumers' personal date in an open banking context?

[...] over the past several years, privacy experts, the Office of the Privacy Commissioner of Canada and various stakeholder groups have noted the risks to privacy posed by open banking and urged the federal government to update the Personal Information Protection and Electronic Documents Act in this respect, in order to modernize Canada's privacy regime and keep it up to date with privacy legislation in other jurisdictions, in particular the European Union (EU)⁵². [references omitted]

Accordingly, modernizing PIPEDA appears inevitable. The exercise would include a revision of consumer protections in terms of personal information access and sharing, explicit and formal consent obligations, but also the Privacy Commissioner's powers. We will further explore all those issues in Chapter 5, which discusses the regulatory framework to put in place.

Open Banking in Practice

ACCOUNT AGGREGATION AND BUDGET PLANNING

Open banking's most common application is personal banking data aggregation in a single intelligible interface made available to consumers. In the United Kingdom, where application programming interfaces (API) have been developed according to a standardized model, several major banks⁵³ have integrated that feature into their online banking systems, thus undercutting fintechs that would have considered offering that service. A bank can thus now (with necessary customer authorizations) have access to balances and transaction statements that appear in a customers' accounts from other financial institutions.

Elsewhere, bank account aggregation is a niche for third-party applications. That feature is often combined with budget planning tools. For example, open banking enables the automation of transfers between accounts held in different institutions⁵⁴.

⁵¹ FCAC, "Open banking review: FCAC submission to the Advisory Committee on Open Banking," op. cit. 49.

⁵² Brett STUCKEY and YONG, Adriane, Open Banking, op. cit. 19.

⁵³ This is notably the case with Barclays, Royal Bank of Scotland, Halifax and Lloyds. See DELOITTE, "Executing the open banking strategy in the United States," *Deloitte*, October 21, 2019, [Online], https://www2.deloitte.com/us/en/insights/industry/financial-services/open-banking-model-strategy-united-states.html (page consulted March 20, 2020)

⁵⁴ In the United Kingdom, the online bank Tandem offers such a service in partnership with, an online payment fintech that has become a multinational corporation. It's also the case for the third-party applications Moneybox and Pledjar.

Budget planning applications that enable bank transfers and thus require write privileges may not be available everywhere, as opposed to bank account aggregation applications that merely require read privileges.

Practical Case – Mint (United States)

Mint is a bank account aggregation application that offers a panoply of services, including the option to create a budget and monitor one's expenditures. A consumer can link to the application his bank accounts, credit cards, loans and investments to obtain an overall portrait of his financial situation. The application can send alerts if his expenditures exceed what he had budgeted initially in different categories (auto, housing, restaurants, etc.). It was offered well before the appearance of open banking in the United States, and at first only operated by screen scraping. Purchased for \$170M in 2009 by the giant Intuit⁵⁵, Mint numbered 20 million users in 2016⁵⁶. Today, access to some banks' data is facilitated by the use of APIs⁵⁷.

The application is offered for free to consumers. Intuit's confidentiality policy⁵⁸ provides the option for customers to obtain all the information held about them and to demand its destruction. Otherwise, personal data may be held indefinitely and used for advertising services offered by the company and its affiliates, and for the "development of insights about you and your needs"). Personal data can be shared with financial service providers, including collection agencies, and with third parties jointly participating in a sale, a promotion or an event. Mint's business model rests on referring partner products to its subscribers, who are targeted through analysis of their financial data⁵⁹.

PERSONAL AND MORTGAGE LOANS

In the United Kingdom, financial institutions were required to develop an open computer interface. At first, APIs were limited to current accounts. The British open banking system then spread to credit cards, electronic wallets and prepaid cards.

⁵⁵ Intuit is also the editor of the popular accounting application (app) QuickBooks and of the tax return preparation tool TurboTax. Intuit was involved, with Microsoft, in developing the Open Financial Exchange format in late 1990.

⁵⁶ MINT, "Mint by the Numbers: Which User Are You?," *Intuit*, April 6, 2016, [Online], https://mint.intuit.com/blog/credit/mint-by-the-numbers-which-user-are-you-040616/ (page consulted on March 15, 2021)

⁵⁷ The banks Citibank, JP Morgan Chase, Bank of America, Wells Fargo, Capital One and PNC have provided Mint with APIs. See MINT, What's new about my bank connections?, *Intuit*, 2021, [Online], https://help.mint.com/Accounts-and-Transactions/939542541/What-s-new-about-my-bank-connections.htm. (page consulted on March 15, 2021) After a long dispute about access to its data, the bank JPMorgan Chase agreed to make available to Mint an API giving more practical and secure access to its data than by "scraping." See Ken SWEET, "Chase, Mint reach deal for faster, more secure data-sharing," *USA Today*, January 25, 2017, [Online], https://www.usatoday.com/story/money/personalfinance/2017/01/25/chase-mint-reach-deal-faster-more-secure-data-sharing/97059434/ (page consulted on March 10, 2021).

⁵⁸ INTUIT, *Intuit Global Privacy Statement*, December 3, 2020, [Online], https://www.intuit.com/privacy/statement/ (page consulted on April 8, 2021)

⁵⁹ Mint's usage terms specify: "Intuit may receive compensation from third parties which may impact the placement and availability of the Intuit Offers." MINT, "Terms of Service," *Intuit*, [Online], https://mint.intuit.com/terms (page consulted on April 8, 2021)

Accordingly, a consumer who would want to make some of his mortgage data available to a third-party company must still share his bank account identifiers with that third party in order to enable the company to proceed with screen scraping.

Access to current account data makes it possible to assess the solvency of loan applicants on the basis of an analysis of their money inflows, saving habits and consumer behaviours. By improving the assessment provided by traditional credit rating agencies such as Equifax and TransUnion, open banking gives certain consumer categories access to a better credit rate. In a working document, the Consultative Group to Assist the Poor (CGAP), which operates under the umbrella of the World Bank, praises open banking for its financial inclusion of marginalized groups⁶⁰.

In the United Kingdom, Koyo, for example, offers loans to a clientele of newcomers without a credit history or to consumers whose credit histories with traditional credit rating agencies don't generally give access to a loan, by using open banking to obtain data for determining the ability to repay⁶¹. Other startups, such as Credit Kudos, which offers individuals a free application, try to compete directly with financial rating agencies by providing a risk analysis service using open banking⁶². Regarding mortgages, Habito, a free application that reports on its website to have transacted more than £4 billion⁶³, claims the ability to find for its customers more favourable rates than those of traditional financial institutions or those generally offered to the customer by their own bank. The application states that it takes the necessary steps with financial institutions on the customer's behalf so that he may obtain the loan. If the most favourable rate is offered by a provider with which Habito has no agreement, the user will be informed so that he may initiate the contact himself, whereas Habito will also take the necessary steps if it has an agreement with the provider.

OTHER CONSUMER APPLICATIONS

Some open banking capabilities are more marginally useful to consumers: for example, simplifying the sharing of banking data with an accountant. In the United Kingdom, the accounting application QuickBooks, charged monthly, already includes that feature⁶⁴.

However, some fintechs have demonstrated more imagination and developed novel services. For example, Canopy, priced according to use, automatically reports the rents paid by the user to a credit rating agency in order to improve his credit score. Kalgera is a free application for preventing fraud and financial exploitation targeting a vulnerable clientele. It enables a user to share a redacted version of his banking operations with a trusted person and generates alerts when suspicious transactions are detected. When adopted by an employer, Wagestream enables employees to configure, for example, their compensation payment methods; fees apply for certain operations.

⁶⁰ CGAP, *Open banking: How to design for financial inclusion*, October 2020, [Online], https://www.cgap.org/sites/default/files/publications/2020_10_Working_Paper_Open_Banking.pdf (page consulted on April 8, 2021)

⁶¹ Ruby HINCHLIFFE, "UK fintech Koyo raises £3.8m to aid wiped credit histories," *Fintech Futures*, October 31, 2019, [Online], https://www.fintechfutures.com/2019/10/uk-fintech-koyo-raises-3-8m-to-aid-wiped-credit-histories/ (page consulted on April 8, 2021)

⁶² CREDIT KUDOS, *Better data for better decisions*, [Online], https://www.creditkudos.com/ (page consulted on April 8, 2021)

⁶³ HABITO, Mortgages made easier, [Online], https://www.habito.com/ (page consulted on April 8, 2021)
64 INTUIT, Open banking, 2021, [Online], https://quickbooks.intuit.com/uk/open-banking/ (page consulted on April 8, 2021)

THE FUTURE: THE FULL POTENTIAL OF PAYMENT INITIATION SERVICES

By developing and democratizing connectivity between banks and third-party companies, open banking should make it possible to accelerate and facilitate payment processing and potentially reduce its costs⁶⁵.

The British payment initiation service "Request to Pay" (RtP), often cited as an important development⁶⁶, would eliminate the third party involved in current payment services. On a simple request by text message, email or an application, a payment would be transferred directly from the payer's bank account to the beneficiary's account by means of direct overwrite. No more payment cards or clearing house.

In Canada, Interac already offers a payment initiation service, which however is not used by all the major financial institutions (Desjardins and National Bank, notably, don't subscribe to the service⁶⁷). Google Pay also offers this service, but limits it to 20 requests per 30-day period⁶⁸. Open banking would enable fintechs to compete with those well-established companies by developing new payment platforms. That could result in a major payment fee reduction for merchants, but it remains to be seen how it would affect consumers.

In the United Kingdom, the Faster Payments company is currently developing a payment initiation service that uses open banking and will enable a payer to answer a payment request by making a partial payment and to initiate a discussion with the beneficiary to settle a dispute⁶⁹.

In the United States, the Federal Reserve announced in August 2019 the development of a real-time payment service (FedNow Service)⁷⁰. Consumer Reports considers that the initiative could provide numerous benefits, while cautioning against the higher fraud risks inherent in instant payments⁷¹.

consulted on April 8, 2021)

⁶⁵ Mike FADEN, "Request to Pay Arrangements Provide a New Way to Quickly Collect B2B Payments," American Express, [Online], https://www.americanexpress.com/us/foreign-exchange/articles/request-to-pay-quick-way-collect-b2b-payments/ (page consulted on April 8, 2021)

⁶⁶ Tony MCLAUGHLIN, "The Request to Pay Revolution," Citibank, 2017, [Online],

https://www.citibank.com/tts/sa/flippingbook/2017/The-Request-to-Pay-

Revolution/files/assets/common/downloads/The%20Request%20to%20Pay%20Revolution.pdf (page consulted on April 8, 2021)

⁶⁷ INTERAC, Enhanced features with Interac e-Transfer, [Online],

https://www.interac.ca/en/consumers/products/interac-e-transfer/enhanced-features/#fi-list-request-money (page consulted on April 8, 2021)

⁶⁸ GOOGLE, Learn about the new Google Pay app, 2021, [Online],

https://support.google.com/pay/answer/9199268 (consulted on April 8, 2021)

⁶⁹ PAY.UK LIMITED, *Request to Pay*, 2021, [Online], https://www.fasterpayments.org.uk/request-pay (page consulted on April 8, 2021)

⁷⁰ Lael BRAINARD, "Delivering Fast Payments for All," *Board of Governors of the Federal Reserve System*, August 5, 2019, [Online], https://www.federalreserve.gov/newsevents/speech/brainard20190805a.htm (page consulted on April 8, 2021)

⁷¹ David BUTLER, "Federal Reserve's Plan to Operate a Faster Payment System Will Benefit Consumers, But Protections Are Needed to Minimize Fraud," *Consumer Report*, August 5, 2019, [Online], https://advocacy.consumerreports.org/press_release/consumer-reports-federal-reserves-plan-to-operate-a-faster-payment-system-will-benefit-consumers-but-protections-are-needed-to-minimize-fraud/">https://advocacy.consumerreports.org/press_release/consumer-reports-federal-reserves-plan-to-operate-a-faster-payment-system-will-benefit-consumers-but-protections-are-needed-to-minimize-fraud/">https://advocacy.consumerreports.org/press_release/consumer-reports-federal-reserves-plan-to-operate-a-faster-payment-system-will-benefit-consumers-but-protections-are-needed-to-minimize-fraud/ (page

OTHER OPEN BANKING APPLICATIONS

Standardizing financial institutions' APIs has not been imposed by all jurisdictions. In the United States, industry's development of open banking implies that each institution if free to develop an API according to its own specifications, which generates compatibility problems⁷². In that context, it's much more difficult for a startup to develop an application enabling connectivity to all banks. Accordingly, there appears to be a major market for "intermediate" fintechs that provide startups with a unified API for connecting to those of financial institutions. This is the case for Plaid and Token. That "abstraction layer" by which fintechs access bank data is invisible to the user, but banking data still flows through additional third parties, even for access to the same service. That will likely increase fees and possibly risks since the data are shared and used by more actors.

Summary

On one hand, open banking would potentially provide consumers with a variety of benefits, such as the opportunity to retake full control over their banking data, share their data and enable their use for new services, in a secure manner.

Given potential benefits such as improved banking services and lower barriers to changing one's financial institution, open banking could increase competition within the Canadian banking system, currently dominated by a handful of large banks.

Open banking could give some consumers access to better credit rates, and even to loans they would not have been able to obtain otherwise on the sole basis of their credit history. Ultimately, open banking could also give underbanked or unbanked consumers access to various banking services, for example by giving financial institutions access to expenditure and payment data in order to determine solvency. Theoretically, contrary to what may have been believed, open banking systems may thus not be a source of financial exclusion. More generally, banking services could also be improved, thanks to greater flexibility in personal financial management. That flexibility could, for example, enable a consumer, in real time, to monitor his credit or check out the various banking offers and easily and quickly change banks in real time as offers are received. Indirectly, open banking could stimulate the Canadian economy, notably due to a growth of the financial technology sector and the appearance of various companies in the field, thus potentially creating jobs.

On the other hand, open banking raises numerous concerns. Establishing secure open banking in Canada would depend on regulations ensuring that consumers' right to control access and use of their data is respected, that consumers' consent to the sharing of their financial data is required, and that consumers' financial data are protected and secure.

Canada is currently studying how to integrate open banking into the Canadian banking system and how to regulate it so as to protect Canadian consumers well. In the next chapter, we will examine the situation of open banking in various countries and will consider

⁷² The banks Wells Fargo, Citibank, BBVA and Capital One, notably, have already deployed APIs. See: Val SRINIVAS et al., "Executing the open banking strategy in the United States," *Deloitte*, October 21, 2019, [Online], https://www2.deloitte.com/us/en/insights/industry/financial-services/open-banking-model-strategy-united-states.html (page consulted on April 9, 2021)

what jurisdictions might serve as models for Canada to deal adequately with the iss raised by open banking.	ues

3. Open Banking Elsewhere in the World

Europe might reasonably claim to be the 'cradle of Open Banking - after all, PSD2 and the UK's Open Banking Standard pioneered it. But, look around now, and open banking initiatives are popping up everywhere. It is not just a matter of replicating the European approach elsewhere. Jurisdictions are adopting their own approaches to Open Banking, reflecting their markets and policy objectives, and in some cases developing crossindustry approaches beyond financial services⁷³.

Deloitte

In North America, including Canada, the adoption of open banking is not as advanced as elsewhere, but other regions – particularly Europe, Asia and Australia – have already launched a variety of initiatives and begun implementation.

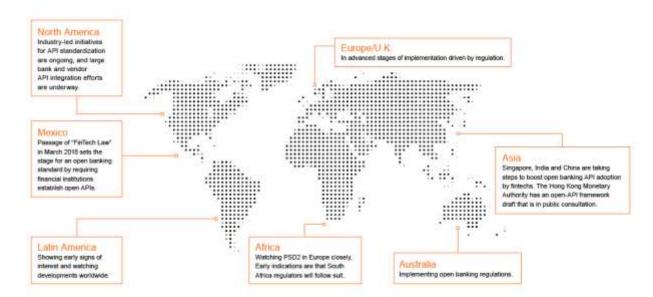


Illustration 2: Global evolution of open banking (2019)⁷⁴

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⁷³ EMEA CENTER FOR REGULATORY STRATEGY, "Open Banking around the world," *Deloitte*, [Online], https://www2.deloitte.com/global/en/pages/financial-services/articles/open-banking-around-the-world.html (page consulted on March 5, 2021)

⁷⁴ Chris THOMPSON, *Understanding the Global Evolution of Open Banking*, July 23, 2020, [Online], https://fiserv.com/en/about-fiserv/the-point/understanding-the-global-evolution-of-open-banking.html (page consulted on March 5, 2021)

Methodology

We chose to examine situations where open banking regulation or implementation are generally more advanced than in Canada. To evaluate the impacts of implementation and regulation on consumers, we had planned to conduct documentary research so as to learn about the positions of consumer rights groups in those jurisdictions. We thus aimed to identify the problems that may be posed by open banking, but also the regulatory frameworks put in place. We expected to complete our research by consulting those groups directly if necessary.

To collect the observations of consumer rights groups, we sent to 11 groups, in September 2019, along with a short presentation of the project, a brief questionnaire focusing on open banking consultations held in their country and on their participation in those consultations, as the case may be⁷⁵. We also questioned the groups about their perception of the main risks posed for consumers by open banking, and about their position on the regulatory framework established in their jurisdiction.

Unfortunately, despite our repeat effort in fall 2020, we received an answer only from two groups, i.e. the Spanish Association of Consumers in Action (FACUA) and the Consumers' Federation of Australia (CFA). Excerpts from the comments are integrated into the appropriate sections.

United Kingdom

The United Kingdom is considered to be a precursor of open banking. As early as 2014, the Open Data Institute and the consulting firm Fingleton published, at the Treasury Board's request, a report titled "Data Sharing and Open Data for Banks⁷⁶." Then, the Open Banking Working Group tabled in 2016 "The Open Banking Standard," which laid the foundation for open banking in the United Kingdom⁷⁷. In tandem, the Competition and Markets Authority (CMA) held a vast consultation on retail banking from June 2013 to February 2017, pertaining to current accounts offered to individuals (personal current account or PCA) and to small and medium-sized companies. After the final report was tabled⁷⁸, confirming a

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⁷⁵ Union Fédérale des Consommateurs - UFC Que Choisir (France); Federation of German Consumer Organisations (Germany); Consumers in Action (Spain); Bureau Européen des Unions de Consommateurs (Union des consommateurs); BSI Consumer and Public Interest Unit (United Kingdom); American Council on Consumer, Consumer Reports (United States); Consumers Association of Singapore (Singapore); Australian Competition and Consumer Commission, CHOICE, Consumers' Federation of Australia (Australia); Consumers Japan, Japan Consumer Network, Consumer Law News Network (Japan); Consumer Council (Hong Kong); Consumer international. The questionnaire is reproduced in Appendix 1.

⁷⁶ HM TREASURY AND CABINET OFFICE, "Data sharing and open data for banks," *H.M. Treasury*, September 2014, [Online],

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/382273/141202_API_Report_FINAL.PDF

⁷⁷ OPEN BANKING WORKING GROUP, "The Open Banking Standard: Unlocking the potential of open banking to improve competition, efficiency and stimulate innovation," [Online], https://www.dgen.net/1/The-Open-Banking-Standard.pdf

⁷⁸ All the reports and documents of the consultation on retail banking are available here: COMPETITION AND MARKETS AUTHORITY, "Retail banking market investigation," *GOV.UK*, August 6, 2020, [Online], https://www.gov.uk/cma-cases/review-of-banking-for-small-and-medium-sized-businesses-smes-in-the-uk (page consulted on April 10, 2021)

serious lack of competition between banks, the CMA ordered the nine largest British banks to develop open APIs within one year⁷⁹. Open banking is indeed perceived as a path to increase competitiveness in the banking sector.

The CMA established in 2016 the Open Banking Implementation Entity (OBIE), a publicprivate corporation funded by the major banks and charged with supervising the implementation of open banking. The entity was co-funded, in proportion to their size, by the country's nine principal establishments in terms of current accounts80. The OBIE has multiple roles:

- Designing specifications for APIs used by banks and other finance companies to provide an open banking system;
- Supporting regulated third-party providers, banks and building societies in applying the open banking standards:
- Creating security and messaging standards;
- Managing the Open Banking Directory, which enables regulated participants to register and participate in open banking;
- Producing guidelines for open banking participants;
- Defining the dispute and complaint managing procedure⁸¹.

The OBIE's governing body is the Implementation Entity Steering Group (IESG), whose members are representatives of nine British banks and five consulting groups, two independent representatives of consumers and SMEs⁸², and four delegates of public and government bodies. The IESG worked in parallel with the establishment of the PSD2 and of the General Data Protection Regulation (GDPR). The United Kingdom integrated the GDPR into its national legislation by means of the Data Protection Act in 2018 in order to protect consumers' personal information.

Open banking implementation by a centralized entity made it possible to establish uniform standards and an accreditation and monitoring regime. The Open Banking Directory (OBD) lists all the providers participating in the system: financial institutions and account servicing payment service providers (ASPSPs)83, payment initiation service providers (PISPs – readand-write access) and account information service providers (AISPs - read-only access).

API end points. OPEN BANKING, Website Glossary, 2021, [Online], https://www.openbanking.org.uk/about-

us/glossary/ (page consulted on April 10, 2021)

⁷⁹ COMPETITION AND MARKET AUTHORITY, "Retail Banking Market Investigation Order 2017," GOV.UK, May 15, 2020, [Online], https://www.gov.uk/government/publications/retail-banking-market-investigationorder-2017 (page consulted on April 10, 2021)

⁸⁰ HSBC, Barclays, RBS, Lloyds Banking Group, Santander, Danske, Bank of Ireland, Nationwide et AIBG. Alexandre COUNIS, "Avec l'Open Banking, le Royaume-Uni a ouvert la voie," Les Echos, November 30, 2017, [Online] https://www.lesechos.fr/2017/11/avec-lopen-banking-le-royaume-uni-a-ouvert-la-voie-186819 (page consulted on July 30, 2019)

^{8†} OPEN BANKING, About us, 2021, [Online] https://www.openbanking.org.uk/about-us/ (page consulted on

⁸² The consumer representative is Ms. Faith Reynolds. The organization Which doubted that a single individual would suffice for the task and suggested instead to include "Consumer Challenge Groups." See the letter submitted by Which as part of the consultation on retail banking, WHICH, December 23, 2016, [Online] https://assets.publishing.service.gov.uk/media/586cdf3d40f0b60e4c00010f/which-response-to-draft-order.pdf 83 Account Servicing Payment Service Providers [...] in the context of the Open Banking Ecosystem are entities that publish Read/Write APIs to permit, with customer consent, payments initiated by third party providers and/or make their customers' account transaction data available to third party providers via their

The list may be divided into two: regulated third-party providers (AISPs and PISPs) and account providers (ASPSPs).

To access data, those service providers must be certified by a public institution, the Financial Conduct Authority (FCA). The approval process generally lasts several months and the requirements differ according to a candidate's business model⁸⁴.

Open banking, in the United Kingdom and Europe, is currently limited to current accounts. However, the FCA published in December 2019 a call for input regarding the development of Open Finance, i.e. the future extension of open banking to a variety of financial products such as savings, investments, pensions and insurance⁸⁵.

On a more technical note, the United Kingdom is also regulating the communication of banking data by an AISP to third parties⁸⁶. The level of regulation imposed on third-party recipients of data depends on their link to the regulated AISP and on the services offered.

Market penetration by fintechs appears quite good⁸⁷. On September 28, 2020, the OBIE announced that more than 2 million consumers use products with features made possible by open banking, a number that had doubled since January of the same year⁸⁸. A July 2020 survey conducted by Nesta has demonstrated a marked increase in the adoption of financial management applications during the COVID-19 confinement, with 54% of the British population using them regularly. More than one third (36%) of those surveyed feel more comfortable using financial management applications today than before the pandemic, and almost one quarter (23%) now have greater trust in online banking services⁸⁹.

European Union

Open banking developed in the European Union after the European Parliament and the Council adopted the European Payment Services Directive 2 (PSD2 or DSP2) on November 25, 2015⁹⁰. That Directive imposes new requirements on banks regarding security and the opening of their data to third-party providers (TPPs) by the deployment of

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⁸⁴ FINANCIAL CONDUCT AUTHORITY, How to apply for authorisation, August 8, 2017, [Online], https://www.fca.org.uk/firms/authorisation/how-to-apply (page consulted on April 10, 2021) 85 FINANCIAL CONDUCT AUTHORITY, Call for Input: Open finance, March 26, 2021, [Online],

https://www.fca.org.uk/publications/calls-input/call-input-open-finance (page consulted on April 8, 2021) FINANCIAL CONDUCT AUTHORITY, AISP models under PSD2, January 21, 2020, [Online],

https://www.fca.org.uk/firms/agency-models-under-psd2 (page consulted on April 8, 2021)

87 A total de 256 entities were registered by November 9, 2020. The directory is available online: Of

⁸⁷ A total de 256 entities were registered by November 9, 2020. The directory is available online: OPEN BANKING, *Meet the regulated providers*, 2021, [Online],

https://www.openbanking.org.uk/customers/regulated-providers/ (page consulted on April 8, 2021)

⁸⁸ OPEN BANKING, Real demand for open banking as user numbers grow to more than two million, September 28, 2020, [Online], https://www.openbanking.org.uk/about-us/latest-news/real-demand-for-openbanking-as-user-numbers-grow-to-more-than-two-million (page consulted on April 8, 2021)

⁸⁹ Daniel LANYON, "Lockdown prompts rise in fintech app adoption, survey finds," *Altfi*, August 5, 2020, [Online], https://www.altfi.com/article/6906_lockdown-prompts-rise-in-fintech-app-adoption-survey-finds (page consulted on April 8, 2021)

⁹⁰ Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC, online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2366

APIs. The EU Member States had to integrate the PSD2 into their national legislation before January 13, 2018. The PSD2 applies only to current accounts⁹¹. As in the British system, third-party providers are divided into two groups, i.e. PISPs (payment initiation service providers) and AISPs (account information service providers).

The European Commission adopted the Regulatory Technical Standards (RTS), the directive's main application regulation, on November 27, 2017, after the European Banking Authority (EBA) tabled a bill⁹². The regulation aims notably to (1) establish the security requirements that participants will be subject to, (2) protect the security of funds and personal data by ensuring efficient and secure communication between banks and third parties, (3) guarantee and maintain fair competition between all providers, (4) guarantee technological neutrality and (5) enable the development of innovative and user-friendly payment methods⁹³.

The terms of the regulation have faced intense opposition, mobilizing the bank lobby against the fintech lobby. The banks feared the impact on their business model and demanded a greater margin of manœuvre for putting APIs in place⁹⁴. The fintechs, for their part, demanded the imposition of uniform technical standards, and pointed out the insurmountable technical difficulties implied, without such standardization, by the adaptation of their systems to the APIs of the 6,000 European financial institutions. In the end, that second model, also promoted by the European Consumers' Organisation (BEUC)⁹⁵, was adopted. The RTS came into force on September 14, 2019.

According to the Ernst & Young Global Index published in 2019, European consumers' level of adoption of fintechs differs widely from one country to another, from 35% in France to 64% in Germany and 71% in the United Kingdom⁹⁶.

The General Data Protection Regulation (GDPR), adopted on April 27, 2016 and entered into force on May 25, 2018, aims to reinforce personal data protection and harmonize related legislation in EU Member States. The regulation's scope is very broad because it applies to any entity that provides goods and services to European residents. The regulation establishes the responsibilities of data holders, as well as sanctions for non-compliance with obligations. Several new rights are granted to consumers, such as the right to data portability (Article 20).

⁹¹ PwC, "Open banking is coming," 2019 report on the Canadian banking sector, Canada, op. cit. 4.

 ⁹² EUR-LEX, Regulation (EU) 2018/389, [Online], https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0389 (page consulted on April 10, 2021)
 ⁹³ DSP2 article 98: regulatory technical standards for authentication and communication.

⁹⁴ See on this subject the graphic on page 11: EUROPEAN BANKING AUTHORITY, "Report on the impact of Fintech on incumbent credit institutions' business models," [Online], https://eba.europa.eu/file/28458 (page consulted on April 10, 2021)

⁹⁵ See the letter addressed to the European Commission, BUREAU EUROPÉEN DES UNIONS DE CONSOMMATEURS, "Secure communication between banks and third party PSPs," May 22, 2017, [Online], http://www.beuc.eu/publications/beuc-x-2017-054 mgo_psd2 - secure_communication_between_banks_and_third_party_psps.pdf

⁹⁶ EY, *Global FinTech Adoption Index 2019*, 2019, [Online], https://www.ey.com/en_gl/ey-global-fintech-adoption-index (page consulted on April 8, 2021)

In its report titled "Consumer friendly Open Banking," BEUC favours the development of payment initiation services (PIS) because of the competitiveness they generate⁹⁷. The main concern raised by the organization pertains to transaction security, since consumers are often less protected when making bank transfers than using payment cards or automatic debit⁹⁸. Regarding Account Information Services (AIS), BEUC considers that consumers might benefit from a more thorough analysis of their risk profile, as made possible by banking data aggregation. However, AIS also have access to very sensitive information that can be derived from banking information, such as state of health, political affiliations, etc. – information that consumers don't necessarily want to share. Moreover, BEUC makes the following recommendations for the open banking environment put in place to give consumers full control over their banking:

- Open banking in the EU should use only the redirection authentication method.
 This means the consumer connects directly to his home banking, and the
 consumer's personalised security credentials are not shared with any third
 party;
- The consumer's consent should be explicit and specifically state which financial data the consumer has given the third party access to.
- The Application Programming Interface standard a communication channel between the consumer's bank and third parties - should enable third party service providers to provide the consumer's bank with the terms of the consumer's consent.
- The API standard should allow consumers to instruct their bank to refuse access to a particular service, being another bank or a third party service provider.
- The consumer's bank should maintain a list of all service providers who have access to the consumer's financial data.
- The consumer should be able to cancel at any time any specific agreement given to a third party. The API standard should require that, when an agreement is cancelled by the consumer, the party which has received the cancellation (the consumer's bank or the third party) should inform the other party⁹⁹.

In response to our request for information, the Spanish association Consommateurs in Action (FACUA) stated its concerns regarding the implementation of open banking, mainly about the risks of consumer data leaks and the data's use for inappropriate purposes. FACUA also mentioned the possibility of an eventual security system failure that could give third parties unauthorized access to consumer data exchanged in open banking. The organization insists that open banking should not be implemented while neglecting or setting aside the protection of consumer rights or their personal data.

⁹⁷ BEUC, Consumer-friendly open banking, September 20, 2018, [Online], https://www.beuc.eu/publications/beuc-x-2018-082_consumer-friendly_open_banking.pdf

⁹⁸ Le BEUC refers to a document from WHICH, Consumer safeguards in the market for push payments, September 23, 2016, [Online], https://www.psr.org.uk/sites/default/files/media/PDF/which-super-complaint-sep-2016.pdf

⁹⁹ BEUC, Consumer-friendly open banking, September 20, 2018, op. cit. 97. BEUC has been raising concerns about this subject for several years. See BEUC, *Proposal for a revised Payment Services Directive, BEUC position*, September 27, 2013, [Online], http://www.beuc.eu/publications/x2013 079 fal psd revision-beuc position.pdf

Australia

In Australia, open banking belongs to the broader context of the Consumer Data Right (CDR), announced by the government on November 26, 2017, with the objective of ensuring that consumers have better access to and control over their data, notably by requiring banks to establish APIs¹⁰⁰. Open banking is a first step; consumers' right to control their data should then extend to the energy and telecommunications sectors.

[Australia] sees Open Banking as the first step in implementing standardized, interoperable data across multiple sectors, including the energy and telecommunications sectors. Because they see this as part of a broader plan, Australia has created a Consumer Data Right that is similar in concept to the data portability right seen in the EU's General Data Protection Regulation¹⁰¹. [references omitted]

Ordered by the Australian government, the report "Review into Open Banking: giving customers choice, convenience and confidence" (Farrell Report) was published in December 2017¹⁰². Following its recommendations, The Australian Competition and Consumer Commission (ACCC) was chosen to regulate and supervise the implementation of open banking by the four major Australian banks, as initial data holders. The ACCC is also responsible for the accreditation and monitoring of third parties, called data recipients¹⁰³. The Office of the Australian Information Commissioner (OAIC) is charged with receiving complaints and conducting investigations¹⁰⁴, while the Data Standards Body (DSB) sets the standards for data exchanges. Strangely, the Australian model excludes payment initiation services (PIS), which greatly limits the scope of fintechs. But it includes access to mortgage data, credit and debit cards, as well as deposit and transaction accounts, as opposed to the European and United Kingdom models.

The Financial Rights Legal Centre, a community organization, is highly critical of the CDR¹⁰⁵. By limiting the CDR's scope to particular sectors – first banking, then energy, telecommunications, insurance, etc. – rather than applying it, as does the European RGPD, to all companies that compile personal information, the CDR creates a double standard for

¹⁰⁰ AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, *Consumer Data Right*, [Online], https://www.accc.gov.au/focus-areas/consumer-data-right-cdr-0 (page consulted on April 8, 2021) ¹⁰¹ Teresa SCASSA, *Open Banking in Canada - A Primer*, op. cit. 33.

¹⁰² Australian Government, Review into Open Banking in Australia - Final Report. The Farrell report and the advisory documents are available here: AUSTRALIAN GOVERNEMENT THE TREASURY, Review into Open Banking in Australia - Final Report [Online], https://treasury.gov.au/consultation/c2018-t247313 (page consulted on April 11, 2021)

¹⁰³ AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, Consumer Data Right goes live for data sharing, July 1, 2020, [Online], https://www.accc.gov.au/media-release/consumer-data-right-goes-live-for-data-sharing (page consulted on April 11, 2021)

¹⁰⁴ The OAIC also published in July 2020 the second version of its "Privacy Safeguard Guidelines" intended for the entities concerned by the CDR. OFFICE OF THE AUSTRALIAN INFORMATION COMMISSIONER, CDR Privacy Safeguard Guidelines, 2021, [Online], https://www.oaic.gov.au/consumer-data-right/cdr-privacy-safeguard-guidelines/ (page consulted on April 5, 2021)

¹⁰⁵ FINANCIAL RIGHTS LEGAL CENTRE "Submission by the Financial Rights Legal Centre and Financial Counselling Australia, Treasury Laws Amendment (Consumer Data Right) Bill 2018," September 2018, [Online], https://treasury.gov.au/sites/default/files/2019-03/t329531-Financial-Rights-Legal-Centre-and-Financial-Counselling-Australia-joint-submission.pdf. The Financial Rights Legal Centre is a community legal centre specializing in consumer assistance, particularly with financial products.

consumer data protection. Even fintechs can avoid being subject to the CDR, by practicing screen scraping rather than using the new APIs¹⁰⁶. The community legal centre also finds the privacy guarantees inadequate by not including the right to erase, the right to privacy by design, the right to restrict the purpose of data use, the right to oppose the processing of data, and the right not to be profiled on the basis of automated processing.

A report by the Australian Communications Consumer Action Network (ACCAN) arrives at similar conclusions¹⁰⁷.

Following our request for information, the Consumers' Federation of Australia (CFA) expressed to us its concern that the increased risks of commercial profiling and price discrimination regarding essential services would adversely affect low-income groups.

Moreover, the Financial Rights Legal Centre worries that the CDR facilitates the transfer of confidential data collected by an accredited entity to third-party providers subject to lower standards. The ACCC held a consultation on this subject between December 2019 and March 2020¹⁰⁸. The organization argues that data obtained through open APIs should never escape the CDR's purview and recommends the establishment of a multi-level accreditation regime in order to include all data recipients¹⁰⁹. The Consumer Policy Research Centre (CPRC) shares that position¹¹⁰.

The CDR's implementation timetable in the banking sector provides three phases involving various data sets. Extended several times, the deadline imposed on the major banks to make their customers' savings and operations accounts available to accredited third parties (phase 1) was July 1, 2020. The obligation was broadened notably to personal and mortgage loans (phase 2) on November 1, 2020 and to all other products (phase 3) on February 1, 2021¹¹¹.

 ¹⁰⁶ See also the submission of: VERIFIER, Consumer Data Right Rules Framework, October 12, 2018, [Online], https://www.accc.gov.au/system/files/CDR%20-%20Rules%20-%20VERSION.pdf. The introduction of APIs will not end screen scaping so long as this technique will constitute a way to bypass the regulations.
 107 AUSTRALIAN COMMUNICATIONS CONSUMER ACTION NETWORK, Consumer rights to personal data access in the communications sector, [Online], https://accan.org.au/grants/completed-grants/1433-consumer-rights-to-personal-data (page consulted on April 12, 2021)

¹⁰⁸ The consultation documents are available on the website of the Australian Competition and Consumer Commission: AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, Consumer data right, December 23, 2019, [Online], https://www.accc.gov.au/focus-areas/consumer-data-right-cdr-0/accc-consultation-on-facilitating-participation-of-intermediaries-in-the-cdr-regime (page consulted on April 8, 2021)
¹⁰⁹ This could apply to an accountant who doesn't have the resources to obtain accreditation as a data recipient and connect directly to bank APIs. By being subject to less strict accreditation, he could use the

recipient and connect directly to bank APIs. By being subject to less strict accreditation, he could use the services of a middleman to obtain his customers' banking data. See the submission of the to the ACCC consultation: FINANCIAL RIGHTS LEGAL CENTRE, Consumer Data Right Consultation on how best to facilitate participation of third party service providers, December 2019, [Online], https://www.accc.gov.au/system/files/CDR%20consultation%20paper%20-

https://www.accc.gov.au/system/files/CDR%20consultation%20paper%20-%20participation%20of%20third%20party%20service%20providers 0.PDF

¹¹⁰ CONSUMER POLICY RESEARCH CENTRE, Submission to CDR Bill – Further Consultation and Designation Instrument for Open Banking, October 12, 2018, [Online], https://cprc.org.au/publications/submission-to-cdr-bill-further-consultation-and-designation-instrument-for-open-banking/ (page consulted on April 9, 2021)

¹¹¹ An illustration of the implementation phases is available here: AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, Consumer data right Commencement of CDR Rules, February 6, 2020, [Online], https://www.accc.gov.au/focus-areas/consumer-data-right-cdr-0/commencement-of-cdr-rules (page consulted on April 8, 2021)

By April 8, 2021, ten data recipients (TPPs) had completed all the accreditation steps and several others had begun the process¹¹².

Apart from open banking, some Australian fintechs benefit from a pilot project ("regulatory sandbox") put in place by the Australian Securities & Investments Commission (ASIC) to provide certain financial products and services without a permit for a period of 24 months¹¹³. Choice, the Consumer Action Law Center and the Financial Rights Legal Center have criticized this program for reducing consumer protections. The organizations point out that in the United Kingdom and Singapore, access to similar programs is subject to the provision of a service that is both innovative and beneficial to consumers¹¹⁴.

Hong Kong

In September 2017, the Hong Kong Monetary Authority (HKMA), the de facto central bank of the special administrative region, started work to establish a regulatory framework for developing and using APIs in the banking sector. The coercive approach adopted by the European Union, the United Kingdom and Australia was declined in favour of a collaborative approach. The HKMA devised a four-step open banking deployment plan, progressing in the confidentiality of data made accessible and in the functionality of APIs¹¹⁵.

The first phase is now completed, but it only covered the sharing of non-confidential information by means of products offered by the banks. The Hong Kong Association of Banks (HKAB) has developed guidelines for implementing the second phase, with the HKMA acting as a simple observer¹¹⁶. In that phase, the banks are responsible for developing an accreditation and monitoring system for third parties with whom they reach bilateral agreements. As opposed to the United Kingdom and Australia, where a public body is responsible for accrediting third parties, Hong Kong thus leaves that task to financial institutions, and follows the American and Singaporean models.

It should be noted that the deadlines for phase 3 (allowing access to account data) and phase 4 (allowing APIs to initiate transactions) are not determined yet. So Hong Kong's open banking implementation trails that of the European Member States and Australia¹¹⁷.

¹¹² The complete list of data providers and recipients is available here: AUSTRALIAN GOVERNMENT, *Consumer Data Right Current providers*, [Online], https://www.cdr.gov.au/find-a-provider (page consulted on April 8, 2021)

¹¹³ AUSTRALIAN SECURITIES & INVESTMENTS COMMISSION, *Enhanced regulatory sandbox*, March 30, 2021, [Online], https://asic.gov.au/for-business/innovation-hub/enhanced-regulatory-sandbox/ (page consulted on April 8, 2021)

¹¹⁴ The consultation documents are available on the website of the AUSTRALIAN GOVERNMENT – THE TREASURY, *Enhanced Regulatory Sandbox*, December 1, 2017, [Online], https://treasury.gov.au/consultation/c2017-t230052 (page consulted on April 8, 2021)

¹¹⁵ HKMA, Open API Framework for the Hong Kong Banking Sector, July 2018, [Online],

https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2018/20180718e5a2.pdf. See articles 8, 11, 21 and 22.

¹¹⁶ HKAB, *Open API Phase II Common Baseline*, November 15, 2019, [Online], https://www.hkab.org.hk/DisplayArticleAction.do?sid=5&ss=22 (page consulted on April 10, 2021)

¹¹⁷ CONSUMER COUNCIL, 2015, [Online], https://www.consumer.org.hk/ws_en (page consulted on November 25, 2020). We could not find reports by Hong Kong consumer associations on the subject. Notably, the HK Consumer Council doesn't seem to have spoken out.

Japan

In Japan, Fintechs are developing in partnership with traditional banking actors. In December 2015, as part of its strategic plan¹¹⁸, a government organization, the Financial Services Agency (FSA), launched a fintech consultation and support office to stimulate innovation in this field¹¹⁹. The Banking Act and the Payment Services Act were amended on May 25, 2016 to allow banks to invest in fintechs and hold controlling shares in them¹²⁰. In May 2017, the Banking Act was reamended to mandate the FSA to develop a system for accrediting TPPs (designated as electronic bill payment agents) that would be compatible with the European Directive PSD2. The amendment also aims at requiring Japanese banks to make APIs available by 2020¹²¹. In addition to meeting FSA requirements, TPPs must reach bilateral agreements with banks they do business with, and the compliance standards provided in those agreements must be made public.

The Japanese Bankers Association published on July 13, 2017 the report of its Review Committee on Open API¹²², which follows on ten meetings with experts, fintechs, IT corporations and consumer associations¹²³. A consensus seems to be emerging on the necessity of attaining a certain level of standardization, particularly in establishing adequate security measures. Without that standardization, TPP connectivity costs would be prohibitive – more than 130 Japanese banks stated they were planning to develop an API in 2018¹²⁴.

More than 80 TPPs are registered with the FSA¹²⁵, but bilateral agreements don't seem to be reached:

Fintechs that must reach agreements with individual banks before a May deadline say they don't have the resources to pay hefty charges or crisscross the country convincing hold-outs ¹²⁶.

(page consulted on November 25, 2020)

¹¹⁸ FINANCIAL SERVICES AGENCY, Summary Points from Strategic Directions and Priorities 2015-2016, September 2015, [Online], https://www.fsa.go.jp/en/news/2015/20151019-2/01.pdf

¹¹⁹ This is the FinTech Support Desk. See the FSA announcement: FINANCIAL SERVICES AGENCY, FinTech Support Desk, December 14, 2015, [Online], https://www.fsa.go.jp/en/news/2018/20180717.html (page consulted on November 22, 2020)

¹²⁰ Y. SUZUKI and R. OUE, "FinTech Legislation in Japan," *International Financial Law Review*, September 30, 2016, [Online], https://www.iflr.com/article/b1lspvt29vnh32/fintech-legislation-in-japan (page consulted on November 25, 2020)

¹²¹ N. KANEHISA and K. TANIZAKI, "Open Banking in Japan," *Payments & Fintech Lawyer*, July 2018, [Online], https://www.aplaw.ip/Payments and Fintech Lawyer July 2018.pdf

¹²² JAPANESE BANKERS ASSOCIATION, *Report of Review Committee on Open APIs: promoting Open Innovation*, July 2017, [Online], https://www.zenginkyo.or.jp/fileadmin/res/en/news/news170713.pdf

¹²³ Although consumer protection associations at the meetings were said to attend the meetings, we could not discover those organizations' identities, the content of discussions, or any documentation produced by consumer protection organizations and speaking out on the subject.

¹²⁴ FORRESTER, "Japanese Banks' Digital Awakening Is On The Way," *Forbes*, June 12, 2020, [Online], https://www.forbes.com/sites/forrester/2020/06/12/japanese-banks-digital-awakening-is-on-the-way/?sh=f4b7ae538b68 (page consulted on November 25, 2020)

The directory is available online (in Japanese only): [Online],

https://www.fsa.go.jp/menkyo/menkyoj/dendai.pdf (consulted on November 25, 2020)

¹²⁶ T. URANAKA et Y. HAGIWARA, "Japanese banks' fortress mentality puts them on trailing edge of fintech revolution," *The Japan Times*, January 27, 2020, [Online], https://www.japantimes.co.jp/news/2020/01/27/business/japanese-banks-fortress-mentality-fintech-revolution/

Moreover, banks appear reticent to invest while not convinced that open banking is desirable¹²⁷.

Screen scraping was prohibited as of May 2020, thus ending services that use it and for which no agreement to proceed with APIs has been concluded.

The prevalence of cash transactions by Japanese consumers - more than 80% of consumer transactions, a unique situation among developed countries¹²⁸ – also limits the attraction and adoption of open banking and the possibility of using payment initiation services.

New Zealand

In 2016, New Zealand's Ministry of Business, Innovation and Employment (MBIE) was mandated to organize a consultation on retail payment systems, which some consider inefficient and too costly129. Open banking is seen as a possible way to improve the performance and competitiveness of payment service providers, so the MBIE encourages banks to demonstrate initiative in working to establish it 130. The role of coordinating the development of open banking is played by Payments NZ (PNZ), a corporation owned by New Zealand's eight major banks, and formed in 2010 with the Reserve Bank's support to act as a governance body for payment systems.

From March 2018 to February 2019, banks and TPPs participated in a pilot project organized by PNZ. Those industry actors have developed API technical standards on their own, modelled after those of the United Kingdom, and intended to be deployed by New Zealand banks¹³¹. New Zealand has not followed Australia's example of reforming consumer rights regarding personal data¹³², but plans to do so regarding functionality by having its open banking system include payment initiation services (as is the case in the majority of the other jurisdictions studied).

In 2019, the MBIE criticized the development of open banking by industry. Apart from the fact that the work is behind schedule, some banks have stated that their APIs would deviate

https://www.privacy.org.nz/publications/reports-to-parliament-and-government/privacy-commissioners-reportto-the-minister-of-justice-under-section-26-of-the-privacy-act/ (page consulted on November 20, 2020)

¹²⁷ Ibid.

¹²⁸ T. KAJIMOTO and I. NAKAGAWA, "Japan wants to go cashless, but elderly aren't so keen," Reuters, November 4, 2019, [Online], https://www.reuters.com/article/us-japan-economy-cashless-idUSKBN1XF0BT (page consulted on November 20, 2020)

¹²⁹ In total, 46 submissions were forwarded to the Ministry, almost half from retailer representatives. All the consultation documents are available here: MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT, Retail payment systems issues paper, January 20, 2017, [Online], https://www.mbie.govt.nz/have-yoursay/retail-payment-systems-issues-paper/ (page consulted on November 25, 2020)

¹³⁰ MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT, Retail payment systems and open banking, [Online], https://www.mbie.govt.nz/business-and-employment/business/competition-regulation-andpolicy/consumer-data-right/retail-payment-systems-and-open-banking/ (page consulted on November 25,

¹³¹ PAYMENTSNZ, API workstream, 2020, [Online], https://www.paymentsnz.co.nz/our-work/paymentsdirection/api-workstream/industry-api-pilot/ (page consulted on November 25, 2020)

¹³² However, recommendations have been issued by the privacy commissioner in favour of modernizing the Privacy Act. See: THE PRIVACY COMMISSIONER, Privacy Commissioner's report to the Minister of Justice Under Section 26 of the Privacy Act, February 3, 2017, [Online],

from the standards proposed by PNZ or would not give access to all the features initially planned in the program. The Ministry also worries that disparities could emerge between banks' requirements toward TPPs for reaching bilateral agreements, which risks preventing the emergence of an ecosystem of fintechs¹³³. Those shortcomings highlight the limitations of the self-regulation approach on which the Ministry has relied.

Singapore

The Monetary Authority of Singapore (MAS) is a regional leader in financial innovation. In 2016, it was the first central bank to organize a conference for accelerating the adoption of APIs by the financial sector¹³⁴. In the same year, in collaboration with the Association of Banks in Singapore, the Monetary Authority published the Financial industry API playbook, intended as a guide for the implementation of APIs by banks, insurers and asset management firms¹³⁵. The Singapore government has chosen not to compel financial institutions to implement open banking; moreover, adherence to the technical standards developed by the central authority is optional, as opposed to the cases of Japan and Hong Kong. Singapore is thus, along with the United States and new Zealand, among the jurisdictions studied that rely most broadly on the free market.

In 2018, the MAS participated in founding the ASEAN Financial Innovation Network (AFIN) in collaboration with the ASEAN Bankers Association and the International Finance Corporation. AFIN's mission is to facilitate innovation and cooperation among financial institutions and fintechs, in order to implement the digital transformation of the banking and financial sectors regionally and to promote the inclusion of underbanked populations¹³⁶. AFIN in turn launched the API platform Exchange, which acts as a cross-border incubator for enabling fintechs and financial institutions to collaborate in developing new products.

According to some indices, open banking is progressing well in Singapore:

Banks in Singapore are actively using APIs by either embedding themselves into third-party ecosystems or building their own marketplaces. For example, DBS's developer portal offers over 200 APIs and has enabled payment and loan innovation with firms such as Grab, PropertyGuru, and McDonald's 137.

¹³³ Letter from Kris Faafoi (Minister of Commerce and Consumer Affairs) to New Zealand banks: Kris FAAFOI, *Open letter to API Providers regarding industry progress on API enabled data sharing and open banking*, December 2019, [Online], https://www.mbie.govt.nz/assets/open-letter-to-api-providers-regarding-industry-progress-on-api-enabled-data-sharing-and-open-banking.pdf

¹³⁴ See the booklet published following the event: MONETARY AUTHORITY OF SINGAPORE AND THE ASSOCIATION OF BANKS IN SINGAPORE, 2016 MAS-ABS Financial World API Conference Post-Event E-Book, 2016, [Online], https://www.abs.org.sg/docs/library/mas-abs-api-conference-e-book.pdf

¹³⁵ The guide is available here: MONETARY AUTHORITY OF SINGAPORE AND THE ASSOCIATION OF BANKS IN SINGAPORE, *ABS-MAS Finance World Finance-as-a-Service API Playbook*, [Online], https://abs.org.sg/docs/library/abs-api-playbook.pdf. It contains recommendations regarding security and governance, as well as illustrated technical specifications for more than 400 API functions.

¹³⁶ AFIN, *About us*, [Online], https://apixplatform.com/about (page consulted on November 25, 2020) ¹³⁷ FORRESTER, *The State Of Open Banking In Singapore*, September 27, 2020, [Online],

https://go.forrester.com/press-newsroom/the-state-of-open-banking-in-singapore/ (page consulted on November 25, 2020)

As early as 2020, new digital banking actors were to appear on Singapore's banking market to offer savings and loans solutions.¹³⁸

In 2018, the firm Finastra ranked the country first in its Open Banking Readiness Index for the Asia-Pacific region¹³⁹. The Singapore Fintech Association lists more than 1,000 companies in its online directory¹⁴⁰, a number accepted by the MAS¹⁴¹. Despite the Singaporean project's ambitions, consumers receive limited benefits from it. The fragmentation of APIs and the fintechs' ties to partner banks lead to the development of isolated markets around specific financial institutions¹⁴². In other words, services based on generalized connectivity, such as banking data aggregators, have difficulty emerging¹⁴³. The Personal Data Protection Commission and the Competition and Consumer Commission of Singapore published in 2019 a document that explores the possibility of regulating the right to data portability¹⁴⁴.

In response to the shortcomings of open banking development by industry, the Financial Planning Digital Services were to be deployed by the end of 2000 under a MAS initiative. That platform aims at improving consumers' access to and control over their financial data. The mechanism by which users consent to the sharing of their data includes SingPass, the authentication service used by citizens for accessing government services online¹⁴⁵.

United States

The private sector drives the implementation of open banking in the United States. That process is complex because it consists of the evolution of existing practices involving competing standards¹⁴⁶. Several regulatory bodies have issued recommendations regarding food practices and API standardization. In 2018, a report by the Treasury Department issued several recommendations for modernizing the legal framework

¹³⁸ LE FIGARO, "Les poids lourds de la tech appâtés par l'ouverture du secteur bancaire de Singapour," *Le Figaro*, January 15, 2020, [Online], https://www.lefigaro.fr/flash-eco/les-poids-lourds-de-la-tech-appates-par-louverture-du-secteur-bancaire-de-singapour-20200115 (page consulted on November 4, 2020)

¹³⁹ IDC FINANCIAL INSIGHTS, Ready for Open Banking?, October 2018, [Online], https://www.finastra.com/sites/default/files/2018-11/Open%20Banking%20Readiness%20Index.pdf

¹⁴⁰ SINGAPORE FINTECH ASSOCIATION, 2017, [Online], https://directory.singaporefintech.org/ (page consulted on November 25, 2020)

MONETARY AUTHORITY OF SINGAPORE, FinTech and Innovation, [Online], https://www.mas.gov.sg/development/fintech (page consulted on November 25, 2020)
 FORRESTER, The State Of Open Banking In Singapore, op. cit. 137.

¹⁴³ Hakan EROGLU, "The Asia-Pacific way of Open Banking regulation," *Finextra*, June 20, 2019, [Online], https://www.finextra.com/blogposting/17396/the-asia-pacific-way-of-open-banking-regulation (page consulted on November 25, 2020)

¹⁴⁴ Competition and Consumer Commission of Singapore, *Discussion Paper on Data Portability*, February 25, 2019, [Online], https://www.cccs.gov.sg/resources/publications/occasional-research-papers/pdpc-cccs-data-portability (page consulted on November 25, 2020)

¹⁴⁵ MONEYTHOR, Open Banking in Singapore; Comparing PSD2 & FPDS, April 29, 2020, [Online], https://www.moneythor.com/2020/04/29/open-banking-in-singapore-comparing-psd2-fpds/ (page consulted on November 25, 2020)

¹⁴⁶ Susan PANDY, "Modernizing U.S. Financial Services with Open Banking and APIs," *Payment Strategies Report*, February 10, 2021, [Online], https://www.bostonfed.org/publications/payment-strategies/modernizing-us-financial-services-with-open-banking-and-apis.aspx. (page consulted on February 25, 2021)

governing financial institutions, in order to enable fintechs to innovate more¹⁴⁷. In the same year, PricewaterhouseCoopers noted the American banking sector's tardiness and attributed it to the absence of government initiative:

While these efforts and initiatives demonstrate progress, there is currently no pending legislation or regulatory effort in the US similar to PSD2 to create a framework and security standards for open APIs. This may position US based financial institutions at a disadvantage compared to their EU counterparts, who have significantly invested more time and have received more guidance on [the development of] internal capabilities. Additionally, US-based financial institutions with a significant EU presence face an additional set of challenges associated with managing an entirely new set of requirements and business practices as well as potentially disparate approaches for US- and EU-based entities¹⁴⁸.

The Consumer Financial Protection Bureau has published guidelines for enabling consumers to access their data in a usable format and to control their access by third parties. The main recommendations focus on measures that financial institutions should take to protect their customers' data; on transparency in the nature of data collected and in their retention period; and on establishing dispute resolution mechanisms¹⁴⁹.

One of industry's main forums for developing open banking is the Financial Data Exchange (FDX), a non-profit association launched in October 2018 in the United States and in July 2020 in Canada¹⁵⁰. The association numbers more than 135 members, including major financial institutions, payment service providers, fintechs and other industry actors. The association promotes the standardization of banking data exchanges based on its model, FDX API. The association's five core principles are:

- Control: Consumers should be able to effortlessly grant, modify and revoke access to their financial data for applications or services they desire to use.
- Access: Account owners should have access to their data and the ability to determine who will have access to their data.
- Transparency: Individuals using financial services should know how, when, and for what purpose their data are used and know who they have permissioned.
- Traceability: All data transfers should be traceable. Consumers should have a complete view of all parties that are involved in the data-sharing flow.
- Security: Service providers need to ensure the safety and privacy of data during access and transport and when those data are at rest.

¹⁴⁷ U.S. DEPARTMENT OF THE TREASUTY, "A Financial System That Creates Economic Opportunities Nonbank Financials, Fintech, and Innovation," July 31, 2018, [Online], https://home.treasury.gov/news/press-releases/sm447 (page consulted on November 26, 2020)

¹⁴⁸ PwC, Open Banking: US is next, April 2018, [Online], https://www.pwc.com/il/he/bankim/assets/2018/Open%20banking-US%20is%20next.pdf

¹⁵⁰ FINANCIAL DATA EXCHANGE, 2020, [Online], https://financialdataexchange.org/ (page consulted on November 25, 2020)

The FDX is not the only organization working to develop a national standard: The National Automated Clearing House Association (NACHA), also known as the Electronic Payments Association, is piloting a second forum that develops and promotes the Afinis standard¹⁵¹.

There is also fierce competition in the sector of fintechs offering intermediate services: Three platforms – Akoya, Finicity and Plaid – try to occupy the same niche, a single access point for sharing data between financial institutions and TPPs. Akoya was acquired in February 2020 by The Clearing House, owned by eleven of the largest American banks¹⁵²; Mastercard completed its acquisition of Finicity in November 2020¹⁵³ and Visa attempted to acquire Plaid before abandoning the project opposed by the Justice Department, in 2021,¹⁵⁴.

That multiplicity of standards complicates the tasks of all the actors and appears counter-productive. Banking institutions that do business both in the United States and Europe must also meet the requirements of the payment Directive (PSD2). In support to those institutions, the Financial Services Information Sharing and Analysis Center has developed an API enabling secure data transfer compatible with PSD2 requirements.

With regard to consumer rights, California followed the example of the federal government by adopting the California Consumer Privacy Act (CCPA), which came into force in January 2020. Like the RGPD, the CCPA defines personal data broadly, and its scope thus extends well beyond open banking. The law applies to any organization that belongs to at least one of the following categories: (1) Its net annual earnings exceed 25 million dollars, (2) it purchases, receives or sells personal information concerning at least 50,000 consumers or households, or (3) at least half of its revenues come from the sale of consumers' personal information. The CCPA grants consumers, in particular, the right to: know what personal information is collected and to whom it is sold or disclosed; refuse the selling of their personal information; access the collected information and demand its destruction. It should be noted that in reaction to that law, the computer tech giants Facebook, Google, Microsoft and Twitter have launched the Data Transfer Project, with the objective of developing an open source code system able to connect multiple online service providers to APIs in order to enable users to initiate data transfers from one service to another.

https://www.businesswire.com/news/home/20210112006080/en/Visa-and-Plaid-Announce-Mutual-Termination-of-Merger-Agreement (page consulted on March 22, 2021)

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¹⁵¹ NACHA, *Nacha's API Standardization: A Necessary Undertaking*, July 23, 2019, [Online], https://www.nacha.org/news/nachas-api-standardization-necessary-undertaking (page consulted on November 22, 2020)

¹⁵² Jim DALY, "The Clearing House Payments Co. And 11 Banks Take Stakes in an Access-Protection Firm," *Digital Transactions*, February 21, 2020, [Online], https://www.digitaltransactions.net/the-clearing-house-payments-co-and-11-banks-take-stakes-in-an-access-protection-firm/ (page consulted on March 22, 2020) The acquisition's objective is described as follows: "The strategy behind the acquisition is to have Akoya stand at the door when customers want to link their accounts to third-party applications from fintechs, as well as data aggregators."

MASTERCARD, Mastercard Extends Open Banking Efforts with Close of Finicity Acquisition, November 19, 2020, [Online], https://www.mastercard.com/news/press/2020/november/mastercard-extends-open-banking-efforts-with-close-of-finicity-acquisition/ (page consulted on November 22, 2020)
154 Visa, "Visa and Plaid Announce Mutual Termination of Merger Agreement," January 12, 2021, [Online],

Summary

Our study of the development of open banking abroad revealed that one of two approaches is adopted: In one, governments regulate the system's implementation, and in the other, the market is almost entirely left to itself. The main differences are five-fold:

- 1) The driving force in developing open banking. Some jurisdictions, such as Europe, the United Kingdom and Australia, have imposed on banking institutions the development of open APIs, whereas the United States and Singapore, notably, have left the initiative to industry. The first approach generally involves the requirement that financial institutions allow the data they hold to be accessed by third-party companies, the creation of regulatory institutions with coercive power, a progressive implementation timetable, a stricter level of regulation, and greater standardization of APIs. In addition, a regulatory institution is able to control the rates charged by banks for access to their APIs. In Europe, the Payment Services Directive 2 (PSD2) provides for example that banks give free-of-charge access to third parties registered as account information service providers. Jurisdictions that take the second approach rely on issue tables involving banking institutions and on forming "facilitating" organizations to promote innovation and partnerships.
- 2) The level of TPP regulation. The objective of banks' establishment of open APIs is to enable third-party service providers to connect to them. Before accessing their users' sensitive data, fintechs must prove their legitimacy. In certain cases, a central authority is charged with the accreditation process. That task is compatible with managing a complaint-handling mechanism and holding investigatory powers. In jurisdictions where no central authority is charged with accreditation, that responsibility for approving access to a third-party provider may also belong to the banks themselves, which will apply their own selection criteria and reach, as the case may be, bilateral agreements.
- 3) The scope and features of APIs. The financial products concerned, and thus the scope of APIs, vary by jurisdiction. For example, some jurisdictions limit their regulation and thus the requirement to give third-party providers access through APIs to operations and savings accounts, thus excluding personal loans and mortgages, for example. Elsewhere, there is an effort to broaden access and include products, for example insurance, from other institutions, such as asset management firms, and even from other sectors of activity, such as communications and energy. As for API features, various types of third-party services necessitate read-only or read-and-write access to banking data Europe and the United Kingdom classify TPPs as account information service providers (AISP read-only access) and as payment initiation service providers (PISP read-and-write access). Australia, notably, limits its framework to read-only access.
- 4) API standardization. Adoption of a technical standard for developing APIs may result from a legal obligation or industry consensus. But some jurisdictions impose no standards. Thus, some banks have developed their own APIs before the arrival of open banking, whereas others have adopted a certain model due to development costs or technical constraints. For TPPs, the absence of standards complicates product compatibility; so closed ecosystems may be formed around specific banking institutions.

5) Improvement in consumer rights. The development of open banking reduces barriers to rapid high-volume circulation of consumers' personal information. Some jurisdictions have chosen to improve their personal data protection regime to reflect the risks facing consumers. The new provisions apply either to data shared within the limited framework of open banking, as in the case of the Australian Consumer Data Right (CDR), or to all personal data holders, as in the case of the European General Data Protection Regulation.

To what type of framework is Canada currently heading? What jurisdiction should Canada use as a model for best protecting consumers?

4. Canada and Open Banking: The Current Situation

The EY Open Banking Opportunity Index reveals Canada is behind its global peers when it comes to readiness to thrive in an open banking environment, landing in 8th position after the UK, China and US¹⁵⁵.

Ernst & Young Global Limited

Open banking issues have started to be raised in Canada, somewhat late compared to other areas of the world. Where are we currently?

Methodology

To draw a portrait of the open banking situation in Canada, we reviewed the literature and attended as observers the discussions held in the 2nd consultation phase of the Advisory Committee on Open Banking.

To enrich our observations, we wanted to collect comments on open banking and its regulations from Canadian consumer rights groups and other interested groups. We thus contacted them directly by sending them, along with a short presentation of the project, a brief questionnaire¹⁵⁶ focusing, for the first groups, on their knowledge of specific problems with open banking or on their specific concerns and, for the second groups, on their perception of the risks of certain consumers being excluded.

We sent our questionnaire in October 2019 to four Canadian consumer rights organizations¹⁵⁷ and resent it in December 2020. Despite some groups' announcements of participation, only the Public Interest Advocacy Centre (PIAC) followed up by sending us as an answer its prepared notes for presenting the organization's concerns before the Canadian Senate Standing Committee on Banking, Trade and Commerce.

In October 2019, we sent an invitation accompanied by a questionnaire to various Canadian associations¹⁵⁸, which unfortunately didn't answer us. After obtaining the open banking briefs provided to the Advisory Committee by those associations or comparable ones, we didn't find it useful to resend our invitation.

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¹⁵⁵ EY, Canada lags global peers in open banking readiness: EY Canada, February 5, 2019, [Online], https://www.newswire.ca/news-releases/canada-lags-global-peers-in-open-banking-readiness-ey-canada-800948695.html (page consulted on April 15, 2020)

¹⁵⁶ The questionnaire addressed to Canadian consumer rights organizations is available in Appendix 2. The questionnaire addressed to other organizations is available in Appendix 3.

¹⁵⁷ Option consommateurs; Consumers Council of Canada; Le Centre pour la Défense de l'Intérêt Public; Coalition des Associations de consommateurs du Québec.

¹⁵⁸ Canadian Bankers Association; Financial Innovation & Technology Association of Canada; National Crowdfunding &Fintech Association; FinTech Association of Canada.

We also sent an invitation and questionnaire to various experts in November 2020¹⁵⁹. While two of them expressed interest, only Karounga Diawara, Professor at the Faculty of Law of Université Laval, sent us his comments.

The situation in Canada

In spring 2018, the federal government announced in its budget that it intended to examine the merits of installing open banking in the country. To that end, the Minister of Finance announced the formation of an Advisory Committee on Open Banking. That committee, formed in fall 2018, was mandated to determine whether open banking could give Canadians significant benefits, and to pay special attention to issues regarding privacy protection and the financial system's security and stability.

FIRST ROUND OF CONSULTATIONS

In winter 2019, the Committee undertook a first consultation, which ended in February 2019, to which no consumer rights group participated. We chose to examine five of the briefs presented to the Committee, in order to identify the diverse views and positions of important associations and organizations: the Office of the Privacy Commissioner, Payments Canada, the Law Society of Ontario, the Canadian Bankers Association and the Competition Bureau.

The **Office of the Privacy Commissioner** is responsible for the application of laws protecting privacy and personal information.

In its brief, the Office of the Privacy Commissioner focuses on issues of monitoring, consent, cybersecurity and information sharing. The Office insists on the importance of establishing a legal framework that would adequately cover various key aspects, such as consent, transparency and accountability, and emphasizes that the exact role and scope of automated algorithms in open banking will have to be closely monitored to guarantee that companies meet their obligations.

The Office indicates to the Committee that regulations should be reinforced to ensure better data protection, which ultimately could raise consumers' confidence and stimulate their participation in the digital economy. The Office states that more powers should be granted to it, including those of issuing orders and levy fines for non-compliance with the law. The Office also estimates that it should be granted the power to verify compliance proactively and thus ensure that Canadians are fully protected.

The Office mentions that the necessary processes for obtaining valid consumer consent should be incorporated as early as the phase of designing new products or offers.

¹⁵⁹ Jacques St-Amant, lecturer, UQAM; Cinthia Duclos, Associate Professor at the Faculty of Law of Université Laval; Karounga Diawara, Full Professor at the Faculty of Law of Université Laval. The questionnaire addressed to experts is reproduced in Appendix 4.

It is integral that both existing and new organizations and business models contemplated in the Open Banking context develop policies and procedures to ensure there is a process for obtaining meaningful consent¹⁶⁰.

The Office points out the consent guidelines for dealing with the problems related to certain companies' procedures, which at times are long and confusing. Regarding cybersecurity, the Office notes the importance of a robust strategy and advocates the reinforcement of PIPEDA privacy provisions.

Given that open banking rests on personal information sharing, the Office estimates that the issue of companies' responsibility is crucial and invites the authorities to make it a priority when devising a strategic and legislative framework.

Lastly, the Office recommends a more thorough examination of the possible broader repercussions of financial and non-financial data potentially being accumulated and used for multiple purposes by the companies that will collect and share those data¹⁶¹.

Payments Canada is charged with the provision of payment systems in Canada. The organization is responsible for the compensation and settlement processes, rules, and infrastructure that are essential for the country's daily transactions.

In the brief submitted to the Committee, Payments Canada notes that the open banking monitoring regime to be put in place will have to be overseen by an independent organization mandated to help develop appropriate industrial standards and implement open banking¹⁶², as occurred in other jurisdictions. Apart from that recommendation, Payments Canada's brief expresses a largely positive perception of open banking:

The use of API technology is facilitating innovation across the financial industry, by bringing efficiencies to legacy systems and transforming customer experiences. To date, most of the innovation has taken place with financial institutions' private use of APIs, and through partnerships with FinTechs. However, we agree with the government's consultation paper that there is potential for much more to be gained with open banking¹⁶³.

The **Law Society of Ontario** (Barreau de l'Ontario) is the organization responsible for regulating Ontario lawyers and paralegals, with the mandate to protect the public interest and to maintain and promote justice and the rule of law.

Like several other stakeholders, the Law Society of Ontario's brief insists on the issue of consent to data sharing:

In summary, the Law Society's positions at this time are that:

¹⁶⁰ OFFICE OF THE PRIVACY COMMISSIONER, *Brief presented to the Advisory Committee on Open Banking*, February 11, 2019, [Online], https://www.canada.ca/content/dam/fin/consultations/2019/ob-bo/ob-bo-56-en.pdf

¹⁶¹ *Ibid*.

¹⁶² PAYMENTS CANADA, *Re: A Review into the Merits of Open Banking*, February 28, 2019, [Online], https://www.canada.ca/content/dam/fin/consultations/2019/ob-bo/ob-bo-58.pdf
¹⁶³ *Ibid.*

- a) no financial transaction data should be disclosed to financial technology firms ("FinTechs") in an open banking system without the consent of all the parties to the transaction:
- b) a discussion should be had with the Law Society about the possibility of excluding licensees' mixed trust accounts from open banking; and
- c) FinTechs should be required to advise consumers that by opting into open banking, they may be agreeing to share data capable of disclosing the existence and nature of a relationship otherwise protected by duties of confidentiality¹⁶⁴.

The Law Society emphasizes that the issues pertaining to the consent process will be complex, in an open banking environment, particularly if the parties do business with varied institutions, if participants to a transaction don't participate in open banking, and if there is no central directory of the various authorizations granted. The Law Society of Ontario doesn't go further in its comments, since the information provided by the consultation document on the way open banking would be implemented in Canada is insufficient for making it possible to analyse the proposal in greater depth¹⁶⁵.

The Canadian Bankers Association (CBA) groups more than 60 Canadian and foreign banks operating in the country. The Association is the central point of contact for governments and other stakeholders regarding all banking issues.

In its brief, the CBA states in turn that consumer confidence is the key to open banking's success:

A high level of trust will be required to support the success of open banking. A key component of fostering trust and widespread adoption is ensuring that the principle of confidentiality of data is considered and respected¹⁶⁶.

In its brief, the CBA outlines various potential risks for consumers regarding the 4 main issues identified in the consultation document: consumer protection, privacy and confidentiality, financial crime and financial stability. The Association notes:

Customers' personal and confidential information ought to be secure and protected at all times by all open banking ecosystem participants, including TPPs. Customer information should only be shared with informed customer consent obtained in a transparent manner that allows the customer to understand how their financial transaction data will be used and secured¹⁶⁷.

The CBA adds that it is essential "that customers do not lose any protections that are afforded to them by regulations applicable to financial institutions." Accordingly:

Canadian open banking development must also consider how various participants can be regulated, where there are regulatory gaps, including TPPs

¹⁶⁴ LAW SOCIETY OF ONTARIO, *A Review into the Merits of Open Banking – Law Society of Ontario Submission*, February 11, 2019, [Online], https://www.canada.ca/content/dam/fin/consultations/2019/obbo/ob-bo-45.pdf

¹⁶⁵ *Ibid*.

¹⁶⁶ CANADIAN BANKERS ASSOCIATION, *Open Banking*, November 2, 2019, [Online], https://www.canada.ca/content/dam/fin/consultations/2019/ob-bo/ob-bo-08-en.pdf

¹⁶⁷ *Ibid*.

that are not federally-regulated financial institutions, non-domestic TPPs, and TPPs who may gain access downstream¹⁶⁸.

Thus, consumers must be kept apprised of their recourses in case of violation or abusive use of data, and the regulatory framework must subject third-party providers to appropriate financial obligations (funds, liquidity insurance).

Third-party companies that will participate in open banking must clearly explain to consumers which specific personal information will be collected, how it will be used, to whom it will be communicated, and must also specify to them the risks that sharing their personal data could entail, as well as the available procedures for withdrawing their consent.

The CBA doesn't address the issue of the necessity of reforming PIPEDA: Applied in concert with the standards developed by financial institutions and those that third-party companies will have to develop, PIPEDA provides, according to the CBA:

[...] the framework and flexibility needed to address emerging privacy law concerns related to personal information exchanged for purposes of open banking¹⁶⁹.

The CBA notes that special attention will have to be paid to the open banking actors' different levels of sophistication so that they all clearly understand their obligations under PIPEDA and adopt protection measures corresponding to the sensitivity of information being managed. To that effect, the CBA proposes several means: contractual agreements, sectoral standards, third-party company accreditation processes applied by a sectoral or regulatory organization.

Underlining the risks of financial crime inherent in open banking, the CBA points out that as the quantity of data shared and the number of actors grow, the risk of identity theft and account takeovers grows, and that increased open banking connectivity raises the networks' vulnerability.

The CBA recommends the establishment of robust consumer authentication procedures, application programming interfaces requiring secured communication protocols, etc. The CBA also indicates that the introduction of open banking would be an opportunity for the sector to adopt specific security standards that would improve the secure conservation, processing and communication of consumer data.

According to the organization, consumers are responsible for protecting themselves and the government is responsible for educating them about the implications of sharing their banking information with third-party companies:

Continued efforts on cyber security awareness are essential for customers to understand the steps required to protect themselves when participating in an open banking environment¹⁷⁰.

169 Ibid.

¹⁶⁸ *Ibid*.

¹⁷⁰ *Ibid*.

The **Competition Bureau** is responsible for administering and applying the Competition Act; the Bureau ensures that Canadian companies and consumers prosper in a competitive environment.

According to the Competition Bureau, open banking has the potential of providing significant benefits to Canadian consumers and companies. Not surprisingly, the Bureau insists on the possible consumer benefits of the increased competition that open banking would generate:

In brief, the Bureau's research points to low levels of financial technology adoption in Canada relative to other countries, and limited consumer engagement driven, in part, by frictions associated with shopping around and switching. These factors are symptoms of a market that is not functioning to its full potential. Banks would be forced to compete harder for consumers, and consumers would have access to a broader range of services, if the benefits of technology could be more fully exploited through open banking¹⁷¹. [References omitted]

Like various participants in the consultation, the Competition Bureau insists on the importance, for their adherence, of consumers' confidence, which will be possible only if appropriate guarantees of consumer protection and privacy, among others, are provided. Privacy and data protection and competition issues must not be considered contradictory. Open banking adoption could in fact reduce the risks involved in other data sharing techniques, such as screen scraping. The Bureau also recognizes in its brief the importance of reviewing and modernizing general frameworks for privacy and data protection, in order to regulate eventual open banking, but also to make the laws adapt to digital transformations and increased commercial data use. If the country goes forward with open banking, devising technical standards would be an opportunity for the Finance Minister of Canada to ensure monitoring of the system and minimize risks of abuse.

SECOND ROUND OF CONSULTATIONS

Constraints due to the pandemic and the focus on Covid-19 in 2020 delayed the examination of open banking and regulatory initiatives. At last, in November 2020, the Minister of Finance announced that the Committee would launch the second phase of examining the merits of open banking. The government also announced that five virtual consultations would be held with stakeholders and the Advisory Committee on Open banking. The consultations took place in November and December 2020. Union des consommateurs attended as observer.

As part of that second phase of consultation, the Financial Consumer Agency of Canada submitted in March 2021 its comments to the Advisory Committee on Open Banking.

The **Financial Consumer Agency of Canada** (FCAC) is a federal body charged with regulating the financial sector. It ensures compliance with consumer protection measures by financial entities subject to federal regulation, promotes financial education and raises consumers' awareness of their rights and responsibilities. FCAC is also responsible for monitoring and evaluating trends and issues that may affect consumers of financial

¹⁷¹ COMPETITION BUREAU, *Submission by the Interim Commissioner of Competition*, February 11, 2019, [Online], https://www.canada.ca/content/dam/fin/consultations/2019/ob-bo/ob-bo-22.pdf

products and services, and it provides information and tools that can help consumers understand the characteristics and risks of financial products and services.

In the document submitted to the Committee, FCAC formulated 10 recommendations:

Consumer protection / market conduct standards and consumer recourse

- 1. Incorporate legally binding consumer protection and financial inclusion requirements into the accreditation criteria from the outset (e.g., fair access to financial products and services; the requirement and verifiable ability to provide financial redress; policies and procedures related to effective complaint handling; express consent for data sharing and how consumer data will be used; and, communicating product and system disclosures in a manner that is clear, simple and not misleading). These requirements should trigger enforcement actions when non-compliance occurs.
- 2. Invest in a national awareness and education campaign focused on open banking to ensure consistent and unbiased messaging to consumers that does not select winners and losers. This campaign should be jointly funded by the industry and government and be coordinated by a respected authority who will employ evidence-based practices. FCAC has the experience and mandate to contribute to and coordinate such a campaign.
- 3. Apply stricter accreditation and implementation programs for firms seeking write access. Write access carries greater risks for consumers than read access and therefore should only be allowed when the framework is established and operating effectively.
- 4. Apply a liability framework that ensures a single, seamless consumer experience, which does not put the onus on the consumer to navigate the attribution of liability, and provides fast redress / reimbursement for consumers.
- 5. Designate a single external complaints body (ECB) for open banking activities and afford the ECB binding resolution authority.

Oversight

- 6. Careful consideration must be given to the delineation of the role, scope and authority of both the accreditation body and the implementation entity.
 - a. It may be appropriate for the accreditation body to be industry-led and responsible for technical standards, particularly in relation to accreditation criteria. It will be important to ensure that consumer issues are adequately represented within this body.
 - b. The implementation entity should be a regulator or be under the oversight of a regulator or other appropriate government body. The implementation entity needs to be set up in a way that is transparent, prioritizes consumer interests and protection, and manages conflicts of interests.

7. Appropriate government oversight of both bodies will be fundamental to consumer confidence, particularly if the accreditation or implementation entity is afforded the authority to establish and enforce rules. Close monitoring will be required to ensure that the rules and their application do not advance business interests at the expense of consumer protection.

Data access

- 8. Given that open banking-type activities are already present in Canada (e.g., screen-scraping), immediate direction is required during the interim period while a framework is developed. This direction should include expected commitments/roles for government and industry, guidance on interim liability allocation and access to redress, how consumer protection will be incorporated, and a sunset date for screen-scraping.
- 9. The open banking framework should include barriers to prevent firms performing similar functions from operating without accreditation and under different rules (i.e., by continuing to use screen-scraping).
- 10. Reciprocity should be driven by consumer consent; firms should not require reciprocal data access in order to provide a product or service¹⁷².

According to FCAC, special attention should be paid to issues of liability, complaint-handling and compensation. If a problem arises, the complaint-handling process should be simple, quick and efficient, and a consumer should not have to untangle complex liability issues and wait for financial institutions and financial technology companies to determine who is at fault. Banks are subject to complaint-handling requirements; FCAC recommends that participants accredited for open banking be subject to similar requirements. In accordance with internationally recognized best practices, FCAC proposes that an external organization with coercive power be assigned to handle complaints related to open banking activities.

FCAC cites as a model the United Kingdom, which has decreed that consumers have priority and that a problem they encounter should be handled from the start, without consumers being redirected to a maze. The remedy should be immediate and the mechanism should thus make it possible to determine the entities that must pay the costs. According to FCAC, the same principle should form the basis of any complaint-handling plan in an open banking environment in Canada.

Consumers should benefit from a similar level of protection in a future open banking system to that provided by major credit and debit card networks – which have pledged publicly to reimburse consumers when a transaction is made without their authorization – and by the limited liability clause of the new framework for protecting consumers of financial products and services.

Any open banking regulatory framework must ensure the protection of personal information from the start and throughout the process. The accreditation system should allow participation only to entities able to demonstrate that they meet the highest standards for

¹⁷² ACFC, "Open banking review: FCAC submission to the Advisory Committee on Open Banking," op. cit. 32.

securing and protecting data and personal information. Consumer consent must at all times be obtained in a clear and simple manner that is not misleading¹⁷³.

Moreover, FCAC insists on consumer information and education, and recommends that a mechanism be provided to fund them in an open banking environment. Information provided to consumers should be objective, consistent and impartial.

As part of the second consultation phase, the Committee provided participants with a variety of consultation documents. The latter present five objectives that pertain notably to consumer protection and that should, according to the Committee, be mandatory in a Canadian open banking system. Figure 13 presents those objectives, and Figure 14 presents the elements that open banking should include in Canada according to the Committee.

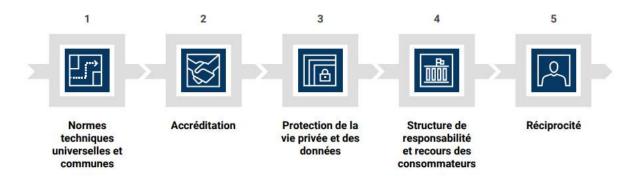
Figure 13: Objectives that would benefit consumers and would be mandatory in a Canadian open banking system



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¹⁷³ *Ibid.*

Figure 14: Basic elements of the system



The documents provided by the Committee suggest that it would recommend an open banking system that would provide consumers with maximum security, with protected data over which consumers would maintain control. Thus, as some stakeholders proposed to the Committee, consumers would have recourses in case of problems. The Committee is considering the development of technical standards and the accreditation of organizations.

In the consultation documents, the Committee has presented the roles it is considering for the various government Departments:

Figure 15: Government Department roles in an open banking system

Contexte – Contexte des services financiers canadiens Le système de gouvernance bancaire ouvert doit refléter le contexte canadien Le rôle du ministre des Finances Rôle du ministre de l'Innovation. des Sciences et de l'Industrie Responsable de l'encadrement du secteur financier fédéral (banques, crédit) Le ministère des Finances Canada et les · Responsable de la mise en place de organismes de réglementation fédéraux du secteur cadres généraux pour le marché en ce financier respectifs équilibrent les quatre objectifs qui concerne la vie privée et la stratégiques suivants : concurrence. · Responsable du Commissariat à la Sécurité et solidité protection de la vie privée et du Bureau Utilité pour les consommateurs de la concurrence. Efficacité dans l'allocation du capital 3 Intégrité du secteur

Les services financiers sont une **compétence partagée**. Le gouvernement fédéral a autorité sur les banques, les sociétés de fiducie et de prêt, et les compagnies d'assurance. Les gouvernements provinciaux et territoriaux ont autorité sur les coopératives de crédit et les valeurs mobilières.

From the Committee's presentation, it appears that two government Departments could share the regulation of open banking. Data protection would fall within the purview of Innovation, Science and Economic development Canada; the system's more general operation and security would fall within the purview of the Ministry of Finance. The latter could establish an independent and self-funded organization, whose members would be

industry representatives, and which would be mandated to implement open banking and devise rules and standards (Figures 16 and 17).

Figure 16: Operation of the implementation organization

Organisme de la mise en œuvre

Un organisme d'utilité publique est un modèle qui intègre le double rôle du gouvernement et de l'industrie

Proposition : Établir un organisme indépendant du gouvernement pour la mise en œuvre, la surveillance continue et l'accréditation des membres. L'organisme est responsable en dernier ressort devant le gouvernement, mais avec une indépendance suffisante pour fournir des incitations aux acteurs du marché pour qu'ils travaillent ensemble.



Figure 17: Role of the implementation organization

Organisme de la mise en œuvre : Rôles

Le Comité envisage des rôles pour le gouvernement et l'industrie, en utilisant le modèle d'un organisme d'utilité publique

En plus d'être membre de l'organisme, l'industrie serait responsable du fonctionnement et de ses fonctions de gestion, notamment



The Committee has provided specifics about its conception of the accreditation process (Figure 18):

Figure 18: Operation of accreditation in an open banking environment

Système d'accréditation

L'accréditation pour le système bancaire ouvert certifie que les participants sont en mesure de répondre aux normes techniques et de se conformer aux règles du système

Proposition

- (1) Les membres devront être accrédités et les demandes de partage de données sur les consommateurs pourront être remplies par les membres accrédités.
- (2) Les critères d'accréditation de haut niveau seraient fixés par le gouvernement, mais le processus d'accréditation lui-même reléverait de la responsabilité d'une autorité de mise en œuvre.
- (3) Le système d'accréditation devrait établir un équilibre entre une voie d'accès simplifiée et des critères d'évaluation stricts, et gérer les processus de manière équitable et transparente, avec des attentes claires pour les entités qui demandent l'accréditation et un recours en cas de problème.

The Committee is scheduled to submit a report to the Minister in the first months of 2021.

OTHER POSITIONS EXPRESSED

While no consumer rights organization has participated in the Committee's consultations, PIAC still presented, during a Senate consultation in April 2019, its positions on the establishment of open banking in Canada¹⁷⁴.

The **Public Interest Advocacy Centre** (PIAC/Centre pour la défense de l'intérêt public) is a non-profit organization that represents consumer interests in various areas such as telecommunications, broadcasting, energy, privacy protection, financial services, competition law, consumer protection and transportation.

PIAC recognizes the potential benefits of open banking, but still worries about the risks of privacy invasion, fraud and Canadian consumers' possible loss of control over their financial data. The organization is decidedly less enthusiastic about the adoption of open banking in Canada than other stakeholders whose briefs we have examined. The organization notes that consumer protection in the current banking system is already insufficient:

First, the underlying foundation of consumer protection in banking in Canada is still underdeveloped and is not adequate to provide baseline rights for retail bank customers. Although Bill C-86 moves us closer to this state, there is still considerable work that should be done to support the innovations of open banking.

PIAC points out that in Canada, the federal government has not adopted any legislative liability protection in the Canadian payment system or banking services generally. For its part, the European Payment Services Directive 2 limits consumer liability to 50 euros, except in cases of negligence. PIAC emphasizes the importance for Canadians' liability to

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¹⁷⁴ PIAC sent us its notes for an appearance before the Senate of Canada's Standing Committee on Banking, Trade and Commerce.

be regulated clearly in open banking if they are intended to participate in such a system. The organization also notes that Canadians don't have a "right" to banking services, and that financial institutions don't have an "obligation to serve," so that consumers can be "excluded" by their financial institution. Any initiative to establish open banking should protect consumers who would want to use eventual non-banking applications from reprisals by their financial institution.

According to the organization, a large part of the value that banking application providers draw from their systems is behaviour tracking, targeted advertising and, eventually, influence on consumer behaviour. Currently, financial services are among the areas not yet integrated into the online platforms and the operations of companies such as Google, Microsoft, Amazon and Facebook. The use of open banking applications could expose Canadian consumers to service terms that include consent to the tracking of their financial activities. Accordingly, PIAC estimates that Canadians' privacy and autonomy must, given the highly sensitive nature of financial data, be protected by stricter confidentiality rules than existing ones.

According to PIAC, using open banking services will necessitate explicit consent to data sharing, as supported by numerous stakeholders, but the organization adds that the adoption of open banking will also require:

- Algorithmic transparency to enable Canadians to see what their data algorithms are doing;
- Data tracking to enable Canadians to track, ideally in real time, the circulation of their data;
- A right to deletion of financial data when consent to their use is withdrawn or when data become old or misleading.

PIAC doubts that a register of authorized applications, modelled after what is done in the United Kingdom, suffices to meet security concerns.

Lastly, the organization wonders what eventual recourses consumers will have in an open banking system, and what organization will handle their complaints: FCAC? Payments Canada? OBSI/ADRBO?

In short, according to PIAC, open banking raises a number of concerns that the authorities will have to meet.

Karounga Diawara is a Professor at the Faculty of Law of Université Laval and Codirector of the Centre de recherche en droit économique (CEDE). He focuses his research on competition law and its internal, comparative and international aspects.

Professor Diawara has also expressed concerns about the establishment of open banking services. Like the other consultation participants, his main concerns are related to the protection of consumers' personal data and privacy. Mr. Diawara emphasized the issue of consent to data sharing; that consent will not be truly informed if a consumer doesn't know the data collection's ultimate purpose or all the possible uses of his data. Indeed, if data circulates in a static learning environment: "At the moment of obtaining the customer's consent, the processing purpose and the scope of application are not specific, so the

explanation of that purpose will be impossible or fictitious." [Our translation] The fact that Bill C-11 provides a right to use data without prior consent only in specific cases is still likely to considerably improve privacy protection in the financial sector.

Second, data sharing (for AI analysis or a service such as mobile payment) between a bank and a technology company can be problematic because contractual consent that is not informed and precise can make intermediaries liable. [Our translation]

The rules for protecting personal data in the financial industry must therefore be modified and adapted, and "The European Union's General Data Protection Regulation, which sets out privacy standards for open banking and establishes a management framework, is a good example of European practices and may be relevant to Canada." [Our translation]

According to Professor Diawara, numerous concerns must be taken into account during the establishment of a regulatory framework in Canada. The rapid evolution of technologies used in the financial industry and the continuing unknowns make it problematic for open banking regulation to protect consumers. That regulatory framework should take into account the specific nature of the data to be protected, i.e. de-identified and algorithmic data, created and processed from first level data. The protection solely of identifiable persons' data can thus no longer be effective.

Competition between major financial institutions and technology companies must also be regulated; the regulation must ensure that their relationship is balanced.

Technology's versatile nature and constant transformation make it difficult to regulate. Mr. Diawara thus advocates a dynamic approach whereby government and industry would share responsibilities. Accordingly, a realistic approach would combine, in his view, guidelines and minimal regulation, with the responsibility for setting technical standards and the relationships between the various actors being entrusted to the market.

The role of government regulation must be limited to broad areas such as customer protection (in which the market does not have enough interest to react and balance the relationships). In this approach, government determines the level of freedoms and disorder accepted in the market. [Our translation]

Questioned about the concerns that might be raised by foreign regulatory frameworks, Mr. Diawara raised the issue of the different frameworks' compatibility. Technological advances and competitive requirements in the financial sector are not the same in every country, nor is the level of data sharing between banks and technology companies. So caution is needed before the transposition of foreign frameworks is considered. The sharing of regulatory powers between the federal government and the provinces adds in this country a level of complexity that can't be ignored in the choice of applicable models.

Summary

Open banking doesn't generate the same enthusiasm among all the participants whose briefs we examined or whom we questioned. Some, such as Payments Canada, are very enthusiastic whereas others, such as PIAC, are much more sceptical about the system's potential benefits. The majority of participants are somewhere in between: Open banking

will be acceptable only if the protection of consumers and personal information is firmly assured, and if the security of operations and of the system is guaranteed.

Several participants whose briefs we examined addressed the issue of consumers' necessary confidence in the system for their indispensable participation to result. But confidence will exist only if they perceive the system to be secure in every aspect and if they have recourse in case of problems. This importance of available consumer recourse was emphasized by the most diverse participants, from the CBA to PIAC, to the Committee itself.

Consumers' adherence to open banking requires major issues to be settled, particularly issues of consent, data security, personal information and privacy protection. Modernizing general privacy and data protection frameworks will be paramount.

5. The Future of Open Banking in Canada: What Regulations Should Be Adopted?

Faced with these significant issues, Canada must define a framework that enables consumers to take advantage of the opportunities offered by financial technology enterprises without placing themselves in a high-risk situation¹⁷⁵.

Marc Lacoursière and Ivan Tchotourian

As we have seen, some countries, such as the United States and Japan, have chosen to allow the market to guide the establishment of open banking in their jurisdictions, whereas others, such as Australia and the United Kingdom, have opted for a stricter regulatory framework.

The Advisory Committee on Open Banking tends to favour a strict framework: establishing an implementation organization, technical standards and an accreditation system. The documents handed to participants in the second consultation phase in December 2020 present the various possible governance models for the four common functions (Figure 19).

Figure 19: Different approaches to open banking

Approche en matière de gouvernance

Le Comité a identifié quatre fonctions de gouvernance communes sur la base de son examen des juridictions internationales

Fonction d'accréditation Orientation ou cadre Entité de mise en œuvre Élaboration de normes ou de contrôle techniques stratégique La majorité des juridictions · Comme dans d'autres Elle comprend · Les juridictions ont établi différentes approches pour généralement des normes, interrogées ont défini une iuridictions, un organisme des règles et une orientation stratégique qui autonome est responsable l'élaboration des normes procédure de demande de décrit les droits, les règles et de la mise en œuvre d'un techniques. participation. système bancaire ouvert et · Aux États-Unis, les responsabilités en Un organisme de de l'administration et de la l'élaboration des normes matière d'utilisation des réglementation est souvent données autorisée par les surveillance continues. techniques s'est faite de responsable de · Par exemple, l'OBIE au manière indépendante. consommateurs. Royaume-Uni et l'ACCC en l'accréditation. Toutefois, les États-Unis · D'autres juridictions ont Par exemple, au Royaumedisposent actuellement d'un Australie. choisi un organisme de Uni, il existe la Financial marché bancaire ouvert et mise en œuvre pour Conduct Authority (FCA) et coordonner l'élaboration actif sans orientation en Australie, l'accréditation stratégique formalisée des normes. est effectuée par l'ACCC.

¹⁷⁵ Marc LACOURSIÈRE and Ivan TCHOTOURIAN, "Métamorphose technologique et institutions financières," Les cahiers du droit, Volume 60, Number 3, September 2019, p. 737–793, [Online], https://www.erudit.org/fr/revues/cd1/2019-v60-n3-cd04870/1064654ar/

The Committee's documents indicate the direction it favours and will recommend to the government, which will choose how open banking will ultimately be introduced and regulated in the country.

What Approaches Should Canada Adopt?

We admit from the outset that where consumer protection is concerned, we think a strict regulatory framework should be preferred. The risks regarding highly sensitive data in particular must be minimized, and we think leaving that responsibility to the market would entail too many uncertainties.

The surveys, including the one we conducted, expose Canadians' great apprehension about the introduction of open banking in the country. The current absence of regulation probably doesn't bolster consumer confidence, but it likely isn't the only reason for that distrust, since consumer confidence is not significantly higher in jurisdictions where regulation is more advanced (see Figure 20). Accordingly, raising that confidence requires adding, to the system's regulatory framework (data sharing and protection regulation as well as technical standards to that effect), a variety of other elements (accreditation entity, complaint handling system, authentication procedures, etc.). Those elements would ensure and demonstrate that consumer protection and data security are priorities, as early as the stage of planning and establishing a Canadian open banking system.

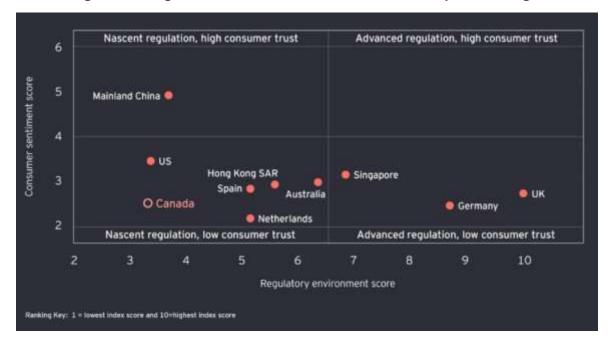


Figure 20: Regulations and consumer confidence in open banking¹⁷⁶

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¹⁷⁶ EY, EY Open Banking Opportunity Index research, op. cit. 35.

To reassure consumers and obtain their adherence to the system, the Canadian government must make certain choices regarding open banking regulation in the country, with the added value depending, according to some, on the regulatory framework's effectiveness¹⁷⁷.

In May 2019, Innovation, Science and Economic Development Canada published, as part of the Canadian Digital Charter, the 10 principles that must guide the government in developing policies applicable to the digital and data-driven economy. That Charter notably proposed a reform and PIPEDA modernization plan that resulted in the tabling of Bill C-11.

The proposals address some of the privacy concerns that were raised by witnesses with respect to open banking, including:

- Data Portability Right. Providing a right for individuals to direct that their personal information be moved from one organization to another in a standardized format, often referred to as a data portability right;
- **Consent.** Requiring explicit, meaningful plain-language consent, which would be separate from any service contract, that describes the intended use of the information and which third parties will have access to the information;
- **Standards.** Using codes of practice, accreditation schemes and technical standards as the means by which businesses can demonstrate compliance with privacy and cybersecurity obligations;
- PIPEDA enforcement. Enhancing the Privacy Commissioner's enforcement and oversight powers, including order-making powers in the form of cessation and records preservation orders as well as increasing the scope and range of fines; and
- **PIPEDA reform.** Redrafting PIPEDA to clearly set out consumers' rights with respect to their personal information and businesses' obligations to protect that information¹⁷⁸.

ESTABLISHING CONSUMERS' RIGHT TO CONTROL THEIR DATA AND IMPOSING DATA PORTABILITY

The first step in regulating open banking should rest on reinforcing consumers' right to control their financial data, i.e. the right to know what data are collected, kept or shared, and to consult and share them at will.

Data portability or mobility is a central aspect of open banking. In this regard, Teresa Scassa, holder of the Canada Research Chair in Information Law and Policy, points out:

Data portability is not a traditional part of data protection; it largely serves consumer protection/competition law interest. Nevertheless, it is linked to data protection through the concept of individual control over personal information¹⁷⁹.

¹⁷⁷ FDATA NORTH AMERICA, Opportunities in Open Banking, 2019, op. cit. 32.

¹⁷⁸ SENATE CANADA, Open banking: What it means for you, op. cit. 15.

¹⁷⁹ Teresa SCASSA, *Open Banking in Canada - A Primer*, *op. cit.* 33.

In Europe, the concept of data portability was introduced in the General Data Protection Regulation adopted by the European Union in 2016 and applied since 2018. Under Directive PSD2, banks must allow their customers' data to be shared with third parties by means of standardized protocols. In Canada, the scope of such a law with respect to consumers' control of their financial data should be integrated clearly into PIPEDA.

The right to data portability is among the principles set forth in the Digital Charter. The Digital Charter Implementation Act tabled in November 2020 (Bill C-11) aims in particular to impose the data portability rule, according to which the customer of a financial institution – or of a company from another sector of activity, since the Bill doesn't address the banking sector specifically – can require it to transmit certain personal information to another company.

However, the Canadian Bill's provision that pertains directly to data mobility is very different from the European regulation's provision. Whereas the European provision states that consumers will be able to recover their data in a legible format in order to use them or share them with a third party, section 72 of Bill C-11 provides direct communication between organizations at the consumer's request:

72 Subject to the regulations, on the request of an individual, an organization must as soon as feasible disclose the personal information that it has collected from the individual to an organization designated by the individual, if both organizations are subject to a data mobility framework provided under the regulations¹⁸⁰.

Data mobility thus will be available on consumer demand and mandatory only if the framework defined by regulation is complied with. Section 120 of Bill C-11 provides the elements that can be taken into account in the eventual regulations respecting data mobility:

- 120 The Governor in Council may make regulations respecting the disclosure of personal information under section 72, including regulations:
- a) respecting data mobility frameworks that provide for:
 - (i) safeguards that must be put in place by organizations to enable the secure disclosure of personal information under section 72 and the collection of that information, and
 - (ii) parameters for the technical means for ensuring interoperability in respect of the disclosure and collection of that information:
- b) specifying organizations that are subject to a data mobility framework; and
- c) providing for exceptions to the requirement to disclose personal information under that section, including exceptions related to the protection of proprietary or confidential commercial information¹⁸¹.

 ¹⁸⁰ PARLIAMENT OF CANADA, Bill C-11, November 17, 2020, [Online],
 https://parl.ca/DocumentViewer/en/43-2/bill/C-11/first-reading (page consulted on May 25, 2021)
 181 Ibid.

Canada thus appears to have made its choice: Security measures, interoperability parameters, applicable organizations, etc. will be defined by regulations rather than emanating from industry. The Bill is not as clear about who will be responsible for implementing open banking.

CONSENT REGULATION

The issue of consent, crucial regarding personal information, must be paid special attention to when establishing open banking, given the very nature of the information concerned and the quantity and speed of data transfers.

Access to consumer data, their sharing and use should be possible only when informed and explicit consent has been obtained for those purposes. That consent should specify the data to be shared, their authorized use, and the validity period of the authorization to transmit, collect, use or keep those data.

According to FDATA North America, valid consent should be based on four key principles:

- 1. Consent must be affirmative and explicit;
- 2. Consumers should be able to amend their consent, including to 'opt-out' of using a service (and revoke access to their data) at any time;
- 3. All parties seeking consent should be appropriately regulated;
- 4. No financial institution should restrict a consumer's ability to share data with third party providers absent a clear and objective risk factor which should be part of the regulation ¹⁸².

On the issue of consent, in particular, BEUC indicated in its 2018 report that:

- Open banking in the EU should use only the redirection authentication method.
 This means the consumer connects directly to his home banking, and the
 consumer's personalised security credentials are not shared with any third
 party.
- The consumer's consent should be explicit and specifically state which financial data the consumer has given the third party access to.
- The Application Programming Interface standard a communication channel between the consumer's bank and third parties should enable third party service providers to provide the consumer's bank with the terms of the consumer's consent.
- The API standard should allow consumers to instruct their bank to refuse access to a particular service, being another bank or a third party service provider.
- The consumer's bank should maintain a list of all service providers who have access to the consumer's financial data.
- The consumer should be able to cancel at any time any specific agreement given to a third party. The API standard should require that, when an agreement is cancelled by the consumer, the party which has received the

¹⁸² FDATA NORTH AMERICA, Opportunities in Open Banking, op. cit. 32.

cancellation (the consumer's bank or the third party) should inform the other party¹⁸³.

Some of the concerns expressed by BEUC – the necessity of explicit consent and the right to withdraw consent at any time - were already addressed in Canadian law; Bill C-11 proposes modest reinforcement of consent rules already in force. We will discuss this further below.

Other points raised by BEUC deserve special attention, because they pertain to aspects less frequently addressed, i.e. consent withdrawal procedures as well as communications between companies sharing the information after a consumer's authorization.

Withdrawal of consent to data sharing should be transmitted immediately to the other party by the company - financial institution or fintech - receiving the withdrawal order, in order to ensure that any transfer or use of data covered by the consent ceases immediately. As proposed by BEUC, APIs should be designed to enable automatic transmission of consent and its terms between financial institutions and third-party companies.

Legislation should also provide additional measures to authenticate a consumer giving his consent. The CBA indicated in its brief the necessity of putting in place robust authentication procedures. The respondents to our survey expressed fears about open banking, but a combination of protection measures, including authentication measures, was likely to help obtain their confidence.

At the moment when a consumer revokes his consent, specific measures will also have to address the issue of the suppression or elimination of collected personal data. Indeed, this is one of the points of criticism raised about Australia's Consumer Data Right by the Financial Rights Legal Centre; the organization estimates that the privacy guarantees are inadequate, because they don't include that right to erase data, notably¹⁸⁴. The National Association for Information Destruction has recommended that the Senate Standing Committee on Banking, Trade and Commerce amend PIPEDA to require companies to destroy user data they no longer need and add a definition of "destruction" ensuring that the documents concerned become "useless or ineffective 185."

The issue of consent to personal data collection, use and sharing is the subject, through bill C-11, of a reform proposal that would receive general application and would thus cover data shared in an open banking environment.

Selon le ministre de l'Innovation, le projet de loi permettra aux consommateurs de mieux contrôler leurs données en exigeant des organismes qu'ils obtiennent le consentement éclairé des Canadiens. En effet, l'article 15 (1) mentionne que. sous les restrictions établies à la loi, l'organisation devra doit d'abord obtenir le consentement valide de l'individu concerné quant à ses renseignements. L'information pertinente devra ainsi leur être présentée en termes précis, clairs

¹⁸⁵ SENATE CANADA, Open banking: What it means for you, op. cit. 15.

¹⁸³ BEUC, Consumer-friendly open banking, op. cit. 97.

¹⁸⁴ FINANCIAL RIGHTS LEGAL CENTRE AND FINANCIAL COUNSELLING AUSTRALIA. "Submission by

the Financial Rights Legal Centre and Financial Counselling Australia, Treasury Laws Amendment (Consumer Data Right) Bill 2018," September 2018, [Online], https://treasury.gov.au/sites/default/files/2019-03/t329531-Financial-Rights-Legal-Centre-and-Financial-Counselling-Australia-joint-submission.pdf. A report from the Australian Communications Consumer Action Network (ACCAN) arrives at similar conclusions.

et simples (article 15 (3)) et le consentement demeure révocable (article 17 (1)). L'individu est ainsi habilité à formuler une demande écrite visant à ce que l'entreprise procède au retrait des renseignements personnels qu'elle a recueillis auprès de lui (article 55 (1)). Le projet de loi établit toutefois certaines restrictions quant à l'obtention du consentement, notamment la nouvelle exception concernant certaines activités d'affaires pour lesquelles une personne raisonnable s'attendrait à une telle collecte ou à une telle utilisation de ses données (article 18 (1)).

Pour les conférencières, la Pre. Céline Castets-Renard (Professeure titulaire à la Faculté de droit – Section de droit civil de l'Université d'Ottawa) ainsi que Me Éloïse Gratton (avocate et cochef national du groupe "Respect de la vie privée et protection des données," Borden Ladner Gervais LLP), le régime du consentement contenu au projet de loi C-11 se voit renforcé, mais demeure tout de même peu innovateur¹⁸⁶.

PERSONAL DATA AND PRIVACY PROTECTION

It seems evident that the specific characteristics of open banking and of the services it will enable require that data security and confidentiality be very strictly regulated:

This includes giving customers more transparency and control over their data by offering them choices, complemented by strong and enforceable consent mechanisms, over how their information is used and shared¹⁸⁷.

The Office of the Privacy Commissioner opined that data protection and regulations should be reinforced by harmonizing Canadian law with global standards; in particular, PIPEDA should grant more power to the Office and allow it to issue orders and levy fines for violating the law.

Bill C-11 takes a step in that direction by providing that administration and monetary sanctions will be imposed for privacy violations¹⁸⁸. The Bill gives the Office of the Privacy Commissioner real powers to issue orders, but financial sanctions would be the purview of a new Personal Information and Data Protection Tribunal, which would hear appeals to Office decisions¹⁸⁹.

By requiring the portability of data held by companies and by regulating it, Bill C-11 represents the first tangible step toward establishing open banking in Canada; the Bill addresses various concerns raised by the introduction of open banking, for example by stating the following aims:

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¹⁸⁶ Marie-Michèle PAQUIN, "Le projet de loi C-11 : grandes lignes et réactions selon différents points de vue," *Droitdu.net*, December 4, 2020, [Online], https://droitdu.net/2020/12/le-projet-de-loi-c-11-grandes-lignes-et-reactions-selon-differents-points-de-vue/ (page consulted on May 22, 2021)

¹⁸⁷ PwC, "Open banking is coming," 2019 report on the Canadian banking sector, op. cit. 4.

¹⁸⁸ GOVERNMENT OF CANADA, *Bill summary: Digital Charter Implementation Act*, November 23, 2020, [Online], https://www.ic.gc.ca/eic/site/062.nsf/fra/00120.html (page consulted on May 20, 2021) ¹⁸⁹ OFFICE OF THE PRIVACY COMMISSIONER, *Statement from the Privacy Commissioner of Canada*

following the tabling of Bill C-11, November 19, 2020, [Online], https://www.priv.gc.ca/fr/nouvelles-ducommissariat/nouvelles-et-annonces/2020/s-d_201119/ (page consulted on May 20, 2021)

- increasing control and transparency when Canadians' personal information is handled by companies;
- giving Canadians the freedom to move their information from one organization to another in a secure manner;
- ensuring that when consent is withdrawn or information is no longer necessary, Canadians can demand that their information be destroyed; and
- providing for the strongest fines among G7 privacy laws—with fines of up to 5% of revenue or \$25 million, whichever is greater, for the most serious offences¹⁹⁰.

ESTABLISHING IMPLEMENTATION AND ACCREDITATION ENTITIES

The regulatory authorities will have to rule on the issue of establishing entities charged with implementing open banking and with accrediting participants.

The governance models those organizations will have to adopt will have to be studied closely. We think the United Kingdom and Australia models constitute an option to be considered in Canada. Those two countries have established a control organization responsible for implementing, administering and monitoring open banking. Some jurisdictions, like the UK, have put in place an organization responsible for accreditation.

Given the currently very low level of consumer confidence in an eventual open banking system, and the perils that an industry left to its own devices can generate, implementation and accreditation entities should be established:

The introduction of an implementation entity can establish a level playing field in which all stakeholders can offer their perspectives regarding policies, standardization, and security measures for market participants, and which is empowered to, with the consumer experience squarely in mind, resolve areas of disagreement among different stakeholders.

 This entity can also provide a consistent measuring of outcomes, over time, that are aligned with objectives of ensuring consumer interests such as data ownership, transparency, safety, privacy, and financial system stability¹⁹¹.

Ideally, the open banking implementation entity should, like the British entity, be a public-private organization funded by the country's major banks, and should be a public or partly public corporation where all stakeholders have a voice, whether they are representatives of financial institutions, financial technology companies, public authorities or consumers. Like FCAC, we think that:

b. The implementation entity should be a regulator or be under the oversight of a regulator or other appropriate government body. The

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¹⁹⁰ GOVERNMENT OF CANADA, *Canada's Digital Charter: Trust in a digital world*, January 12, 2021, [Online], https://www.ic.gc.ca/eic/site/062.nsf/eng/h 00108.html (page consulted on May 20, 2021) ¹⁹¹ FDATA NORTH AMERICA, *Opportunities in Open Banking*, *op. cit.* 32.

implementation entity needs to be set up in a way that is transparent, prioritizes consumer interests and protection, and manages conflicts of interests¹⁹².

In the United Kingdom, the Open Banking Implementation Entity was charged with devising technical standards, maintaining a register of regulated and registered financial service providers, and handling disputes and complaints. Establishing uniform technical standards for all the actors will prevent a situation like that prevailing in the United States. There, each bank develops its own API, and intermediary fintechs develop and provide services connecting the various APIs, so that consumer fees increase and the system is exposed to risks.

The regulatory framework planned by Bill C-11 avoids those risks *a priori* by specifying that data mobility regulatory frameworks will establish security measures that an organization will have to put in place to allow the collection and secure communication of personal information, as well as parameters for technical means of ensuring interoperability. The Canadian model, reportedly based on uniform technical standards, would thus follow the European model.

As for dispute and complaint handling - a crucial aspect of the framework, and one that would likely be assigned to the implementation entity -, we will address this in further detail in a subsequent section.

Adding specifics on putting in place an accreditation entity, FCAC notes:

- 6. Careful consideration must be given to the delineation of the role, scope and authority of both the accreditation body and the implementation entity.
 - a. It may be appropriate for the accreditation body to be industryled and responsible for technical standards, particularly in relation to accreditation criteria. It will be important to ensure that consumer issues are adequately represented within this body.

[...]

7. Appropriate government oversight of both bodies will be fundamental to consumer confidence, particularly if the accreditation or implementation entity is afforded the authority to establish and enforce rules. Close monitoring will be required to ensure that the rules and their application do not advance business interests at the expense of consumer protection¹⁹³.

Bill C-11 provides the development of an additional regulatory framework but doesn't explicitly mention a mandatory accreditation and establishment of an entity to that end.

In the United Kingdom, only fintechs accredited following a rigorous process can provide financial services through open banking. Fintechs must register with a public authority, the Financial Conduct Authority; provide information on their business model; present proof of civil liability insurance; provide copies of the necessary policies and procedures; demonstrate compliance of security, data storage, IT and policies with applicable regulations; and test their product. This type of system ensures the monitoring of

¹⁹² FCAC, "Open banking review: FCAC submission to the Advisory Committee on Open Banking," *op. cit.* 49. ¹⁹³ *Ibid.*

participants. Australia has developed a similar system with mandatory accreditation of companies that plan to provide consumers with products or services.

We agree with this estimate by FCAC:

Clarity will be required regarding what requirements will be set out in the overall framework and what requirements will be developed by the proposed accreditation and implementation entities. To ensure consumer protection is prioritized by all participants, FCAC recommends that, where possible, all consumer protection requirements be legally binding, be embedded in accreditation requirements, and trigger enforcement actions when noncompliance occurs¹⁹⁴.

PUTTING IN PLACE A COMPLAINT HANDLING SYSTEM AND DEFINING THE LIABILITY OF PARTICIPANTS

The United Kingdom's Open Banking Implementation Entity has indicated to the Standing Senate Committee on Banking, Trade and Commerce that a dispute resolution mechanism must be established from the start to handle situations such as "a missing payment, wrong data being sent, or the wrong advice being given based on erroneous data¹⁹⁵." We concur.

The issue of complaint and dispute handling was addressed by numerous participants during the consultations of the Advisory Committee on Open Banking: by FCAC, but also by consumer rights organizations, including PIAC. In an open banking system, as in the financial system generally, consumers must know their rights and have the possibility of asserting them if they feel wronged. The CBA has recognized that consumers must be informed of their recourses if their data are breached or abusively used. When open banking is introduced, it will thus be essential to plan and regulate the complaint handling processes that all the actors concerned will have to put in place and participate in.

Available resolution services will have to be widely publicized because consumers' ignorance of their existence would limit access to those services or even prevent consumers from using them.

Currently, federally regulated financial institutions must have internal complaint handling procedures and must be members of an external independent complaint handling entity. The fact that not all financial institutions are members of one and the same organization, as authorized by law, confuses consumers and contributes to their ignorance of the option to approach an external organization in case of a dispute.

That mistake should not be repeated in an open banking system. All open banking participants should offer an internal complaint handling system that is accessible, quick and effective, but should also be members of one and the same external independent complaint handling organization. FCAC or a third-party organization – for example the implementation entity – could be responsible for handling consumer complaints, and also for evaluating if there is systemic noncompliance with the rules in force and for indicating what should be better regulated.

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¹⁹⁴ *Ibid*.

¹⁹⁵ SENATE CANADA, Open banking: What it means for you op. cit. 15.

For a complaint handling system to function adequately and effectively, the issue of each actor's responsibility will have to be defined clearly. This issue of responsibility has been addressed by the Office of the Privacy Commissioner, the CBA and PIAC; it must be clear to anyone relying on the complaint handling service that each open banking participant will be held liable for its actions.

FDATA North America proposes a liability model we think would benefit consumers:

The basic structure of the liability model for effective open banking ensures there is:

- A method to make the customer whole if, through no fault of their own, they suffer a loss;
- An accurate, fair and reasonable methodology to allocate liability and cost between firms;
- A system to protect authorized open banking participants from customers making fraudulent claims¹⁹⁶.

FCAC adds an important consideration: Consumers should not have to understand the liability assignment model in order to have quick access to recourses or reimbursement measures¹⁹⁷.

What Approaches Should Be Adopted regarding the Provinces?

In Canada, the financial regulation jurisdictions are divided between the federal and provincial/territorial governments. For example, the federal government regulates banks, whereas the provincial governments regulate credit cooperatives and credit unions. In this context, how will provincially regulated financial institutions be integrated into the open banking system established by the federal government?

If the federal government establishes open banking, the millions of customers of provincially regulated credit cooperatives and credit unions must not be ignored, and open banking's benefits to consumers must not give federally regulated entities an unfair competitive advantage.

Apparently, the federal government wants to regulate Canadian open banking by replacing the Privacy Act's relevant provisions. But that Act (and, according to Bill C-11, the one that will replace the relevant provisions) is applied in every province, except those that have adopted essentially similar laws (currently, Alberta, British Columbia and Québec¹⁹⁸). Because Bill C-11 states, for example, that only organizations "subject to a data mobility framework provided under the regulations¹⁹⁹" will be assured of being able to participate in open banking, adjustments will likely be necessary for guaranteeing equal participation by federal and provincial businesses across the entire country.

¹⁹⁶ FDATA NORTH AMERICA, Opportunities in Open Banking, op. cit. 32.

¹⁹⁷ FCAC, "Open banking review: FCAC submission to the Advisory Committee on Open Banking," *op. cit.* 49. ¹⁹⁸ It should be noted that the federal law, in those provinces, continues to apply to companies registered by the federal government, i.e., in the case of interest to us, financial institutions.

¹⁹⁹ Bill C-11, sec. 72

Slightly before the federal government, Québec proposed an amendment to its own personal information protection law (Bill 64). As does the federal Bill, Québec's Bill addresses the issue of data portability, but with differences that could affect the establishment of open banking in Québec:

De son côté, le projet de loi C-11 propose de permettre aux individus de demander que l'entreprise qui détient leurs renseignements personnels les transfère vers l'organisation de leur choix dans un format permettant d'assurer l'interopérabilité des données (art. 72 LPVPC), mais <u>il ne prévoit pas</u> la possibilité pour l'individu de récupérer ces données dans le format en question. Ainsi, avec la proposition du fédéral ce sont les organisations qui assureraient la "portabilité" des données personnelles tandis que cette responsabilité incomberait aux individus du côté du projet de loi québécois.

Dans les deux cas, le droit à la portabilité des données <u>n'oblige pas</u> l'organisation visée par une requête à supprimer les données de son système; celle-ci peut donc les conserver dans le respect des exigences prévues par la loi. Toutefois, le projet de loi C-11 propose d'accorder aux individus le droit de demander aux entreprises la suppression définitive et irréversible de leurs renseignements personnels (art. 55 (1) LPVPC) alors que le projet de loi n° 64 se limite à un droit à la rectification des renseignements personnels (art. 28 LPRPSP)²⁰⁰.

Bill 64 is thus more similar to Europe's GDPR than to the federal Bill C-11. However, in contrast to the GDPR, Bill 64 grants individuals the right to receive their personal information, but limits the possible retransmission of their data to another legally authorized person or organization. Moreover, given that Bill 64 doesn't impose interoperability, the Bill's right to portability could be viewed as in reality only an aspect of the right of access²⁰¹.

In August 2020, Ontario launched a consultation; the province plans to adopt in turn its own personal information protection law, in order to recognize new rights for individuals, including the right to data portability²⁰². To date, no Bill has been tabled.

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²⁰⁰ Simon DU PERRON, "Le temps des réformes: cinq comparaisons entre le projet de loi n° 64 et le projet de loi C-11," *Laboratoire de cyberjustice*, November 24, 2020, [Online], https://www.ajcact.org/en/2020/11/24/letemps-des-reformes-cinq-comparaisons-entre-le-projet-de-loi-n-64-et-le-projet-de-loi-c-11/ (page consulted on May 20, 2021)

²⁰¹ Julie UZAN-NAULIN and Jennifer STODDART, "Right to Data Portability: True Data Portability or Simply an Updated Version of the Right of Access?," *Fasken*, Bulletin #14, September 14, 2020, [Online], https://www.fasken.com/en/knowledge/projet-de-loi-64/2020/09/14-droit-a-la-portabilite-modernisation-droit-dacces (page consulted on June 5, 2021)

²⁰² Daniel FABIANO and Christopher FERGUSON, "A New Privacy Law for Ontario? Towards a "Made-in-Ontario" Response to Global Developments," *Fasken*, Privacy and Cybersecurity Bulletin, September 3, 2020, [Online], https://www.fasken.com/en/knowledge/2020/09/2-new-privacy-law-ontario (page consulted on June 5, 2021)

Conclusion

Given the high stakes, Canada must define a framework that puts consumers in a position to benefit securely from the possibilities offered by financial technology companies²⁰³.

[Our translation]

Marc Lacoursière and Ivan Tchotourian

More and more, consumers rely on the new technologies to manage their personal finances. They consult their bank accounts and perform a variety of transactions online and, thanks to the new possibilities provided to them by fintechs, they now have access to all kinds of new applications for monitoring their expenditures, managing their budget, comparing the offers of different financial institutions, etc.

Currently, consumers who want to benefit from those new services must authorize access to their financial data by communicating their bank account identifiers. Third parties visit the financial institutions' portals, where they have access to the same information (and at the same transaction capacities) as the consumers themselves have. Those rather risky methods of access could soon be a thing of the past.

Access, through interfaces enabling very precise configuration, to data held by third parties constitutes the basis for open banking systems, which are being developed in more and more countries, including this one.

Indeed, the Canadian government has been studying in recent years the way that open banking should be put in place and regulated in this country. The Covid-19 pandemic has delayed work to establish open banking here, while fintechs and other actors of the future Canadian open banking system are waiting impatiently²⁰⁴.

But nothing justifies haste; open banking can certainly benefit consumers by stimulating competition and ending current risky practices for providing innovative financial services, but the project still raises numerous issues of personal information protection and security. Prior in-depth analysis of open banking issues and risks is necessary:

One of the biggest concerns prior to launching an OB project is understandably, the security of account holder data, and how to prevent the bank being hacked. If an API is well designed, developed and structured, and there are strict controls in place governing the API Management Full Cycle, these security issues will disappear.

To further ensure safety and security, API users can implement a multi-layer control covering people, processes and technologies, and define multiple controls

²⁰³ Marc LACOURSIÈRE and Ivan TCHOTOURIAN, *Métamorphose technologique et institutions financières*, on cit 175

²⁰⁴ Geoff ZOCHODNE, "Open banking review faces 'worrying' delay as pandemic drives Canadians to fintech," *Financial Post*, April 6, 2021, [Online], https://financialpost.com/news/fp-street/open-banking-review-faces-worrying-delay-as-pandemic-drives-canadians-to-fintech (page consulted on June 5, 2021).

for the same risk, such as two-factor authentication, network segmentation and multiple firewalls²⁰⁵.

There is currently in Canada no major demand for open banking. Pressure to introduce such a system is exerted more by fintechs and other actors who anticipate potential financial gains.

Our survey's results in this regard are clear: Canadians are highly distrustful of the very concept of open banking and are not at all in a hurry to use it. The lack of enthusiasm for open banking probably results from poor knowledge of the possible benefits Canadians could obtain: better control and greater security during financial data transfers, access to new types of financial services, better banking services and customer service, reduction of barriers to changing one's financial institution, etc.

Nevertheless, open banking raises fears, shared by various interested organizations, including consumer rights groups in Canada and abroad. Those fears pertain to issues of consent, security and, for some, complaint handling. Almost all stakeholders agree that all those aspects will have to be strictly regulated.

Foreign jurisdictions that have already established open banking have not all opted for similar governance systems. Most foreign jurisdictions have a definite strategic framework – the United States is the notable exception. Some countries have also chosen to put in place an open banking implementation entity, thus following the example of the United Kingdom and Australia, among others. Several jurisdictions also require open banking participants to adopt a number of common industry standards. Those implementation and accreditation entities are in many cases government regulated, such as the OBIE in the United Kingdom, or governmental as in Australia.

As for technical standards, they have generally been developed under the coordination of an implementation organization, in order to ensure that all participants have equal access to the new market. The United States has here again gone it alone: Industry has developed the standards and no regulation has required interoperability, so that collaborations have been developed in isolation and additional intermediaries have emerged to interconnect APIs.

Fortunately, the Advisory Committee for Open Banking appears to favour introducing in Canada an open banking governance model in the image of the one chosen by the UK and Australia.

Establishing open banking in the country will require close study, in view of adopting adequate regulation, of issues as varied as: consent to access and use of personal data, including consent limitations and withdrawals; adequate definition and protection of sensitive personal data and privacy; data mobility; interconnectivity; the constitution and governance of implementation and accreditation entities; complaint handling; the liability of the system's various participants; the powers of a Privacy Commissioner and the methods of intervention at his disposal; etc.

²⁰⁵ MORTGAGE FINANCE GAZETTE, "Open Banking: A brave new world," *Mortgage Finance Gazette*, June 29, 2020, [Online], https://www.mortgagefinancegazette.com/features/open-banking-brave-new-world-29-06-2020/ (page consulted on June 5, 2021)

The tabling of Bill C-11 indicates that the government wants to go ahead by taking the first steps to enable data transfers and by recognizing consumers' right to data mobility. However, the Bill is silent about various aspects, such as implementation and accreditation processes and the entities that will be responsible for them, the very requirement of accreditation or its regulation, applicable security standards – all aspects that should be regulated, as outlined in section 120, but whose details remain unknown. So it's difficult to know what rules are being considered and to form an estimate. Moreover, Bill C-11 only proposes a modest reinforcement of consent rules, which are crucial regarding sensitive data such as financial data. We also observe that the issue of complaint handling, which we think highly important, is totally absent from the Bill; complaint handling may – or may not – be included in the regulations...

In our view, it will be important for organizations that want to participate in open banking to be accredited beforehand by an independent entity, charged with applying rigorous implementation standards defined in collaboration with industry. Similarly, the system's implementation entity, whether or not it is different from the accreditation entity, will have to give industry a role regarding all technical issues, but will also have to give consumer rights organizations a role regarding all consumer protection and complaint handling issues.

The report of the Advisory Committee on Open Banking is expected in the coming weeks. The document handed by the Committee to participants in the second consultation round suggests that the Committee will opt for recommendations that are essentially in line with ours. The federal government will be responsible in the end for regulating open banking in Canada.

Recommendations

Regarding the establishment of a framework for introducing open banking in Canada

Whereas Canada is currently studying the introduction of open banking in the country;

Whereas open banking, and more generally personal data portability, should give consumers better control over their financial and personal data;

Whereas open banking would enable consumers to use new financial services without exposing them to the risks inherent in the screen scraping technology currently used for providing this type of services;

Whereas open banking could stimulate competition regarding financial services and thus benefit consumers;

Whereas a very large majority of adult Canadians distrust open banking systems;

Whereas Canadians are uneasy about the idea of sharing their financial data with financial technology companies;

Whereas Canadians' main concerns about open banking pertain to their financial data's security, identity theft and potential fraud;

Whereas those concerns are also shared by the various experts, who recognize those risks and generally advocate stricter regulation;

Whereas open banking will be able to function adequately only with consumer participation and whereas said participation will rest on their confidence that their interests have guided the system's development and establishment;

Whereas Bill C-11, tabled by the government, provides indications on the approach considered for establishing open banking in Canada;

Union des consommateurs recommends the adoption of a strict regulatory framework to ensure the creation of an open banking system in Canada;

Union des consommateurs recommends that data portability be imposed under precise and complete rules that government organizations would be responsible for developing, establishing and monitoring;

Union des consommateurs recommends that a directory of authorized companies be made available to consumers who want to make sure a third party participating in open banking is legitimate;

Union des consommateurs recommends that special attention be paid to the protection of consumers and their personal data, both in terms of control and security, and that consumer groups be called upon to participate in developing standards and rules, so that consumer interests take priority.

Regarding complaint handling in an open banking system

Whereas, notably, the multiplicity of actors and the highly technical nature of interactions in an open banking environment are likely to complicate consumer access to traditional dispute resolution methods;

Whereas access to a dispute resolution method should not depend on a consumer's understanding of attribution liability rules in an open banking environment or on his ability to assign fault;

Whereas Canadians, when involved in a dispute with their financial institution or a thirdparty company about an open banking activity, must be able to rely on an effective, uniform and easily accessible complaint handling system;

Union des consommateurs recommends that all organizations participating in open banking be required to make available to consumers a standardized internal complaint handling system;

Union des consommateurs recommends that consumers dissatisfied with how their complaint is handled by an open banking participant be able to rely on an external organization for handling their complaint;

Union des consommateurs recommends that a single external and independent organization, with the power to settle disputes and whose decisions are binding, be assigned to handle consumer complaints externally;

Union des consommateurs recommends that the external complaint handling organization be also assigned to identify any systemic problem that could arise from open banking and could affect consumers, to report such problems to the competent authorities and issue recommendations.

Regarding consent

Whereas consumers' financial data are highly sensitive;

Whereas all issues of consent to financial data access and use, including consent limitations and withdrawal rules, must be strictly regulated;

Union des consommateurs recommends that work continue to modernize the general privacy and data protection frameworks, as well as the specific rules necessary for protecting sensitive data;

Union des consommateurs recommends that lawmakers enact the following open banking consent obligations:

- Informed, explicit and affirmative consent:
- That consent and its scope be easily modified and revocable;

- That the parties authorized to solicit consent to sensitive data access and use be regulated;
- That consent requests clearly indicate the data that a consumer consents to share and the limits of such sharing, as well as the period for which consent is authorized;
 - Union des consommateurs recommends that the details of consent transmission between the parties be provided in the open banking regulatory framework, including:
- That the API directly communicate between the parties a consumer's terms of consent and any modification or withdrawal thereof;
- That financial institutions keep a list of the businesses concerned by a consumer's consent to the transmission of his financial data;

Other

Whereas the contribution of consumer rights groups is indispensable for establishing open banking in the country, in order to reassure consumers and guarantee their participation;

Union des consommateurs recommends that the federal government ensure that community organizations defending consumer rights be granted adequate participation in work to establish the framework and oversight of open banking and that the federal government provide adequate funding for that participation.

Appendix 1

Research Project Funded by the Office of Consumer Affairs

(Innovation, Science and Economic Development Canada)
October 2019

QUESTIONNAIRE ADDRESSED TO FOREIGN CONSUMER GROUPS

Presentation of the organization

Union des consommateurs is a non-profit organization comprised of 13 consumer rights groups. UC's mission is to represent and defend the rights of consumers, with special emphasis on the interests of low-income households.

UC acts mainly at the national level, by representing the interests of consumers before political or regulatory authorities, in public forums or through class actions. Its priority issues, in terms of research, action and advocacy, include the following: household finances and money management, energy, issues related to telephone services, broadcasting, cable television and the Internet, public health, financial products and services, and social and fiscal policies.

Presentation of the project

Union des consommateurs is currently conducting a research project on open banking systems. The project, titled Open Banking: A Panacea for Consumers?, is funded by the Office of Consumer Affairs of Innovation, Science and Economic Development Canada.

In this research project, we examine consumer issues that may result from the establishment of open banking systems, and we study exemplary consumer protection practices that have proven their worth in other jurisdictions. We attempt to identify protection measures that could be applied in this country, as well as possible deficiencies in foreign measures, in order to propose the best practices to be adopted here.

Context and questions

Canada is currently examining how it should regulate the establishment and implementation of an open banking system in the country. Accordingly, we're attempting to acquire tools for intervening adequately in discussions and consultations conducted by the Canadian government, and for making relevant comments on the draft legislation that will likely be submitted by the Canadian government. More specifically, we want to intervene so that consumer rights and interests are adequately taken into account and respected in future regulations.

A number of jurisdictions are more advanced than Canada in establishing open banking regulations: for example, the European Union, the United Kingdom, Singapore, Australia,

Japan and Hong Kong. Accordingly, we would like to obtain the views of consumer groups in those jurisdictions, to help us identify best practices and avoid errors committed elsewhere from being repeated here.

In that vein, we would very much appreciate your taking the time to answer this short questionnaire If certain questions don't apply to your country, please ignore them.

Did your government hold consultations before adopting open banking legislation? If so, did you participate in them? Can you give us access to the brief or other documents you filed?

What main risks for consumers are posed by the establishment of open banking systems or their regulation?

Does your country specifically regulate open banking? If so, what law (or other framework) has been put in place?

What are the pros and cons of that regulatory framework?

What aspects of consumer protection should be addressed or better addressed in open banking regulation?

Do you have other comments to make about open banking or its regulation?

Thank you for your collaboration.

Please return the completed questionnaire by Friday, December 20, 2019 to:

Sophie Roussin

Email: sroussin@uniondesconsommateurs.ca

Research Project Funded by the Office of Consumer Affairs

(Innovation, Science and Economic Development Canada)
October 2019

QUESTIONNAIRE ADDRESSED TO CANADIAN CONSUMER RIGHTS GROUPS

Presentation of the organization

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Presentation of the project

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Context and questions

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so that consumer rights and interests are adequately taken into account and respected in future regulations.

In that vein, we would very much appreciate your taking the time to answer this short questionnaire.

In January 2019, the Advisory Committee on Open Banking led a consultation (*Review of the Merits of Open Banking*). Did organization submit a brief as part of that consultation? Can you give us access to the documents you filed?

In your view, should consumers be wary of open banking systems?

What are the main risks posed for consumers by open banking systems?

Do you have any concerns of your own about open banking systems?

Do you have other comments to make about open banking or its regulation?

Thank you for your collaboration.

Please return the completed questionnaire by Friday, December 20, 2019 to:

Sophie Roussin

Email: sroussin@uniondesconsommateurs.ca

Appendix 3

Research Project Funded by the Office of Consumer Affairs

(Innovation, Science and Economic Development Canada)
October 2019

QUESTIONNAIRE ADDRESSED TO CANADIAN ORGANIZATIONS

Presentation of the organization

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In this research project, we examine consumer issues that may result from the establishment of open banking systems, and we study exemplary consumer protection practices that have proven their worth in other jurisdictions. We attempt to identify protection measures that could be applied in this country, as well as possible deficiencies in foreign measures, in order to propose the best practices to be adopted here.

Context and questions

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Various groups, companies and organizations are involved or interested in open banking systems (consumer groups, financial institutions, Fintech, governments, etc.). We are addressing this questionnaire to you, as an open banking stakeholder, to obtain your views about the risks of excluding some consumers and about issues that should be addressed regarding the risks posed to consumers by open banking systems.

In that vein, we would very much appreciate your taking the time to answer this short questionnaire.

In January 2019, the Advisory Committee on Open Banking held a consultation (*Review of the Merits of Open Banking*). Did your organization submit a brief or another document to the committee as part of that consultation? Can you give us access to the brief or other documents you filed?

In your view, do some consumers risk being left behind by the development of an open banking system in Canada? If so, which consumers and why?

In your view, what aspects of open banking systems should we focus on to protect Canadian consumers effectively?

Do you have other comments to make about open banking or its regulation?

Thank you for your collaboration.

Please return the completed questionnaire by Friday, December 20, 2019 to:

Sophie Roussin

Email: sroussin@uniondesconsommateurs.ca

Appendix 4:

Research Project Funded by the Office of Consumer Affairs

(Innovation, Science and Economic Development Canada)

Open Banking: A Panacea for Consumers?

November 2020

QUESTIONNAIRE

Presentation of the organization

Union des consommateurs is a non-profit organization comprised of 13 consumer rights groups. UC's mission is to represent and defend the rights of consumers, with special emphasis on the interests of low-income households.

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Presentation of the project

Union des consommateurs is currently conducting a research project on open banking systems. The project, titled Open Banking: A Panacea for Consumers?, is funded by the Office of Consumer Affairs of Innovation, Science and Economic Development Canada.

In this research project, we examine consumer issues that may result from the establishment of open banking systems, and we study exemplary consumer protection practices that have proven their worth in other jurisdictions. We attempt to identify protection measures that could be applied in this country, as well as possible deficiencies in foreign measures, in order to propose the best practices to be adopted here.

Context and questions

Canada is currently examining how it should regulate the establishment and implementation of an open banking system in the country. Accordingly, we're attempting to acquire tools for intervening adequately in discussions and consultations held by the Canadian government, and for making relevant comments on the draft legislation that will

likely be submitted by the Canadian government. More specifically, we want to intervene so that consumer rights and interests are adequately taken into account and respected in future regulations.

We would like to obtain your views on various consumer protection issues related to the establishment of an open banking system in Canada.

The questions are accompanied by a brief contextual setting that summarizes the results of our research to date.

Highlights of our research

Pros and cons of open banking systems

Benefits

Open banking presents numerous potential advantages. In particular, it could offer consumers an opportunity to take better control over their banking data and share the latter more securely. Moreover, consumers could benefit from improved banking services (fund transfers between financial institutions, better offers from financial institutions, etc.). Thanks to open banking, consumers normally excluded from various banking services, because of their credit history, could have access to better credit rates, even to loans they might not have been entitled to. Open banking could also offer under- or un-banked consumers a variety of banking services, for example by allowing financial institutions to access expenditure and payment data in order to determine solvency. Banking services would also be improved due to greater flexibility in personal financial management. For example, consumers could, in real time, monitor their credit, confirm their eligibility for better mortgage rates, check out the various banking offers, and change banks easily and quickly to take advantage of those offers.

Indirect benefits

Open banking could enable the Canadian economy to generate gains due to the growth of the financial technology sector and the emergence of many fintechs. Jobs could thus be created in the country in those sectors. In the view of some, greater competition in the offer of banking services could lessen unfair practices.

Risks and issues involved in open banking

The arrival of open banking raises many questions and concerns. The key to establishing a secure open banking system in Canada will be to devise regulations that will clarify consumers' right to access their data currently held by third parties, consumers' consent to their financial data being shared, and the protection and security of those data. Indeed, protecting privacy and personal data is one of the main issues surrounding the establishment of open banking. Accordingly, lawmakers should thoroughly revise the Personal Information Protection and Electronic Documents Act (PIPEDA) to ensure the protection of consumer data.

1(a) In your view, what may be the most serious risks posed by the arrival of open banking in Canada? Why?

1(b) In your view, what would be the best ways to counter those risks?

Regarding Canada's regulatory framework

In spring 2018, the federal government announced in its budget its intention to examine the merits of establishing open banking in the country. To proceed with that examination, the Minister of Finance announced the appointment of an Advisory Committee on Open Banking. That committee, created in fall 2018, was tasked with considering whether open banking would provide meaningful benefits to Canadians.

In winter 2019, the Committee launched a first consultation, which ended in February 2019.

In November 2020, the Minister of Finance announced a second consultation. Five virtual consultations with stakeholders were planned; those consultations were held in November and December 2020.

In parallel with the Committee's work, the federal government tabled a Bill on November 17, 2020: the *Digital Charter Implementation Act, 2020 to modernize the framework for the protection of personal information in the private sector.*

This new law will allow data portability. Consumers will thus be able to request that their bank communicate their personal information to other financial institutions, which opens the door to open banking.

- 2(a) In your view, what would be the essential concerns to take into account when developing regulatory frameworks? Why?
- 2(b) In your view, is Canada taking the right direction with the Digital Charter Implementation Act, 2020 to modernize the framework for the protection of personal information in the private sector?

Regarding foreign regulatory frameworks

Foreign legislation enacted to regulate open banking differs by country:

- Impetus for the development of APIs: coercive regulations with, for example, technical standards developed by a central authority or the free market (development by industry);
- Consumer rights: presence or not of new legislation enhancing consumer rights with respect to personal information;
- Standardization of APIs: mandatory or voluntary adherence to technical specifications developed by a centralized authority;
- Regulation of third-party providers (TPPs): accreditation by a central authority or bilateral agreements with financial institutions. In the latter category, certain banking associations work to develop standardized agreements;

- API features: read-only access to bank account information or read-and-write access enabling payment initiation services. Some jurisdictions add lower levels of access during implementation phases, for example by allowing access solely to non-confidential information such as the list of products offered by the institutions;
- Scope of APIs: limited to operations accounts or including savings accounts and certain financial products. Some jurisdictions want to extend data access to insurers, asset management firms or even to the communications and energy sectors.
- 3(a) In your view, what approaches taken by foreign legislation should inspire Canada in the development of a regulatory framework for open banking? Why?
- 3(b) Do foreign regulatory frameworks raise certain concerns?

Thank you for your collaboration.

Please return the completed questionnaire by January 6, 2021 to:

Sophie Roussin

Email: sroussin@uniondesconsommateurs.ca