

# Review into the Merits of Open Banking

Submission to the Advisory Committee to the Open Banking Review  
Department of Finance Canada

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*Submitted by Michael Sivan  
Data Management Consultant  
Email: [msivan@eldan.com](mailto:msivan@eldan.com)*

## General

This document is being submitted in response to the consultation paper published by the Department of Finance on the Merits of Open Banking. I give consent to the complete disclosure of all the contents of this submission.

I would like to convey my compliments on the quality of the consultation paper A Review into the Merits of Open Banking. The document is clear, consistent and concise.

As proposed, I would like to submit my comments on the following questions:

1. What are the real benefits and improves outcomes for Canadians?
2. How should the risks related to open banking be managed?
3. What role in the implementation of open banking should the federal government assume?

In addition, I would like to highlight additional issue that covers all aspects of open banking, namely data governance. It is an area where the federal government can play a significant role, even though it addresses important aspects of data ownership, access to data, data sharing and other responsibilities.

## Open Banking Benefits

Most benefits of open banking platform have been presented in the consultation paper A Review into the Merits of Open Banking. The document lists the benefits in terms of market participants:

1. Canadian consumers of financial services will have an opportunity to wrest their financial data from the large banks and assume control over their financial data. It creates a need for better financial education and more innovative and resilient products and services, that can be provided by existing and new market players. In addition consumers (particularly “digitally-native” millennials) will be able to leverage the new offerings enabled by open banking to lower the cost of financial services.
2. Large banks will be able to leverage their customer base combined with the efficient and reliable products and services to open up their offerings to existing and new customers. It will give them an opportunity to improve their brands as technologically current and innovative.
3. Smaller financial service providers will get a chance to compete with the large banks more effectively by leveraging the new platform and customer intimacy.
4. FinTechs will gain more effective access to customer data with consumer consent to build better and more innovative products. This will allow them to increase their participation and customer base.
5. Finally Canada's financial sector as a whole, will not only improve its efficiency by opening up the market for new and competitive financial products and services, but will also strengthen its image as technologically advanced sector of the Canadian economy that has interests of individual Canadians and small businesses as its top priority.

Finally opening up the whole area for new and innovative solutions will facilitate the introduction of new technology into banking sector, that may benefit the consumers, as well as the new and existing participants. We are likely to see solutions based on artificial intelligence and smart algorithms, Big Data, blockchain for protection and security, virtual currency, Internet of Things, neural nets, quantum computers, and other, yet unseen, technologies.

## Risk Management

Managing the risks associated with access to financial data has always been a top priority for financial services providers. Managing customer trust is the foundation of effective service.

Implementing open banking can address those risks, for example, protection and privacy can be embedded in the API's, e.g. using tokens, thus providing more effective and timely controls. Fraud prevention is always better than fraud detection.

There are aspects of the new environment that may increase risks associated with open banking. Consumers (individuals and small businesses) will gain more control over their financial data. While it is good in the long run, in the short run it may open opportunities for fraud and exposure to risks, such as virus-infested products, identity theft, hacking, fraudulent schemes, and other, yet uncovered dangers. Better education and new innovative tools, such as face id, touch id, authentication, etc. will mitigate the risks associated with open banking.

Consultation paper refers to the need for better consumer education and information as to the "rights and responsibilities with respect to data management." Having been involved in the field of data management for over 40 years, I have to compliment you on recognition for the need for clear definition of responsibilities for data, particularly for sensitive and critical data: User Id, password, account number, account balance and PII (Personally Identifying Information) such as name, address, SSN, date of birth, etc. In the corporate world those rights responsibilities are typically addressed by a RACI (Responsible, Accountable, Consulted, Informed) chart for critical data-related functions, e.g. acquire data, store data, provide consent to access data. Considering the need to involve and educate consumers, those responsibilities should be conveyed in a more simplified and straightforward manner. See more in the Data Governance section later in this document.

## Role of the Federal Government

Federal Government, Department of Finance (hereafter the Department) in particular, has a critical role to play in the introduction and implementation of the open banking in Canada. Here are some of the key aspects of Department's participation:

1. Appointment of the Advisory Committee and initiation of these consultations are the initial steps of the Department in implementation of open banking.
2. As there are two approaches to open banking implementation in various jurisdictions around the world, i.e. "push" approach driven by regulators and communicated to the stakeholders and "pull" approach driven by the market participants with discussions and consensus; it will be up to the Department to determine the appropriate approach for Canada. Personally I would prefer the pull approach.
3. Form a consortium of market players, including large and small banks, fintech companies, government and representatives from consumer and small business groups to agree on scope and definition of the requirements for open banking standards and regulations.
4. Ensure regulatory and legislative base for those requirements, e.g. Canada's privacy framework.
5. Develop and publish the standards and regulations related to open banking implementation, e.g. account data, payment initiation, consent to data sharing, etc.
6. Form a technical advisory group to design and publish the necessary technical standards and specifications, e.g. API framework and architecture.
7. Define a Data Governance function that will be responsible for the stewardship of the critical data elements in the open banking.
8. Define and implement a proof of concept project with a limited scope and number of participants.
9. Develop publish a plan with detailed roll-out schedule of the necessary components of open banking platform.
10. Coordinate development of the education materials that should accompany the roll-out of various components.
11. Monitor the roll-out of the various components by market participants and effectiveness of the implementation of open banking.

## Data Governance

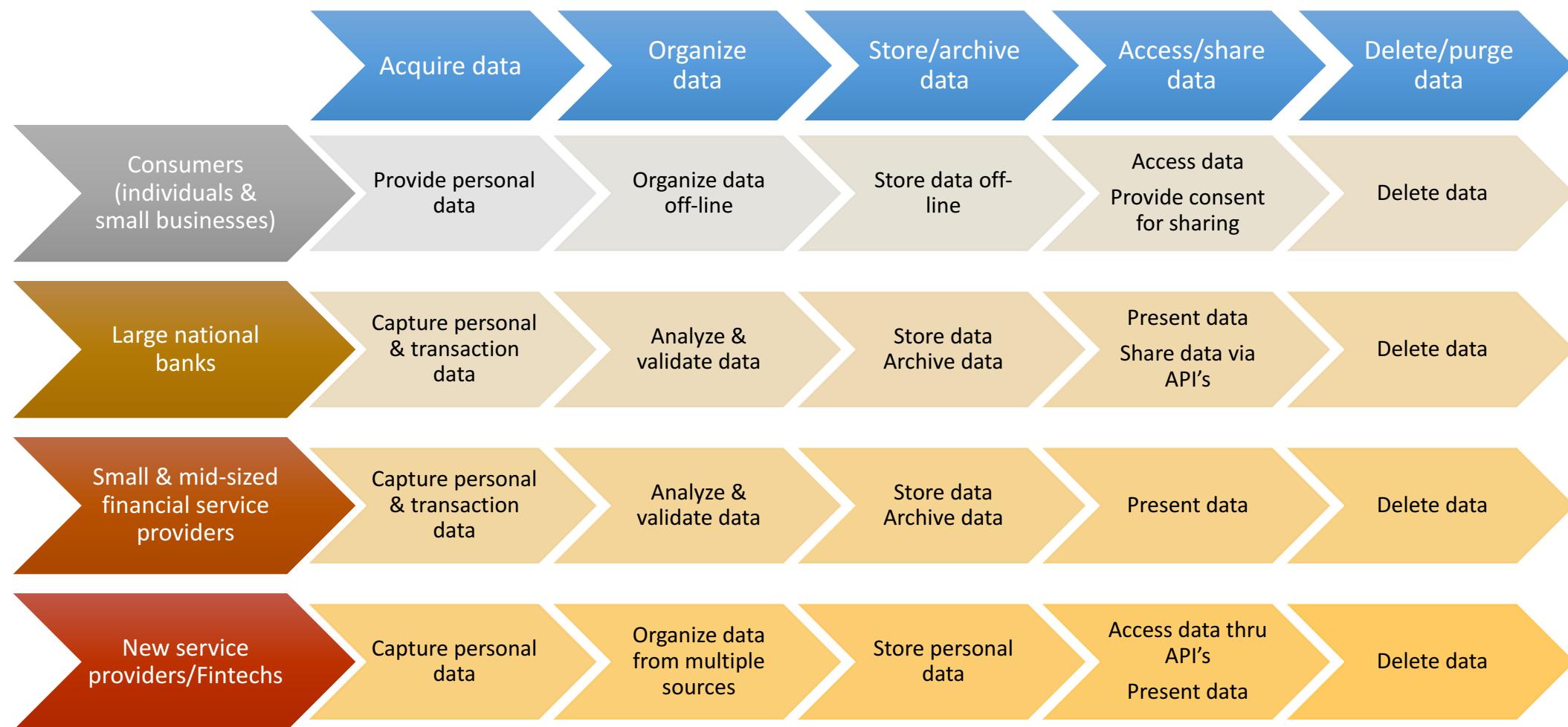
Every piece of data goes through a lifecycle, it has to be captured or acquired, processed, stored and archived, accessed and reported and finally deleted or purged. Levels of controls, protection, exposure, etc. can vary, however responsibilities for data elements need to be clearly defined and communicated. Absence of those responsibilities will increase the risks of data fraud and misuse. It is an essential function of the data governance to establish those responsibilities and ensure that data is properly controlled and adheres to all privacy and protection rules. Data governance provides best mitigation for data-related risks.

Each market participant is performing some data-related functions (create data, store, present data, etc.), however it is essential that the Department, or more specifically the Director of Data Governance or Chief Data Officer, that are responsible for the governance of financial data in the Department, define and communicate the primary responsibilities of the market participants related to data. For example, customer opens an account in a large bank, the bank's system then creates a customer profile and captures financial transaction data for that account. A new market player, a fintech, creates a mobile app, that helps customer make financial decision, and that needs the financial data to enable the app functionality. Customer creates an account in the app and then gives consent to the app, that uses the API's to get the required data from the bank. The situation could become even more complex, if an update of data is allowed.

All is well until the customer notices discrepancies between the accounts. Those could be in account profile, e.g. wrong address or in dynamic transaction data, e.g. wrong transaction date or amount. Any errors in processing will affect the quality of data. The critical question will be who is responsible for which data at each step of the data lifecycle?

The following diagram (for illustration only) depicts very high level definition of the responsibilities for the stages in the data lifecycle by open banking market participants.

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## Conclusion

To conclude, I would like to thank you for the opportunity to respond to the consultation paper A Review into the Merits of Open Banking. As proposed, I have submitted my comments on the following questions:

1. What are the real benefits and improves outcomes for Canadians?
2. How should the risks related to open banking be managed?
3. What role in the implementation of open banking should the federal government assume?

Finally I have attempted to highlight an additional issue that covers important aspects of data management in the open banking ecosystem, namely data governance.

I wish you and all the stakeholders in the new and exciting endeavor success. May this innovative and forward-looking approach to banking bring benefits to all Canadians.

Respectfully  
Michael Sivan