

Open Banking - A Story of Data *Chapter 1*

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**The
Initiatives
Group**



Open Banking

This is a story about data. Every day, each individual generates an incredible amount of electronic information. Every time they engage with a retailer, telco, bank or another institution, they leave behind data about their person, their behaviour and their transactions. Organisations hold significant amounts of information on the who, what, when and why of their customers, and accumulate more as their services are used. Traditionally, the value of customer data has been a poorly understood and utilised concept; however, both organisations and individuals are becoming smarter in utilising and exploiting this value. Understanding this, then the question of who holds, owns and uses the data that we generate becomes of ever increasing importance.

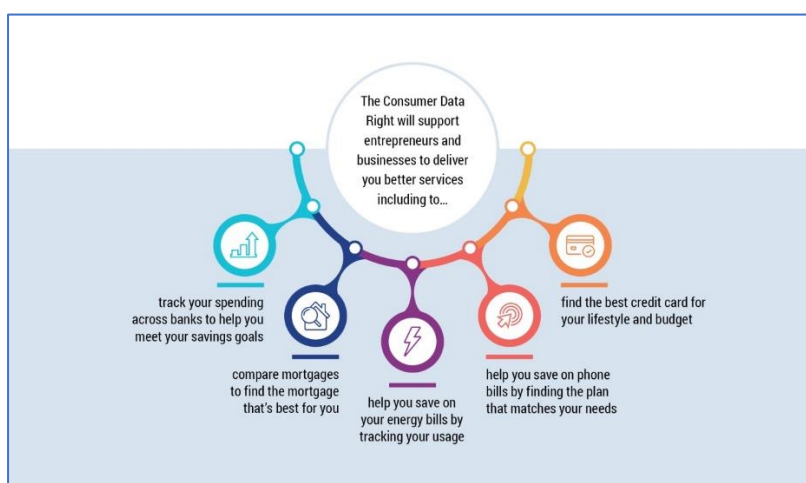
It is worth sparing a moment to consider what Open Banking could mean in the future. Improving the control, choice, convenience and confidence of customers should, in the longer term, create a customer-centric data sector which generates growth and employment and, importantly, value to customers by increasing the safe and efficient access to data. The new services, new products and new skills inspired by Open Banking that benefit customers are likely to be in demand not only in Australia but also overseas.
From the Australian Government Treasury, Review into open banking, December 2017

The Right to Data

As regulators and consumers around the world begin to recognise the potential uses for their data, it has been concluded that consumers need a greater level of access and control over the information that others hold on them, and with whom this data may be shared. This has been seen in newly introduced regulations, especially in the EU, where consumers have the General Data Protection Regulation (GDPR) granting them increased privacy and control over their data, whether or not it is held within the EU.

Australia's "Consumer Data Right"

Following the Open Banking Review, in November 2017 the Australian Government announced plans for the introduction of a consumer data right in Australia, and the relevant Consumer Data Right Bill passed both houses in parliament on 1 August 2019. The Consumer Data Right (CDR) will improve



consumers' control over their data, and in practical terms enhance their ability to compare and switch between products and services. It will also encourage competition between service providers, leading not only to better outcomes and prices for customers, but also more innovative products and services.

Source: Consumer Data Right Booklet - Australian Treasury

It was determined that Australia's CDR would first apply to the Banking sector, from 1 July 2019 for basic product information of the major banks¹, then mortgage accounts, credit and debit cards, and deposit and transaction accounts from 1 February 2020. Banking would be followed by the Energy sector and then Telecommunications.

What is Open Banking?

Open Banking refers to the formalised data sharing regime, where consumers can authorise third parties to access the data that is held by their banks, primarily through the use of APIs (Application Programming Interface). In many ways, the concept of Open Banking is not new, services such as Yodlee already provide the ability for consumers to approve the extraction of data, such as balances and transactional information, from their banks using screen scraping - however, this has usually been against the security policies of the banks, as user names and passwords are normally required. Alternatively, most internet banking platforms allow for the (bilateral) manual export of transactional level data for use with accounting software. The difference is that Open Banking mandates that banks provide a new, formalised channel through the use of standardised APIs that in Australia will be overseen by Data61, an arm of the CSIRO.

In the EU, Open Banking has been brought in by the introduction of the Second Payment Services Directive (PSD2) which has mandated a regulatory approach to APIs and forced banks within the EU to open up and allow access to their systems via a common set of APIs.

In computer parlance, an API is a set of functions and procedures within a database, program, operating system or hardware that are exposed for use by external programs. APIs are not new. For example, APIs are used by smartphone apps on Android and iOS to access the phone's location, app store, email services and other functions. In banking, APIs are often deployed as part of an SDK or Software Developers Kit by online payment service providers to allow for easy card acceptance on e-commerce websites and in apps.

What is new is the move to standardisation

While APIs will differ between different implementations, each API has its own specifications which detail how the API can be used, including the type and structure of data that can be extracted via the API.

In addition to specifying a technical requirement through the use of APIs, the Open Banking regime also details what type of information is required to be available for access using the Open Banking APIs. These are:

- Customer Provided data
- Transactional data
- Value-added customer data for the purposes of identity verification and assessment
- Product data

The Australian implementation of Open Banking has a few key differences to the systems seen overseas, most notably:

- There is only the ability to "read" data and not to "write" new data (or transactions), although debit (or pull) payment functionality on the New Payments Platform will in time effectively provide a ubiquitous "write" capability to transactional bank accounts;

- The provision of data between approved entities is reciprocal, such that if Bank X provides data to Fintech Z, then Fintech Z must have the capability of providing data to Bank X, if that is what the consumer requests.

How Open Banking might be used

Financial Aggregation Tools

Financial Aggregation Tools are third party apps, programs or web services that allow consumers to import all of their existing banking data into one place. By doing so, these tools are able to provide a consolidated and aggregated view of an individual's overall financial situation (which may not be possible today if they bank with multiple institutions); as well as providing additional analysis such as spend categorisation and tracking, net worth summaries and budgeting advice. They may also repackage existing bank data into an interface, perhaps a dashboard, that is more user friendly than what is provided by the individual banks themselves.

Imagine being able to see an aggregated summary, segmented by spend type for the multiple credit cards held by the one customer.

Currently, these tools tend to rely on screen scraping to extract data from a user's bank. Screen scraping has many limitations that are not present with the use of an Application Programming Interface (API). As noted previously, screen scraping relies on the consumer providing their username and password to the screen scraping provider; something that is expressly forbidden under all banks' terms and conditions.

While some screen scraping providers give the impression that they are associated with particular a bank, for example through the use of logos and claims of "bank-grade security", by providing their login details, consumers are left liable in the event of a data breach or unauthorised access. Additionally, screen scraping relies on extracting information off the internet banking webpage, a linkage which may break if the bank makes changes and updates to the screen layout.

Under Open Banking, these Financial Aggregation Tools would not need to be provided with a customer's internet banking username and password. Instead, users would be able to grant (and revoke) the third party tool's access via their bank. Data between the customer's bank and the authorised third party tool will be shared through the Open Banking APIs provided, all the while under the defined data governance, security and architecture that would not be possible with screen scraping.

Financial Management Tools

Financial Aggregation Tools will likely be the first type of product to take advantage of data sharing via Open Banking. Open Banking in Australia however will be "read only", and therefore Financial Aggregation Tools will only be able to repackage existing data and potentially make recommendations to their users, but it will be up to the user to act upon those recommendations. Going beyond that there exists, however, the possibility for similar tools to act on their own initiative and carry out basic operations by using Open Banking for read access, and a direct debit or payments initiation type service for enablement of agreed actions.

¹ National Australia Bank has indicated that it will not be able to meet this requirement until early 2020, but the other 3 major banks are already trialling their exchange of data.

Identity verification and Digital IDs

When a customer first opens an account with a financial institution, there is a requirement to positively identify them under the Know Your Customer (the KYC 100 point check in Australia) rules, for the purposes of complying with anti-money laundering, counter-terrorism financing and other similar regulations. When a customer authorises a third party to access their bank account details through Open Banking, this will create an ecosystem where the customer has already been identified and thus the third party can electronically rely on the original KYC clearance, and would not need to conduct a new KYC check.

One of the reasons cited as to why consumers tend to stick with their current banking providers is attributed to the friction involved in the new signup process. Part of that is the documentation that may be required to verify customer identity, creating a disincentive to switch and open new accounts.

Through the sharing of customer data and KYC information, this process could be significantly simplified and made largely transparent, making it easier for someone to change from one bank to another bank. Extending beyond the banking/financial services area, Open Banking and the sharing of verified KYC credentials could be used as part of a broader introduction and use of Digital Identities by government and other institutions.

Better Credit Assessment

Traditionally, credit assessments for mortgages, credit cards, personal and business loans and other forms of credit have relied primarily on the information provided in the application form and an applicant's credit history as recorded with a credit bureau. In Australia, the ability for lenders to accurately assess the credit worthiness of potential customers has recently been greatly improved with the introduction of Comprehensive Credit Reporting (CCR), under which information such as open lines of credit, repayment history and the total amount of credit available to an individual is now visible at the credit bureau.

To meet ASIC responsible lending requirements, however, CCR may not be enough, and lenders may need to conduct more detailed investigations into a borrower's income and expenditures, including reviewing past statements for particular types of transactions. With Open Banking, banks and other lenders could access the prospective borrower's historic bank data, with consent from the customer, via an API, and make assessments on real inbound and outbound flows of funds. It is possible, again with consent, that credit bureaus could access the historic transactional data as another input to feed into their credit scoring models, providing a more holistic insight.

Open Banking in Action

Open Banking has been live in the UK for the major banks since January 2018. Only the 9 largest banks were required (also known as the “CMA9” due to the mandate set by the Competition & Markets Authority) to make available their customer data, but other smaller banks have also enabled API access into their systems. Initially, only 4 out of the 9 banks could meet the deadline set, with the remaining banks receiving extensions to meet their obligations.

The first implementations of Open Banking in the UK have been quite conservative, with it being mainly used by Financial Aggregation Tools.

Certain banks, such as Barclays and HSBC, use Open Banking to allow its customers to view their accounts held with other banks inside its own mobile banking app.

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Connected Money
Your banks. Your accounts. Together in one place

An early insight into what may lay ahead for consumers under Open Banking in the UK is the Beta app, launched by HSBC in September 2017 and currently being trialed by 10,000 of its customers. Beta provides HSBC customers a consolidated view of their bank accounts held with up to 21 different banks. The account categories covered by this app are wider than those mandated by the CMA for inclusion in the UK's Open Banking reform. Beta provides some value-adding services, such as 'safe balance', which shows how much cash the user has left until payday, and a nudge feature, which will let the user know if they exceed their spending limits.

Good morning
You have £17,311.47
You owe £565.87

Shopping
£715.20

Current balance £3,417.83

Upcoming bills £2,700.63

Safe Balance £717.20

Your accounts
HSBC £1,517.20
HSBC -£565.87

Recent transactions
Amazon -£123.45
Tesco -£13.99
Amazon -£123.45

ING NV have launched the standalone app “Yolt”, which allows users (including those who do not hold an account with ING) to view multiple accounts and spending data from multiple banks in a single interface.

Rabobank in Europe offers an open API for approved financial services businesses to access a customer’s KYC information, with consent from the customer. At this stage, it appears that this is generating revenue for Rabobank via a fee charged to the recipient organisation.

Moneybox, a fintech in the UK, uses Open Banking to access any debit card bank account to provide a “round-up” investment service.

YOLT

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According to Imran Gulamhuseinwala, trustee of the Open Banking Implementation Entity, it appears that the UK banks have mainly decided to approach Open Banking from a regulatory and compliance point of view. Banks are looking to comply with standards and choosing to implement

more the simplistic Financial Aggregation Tools as a practical use case rather than looking to push and innovate.

Part of this would also be due to the lack of demand for Open Banking type services by consumers. A November 2018 study conducted by Splendid Unlimited found that only 22% of UK consumers were aware of what Open Banking was and only 9% of UK adults had actually used an app or service that utilised APIs. Ultimately, more needs to be done to demonstrate that Open Banking is actually valuable and useful for consumers, not just a way for financial institutions to share data more easily between themselves; which was a view shared by 26% of consumers polled.

Up in Scandinavia, fintech companies Spiir and Minna are using Open Banking in different ways. Although Spiir acts like a financial aggregation tool, it has targeted its offer primarily at Millennials and “gamified” the results: for example, instead of telling the user how much they have spent in restaurants this month, the app asks “How much do you think you have spent in restaurants this month? \$300? \$400? \$500?” - the reaction to this approach by younger users has been very positive.

Minna has focussed on the (fast growing) subscription economy, providing a centralised platform where you can view all your subscriptions (e.g. Netflix, FitnessFirst, etc) and have Minna make changes to them on your behalf. This addresses consumer issues around both tracking which subscriptions are “turned on” and who to go to (e.g. is it the merchant or the bank?) to make changes to or “turn off” the subscription.

Where are we up to in Australia?

The original deadline for widespread Open Banking data exchange of 1 July 2019 has come and gone, and was downgraded from the original requirements to just the Big 4 banks piloting the exchange of product data between themselves. We have seen a number of the Big 4 banks release their API specifications which 3rd parties can use to develop connectivity, however the real Open Banking exchange of data will have to wait until 2020 and beyond.

Whilst account data exchange is underway – such as Xero and MYOB being able to access data from a business’ bank accounts, or financial management apps such as Pocketbook being able to access consumer accounts - for Open Banking, as it is envisaged by the Australian Government, it is very much “watch this space”. With all of the various and numerous compliance issues being implemented by the IT departments of the banks, and the RBA also pressuring for more resilience in the systems (somewhat at a contradiction to all of the system “tinkering” that is required for compliance), timeframes for full Open Banking are likely to slip.

Also likely is that Open Banking will be the subject of future whitepapers from The Initiatives Group and others.

The Initiatives Group



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