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# Open for Business

A Guide to **Open Banking** in New Zealand





## Join us on our **Open Banking journey**

Open Banking has the potential to revolutionise the way we bank and do business in New Zealand.

As the Director of Open Banking at Westpac New Zealand, I'm working with a wide range of businesses to investigate how we can use Open Banking principles to deliver next-level customer experiences through innovative new products and services.

Right now, we're at the beginning of our journey. So naturally our customers have a lot of questions like: ***Why do we need Open Banking? How does it work? What will it mean for my business?***

This guide is designed to answer these questions and provide an overview of our progress so far.

If you're interested in staying up to date with our journey, just email **[api@westpac.co.nz](mailto:api@westpac.co.nz)** to join my mailing list.

**Matt Haigh**  
Director, Open Banking, Westpac New Zealand



# Welcome to the future

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To understand how Open Banking can benefit businesses and consumers, we first need to explain how it works. So what makes an Open Bank different to a traditional bank?

## **Traditional bank**

In a traditional bank a series of products and services are provided directly to customers. Those product lines are marketed, made available and supported through a series of channels (e.g. branches or online directly to a customer. The pattern here is one of vertical integration).

This means a bank owns the channels that provide those products and services. They provide products using a core set of systems – such as a card management system or a bank account management system.

## **Open Bank**

An Open Bank is very similar to a traditional bank but the key difference is that an Application Programming Interface (API) platform is introduced. This API platform gives external developers secure, consent-driven, access to the bank's core systems. This allows them to build new third party apps and devices.

Under Open Banking, third parties provide our mutual customers with products and services. These third party products and services exist alongside our own vertically integrated banking products and services.

## **One thing stays the same. The customer.**

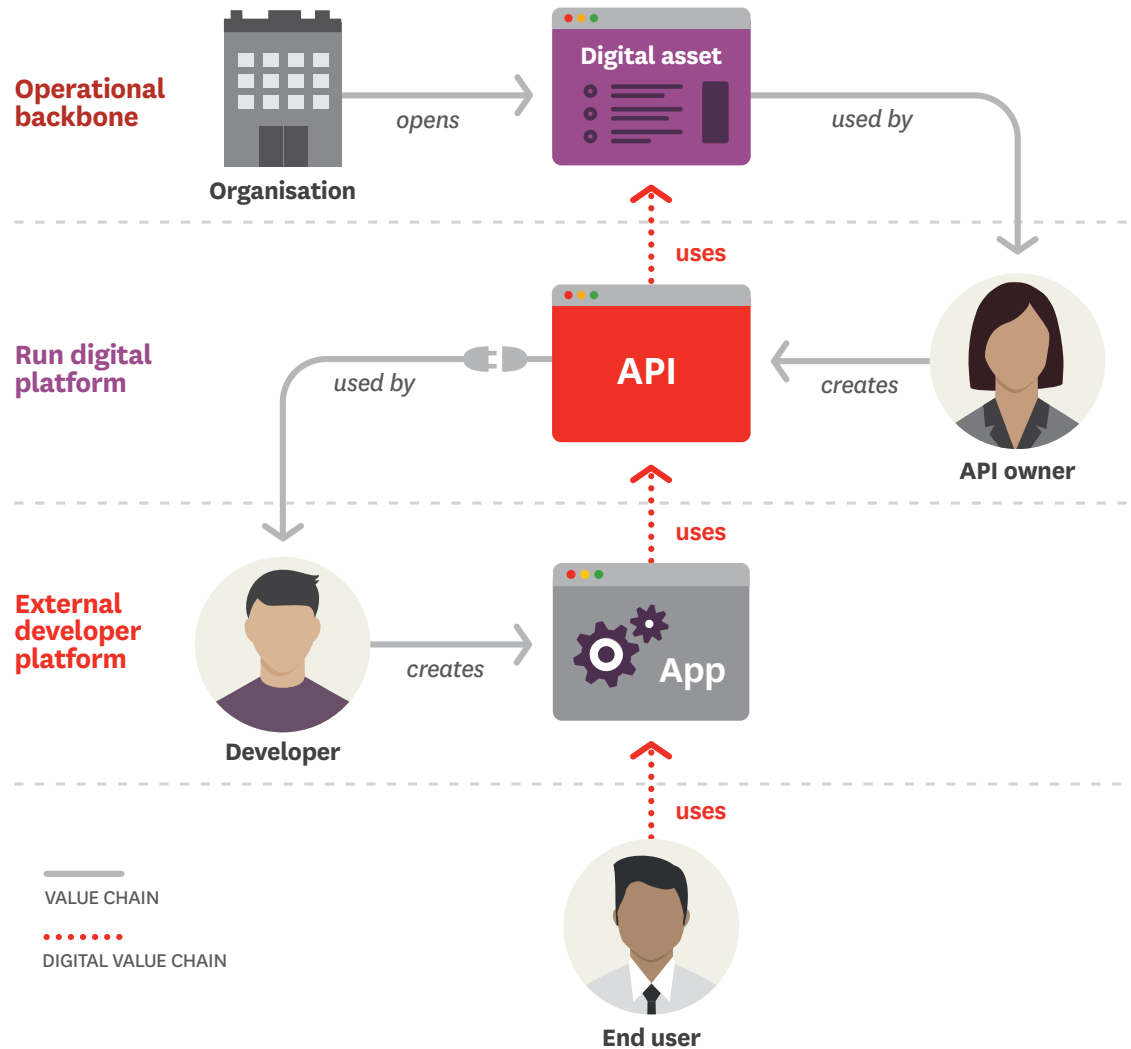
Even though the apps are produced by a developer, the customer that is using the app is also a customer of the bank. This means the bank maintains its existing linkages with the customer (e.g. through its online banking system or relationship manager) but it creates a multi-sided platform to promote innovation.

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*“Opening up aspects of the banking system could provide benefits to New Zealand consumers by providing them with increased choice and empowering them to pursue and achieve their financial goals.”*

**Commerce & Consumer Affairs Minister  
Hon Kris Faafoi**





## What are APIs?

APIs allow software applications to communicate securely with each other. It is effectively the glue for forming new services and has been the enabler for innovation and disruption in many other industries. Businesses like Airbnb and Uber are possible thanks to APIs. The API value chain can be described by this diagram.

### How secure is an API?

- They are configured for a specific purpose.
- Credentials need to be exchanged to use the API.
- Calls on an API must be in a specific predefined form.
- APIs use industry standard protocols such as OAuth to share data.

*Open Banking means making payments and customer data available to third parties on the customer's request by using a web technology called APIs.*



## Now we know what Open Banking is. But why do we need it?

Banking has traditionally been a safe, predictable business – in New Zealand and around the world. Predictability is typically not ideal for promoting innovation. Open Banking is intended to:

- Give customers greater access to and control over their banking data.
- Potentially transform the way in which customers use and benefit from the banking system.
- Stimulate competition and innovation.
- Enable third parties and fintechs to provide bank customers with a new type of service that will be beneficial to them.

That's the theory. But how are banks putting it into practice?

### UK and EU

In January 2018, the Open Banking standard came into force in the United Kingdom. The European Union also has the Payments Services Directive 2 (or PSD2) that is in the process of implementation.

Both are similar despite the detailed technical differences. They require that banks offer API services to manage payments and associated data.

### Australia

In July 2017, the Honourable Scott Morrison MP commissioned the Open Banking Review, chaired by Mr Scott Farrell – who was asked to recommend the most appropriate model for Open Banking in Australia.

His report raises the concept of the Consumer Data Right. But notably, it has been careful not to single out banking. Banking is simply the first of the industry verticals that Australia will start to apply the Consumer Data Right to – but it will flow further into utility and telecommunications companies.

Within Scott's report, there were four key principles discussed. The first one is the need to be customer focused on producing new customer experiences relating to the data that is made available. The second is to encourage competition in products and services – noting that many customers have long, established relationships and don't often move between institutions.

The last two relate to the industry of data. It is proposed that by making APIs available, new opportunities will emerge to use the data. Importantly, it should also be efficient and fair – meaning that the structures put in place should protect customers from their data being misused, but should not be so difficult that it prevents fintechs and other companies from innovating and creating new experiences.

### Other countries

- **Singapore** wants its lenders to share data with financial technology and other non-bank firms.
- **Hong Kong** has published a set of standards to be worked through.
- **Nigeria** has had an Open Banking programme underway for well over a year.
- **India** already has the Universal Payment Interface (UPI) that encourages payment innovation in a similar way to Open Banking.
- **Canada** is working through a review of Open Banking.
- In the **US** the National Clearing House is also looking into how a standard could work.

### New Zealand

New Zealand has taken an interesting approach to Open Banking. Hon Kris Faafoi, the Minister of Commerce and Consumer Affairs, is allowing the industry to decide how it adopts Open Banking as a first step.

Currently there is a pilot in New Zealand led by Payments New Zealand. This pilot includes Westpac, BNZ and ASB along with Datacom, Trade Me and Paymark. Datacom, Trade Me and Paymark operate payment gateways so they are used to accepting payments on behalf of customers.

The objective of the pilot is to test the standard and then allow it to be published and adopted by the wider industry. New Zealand is adopting a market-led, standards driven approach to Open Banking. This should help to create positive experiences for consumers without the requirement to introduce new regulation.



### **What will happen under this pilot?**

All the banks involved are required to develop a payments API and an account information API. Each of the companies involved will pilot those APIs for around about two months. So what does that mean?

### **Some things change. Some things stay the same.**

It is the duty of a bank to keep customers' money and information safe. That doesn't change with Open Banking.

Open Banking provides a set of interfaces that allow third parties access to this information with our customers' consent. But we still need to make sure that proper processes are put in place to prevent unwanted disclosure of money and information.

### **Open Banking has created two new types of organisational roles or companies.**

- 1.** Payment Initiation Service Provider (or PISP)
- 2.** Account Information Service Provider (or AISP)

### **How a PISP works**

When a customer visits an online platform to purchase consumer goods or services they add these to their shopping cart, then they check out. At checkout they're given the option of paying by credit card as well as other payment options. This payment is usually managed by a system called a "payment gateway" which interacts with the online customer, the credit card schemes and the merchant's online shopping site and bank.

A PISP, as defined in Open Banking, works in a similar way. As a PISP, the software application makes a secure connection to the bank, then with the customer's consent, requests that money is transferred to a merchant's bank account.

Many payment gateways will choose to use APIs to process payments.

### **How the payment APIs work**

This is typically based on a three step process.

- 1. Authenticate.** The customer needs to log in and therefore identify and authenticate with the bank to prove that they have control of the account and should be allowed to make that payment.
- 2. Choose the account.** The customer selects the account they want to use to make the payment.
- 3. Confirm payment.** The customer accepts the terms and conditions and then authorises the payment.

This is how a customer makes a payment as a PISP.

### **How an AISP works**

An Account Information Service Provider (AISP) follows a similar process but the result is different. Under an AISP model, the customer requests that the bank shares data such as their account information with a third party. The third party can then provide them with a value added service like a personal financial management tool or an account aggregation service.





## What does the future look like for Westpac's retail customers?

Customers will probably use the new apps enabled by Open Banking if these apps make it easier for them to manage their money, make better decisions or just simply save them time. Examples of new apps could include things like:

- Making e-commerce purchases using their own money rather than credit card.
- Personal Financial Management tools that help them manage their money better.
- Aggregation of all of their financial information into one place.
- Services that notify them when a bill is due.
- Prepopulating application forms e.g. for credit requests to shorten the time to a decision.

## Trust is going to be absolutely imperative to the success of Open Banking.

Why is it important? Without trust, customers will not choose to use a third party to initiate a payment – and they will not trust the sharing of their personal or transaction data with a third party to provide them with a service.

Banks need to ensure that the process of facilitating the exchange of data to third parties is secure, and that our customers make an informed decision about this disclosure. There is already an ongoing discussion in the media about consent, data and protocols.

## Banks also need to consider peer data breach.

A peer data breach is where a customer instructs a bank to share their data with a third party and that third party then misuses the data. The bank may act on their customer's request, but they still need to ensure they can trust what that third party does with the data that's been shared as customers could see their bank at fault.

It's a difficult position to be in but we want to find a path that is workable and we will continue to work with industry participants to devise a pragmatic process for data sharing.

## A new platform to work with third parties

Financial Technology organisations (FinTechs), as well as payment processors and third parties who choose to build to the new APIs will essentially become Westpac customers. A payment or data API is a Westpac service. Open Banking creates a new type of customer, a Third Party Processor (TPP), and we are keen to support them, just like all of our customers, in realising their financial goals.

As TPPs gain experience working with the Open Banking APIs, they will likely identify new opportunities to use the existing APIs, require updates to the specifications and share with us new use cases. This is why we think the relationship between the banks and TPPs is more likely to be symbiotic than an arm's length interaction.

TPPs will want to build great experiences for their customers, and indeed, their customer's customer. Due to the circular nature of Open Banking, customers interacting with the Open Banking services through a new app or device will also be customers of Westpac. For this system to flourish, we will need to build relationships both with TPPs and our shared customers.

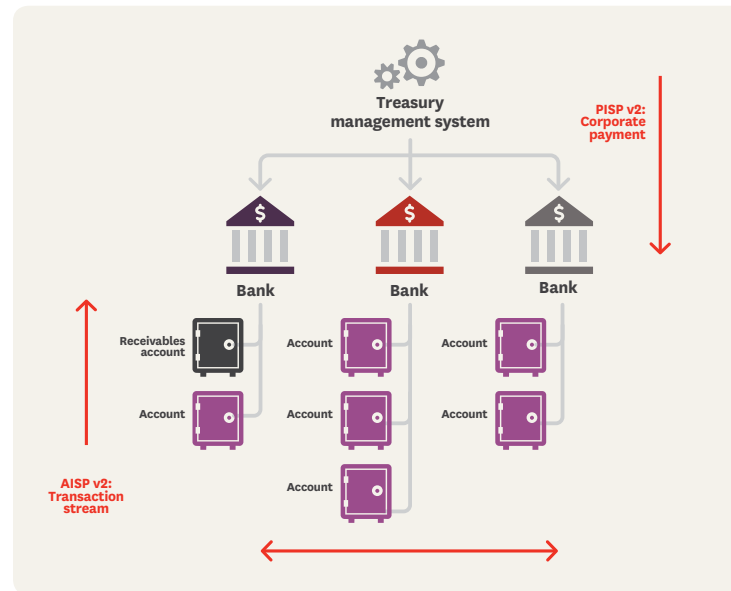


## What does the future look like for Westpac's business customers?

The impact on our business customers is likely to be indirect unless their business is, for example, being a payments aggregator or gateway.

Many businesses will continue to partner with their existing payments gateway to enable Open Banking services. But there is an opportunity to build highly customised or elegant customer experiences, for payments or sharing of data, through Open Banking.

### Prepare for more financial process automation



It is foreseeable that Open Banking will over time involve business and other types of institutional accounts. This creates complications in the authorisation of data sharing and payments as there is often more than one approval required to conduct activity on the account. Many of our largest business customers use treasury management systems across several banks because their treasury policy requires them to manage their investments, cash flows and overall corporate financial position in such a way.

It could be possible for treasury management system to call a future set of open banking APIs to understand balances and transactions, process payments out (including payments processed from operational systems to pay suppliers, refunds or other payments to customers) and then perhaps advanced sweeping within that tool to manage an automated flow of information.

## Where to from here?

We've already started talking to businesses about the introduction of Open Banking. I'm proud to be leading the charge by working with digital specialists from a wide range of New Zealand businesses – from corporates to fintechs. It's an exciting time for banks, businesses and (most importantly) our customers. To stay up to date with events, communications and our progress, just email 'subscribe' to [api@westpac.co.nz](mailto:api@westpac.co.nz)

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