Deloitte.

Open banking

Why APIs matter

April 2018



For years, discussions around APIs were confined to the developer community, but today they are the stuff of backyard BBQs, millennial games nights as well as blue chip boardrooms. The imminent arrival of open banking and the spread of data-sharing continue to amplify the importance of the 'API Economy'.

Launching the Marketplace Bank

Imagine this scenario... The new Marketplace Bank has just launched its services in your area. The bank has fully adopted the concepts around open banking, and has built its business model around a service that acts as a gateway to your (and everyone else's) APIs with minimal banking infrastructure.

Excited customers can now mix and match products from the entire financial services ecosystem, and manage the products on offer through a single easy-to-use interface. Marketplace Bank offers services including a highly popular personal finance management tool that provides an overview of the customer's full financial position as well as easy access to all the customer's transactions.

By underpinning its marketplace with a set of APIs, Marketplace Bank also seamlessly integrates with a number of leading Fintechs, giving its customers direct access to a host of new, innovative offerings. Because Marketplace Bank doesn't have to invest in expensive infrastructure, or manage ageing legacy systems, it can offer its products and services at a lower price.

This is not 'yet to happen'. It is happening now.

Notes

Transforming the banking landscape

Open banking is poised to transform the industry and introduces a number of exciting opportunities both for incumbents and new entrants.

New relationships between financial institutions and non-banking organisations could enable new, innovative business models. Also, as in any significant shift, open banking is likely to drive a myriad of new use cases that are yet to be defined.

As ownership of a customer's financial data shifts from the bank to the customer, the entry barrier for new entrants will reduce. In this future, proprietary customer data will become less important and the ability to aggregate, manage and analyse data will become increasingly important.

We have already seen the establishment of Amazon Lending. New competitors could emerge from other technology giants such as Facebook, Apple, Alibaba, Netflix and Google.

Additionally, new product innovators that introduce better priced and more accessible choices for customers are also likely to result in increased pressure on traditional banks to retain the ownership of the customer relationship.

A recent World Economic Forum report, co-authored by Deloitte, predicted that traditional banks "are at risk of being deeply disrupted by the drive towards platform model of banking" and that "platforms that offer the ability to engage with different financial institutions from a single channel may become the dominant model for the delivery of financial services".

This transformation is underpinned by APIs.

In the US Amazon's CEO Jeff Bezos has stated that he was looking to team up with banks that could help Amazon expand its lending program for small businesses that sell on Amazon's websites. Amazon is also reported to be is contemplating launching a new checking account that would cater to young people and "the unbanked" — those defined as having struggled to gain access to traditional financial services. See also https://www.usatoday.com/story/tech/2018/02/14/amazon-teams-bank-america-business-lending/339700002/ and https://thenextweb.com/money/2018/03/07/if-amazon-gets-into-banking-itll-change-everything/

World Economic Forum and Deloitte, Beyond Fintech: A Pragmatic Assessment Of Disruptive Potential In Financial Services, August 2017. See also: https://www.weforum.org/reports/beyond-fintech-a-pragmatic-assessment-of-disruptive-potential-in-financial-services

Considering strategic options for retail banks

If the banking landscape in the near future may look substantially different from today and there is a real risk of being disrupted, where do you see yourself in three or five years?

Deloitte's research on the impact of open banking concludes that banks have four broad strategic options: Full-service provider; Utility; Supplier; and Marketplace interface. These four options are not mutually exclusive. Two of these – utility and supplier - involve losing control of the customer interface as products and distribution become unbundled. However, organisations pursuing more than one option are likely to need to sharpen their own proposition for each option they pursue to remain competitive.

Key questions when considering your most suitable approach include:

- Target customers: Are you going after a broad set of customers with diverse needs? Or do you want to focus on customers that value choices and the ability to exert control?
- Business: Are you building an infrastructure on which an ecosystem can develop? Or are you connecting a large number of customers and suppliers?
- Relationship driver: Are you a reputable trusted brand that can fulfil unique needs? Or are you a central access point to multiple competitive options for financial needs?
- Value chain expansion: Are you looking for a natural extension of today's value chain by leveraging various partner ecosystems (both within the financial services industry and with adjacent players such as retailers and utilities)? Or are you largely looking for something similar to today's value chain?
- Value chain ownership: Are you addressing core financial products - with services and experience being externalised?
 -Or is the focus on customer reach and services (e.g., advice and recommendation) with financial products being externalised?
- Degree of openness: Are you looking for a completely open platform? Or would you prefer something only slightly more open compared to today?

Once you've answered these questions, you can start shaping your preferred approach. Here are two potential scenarios to consider.

Third-party distrubution Incumbent as utility as supplier Third-party distribution Banking as a ncumbent bank products Third-party products Incumbent bank Incumbent bank distribution distribution Incumbent bank Third-party Incumbent as Incumbent full-service supplier as interface

Bank distribution

The App Store

The bank focuses on creating an ecosystem of service providers on top of its core products. It deploys and manages an API-based 'app store' on which a diverse set of external players can develop services, functionalities and experiences for customers. These providers would access customer data within the boundaries established by the bank and gain instant reach to customers.

In this scenario, the bank's main role would be to govern the app store and provide core financial products offering a diversified customer experience. The bank may also form an alliance with banks in other jurisdictions to increase the market for third party providers.

The main benefit of this approach is to retain customers and drive product profit pools.

The Marketplace

The bank focuses on reaching customers, identifying their needs and curating a large number of financial product providers. It essentially serves as a marketplace. The bank would have a limited product shelf compared with traditional full service banks, providing a bare minimum required to serve as interaction points (e.g. current accounts and debit payments).

In this scenario, the bank's main role would be as a central access point for customers to explore, compare and purchase products from various external providers – like a brokerage platform.

The main benefit of this approach would be to retain the ownership of the customer's experience, relationship and data.

Notes

Deloitte, Open Banking, How to flourish in an uncertain future, June 2017. See also: https://www2.deloitte.com/uk/en/pages/financial-services/articles/future-banking-open-bankingpsd2-flourish-in-uncertainty.html.



Opening up the technology landscape

In the past, banks have kept the data of their customers secured and locked away. A top priority was to stop any external access to the information. Now, with Comprehensive Credit Reportingiv and the release of the recommendations for an Open Banking framework', banking institutions will be required to share data with various third parties.

This change has a tremendous impact on the banks' underlying technology landscape. It has the potential to cause a severe headache for the technology architects involved. Open banking requires far more change to a bank's architecture than just flicking a switch.

In addition Privacy by design (PbD) should be embedded into the design and build of any project that involves the processing of personal information. The principles of PbD include maintaining a customer centric focus, and ensuring privacy is a default.

When assessing the implications on the technology landscape, at a minimum banks need to address:

- Security: Do you understand the implications on data security in an open environment? What layers of security would be required? How would you manage the complex network of service providers interacting?
- API management: How will you govern your APIs?
 How will you manage the API lifecycle from the idea stage
 to decommissioning? What about third party APIs? How do
 you manage change of your APIs? Breaking changes versus
 non-breaking changes?
- Customer data: How do you ensure strong authentication that allows for protection of customer data? How do you manage variability of authentication capabilities of third parties? Who will be held responsible and how will adequate protection be ensured when customer data shared with third parties are breached?
- Customer consent: How do you control data access?
 Who can access what data and when? How will you ensure
 that customers are fully aware of the scope of data usage?
 How do you capture their consent?
- Standards: How do you ensure that your APIs are easy to discover and easy to consume? Do you follow industry best practices?

Needless to say, this will require significant effort.

Building out the API platform capability

After assessing these issues, the next step is establishing or upgrading the API platform. Most banks would already have an API platform in place today. However, because it is a key enabler for open banking, it's likely that the API platform will require a significant makeover. Some components will already be in place, others will be provided by vendor products, still others will fall to the bank to architect and enable.

Organisations will require a range of capabilities. Depending on your approach, certain capabilities will be more important than others. Traditional banks with significant legacy technology environments, are likely to have to reengineer a significant portion of their technology landscape.

API Platform Capabilities

API gateway	Exposing APIs
Throttling	API support
OAuth/Open ID	API management
Rate limiting	Training
Fraud protection	Service orchestration
Monetising	Policy enforcement
Access control	Routing
Third party provisioning	Analytics and reporting
Versioning	Enrolment
Auditing	Caching
Governance	Deployment
Publishing	Monitoring and error handling

Notes

 $^{^{\}mbox{\tiny IV}}$ Morrison, Scott, Mandating comprehensive credit reporting, Media Release 2 November 2017. See also http://sjm.ministers.treasury.gov.au/media-release/110-2017/

^v Australian Government, Open Banking customers' choice convenience confidence, Scott Farrell, December 2017. See also: https://static.treasury.gov.au/uploads/sites/1/2018/02/Review-into-Open-Banking__For-web-1.pdf



The last word

In shaping your open banking journey it is important to define your role in the ecosystem, assess the implications on your technology landscape, and consider the necessary components of the API platform. Above all, it is critical to just get started.

Becoming an early adopter gives you the opportunity to influence standards and offer a wide-range of APIs to future partners. Fintechs wanting to test a new app will reach out to those organisations that are most prepared.

Organisations that decide not to invest, should consider the words of Australian Treasurer, Scott Morrison: "The introduction of an open banking regime will give customers greater access to their own data, empowering them to seek out better and cheaper services".vi

Open banking is a significant opportunity to grow both your customer base and revenue. Those that choose to view this change as just a regulatory requirement or simply a defensive measure will lose out. Organisations that embrace open banking, will have access to third party products and data, and so be able to offer a more relevant, seamless experience to their customers. All of this is underpinned of course by a powerful set of APIs.

Open banking will transform the banking landscape.

Are you getting ready for the launch of the Marketplace Bank?

Notes

Contacts



Daniel Nilsson Partner+61 457 853 751
dnilsson@deloitte.com.au



Brendan Harrap Principal+61 2 9322 7504
bharrap@deloitte.com.au

Series editor



Paul Wiebusch
Partner, Financial Services
+61 3 9671 7080
pwiebusch@deloitte.com.au

This publication contains general information only, and none of Deloitte v Tohmatsu Limited, its member firms, or their related entities (collectively the "Deloitte Network") is, by means of this publication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/au/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

About Deloitte

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte's approximately 244,000 professionals are committed to becoming the standard of excellence.

About Deloitte Australia

In Australia, the member firm is the Australian partnership of Deloitte Touche Tohmatsu. As one of Australia's leading professional services firms. Deloitte Touche Tohmatsu and its affiliates provide audit, tax, consulting, and financial advisory services through approximately 7,000 people across the country. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. For more information, please visit our web site at www.deloitte.com.au.

Liability limited by a scheme approved under Professional Standards Legislation.

 ${\it Member of Deloitte Touche Tohmatsu Limited}.$

© 2018 Deloitte Touche Tohmatsu.

Budget Speech (Scott Morrison, 2017) http://www.budget.gov.au/2017-18/content/speech/html/speech.htm