



THE WORLD OF OPEN BANKING

Abstract

Open Banking has set the pace for systemic transformation for the banking industry. It is poised to transform not only how banks function, but how and even why consumers and businesses choose their services there by catalyzing innovation in the services. The global enthusiasm surrounding Open Banking has been at a fever pitch, with all the major economies taking a close look at benefits it is poised to bring for the customers. In this white paper, we look at the broad category of drivers which are fueling this evolution in banking and the risks and challenges it poses for incumbents. We will also look how are the banks and other players are exploring new avenues to boost revenues and take on this challenge to ensure their positions remain secure in the value chain.

1. Open Banking – An Overview

Year 2018 has been marked as an important year for retail banks in European Union (EU) as the Payments Service Directives (PSD2) implementation has finally gone live. It took many years and revisions since the regulation was first conceptualized to reach the current state. In a nutshell, PSD2 regulation is set to open the doors to any company to provide financial services by ending bank's monopoly on customer's account

information and its banking services. Banks will be obligated to grant access of customers account information to third party providers there by enabling them to build financial services on top of this data and bank infrastructure. For the customers, both consumers and businesses, it means using the services of third party providers to manage their finances, make payments while the money still stays safe in their current bank accounts.

While it is poised to fundamentally change the payment value chain and the business models for the players, it has also acted as a catalyst for industry's willingness towards embracing the framework called '**Open Banking**'. The framework encourages collaboration between banks and other players within the banking eco system through adoption of common standards for data sharing and exposure of banking services.



2. How is Open Banking being adopted worldwide?

While EU and UK may have paved the way for this radical change, many other markets around the world have taken a note of this and are adopting similar principles

with the ultimate aim of benefitting the customers with better financial outcomes. Broadly two approaches are being followed worldwide – market driven and regulation

driven. The data table below presents a view of what other countries have been doing.

| Approach | Country/Region | Initiatives |
|----------------------------|----------------|---|
| Regulation driven approach | UK | <ul style="list-style-type: none"> • Competition and Markets Authority (CMA) came out with the 'Open Banking' project in 2016 • The CMA set a deadline of January 2018 for the UK's 9 largest current account providers to open application programming interfaces (APIs) for their corresponding current accounts |
| | EU | <ul style="list-style-type: none"> • European Banking Authority(EBA) came out with the revised Payments Services Directive (PSD2) in 2015 to be effective in the (Single Europe Payment Area) SEPA • In Germany, current account APIs are already in operation for processes like onboarding and credit scoring • Regulatory Technical Standards(RTS) are set to come into force from Q3 of 2019 |
| | Australia | <ul style="list-style-type: none"> • The Consumer Data Right Act (CDR), a general right being created for consumers to control their data, will allow consumers to share their banking data with authorized third parties their choice |
| | Mexico | <ul style="list-style-type: none"> • The law regulating Financial Technology Institutions ('FinTech Law') became effective in March 2018, setting the stage for the Open Banking initiatives |
| Market driven approach | USA | <ul style="list-style-type: none"> • An US Treasury report in published in 2018 has recommended developing regulatory approaches to enable secure data sharing in financial services • Large banks being aware of the strategic implications of Open Banking are getting into data sharing agreements with API standardization program |
| | Japan | <ul style="list-style-type: none"> • In May 2017, the Amended Banking Act introduced a registration system for Third Party Providers (TPPs) and required banks to publish their open APIs policies while encouraging banks to contract with at least one TPP by 2020 |
| | Singapore | <ul style="list-style-type: none"> • Monetary Authority of Singapore (MAS) and The Association of Banks have published an API Playbook aimed at supporting data exchange and communication between banks and FinTechs |
| | India | <ul style="list-style-type: none"> • No central directive but numerous API driven initiatives like central authentication, P2P and instant payments networks are supported through the Unified Payments Interface (UPI) |
| Others | Canada | <ul style="list-style-type: none"> • The Canadian government launched an Open Banking review in February 2018 seeking to explore the benefits and risks associated with the same |
| | New Zealand | <ul style="list-style-type: none"> • New Zealand is developing their version of Open Banking framework primarily through the voluntary cooperation of its major banks and other financial services players |
| | South Africa | <ul style="list-style-type: none"> • The impact of PSD2 is being closely observed and as similar regime may be implemented based on the successes of PSD2 |

3. A glance at the prime forces driving Open Banking adoption

- **Regulatory mandate** – Governments are now taking a proactive approach in “democratization” of financial products and services. The lead in this direction was taken by EBA in the EU by adopting the PSD2 in 2015, formally ushering in Open Banking. A year later, the U.K.’s CMA issued new guidelines requiring banks to implement Open Banking by 2018. These mandates are compelling banks to open up their proprietary data to third party providers.
- **Technology fueled innovation** – Rise in the number of smart devices and the shift to instant payments, are opening up new opportunities in financial services. Along with this, the growth of APIs - which allow systems to be interconnected with each other- is

laying the foundation on which the Open Banking system is based. The use of cloud-based platforms will add to the agility, flexibility and scalability of the institutions’ capabilities and round the clock availability of the banking services.

- **Changing customer expectations** - The advent of mobile devices coupled with high speed internet has resulted in a hyper connected world aiding the growth of firms viz. Google, Amazon, Facebook, Uber, Netflix and others who offer customers a rich user experience, customized products and services and multi-device round the clock availability. Customers are increasingly demanding the same experience from the banks making a very strong case for adoption of Open Banking across the globe.

- **Increased competition** - A gamut of players backed by technology giants like GAFA – Google, Amazon, Facebook and Apple – have come into the fray of financial services offering. Such players, called fintechs, are offering faster payment solutions, while facilitating the seamless integration of cards, e-wallets and other payments types ramping up competition for the banks. In fact, these players are more than ready to offer their services in the Open Banking ecosystem. According to a survey in the UK, 94 percent of fintechs see Open Banking as a major opportunity while 81 percent are actively preparing for the opportunities it presents^[8].



4. Changes brought by Open Banking and the value it is creating for the stakeholders

The Open Banking ecosystem is aimed at customer benefits and is slated to bring in a host of changes in the banking environment driving values for the customers and the industry stakeholders at large. Following section enumerates some of the compelling value propositions of the changes brought about by Open Banking envisages to deliver:

- **A Seamless Experience** - With potential convergence of Open Banking and Artificial Intelligence, user experience is set to be all the more digitally transformed. Streams of data from a multitude of sources will converge, allowing service providers to gauge the exact customer sentiments and requirements allowing for highly customized financial offerings. Many cumbersome procedures are also expected to become simplified and automated. With access to the banking APIs, fintech firms can provide users with opportunities to improve their financial lives by providing newer services like financial planning and insights based on the data. In essence, banks and other financial institutions will be able to create unique financial profile of each customer based on their financial data and forecast their consumption patterns and behavior leading to product customization much more efficiently. For instance, the **Bank Account Starter API** by UK's **Capital One** allows customers to share basic information, retrieve account products' details, as well as apply for various kind of products in a hassle free manner right from a third-party site.
- **Real time payments facilitating easier treasury and cash management for SMEs** - Open Banking will enable payments to become almost real time, as TPPs will be able to aggregate all payments into one digital interface. One key implication is for SMEs, who typically do not have their own treasury departments unlike their larger counterparts. Real Time Payment (RTP) promises to transform treasury management services creating immense

value for SMEs giving better visibility of their cash flows and liquidity positions. RTP will also catalyze the Peer to Peer (P2P) payments, bill payments and e-commerce payments space. According to an industry survey payments and cash management were the top business areas which Open banking can improve thought 25 percent and 21 percent of the SMEs respectively^[9]. Also, 22 percent of the large corporations also think payments could be improved through Open Banking^[9].

- **Data sharing prompting product innovation and financial freedom** – With Open Banking, banks are required to share their customers' data with authorized third parties. This is expected to make the players come up with better financial products as firms will use this data to derive customer insights and consequently become more innovative and customer centric. By taking on the new roles of Payment Initiation Services Providers (PISPs) and Account Information Service Providers (AISPs), European banks can create new product and service propositions potentially amplifying banks' reach and distribution. For example, **iDEAL** is a PISP created by a consortium of Dutch banks which facilitate online inter-bank transfers.
- **APIs enhancing cross selling and cost optimization opportunities** - Open Banking presents banks with the

opportunity to incorporate product and service features from third-party partners into their own offerings through APIs as a plug-and-play model. By bundling such readily available services from TPPs and vice versa, banks can rapidly enhance personalization of customer service, build customer loyalty, generate new revenue streams and lower banks' operating costs. Furthermore, banks can reduce the risk and cost of experimenting with newer products simply by adopting this plug-and-play model of integrating APIs of third parties with their core products on their digital platform.

- **Rise of non-banking Third Party Providers (TPPs)** – In the Open Banking ecosystem, banks will not only be competing against banks, but against everyone offering financial services. Like in Europe, PSD2 is set to give rise to two TPPs in the financial space – AISPs and PISPs. AISPs will have access to the account information of bank customers. Further, such service providers could analyze a user's spending behavior by aggregating customer's account information from several banks into one overview. PISPs on the other hand are the ones who will be initiating a payment on behalf of the customer. The best use cases for PISPs are in the areas of P2P transfer and bill payment.



5. Risks, Challenges, Opportunities and Strategies banks to succeed in the Open Banking ecosystem

5.1 Risks and challenges

The Open Banking initiatives have opened up a host of new challenges and risks for the incumbent banks which can have far reaching implications of their business prospects even to the point of an existential crisis. Some of them are enlisted below:

- **Rise of new competition** – The incumbent banks are confronted by non-banking fintechs which are pure digital entities such as GAFA. Such tech-savvy firms are luring customers by offering unbundled, innovative and engaging financial products and services. Most incumbent banks are saddled with legacy system, yet if they don't meet this threat head-on, they risk the prospect of erosion of market share, increased customer churn and pressure on margins.
- **Data Security** - The financial data being shared through the APIs to the third

parties come with the inherent risk of data security and breaches. A lack of homogenous technical standards and data sharing formats may make operating processes susceptible to security breaches and fraudulent activities. With complex chains of data access, banks have to heavily invest into risk mitigation and security initiatives which can have significant implications on their costs. Yet, banks cannot afford to lose the revenue potential of these data streams in the Open Banking ecosystem.

- **Risk of Commoditization** - With open APIs, incumbent banks are increasingly running the risk of being commoditized. With many of the existing barriers to switching account providers ceasing to exist, Open Banking is allowing customers to switch between current account providers and shop around for other products based on price only. Banks face the prospect that many

of their customers may seek out the convenience of digital aggregators (TPPs) resulting in migration of their accounts and the profit pools along with them. It is estimated that in the UK alone, 10 to 20 percent of banking profits could be at risk of disruption and within the next five years, somewhere between £1-£2 billion of annual pretax profits could be under threat from disintermediation^[10].

- **Risk of losing customer relationship** - Open Banking will bring the banking information and payment services into one single interface from the bank's purview into the ambit of AISPs and PISPs respectively. This will hurt the banks as it will result in loss of direct relationship with the customer and becoming a utility service used by the TPPs. Since the customer touch points would be owned by TPPs, it implies loss of customer insights and data and hence opportunity loss for cross-sell.



5.2 Strategies for banks in the era of Open Banking

Even with all the above challenges, the horizon is not that bleak for the incumbents who are willing to evolve. In fact, by 2022, the Open Banking market is expected to generate £7.2bn of revenues in the UK alone^[11]. Another estimate suggests, that even as early as 2020 could see the banks who transform digitally to adapt to Open banking could generate up to 20 percent more of their current lending revenue pool and 21 percent of the corresponding current account revenue pool^[12].

- **BaaS and BaaP** – Banks can become platforms (Banking as a Platform [BaaP]) with an API-enabled network of partners on which value-added banks' core services can be bundled together with those of TPPs offering advisory, business management along with traditional banking services. This integration will allow service providers to use data and anticipate a SME client's needs allowing best-in-class financial services product suite. On the other hand, for larger corporations, the Banking as a Service model will potentially amplify the ability to connect to multiple banks, while boosting efficiencies. In India, **ICICI** bank in India has created a platform called **InstaBIZ** with the sole focus on MSMEs. It offers a wide range of services digitally including instant overdraft and business loans, easy bulk collection and payments of funds, automatic bank reconciliation as well as inward and outward remittances. MSMEs who are not the bank's customer can use InstaBIZ and use the facilities too.
- **Monetize data and APIs** - With the vast amount of data stored by banks, there is immense scope to apply analytics to understand customer behavior and identify commercial opportunities. Open Banking regulations provide banks with the unique opportunities where they can partner with ERP providers and fintechs to monetize the access to data. Orange Bank, for example, offers value-added data services in this way.

Monetizing access to APIs through joint offering developments is another promising area of future revenue stream. **BBVA** of Spain has created **PayStats**, an API that delivers aggregated and anonymized transaction data from POS terminals and cards to third parties.

- **Focus on 360-degree experience** – There is need to close the gap between the banks service offerings and the customers' expectation. With Open Banking, financial services providers have the chance to offer bundled services to meet the unfulfilled needs of SMEs and corporates. Moreover, they have the opportunity to offer personalized, value-added services enabled by Open Banking at a fraction of the cost. It is imperative to use data effectively and efficiently to create a holistic, 360-degree view of the

customers' needs and financial position. Credit scoring can become more precise as well as pricing of loans and other products can be refined and curated almost on a one-to-one basis.

- **Marketplace like ecosystem between bank, merchants and consumers** – Collaboration and partnership by the banks with other the TPPs and merchants can create a marketplace like ecosystem. The financial products as can be bundled with other non-financial products creating cross-selling opportunities. In fact, 89 percent of banks are ready to build an ecosystem platform with third-party services which aims to benefit their SME and corporate customers^[9]. **DBS** of Singapore offers a one-stop online market for its customers who are looking to purchase or sell cars through its **Car Marketplace**.

Conclusion

It is evident that Open Banking will fundamentally transform the financial service value chain by the way of fostering innovations and encouraging new business models. The emergence of fintech will usher collaboration there by helping to create a new ecosystem in which banks role will shift markedly. It also raises issues around regulation and data privacy and hence the adoption by various countries varies in their approach towards the implementation. However, irrespective of the geography, the momentum towards open banking is high and requires banks and fintechs to position themselves alongside each other for ensuring success in the emerging environment.

The imperatives for banks to create long term avenue for growth are:

- Augment the existing set of offerings by reinforcing the core through collaboration with third party providers there by creating new value proposition through service integrations

- Expand the traditional service portfolio through building strong API portfolio to engage the developer community, promote cross collaboration through marketplaces
- Adopt the Banking as a Platform (BaaP) model with an API-enabled network of partners on which value-added banks' core services can be bundled together with those third parties, offering advisory, business management along with traditional banking services.

Infosys can help banks transition to a platform model by offering a broad selection of open APIs and applications, facilitating engagement with FinTech firms, building an applications marketplace, as well as creating a core banking-agnostic omni-channel hub through which banks can distribute their own and third party partner products.

To know more about this paper, please reach out to digital@infosys.com

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