

Opportunities and Challenges of Open Banking Around the World

A Global Shift for Financial Services

Open Banking is one of the hottest topics in financial services today. It signals a shift from the days when financial institutions would hold and manage their customers' information, to a model where personal information can be shared among organizations. The result promises to be increased financial transparency, greater collaboration and offerings tailored to what customers want. Financial institutions will be able to build new business models, create more value for customers, and grow their businesses by capitalizing on the data they possess. The introduction of the Revised Payment Services Directive (PSD2) legislation has incited banks that offer online-accessible payments to make their customer and account data available to external third-party payers (TPPs). Initially introduced in Europe and the UK, Open Banking is widely viewed as a model to be replicated in other parts of the world. Customers pushed for this type of transparency and cooperation to make it easier to deal with accounts in multiple banks, get loans at the best rates, and make informed decisions so they can manage their money better.

For banks, there are both clear benefits and challenges. Among the benefits are the potential for Open Banking to encourage innovation and competition, with the promise of increased efficiency among banks and other payment institutions. Challenges include the work required to meet key requirements of Open Banking: Strong Customer Authentication (SCA) to ensure that users are known and have given consent, data exchange enabling entities to talk to one another via application programming interfaces (APIs) and the definition of new TPPs. Banks are further challenged to ensure that the customer experience is frictionless, and to deal with issues of cross-border and regional interoperability. This paper explores both benefits and challenges, and how they are being dealt with around the world.

Open Banking Is the Gateway to New Innovative Services

Open Banking aims to leverage financial data and analyze the financial habits and needs of users in order to provide innovative tailor-made services that will increase customer stickiness. Some important examples:

- Investment advisors will be able to provide more in-depth account oversight and investment advice if they have a view of the customer's aggregate account information.
- Third parties or banks with a macro view of the customer's personal financial situation can provide more customized advisory services based on the data such as the most suitable loan, financing or savings opportunities.
- Micro transactions can be made by IoT application on behalf of consumers (e.g. cars could pay for their own parking, a refrigerator could order groceries and pay automatically) when secure communication is enabled.

Financial technology (fintech) companies are at the forefront of this movement, using innovation and speed to bring to market new user-centric services. Unafraid to try new business models and social media interaction, they can often pioneer new solutions that address difficult customer issues.

Open Banking Around the World

The Open Banking movement has rapidly gained momentum, with examples of adoption coming from all geographical areas.

Europe and the UK:

PSD2/Open Banking started in Europe when PSD2 came into effect, but it has quickly become a global phenomenon. The UK's efforts started with the UK Open Banking standard which contains technical specifications, security profile

and customer experience guidelines, and conformance and certification processes.ⁱ The movement quickly spread to the Nordic countries, with Nordea opening its APIs to developers and offering pilot program access to real customer data. Similar efforts are underway in Sweden, France, Poland, Spain and the Netherlands, as well across Europe via pan-European initiatives such as the Berlin Group, a European standards groupⁱⁱ.

Asia-Pacific:

Efforts to embrace Open Banking can be seen throughout the Asia-Pacific region, as many countries are preparing to implement open APIs. With a large population under the age of 30, an acceptance of new technology along with a willingness to look to fintech players for services, this region could rapidly embrace Open Banking. In the vanguard are Singapore, whose Monetary Authority is exploring an ASEAN-wide industry sandboxⁱⁱⁱ, the Hong Kong Monetary Authority, which is requiring Tier 1 banks to open their APIs, and South Korea which was the first country to launch a common API infrastructure across financial institutions. Similar efforts are ongoing in Malaysia, China, South Korea, Thailand, Cambodia and Indonesia. In India, with digital identities for all citizens, a digital ecosystem to include Open Banking APIs is being created.

North America:

Open Banking in North America operates under a more flexible set of directives and regulations. The regulatory system that governs fintech in the US is fragmented, with at least eight federal regulatory agencies having jurisdiction over some portion of financial data access. The US Treasury Department has called for agencies to align behind the move to allow US citizens to grant permission to their financial data. Recently, the US Consumer Financial Protection Bureau released its principles on data sharing and aggregations^{iv}, and several US banks have begun to develop open banking portals and APIs.

Latin America:

Open Banking is taking hold across Latin America even without national or regional mandates. Mexico's Open Banking law encourages open APIs throughout the entire financial system, and projects are underway to develop an Open Banking Standard—especially as it relates to API standardization.^v The Central Bank of Brazil is designing an open banking model that will allow clients to authorize their financial data to be accessed by banks, digital banks and fintech organizations with interesting services to offer.

Oceania:

Australia has made a firm commitment to Open Banking, and all major banks will need to make banking data available to consumers under a new open banking agreement with the federal government.^{vi} In New Zealand, banks and fintech organizations are joining in an Open Banking pilot^{vii}.

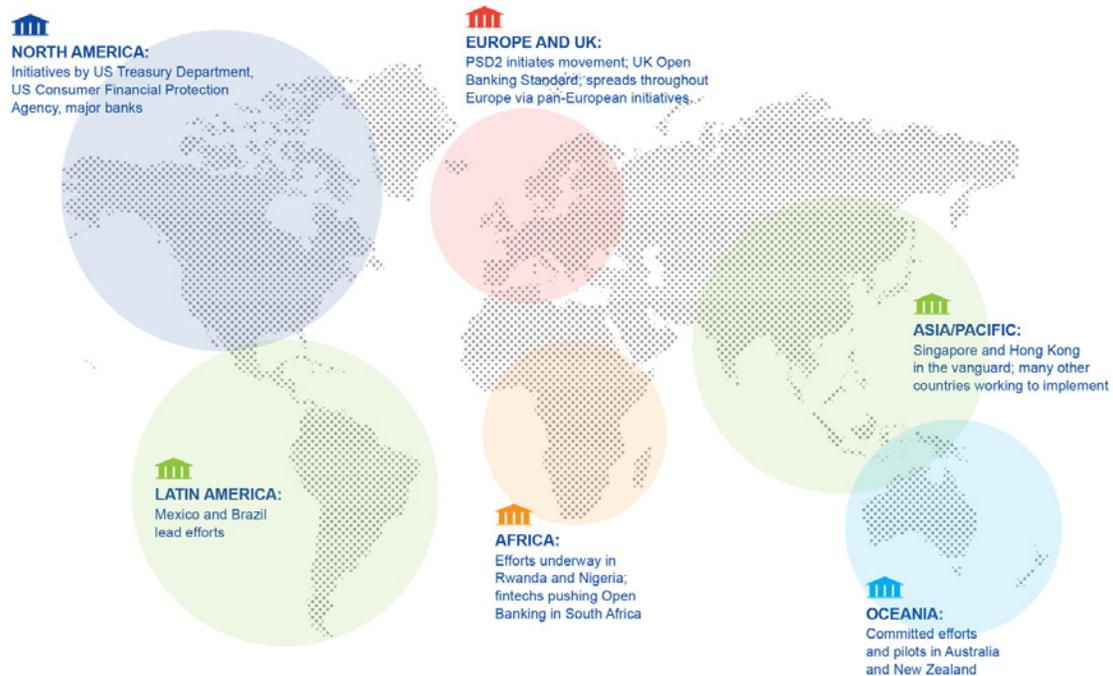
Africa:

There is a growing financial technology market in Rwanda, and the National Bank of Rwanda has published a regulation to formalize the approach to mining and analyzing customer data^{viii}. In Nigeria, API standards are being developed for direct debit, ATMs, transaction history, bill payments and other use cases. Organizations such as *Africa's Talking* have already provided payment and communications APIs to help banks and financial technology organizations communicate with their customers across Africa.^{ix} In South Africa, both innovative banks and fintechs are pushing the Open Banking trend.^x

Standardization Is a Global Agenda Item

Open Banking APIs let banks and TPPs interact and share data more easily, giving customers the ability to manage their finances through whatever means they want. While many one-off agreements have been inked, if banks are to create a full suite of financial services to offer customers, they will need to move to standardization across entire ecosystems. This will allow for rapid growth of the ecosystem, while ensuring that APIs are secured from attacks—which are growing in number and severity, especially in cross-border transactions. Attempts are underway around

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the globe to achieve standardization, although still on a country-wide basis or across regions. In the UK, the Open Banking Implementation Entity is working to design specifications for standardized APIs. The Entity was created by the UK Competition and Monetary Authority (CMA) and is funded by the nine largest banks in the UK. We see similar bank consortium initiatives across Europe, including STET^{xi} in France and the Berlin Group^{xii} (a consortium of more than 45 players in the payment industry). The Swiss Open Financial API (SOFA) is dedicated to creating a common API and standard for the Swiss financial services industry^{xiii}. In the US, FS-ISAC^{xiv}, NACHA and the US Treasury Department are moving toward standardization, while in Canada, the Canadian government is developing API playbooks.

In the Asia-Pacific region, South Korea was the first country to launch a common API infrastructure across financial institutions.^{xv} Efforts to create consistent APIs are underway in Australia, Hong Kong, Singapore, Japan and India, among others. The previously mentioned New Zealand Open Banking pilot is developing and testing two APIs, with the goal of coming to a consensus on common APIs.

Trust Is the Foundation for Open Banking

One of the most important aspects of Open Banking is ensuring privacy and security. When a transaction takes place, the bank must be sure that the customer is who he/she claims to be and has provided consent for the third party to access his/her personal data. Allowing third parties to access customer accounts raises security and privacy concerns. Customers will use new services only if they trust that their data is secure. PSD2 addresses this with a requirement for Strong Customer Authentication on both sides of the transaction.

In this growing ecosystem, authentication and identity management rest solely with the account-holding banks, which know the end users and will be in charge of authenticating them. Banks have, for years, understood the need to authenticate users and sign transactions; they are parlaying this knowledge into building a secure environment around their APIs. The fundamental requirement is risk-based, frictionless authentication based on artificial intelligence (AI) and machine learning to enable effective cyber threat and fraud detection. Deploying intelligent, data-driven authentication

methods can optimize the user experience by defining the appropriate level of authentication assurance to be applied depending on the risk level of the user's environment and transactions. To the extent this can be achieved with high levels of security and an intuitive user experiences, it will create new growth opportunities for financial institutions.

Open Banking Obstacles and Opportunities

The two principal challenges with Open Banking are being addressed in different ways and by different groups. Standardization of APIs is well underway but to date is only on a locally or regionally specific basis, with no real synergies among different regions. Meanwhile, strong customer authentication remains the central element in the Open Banking API ecosystem. It must be a priority both for banks— who already understand that sensitive data requires high security and protection—and for TPPs, who are just at the beginning of the learning curve. The challenge of establishing and maintaining trust may be unusual for them, as they are often not as security-savvy as banks; TPPs may err on the side of making authentication too easy (thus not robust) or too difficult (leading to a poor consumer experience.) New entrants into the ecosystem are wise to leverage the brand identity and trust of the banks to ensure they don't make mistakes that could jeopardize customer security and privacy. At the same time, banks can leverage startups' innovation and openness to change as they expand their footprint and increase customer stickiness.

OPEN BANKING OPPORTUNITIES:

TRUST, based on risk-based authentication and a frictionless customer experience, can create new growth opportunities for financial institutions.



Customer Confidence Will Energize Growth

Open Banking is a global phenomenon and is rapidly impacting banks across the globe. It promises to enable banks to become more engaged and active with customers by providing or facilitating a variety of new services and products. While issues related to standardization are being worked out, we can't lose sight of the fact that the bedrock is trust.

As financial fraud incidents grow in digital banking channels, it is imperative that institutions protect their customers. This includes securing their browsers, devices and applications while ensuring each transaction can be trusted, from money transfers to adding a beneficiary or requesting a new loan. These requirements are driving a new approach to multi-factor authentication that is based on machine learning and artificial intelligence, allowing organizations to make smarter real-time risk-mitigation decisions while cutting operational costs and reducing fraud-related losses.

HID Global enables financial institutions to provide peace of mind to customers by ensuring that shared customer data remains fully secure. The increased level of trust provided by HID Global solutions can lead to greater customer acquisition and retention and make users feel more confident about taking advantage of the full range of new innovative services.

For more information visit hidglobal.com/trusted-transactions

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- ii <https://www.thepayers.com/reports/open-banking-report-2018-building-trust-gaining-consent-and-improving-customer-experience/r775060>
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