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How open banking and open finance ecosystems should generate value for everyone

Our open banking/open finance ecosystem maps the way that APIs can help generate new products and create financial health for end users, and indirect benefits for society, local economies and the environment.

Governments direct regulators to expand digital financial services infrastructure through open banking and open finance (in some locations, markets themselves encourage greater action). API providers (including banks and fintech platforms, like payment gateways) make APIs available, drawing on industry standards and internal API governance. These APIs are used by API consumers (such as fintech, API aggregators and marketplaces) to build new products and services. The utility of these APIs depend on value enablers including the level of developer experience, security and privacy provisions, and are influenced by demand for digital services from end users. End users including individuals, businesses, and enterprises make use of API-enabled fintech to generate financial health and wellbeing. The broader ecosystem could also generate indirect impacts on society including impacts on levels of participation and inclusion, support for local economies through increased employment opportunities, and the environment through more optimised use of resources and creation of sustainability products.
Executive Summary

1. Open banking and open finance is here and reshaping global financial services infrastructure. Regulations are emerging, standards help accelerate fintech participation, and consumers are demanding digital solutions.

Find out more: Review pages 8-11 for regulations and standard, and 24 for consumer readiness.

2. Open banking API product innovation is moving passed compliance. Business models from banks are not moving as fast, resulting in new APIs being available in limited categories where banks can own the relationship, with either the customer or the fintech partner.

Find out more: Review pages 12-18 for deep dive into the incumbent banks.

3. API-enabled fintech are still predominantly generic payment, digital banking and account keeping solutions targeting SMEs and Individuals/households. There is a huge opportunity to diversify and build new API-enabled fintech to address specific customer segment needs.

Find out more: Review pages 20-29 for more details on fintech products and target markets, and pages 31-32 for indirect benefits of open banking and open finance.
The open banking landscape

A summary of key trends and activities covering Q4 2021
Open banking is unfolding at an annual growth rate of 175%

Supply-side characteristics include:

- **Regulations**: We have identified 108 countries where open banking regulations have been introduced or are under discussion. 59 are either in implementation stages or under consultative review at present.

- **Standards**: Globally, 85% of bank platforms are using the OpenAPI Specification standard to describe their APIs, which is facilitating rapid adoption by third parties, as it helps potential API consumers more readily understand the bank APIs.

- **Availability**: We count 1,537 banking platforms that make APIs available as at end Q4 2021, equating to an annual growth rate of 175%. Collectively, these bank platforms make 5,133 open banking API products available, up from 3,496 at end Q4 2020.

- **Ease of use**: Overall, however, banks are not making it easy for API consumers to use their APIs. Globally, on average, they rate at 37/100 for providing DX resources.

- **Security risks**: In Q4, there were 4 security incidents involving banks and fintech, representing 16% of all industry-related security breaches.
Worldwide, open banking regulations evolve towards open finance and data sharing

Beyond open banking, Europe and the UK have now mapped out their next steps to expand open finance via the UK Smart Data Initiatives and European Commission Digital Finance Strategy. These initiatives seek to foster a coherent and coordinated regulatory approach to data sharing within and across sectors. The European Commission has requested inputs from the European Banking Authority to start a PSD2 review and the UK has closed public consultation on a framework to regulate the buy-now-pay-later market.

Momentum is also gathering pace in the US. In Q4 2021, the Consumer Financial Protection Bureau’s held a public consultation on consumers’ data held by big tech payment platforms. In Canada, the results of the second review of open banking, were also released.

Regulations across Asia Pacific have also leapfrogged over open banking to open finance and open everything.

- The Philippines has officially launched its Open Finance framework.
- India has launched an account aggregation framework for financial data sharing, and is also looking to link its instant payment system UPI with Singapore’s Paynow.

- Australia continues to roll out its data sharing framework, now with a focus on the energy sector with the recently published Consumer Data Right Amendment Rules (No.2).

Brazils’s approaches in Latin America are rippling across the region (and worldwide)

- Brazil launched the last phase of its open banking framework. Participant institutions now have till 25 March 2022 to obtain the API functional certification to share information beyond traditional banking products and services. SUSEP has also released guidelines to implement an Open Insurance framework by December 2022.

- Outside Brazil, Colombia URF has also published a draft decree on Open Finance, paving the way for a voluntary, market-driven framework.

Nigeria and South Africa lead open banking regulation in Africa, with the Open Finance Nigeria framework and South Africa’s Protection of Personal Information Act recently introduced and public consultation on an open finance regulatory framework currently in progress.
The first half of 2022 will see regulation discussions move to data sharing

Several Asian Pacific countries are pressing on with their open economy agendas for 2022. Key ones to watch are:

- **Australia** is rolling out consumer data rights to the energy sector - a trend that is likely to rapidly emerge globally
- **New Zealand** is looking to establish a Consumer Data Right framework similar to Australia, with a Bill to be introduced to the Parliament late 2022
- **Indonesia** is rolling out the second launch of instant payment system BI-FAST and working to introduce Open API Standards
- **Philippines** is implementing Open Finance framework with a tiered approach.

Europe and the UK are also formalising and regulating the environment for data sharing in the broader financial sector as well as across sectors.

Regulatory development in Latin America in the coming months will still largely be driven by activities in Brazil, Colombia and Mexico, where the regulators are expected to continue to introduce specific guidelines for a full implementation of local frameworks before the end of 2022.

For North America, we are excited to see next steps from the US and Canadian regulators as they make further inroad to formalising the open finance environment with several ongoing public consultations.

Sub-Saharan Africa is also putting in motion initial works to achieve open banking by 2025. The latest example is Tanzania, which is looking to introduce an instant payment platform TIPS after successful pilots since June 2021.
Berlin Group is emerging as the global de facto API standard for open banking, and is used at times in conjunction with country-level standards. In some Central & Eastern European countries (Czech Republic, Croatia, Poland, Slovakia), where regulators have been seeking to encourage a standardised approach by creating their own country-level standards, Berlin Group has also been used as foundation for national standards. The Berlin Group is currently extending its NextGen PSD2 open banking framework into standards for open finance, placing high priority on account information, payment, and trade extensions, API management and administration/registration services.

UK has developed a mature suite of open banking API standards which all banks in the UK must use. A similar approach is being taken in Australia, Brazil, and Mexico.

For the rest of the world, where official open banking regulation is only starting to emerge, industrial collaborations such as Financial Data Exchange and Open Banking Nigeria have helped guide API design best practices.

Fintech looking to build with bank APIs would do well to familiarise themselves with these standards to speed up integration when not using API aggregation platforms.

Open banking regulations may initiate fintech growth, but open standards are an accelerant. A linear regression analysis on 1506 banks in countries with at least 0.5 million population and at least 2 open banking platforms reveals a positive correlation (41% R-square) between the level of open API standard adoption by banking platforms and the number of operating fintech in the country. This implies that for many countries, having open standards does make it easier for fintech to participate in emerging digital ecosystems.

Having a standardised API standard which all banks must conform to has been a key factor in the UK’s top positioning as a creation hub for fintech. (Other factors include UK’s wider financial services maturity and larger population of financial services professionals).

The US’ tech startup culture has also been a good foundation (alongside VC willingness to invest), enhanced by around half of the US-originated API-enabled fintech that we track being built on Financial Data Exchange (FDX) API standards.
Financial Data Exchange (FDX), released version 5.0 in Q4 2021, with interoperability and consent focus

Consumer digital readiness is a key enabler that impacts how much value can be generated from open banking APIs. Consumers — whether it be enterprise and business users or individuals and households — need to feel confident that their finances and personal data will be protected if they agree to link their bank account to a third party app.

To foster greater trust amongst consumers for open banking, clear consent workflows are needed that describe how fintech apps will make use of their connections to end user bank accounts (whether that be to read bank transaction data or to perform actions, like payments, savings and investments from an end user’s account). Clear user consent flows are also an important tool for financial inclusion and online safety, as they create common standards and shared expectations that help build digital financial literacy. When clear consent workflows are repeated across various applications, consumers can better understand what to expect when they link their bank data to apps.

The FDX’s API standard released version 5.0 in Q4 2021. The update introduced new standardised consent mechanisms. These new API features support ecosystem stakeholders to show a consistent series of consent screens, including clear descriptions that describe how the third party will use the data or capabilities of connecting to a consumer’s bank account, and clarify timelines for how long the data connection will be in place, and how consumers can remove the integration.

Other version features include extended alignment with other key standards including some of the most common Financial-grade API (FAPI) protocols, and reciprocal data sharing standards to support ecosystem stakeholders to more easily share fraud signals data.

The FDX API standard describes 625 API elements that can be documented in a bank or finance API. In Q4 2021, FDX reported that 22 million consumer accounts are using applications or services that are defined by the FDX API, collectively making almost 2 billion API calls each month.

“FDX API 5.0 represents FDX’s first major release since early 2020 and significantly expands the standardization of consumer data sharing in the financial industry. FDX API 5.0 is not only increasing efficiency and ease of use across the open finance and open banking landscape, but we have made huge strides on global interoperability with this release.”
Europe’s banks account for 75% of the world’s banking platforms

As at end Q4 2021, we tracked 1,537 open banking API platforms globally (up from 559 at Q4 2020), with 5,133 API products being made available (up from 3,496 at Q4 2020).

Europe remains the leader in both banking platforms created and API products built, with 1,153 platforms opening 2,451 APIs to third party providers at end Q4 2021. Regionally, the annual growth of 204% is largely driven by our tracking of more cooperatives and savings banks in Germany and France having now published their API platforms. We find that while most smaller, European regional banks offer PSD2 APIs, it is the larger multinational banking entities that are increasingly focusing on expanding APIs.

More banking platforms have been created in the UK than US & Canada (49 versus 30 in Q4 2021), but US and Canada offer more API products than the UK (296 versus 253). In the US, 50% of the banking platforms we track are investment banks focused on creating enterprise and business services.

Elsewhere, new regulatory frameworks in some key countries continue to drive steady growth in open banking platforms.

- In Asia Pacific, open banking platforms grew 139% to 184 in Q4 2021, largely reflecting continued deployment in Australia under the CDR framework.
- API platforms surged 147% to 47 in Latin America as participant banks in Brazil progress with their open finance implementations and incumbents in Mexico start to share products and services information.
- Similarly, Middle East and Africa saw a 65% annual growth to 71 in open banking platforms in Q4 2021, largely thanks to activities in Nigeria.

### Global Open Banking API Platforms and their API Products

<table>
<thead>
<tr>
<th>Region</th>
<th>Platforms Created</th>
<th>Platforms Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe &amp; Scandinavia</td>
<td>1153</td>
<td>2451</td>
</tr>
<tr>
<td>Middle East &amp; Africa</td>
<td>71</td>
<td>457</td>
</tr>
<tr>
<td>Eastern Europe &amp; Russia</td>
<td>184</td>
<td>1441</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>1441</td>
<td>184</td>
</tr>
<tr>
<td>Latin America</td>
<td>217</td>
<td>47</td>
</tr>
<tr>
<td>UK</td>
<td>253</td>
<td>49</td>
</tr>
<tr>
<td>US &amp; Canada</td>
<td>296</td>
<td>30</td>
</tr>
</tbody>
</table>

Methodology: Platformable tracks all banks globally and tallies those that have established an open API platform. We then review how many API products are made available by each bank and tally them according to category, and measure other API characteristics such as standards and specifications used, developer experience strategies employed, and business model/monetisation approaches. We review each bank at least once every three months.
Open banking API product innovation moves beyond compliance

Globally, API products grew 47% above Q4 2020 levels. With the biggest increase in API product growth emerging from Latin America (178% annual increase), US (164%), UK (122%) and Europe (82%). While we note that open banking API products declined 2% in Asia Pacific, this is largely due to banks shifting from granular, micro-services like APIs to bundled APIs with more functionalities in use-case oriented collections.

Outside the small market observed in Eastern Europe and Russia, mandated APIs (payments, account information and product information) still account for the majority of open banking APIs product availability in Q4 2021. This suggests innovative open banking API product innovation accounts for around roughly 20-40% of the offering mix. Identity, trading and credit services are key innovation areas in most regions, while the US has expanded rapidly on data product APIs. Of note among additions in Q4 2021 are Commerzbank’s mortgage widget and Natwest Group’s identity functionalities.

Account and payment APIs made up 49% of total APIs produced in the US & Canada in Q4 2021, mostly reflecting the US’s investment and commercial-led product offerings as well as BaaS models, where banks encourage large enterprises to offer financial services underwritten by the bank to their own customers.

Despite the move from granular to API use case collections in Asia Pacific, the share of mandated APIs in the region remained consistent at 57% of all APIs. In Middle East & Africa, 61% of total APIs were mandated banking products (payments and account information), with trading and identity products accounting for 18% of the innovative API products being created.

Bank API Products by Category and Region
Q4 2021 (N = 5,133)

Annual growth of API products
Q4 2021

Methodology: Platformable tracks all banks globally and tallies those that have established an open API platform. We then review how many API products are made available by each bank and tally them according to category, and measure other API characteristics such as standards and specifications used, developer experience strategies employed, and business model/monetisation approaches. We review each bank at least once every three months.
Open banking platforms are starting to monetise their APIs

<table>
<thead>
<tr>
<th>Banks</th>
<th>Country</th>
<th>Predominant Business Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bci</td>
<td>Chile</td>
<td>Partnerships model</td>
</tr>
<tr>
<td>COMMERZBANK</td>
<td>Germany</td>
<td>Open and Premium APIs, Partnerships model</td>
</tr>
<tr>
<td>DBS</td>
<td>Indonesia</td>
<td>Open, Partnerships and Marketplace model</td>
</tr>
<tr>
<td>NMB</td>
<td>Tanzania</td>
<td>Open and Partnerships model</td>
</tr>
</tbody>
</table>

### Open banking business models: Platformable's taxonomy

- **Open Platforms**
  - Open banking platforms with a catalogue of APIs is available to test and use by any fintech (Production use must be approved by the bank)

- **Premium APIs**
  - Banks make high value product APIs available to potential API consumers for a price, for example, a tiered subscription-based on number of API calls made (production use must be approved by the bank)

- **Partnership Platforms**
  - Banks seek out fintech partners with non-competitive products and use partner APIs with selected fintech to extend product range to their consumers

- **Incubators and Acquisitions**
  - Banks offer a pool of funding to early stage startups to help them build new products and mentor/advise them along the way. Banks acquire existing fintech in order to extend their API capabilities or infrastructure

- **Banking-as-a-service**
  - Banks provide full range of white-labelled core functionalities in order for fintech and enterprises to build their own customer-facing bank offerings built on the bank's infrastructure

- **Marketplace**
  - Banks that offer marketplaces that include third party apps and providers
**BCI**

An industry-led market approach to making APIs available

**BCI is the first API marketplace in Chile, offering both open APIs and a partnership program to third party providers**

<table>
<thead>
<tr>
<th>API products by category as at Q4 2021 (N = 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandated APIs</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

- 25% 50% 75% 100%

**Known fintech API consumers**

- **MACH**
- **Evo**

**Known fintech partners**

- **Pago Facil**

**BCI has a wide range of API product offerings, that could be used to build products targeting both individuals/households and businesses.**

- **A mortgage widget** enables third parties to easily integrate BCI home loan APIs into their websites through a low-code integration
- **Economic Indicators APIs** allow third parties and businesses to integrate BCI’s real-time economic indicators directly into their workflows and analytics systems.

**BCI offers a partnership program to third party providers.** To become an “official BCI partner” and build apps with BCI’s APIs, a formal request for the bank’s approval is required. Given that Chile does not a regulated open banking environment, BCI’s partner onboarding process provides a funnel for the bank to independently review potential third party users.

BCI is also drawing on incubator and acquisition business models to expand their capabilities. It has recently acquired **Pago Facil** to strengthen its own payment platform and expand into e-commerce.

To date, BCI has not published details of the fintech partners or products and services built with their APIs.
Commerzbank

Catering to both end-users’ and fintech partners’ needs

API products by category as at Q4 2021 (N = 15)

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandated APIs</td>
<td>5</td>
</tr>
<tr>
<td>Identity</td>
<td>2</td>
</tr>
<tr>
<td>Credit services</td>
<td>3</td>
</tr>
<tr>
<td>Data services</td>
<td>4</td>
</tr>
<tr>
<td>Trading</td>
<td>2</td>
</tr>
<tr>
<td>Loyalty rewards</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
</tbody>
</table>

Commerzbank has divided its API program into two streams: PSD2 APIs and Premium APIs, to enable new revenue opportunities and business models from their APIs.

Known fintech API consumers

- connec
- meniga
- ecospend
- optipay
- treefin
- Fondy
- Finanzguru
- GARMIN
- tink
- caspian: one

Known fintech partners

- optipay
- Isabel Group

API product roadmap announces regular releases

Commerzbank’s developer portal includes an API catalogue, guidelines, partner onboarding and use case descriptions, all of which are best practices for developer experience (DX).

Forthcoming APIs are also outlined, which acts as a roadmap to assist third party providers to start thinking about designing new fintech products and services. A range of Banking-as-a-Service APIs are also available to corporate customers.

Customer and Home Loans Light APIs are the latest additions to the bank’s API catalogue. The Customer API helps streamline customer onboarding for authenticated customers so that end users do not need to duplicate address and related information. The Home Loans Light API allows third parties to offer end users an indicative interest rate based on their loan application details.

Leading sustainability use case development

Commerzbank includes a collaboration section on their developer portal to promote their open banking partners.

For example, the pre-paid power supplier Energie Revolte, uses Commerzbank’s Corporate Payments API to offer an instant payment method to their energy customers, which in turn provides almost real-time updates on payment notifications, enabling faster energy supply to their customers as pre-paid energy payments are confirmed.
DBS Indonesia
An exemplary embedded finance practice in Indonesia

DBS Indonesia embeds its financial services into its clients’ systems, offering over 180 modular APIs that can be combined to meet various industry needs.

DBS Indonesia has a clear API-as-a-product business model:

- The bank positions its APIs as digital financial services solutions - the DBS IDEAL RAPID - for corporate clients. Through these APIs, it embeds its financial services directly into the clients’ systems.
- The product page is well organised and engaging, with a casebook and videos explaining specific use cases with real examples from API consumers.
- While FAQs are also available to address key technical support requirements, the focus remains on business solutions of their API offerings, including informational APIs, transactional APIs, and workflow APIs.

Each use case page in the casebook is organised into the client’s pain points, the solution enabled by the bank’s APIs, and the value/outcome to the client once the integration is in place. A full workflow of each use case is provided.

The casebook also showcases the bank’s key capabilities in Southeast Asia: marketplace (agriculture with Halcyon), payment solutions (e-commerce and mobility with Bukalapak, Gojek), and banking reconciliation (with insurtech Singlife).

Of note, DBS APIs enable Indonesia’s leading online retail platform Bukalapak to automate payments to its merchants, most of which are small businesses. Bukalapak also has a similar partnership with Standard Chartered, which indicates an open ecosystem in the making.
**NMB Bank**

**Tanzania’s first open banking initiative by a leading incumbent**

**Sandbox created to attract fintech partners**

NMB Bank has a strategic approach to open banking business models and fintech partnerships.

- It is the first leading incumbent to have opened a sandbox environment to enable local fintech and startup partners to test their APIs. The sandbox portal outlines a wide range of use cases that NMB Bank, which is traditionally a bank for individuals and microenterprises, is looking to collaborate on with fintech. These include deposit acceptance, payments, lending related and credit reference services.

- Prior to the launch of the sandbox, NMB Bank already partnered with Mastercard, Union Pay International, and Selcom for a number of innovative payment solutions.

**Learning from international best practices in standards and DX**

Developer resources include SDKs and documentation aligned with key international open banking standards (Berlin Group, STET, and the Australian CDR standard). This indicates the bank is benchmarking international developer experience best practices.

**Known fintech API consumers**

**Known fintech partners**

NMB Bank offers both working capital and technical support to local startups through ~ $0.5 million seed fund and a sandbox environment.

API products by category as at Q4 2021 (N = 1)
The open finance landscape

Fintech platforms
Fintech building with open banking APIs
How we see open banking generating value for everyone

Demand-side characteristics include:

- **Fintech**: We currently track 1943 fintech that make use of open banking APIs or that are fintech platforms in their own right.
- **Aggregators**: Of these 1943, 95 are API aggregators specialising in harmonising fintech and bank APIs in order to speed up product development.
- **Marketplaces**: With the surge in embedded finance, it will be essential to start mapping how finance APIs are used in marketplaces.
- **End Users**: The bulk (38.8%) of fintech built on banking and finance APIs focus on the small and medium enterprise (SME) market.
- **Indirect Beneficiaries**: From a societal perspective, fintech could play a part in reducing exclusion, but to date only 58% of fintech appearing to have women in leadership positions while only 46% have diverse management teams.
API-enabled fintech is limited and often home-grown

Open banking platform availability is not yet translating into wider consumer choice. In US, UK Europe, and Latin America, locally originating fintech account for 80% of the market. Locally founded businesses in the Middle East and Africa account for 66% of the operating market, while local fintech account for 72% of the market in the Asia Pacific region.

The UK still leads the world with the highest number of fintech per 1 million inhabitants.

There has been noticeable growth in Asia Pacific: although the region hosts only 231 fintech originating locally (with 319 fintech currently operating in the region), it is a marked increase from the 281 fintech operating and 212 originating as of Q2 2021.

The changing financial landscape in India means digitalisation has increased, opening up new opportunities for fintech. According to India's Finance Minister, Nirmala Sitharaman, India's fintech consumer adoption rate is 87%, the highest in the world. The majority of this adoption is focused on digital payments. We expect to see continued growth after India announced their adherence to The UN's Responsible Digital Payments principles, with the goal to make their regulatory landscape safer and more equitable for all.
Over one-third of fintech built with open banking and open finance are payment solutions

Four of the top 10 fintech sub-categories are payment apps predominantly targeting SMEs across the globe.

US and Europe host the highest number of payment back-end and infrastructure, FX services and B2B payment service providers, who are meet the increasing needs of SMEs to streamline and reduce costs of making and receiving payments to suppliers and from customers (also impacted on by the ongoing COVID pandemic).

There are also high number of account keeping and budgeting and account/API aggregation fintech that offer generic book keeping and financial management solutions to SMEs and individuals/households, reflecting the first wave of products able to be built with open banking APIs.

Other fintech products being built with open banking and open finance include digital banking, card and wallet management, consumer lending and credit services, and alternative lending, many of these targeting individuals and households.

As we only measure API-enabled fintech being built on open banking and open finance APIs, it is a smaller subset of the fintech market. Open banking APIs in particular are also being used as part of internal processes and automated workflows by enterprise and SME customers, which is not captured in the fintech taxonomy. In any case, there is plenty of opportunity to build more products that meet a vast range of end user needs that are as yet untapped.

Methodology: Platformable tracks all fintech globally that are accredited or known to use bank APIs. We then review what products they are making available and tally them according to category, and we measure other characteristics such as their target customer segments and business model/monetisation approaches. We review each fintech at least once every three months.
Payments infrastructure leads the API-enabled open banking/open finance ecosystem

Globally, Payment Back-End and Infrastructure remains the top fintech sub-category. Many of these connect to open banking to allow seamless payments direct from bank accounts, but also reflect the payments gateways themselves offering themselves as open platforms for fintech to build with, circumventing banks completely. However, payment providers are also partnering with banks: Paycorp, partners with eight top South African banks like Nedbank, Standard Bank, and Absa to extend the bank’s brand at ATMs, allowing customers to withdraw money directly from their bank accounts using Paycorp’s transaction processing software.

In addition to infrastructure, other payments sub-categories such as FX Services, B2B Payments, and Card and Wallet Management also feature in the top 10, making payments the most represented category overall.

Banking platforms continue to focus predominantly on business models that partner and incubate with fintech, keeping their relationships close. However, open banking could enable banks to generate revenue from API products by allowing fintech to build new end user-facing products. To date, only a small selection of banks are taking such an approach.

The Open Finance Landscape

Methodology: Platformable tracks all fintech globally that are accredited or known to use bank APIs. We then review what products they are making available and tally them according to category, and we measure other characteristics such as their target customer segments and business model/monetisation approaches. We review each fintech at least once every three months.
Consumers want more innovation from open banking and open finance

Digital readiness is a key factor in whether open banking and open finance will continue to grow. On a supply side, there needs to be performant, secure APIs provided by banks and fintech platforms, and fintech using these APIs to build solutions. But on the demand side, there also needs to be consumer willingness to use solutions that directly connect with their bank accounts, and an appetite adopting or fintech solutions. Digital readiness will require trust and understanding in the value of open banking, a willingness to use fintech apps and availability of fintech solutions that meet consumer needs.

Understanding of open banking

In a study by Axway, 52% of respondents had not heard the term “open banking”. When the concept was discussed with them, survey respondents worried about issues surrounding constant monitoring of their financial activity (33%), losing control over access to their financial data (47%), and financial institutions using their data against them (27%).

Willingness to use fintech apps

A study by open banking middleware platform Temenos found that interest in digital financial services has evolved rapidly following COVID. They quote Michal Kissos Hertzog, chief executive of Pepper, an Israeli digital bank: “Overnight people became digital, when it was supposed to take ten years. It doesn't matter if you are Gen X or Gen Z—everyone became digital.”

In a study with 4000 UK and US consumers, Plaid found that 88% of Americans and 86% of Britons used fintech in 2021, bitting: “Usage jumped in every category, both in terms of the percentage of people's money managed digitally—from 55% to 65% in the U.S., and 67% in the U.K.—and across the types of fintech tools used (payments, investing, and saving each surpassed 50% adoption in 2021).”

Demand for specific services

A study by Morning Consult with 17,401 adults across 14 countries found that Latin American and Spanish consumers, in particular, would like to see greater innovation in the types of financial services and products that are made available.
The bulk of API-enabled fintech target small and medium-sized enterprises

Fintech built using open banking and open finance APIs are predominantly targeting the SME (close to 40% of all products) and individual/household market (around one-third of all products). However, we see that the majority of these products are fairly generic in nature and are not targeting sub-populations by designing specific features that meet the needs of end users.

That is not always the case, of course. Products like Holded, founded in Spain and offering SMEs account-keeping integrations and business financial management tools, address specific market gaps by providing features that help businesses manage complicated country-specific tax invoicing regulations.

Positively, we are seeing some growth in the number of business operations and data/algorithms/analytics products being provided to support SMEs leverage financial data and fintech digital transformation in their businesses.

From an individual/households target market perspective, research like Bailey Kursar’s Good Futures Project identifies financial product needs for women, which could be used by fintech to design specific products or to enhance current products with specific features. Beyond marketing exercises, we are seeing a limited range of fintech products specifically targeting women’s financial needs.

**Consumer Benefits of Open Banking**

*Methodology:* Platformable tracks all fintech globally that are accredited or known to use bank APIs. We then review what products they are making available and tally them according to category, and we measure other characteristics such as their target customer segments and business model.MONETISATION approaches. We review each fintech at least once every three months.
Nordigen

Account/API Aggregation services (Market Enablement and Provision)

Nordigen’s banking API connects to over 2,000 European banks across 31 countries.

Open Banking Data Standardization

Nordigen for Startups

Nordigen launched Nordigen for Startups, a program granting European startups affordable access to open banking technology. Nordigen’s Premium Services are offered for free as part of the program, in addition to enabling access to over 1,000 European open banking APIs. The Premium Services provide data insights valued at €10,000 that eligible startups can access for a year.

Increased accessibility to open banking APIs eases the barrier of entry for European startups wishing to launch third party software which in turn gives consumers more open banking options.

Open Banking Data Standardization

Nordigen Premium, a suite of six new products, was released in December 2021. The products—Verification, Scoring, Categorization, Patterns, Cleaning, and Enrichment—allow users to clean and structure their data, while also pinpointing specific account owner details. Important merchant information like name, website, and logo are organized in a readable manner for the end user.

Providers like ISD FENIQS are simplifying access to Nordigen’s APIs by creating low-code connectors, integrated with app development platform OutSystems, to increase use within new fintech apps.

European Startup Support

Known bank/fintech API consumers

Known bank/fintech partners

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Quanto supports companies to **draw on open banking data and services to improve financial decisions**

**Data, analytics and algorithms (Business Operations)**

### Widespread accreditation under Brazil’s open finance regulations

Under Brazil’s open banking regulations, banks and fintech must achieve accreditation* for each functionality they wish to either expose as APIs (predominantly for banks), or to consume as third parties (predominantly for fintech platforms).

To date, Quanto has achieved the maximum available 8 accreditations, enabling them to offer extended workflows to companies that want to automate and extend their financial information and decision-making workflows.

### Increased API calls show potential use cases

Quanto analyses a range of market indicators and internal data to work with their customers to identify new opportunities.

Quanto share one example where open banking APIs **allowed a company to improve their credit approval rate**. Using open banking APIs, one company was able to demonstrate their transaction history, cashflow, return on investment and so on, to increase their credit approval rate by 28%.

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* Platformable also uses this data to quantify banking platforms in our dataset, however there is a lag between banks achieving accreditation and making APIs available, and we only add the banks when their APIs or developer portal is published.
Pinwheel is a payroll connectivity API, used by some of the largest neobanks and fintechs in the United States.

Payroll connectivity API provider Pinwheel has gained traction in the industry due to its focus on an "income layer" of data that extends beyond salaried payroll to include hourly clock-ins. The varied income options available increase accessibility to the rising number of gig-economy workers who are paid on an hourly basis.

By creating an income verification and deposit switching API infrastructure, Pinwheel is enabling digital financial services to complete user journeys seamlessly and at pace.

Pinwheel's APIs cover over 1,400 payroll platforms, from top 100 employers to gig platforms, government employees, and those accessing unemployment benefits. They aim to increase lending opportunities for credit damaged and credit invisible individuals who have traditionally been locked out of such opportunities.

Payroll data is invaluable for assessing the income stability of those who would be good candidates for loans, yet are unable to depend solely on their credit scores for access to affordable financial products.
FinScore was the Philippines’ fastest growing alternative credit platform in 2021

Credit access expanded across the Philippines

SB Finance, a strategic partnership between the Philippines’ Security Bank Corporation and Thailand’s Bank of Ayudhya (Krungsri), has partnered with FinScore to expand banking opportunities across the Philippines. Using FinScore’s telco data scoring system, SB Finance can predict potential borrowers’ creditworthiness and access their ability to avail themselves to the company’s loan offerings.

FinScore’s use of alternative data in predicting creditworthiness increases loan availability to borrowers across the Philippines who lack a solid financial history.

Digital footprints offer alternative credit scoring data

Many Filipino banks are unable to process borrowers’ loans due to the use of fraudulent identities and a lack of credit history from the borrowers. FinScore’s social media lookup tool, FindSocial, combats both issues by utilizing social media data as an alternative to traditional credit scoring methods.

The digital footprints borrowers leave in the form of their social media presence helps banking institutions quickly verify their existence. Using digital footprints to confirm identity and access borrowers’ data opens unbanked and underbanked populations to lending opportunities they have traditionally been prevented from accessing with traditional credit scoring methods.
Wider benefits of the open banking/open finance ecosystem

Impact on financial inclusion
Impact on society, local economies and the environment
Greater work is needed to monitor whether open banking and open finance are addressing financial inclusion

At Platformable, we are experimenting with models to track the impact of open banking ecosystems on financial inclusion.

The World Bank’s Consultative Group to Assist the Poor (CGAP) has created a range of resources to support telcos and banks in low and middle income-countries to open APIs so that third parties can build products that improve financial inclusion. Our bank and fintech profiles also highlight some examples.

However, in several jurisdictions (such as Indonesia and Brazil), regulations specifically note that open banking should address financial inclusion. In other areas (like UK and Australia), financial inclusion is implied in the regulation, which focuses on improved choice and financial wellbeing for consumers. However, regulators around the globe are not creating reporting mechanisms to monitor and share regular data on whether open banking ecosystems are improving financial inclusion.

Platformable’s model tracks which end-user facing products could be used by low income, underbanked and unbanked individuals, sole traders and small businesses. We estimate that 54% of the global products being created from open banking APIs could be used to improve financial inclusion.

Methodology: Platformable has identified a subset of the fintech product taxonomy to identify which products have the greatest potential to improve financial inclusion. These are tallied as absolute numbers and as a proportion of all fintech operating in each region in order to show the potential of fintech using open banking APIs and fintech open finance platforms to address financial inclusion.
Indirect benefits of Open Banking/open finance

Open banking and open finance APIs could be used to foster inclusion, build local economies and create products that support environmental action

Society

Fintech follows wider business organisational patterns where there is under-representation from women and diversity in management teams. Less than 6 in 10 fintech have women in management positions. Less than half have diverse management teams.

In a survey with bank product owners around the globe, middleware platform Temenos found that the bank respondents are planning to create new products that provide microfinance for entrepreneurs (34%), accounts for the unbanked (33%) and responsible lending to underbanked populations (32%) as top actions to promote financial inclusion and empowerment.

Economy

In the past month, TrueLayer has announced 20 vacancies across global locations.

Qonto is hiring for 84 roles remotely or across its European location. Actual employment growth is expected to surge beyond these roles: 8 talent acquisition hires will create a multiplier effect for scalable hiring beyond advertised positions.

Klarna, the Swedish payment provider giant, currently has 544 open job listings, 32 also in talent acquisition.

Environment

Enfuce’s My Carbon Action calculates the carbon footprint for payment transactions.

Profile Pensions offer ESG aligned pension portfolios with competitive management fees.

Solar21 are a solar energy subscription service that removes the upfront installation costs for households.
Methodology

At Platformable, we have:

**Defined the open banking value flow.** Drawing on industry and academic research, as well as our own datasets and analytics techniques, we have documented how value flows to various stakeholders in an open banking ecosystem.

**Researched and defined taxonomies for key data model elements including:** regulatory goals, API specifications, API standards, security tech, value stakeholders, value generated, bank types, bank platform business models, API product categories, API product pricing models, and fintech categories.

**Identified primary and supplementary metrics for ongoing measurement.** For each node in the ecosystem, we have defined primary indicators/metrics and secondary data points. These assist with measuring impact of the ecosystem elements overall on generating and distributing value. We are also testing scores for key components of the open banking ecosystem so that we can create scorecards and rankings of where open banking maturity is progressing.

**Created a regular data collection system.** We now have processes in place to continually collect and monitor how value flows in the global open banking ecosystem.

**Regular data collection**

We use alerts, scraping bots, data subscriptions, regulatory datasets, and manual data collection processes to identify banking platforms and API-enabled fintech. On a rolling weekly basis, we update aspects of our datasets and conduct global scans in the month prior to each trends report release to review any potential gaps or new entries our alerts, etc may not have picked up.

We will be creating mechanisms to invite greater community and industry consultation on our data models and methodologies over 2022. Please contact phuong@platformable.com to be involved in upcoming consultations.

Particular aspects of our data model and data collection can be improved to address shortcomings:

**Tally of use of API standards.** We draw on API documentation from each banking platform in order to identify how many bank platforms make use of each API standard. However, this can under-represent some standard usage. For example, in the US, the FDX standard is used by middleware platform providers that assist banks to expose APIs internally and to partners, which is not clearly documented on bank developer portals. As such, we estimate that FDX usage is under-reported in our model. We have decided instead to count the number of bank members of FDX as a better (but still conservative) indicator of the use of FDX by banks.

**Calculation of financial inclusion.** Drawing on our fintech taxonomy, we have identified 23 subcategories of fintech products that we believe could play a role in increasing financial inclusion. These fintech categories focus on the potential to impact end users, that is, unbanked and underbanked individuals/households, sole traders and microenterprises and small businesses. However, when calculating the proportion of products for financial inclusion we have calculated on the total subset rather than those that are end-user facing, and will update our models in future to more accurately reflect proportions of products.

**Recognition of API-enabled fintech.** Our model seeks to focus only on those fintech that are part of the open banking/open finance ecosystem. We seek to list fintech that are accredited to use bank APIs (in markets like Europe, UK, Singapore, Mexico and Brazil where this is regulated), or where we are able to identify that fintech make use of bank or fintech APIs beyond using a payment gateway to charge customers for their services.
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Open Banking API for a sustainable Digital Transformation

Open Banking API is a real enabler of innovation for a wide range of enterprises and startups. They can be leveraged to build new products and embed financial services directly into their offerings. In parallel, as 2022 commences, we are seeing an uptick in green fintechs using APIs to create solutions that directly address the impacts of technology on the climate, the need for environmentally friendly solutions, and a move to a circular economy. Discover the power of an API Management Platform and the new trends in Open Banking in Europe.

Commerzbank AG, a renowned German bank with an international presence, is using the Amplify API Management Platform as the cornerstone of its digital transformation. They have opened their platform to partners and provide the modern, responsive, and sustainable services that their clients expect.


February 8th, 2022 | 11:00am CET

Register today to learn:

- How is Commerzbank transforming traditional branch-based services into seamless digital experiences?
- What APIs can help you embrace the green transition?
- How is Europe trending in the adoption of open banking for sustainability?
- The best practices for using the Axway Amplify API Management Platform to empower open initiatives across the financial services industry.

This webinar will include a live Q&A where our speakers will answer your most pressing questions.

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