

Open Banking/ Open Finance Quarterly Trends

Q1 2021

Data and Trends Report



Contents

Introduction	2
The Open Banking Landscape	9
The Open Finance Landscape	33
Consumer Benefits of Open Banking	43
Key Insights	52

We would like to thank our network of knowledge experts who were able to provide feedback and advice on the trends and data as we prepared this and previous Open Banking Trends reports including: Rizlane Ait Mamas, S. Adeel Ali, Loubna Bazine, Adrita Bhor, David Biesack, Yves Bovin, Christian Cagnol, Tom Carpenter, Don Cardinal, Josh D'Addario, Francis Darby, Bruno Diniz, Bill Doerrfeld, Jana Frejova, Richard Gall, Michel Hanouch, Ameer Hassan, Adrian Hausser, Karen Holmes, James Higginbotham, James Hirst, Maha Khan, Allan Knabe, Ekere Ikpeikpe, Spencer Jenkins, Hanissa Khodri, Daniel Lane, Kin Lane, Ray Low, Susana Manzano, Lars Markull, Gergely Mate, Mehdi Medjaoui, John Musser, Nathaniel Neudecker, Ivan Nokhrin, Per Nymand-Andersen, David O'Neill, Jacques Pütz, Mike Ralphson, Giulio Rattone, Jennifer Riggins, Emilian Siemsia, Eyal Sivan, Yojas Samarth, Suzi Thurston-Semerdak, Kristof van Tomme, Simon Torrance, Mariana Velasquez, Aaryman Vir, John Mark Walker, Gertjan de Wilde, Mark Winberry, and Markos Zachariadis.

Special thanks to [Joanna Smerea](#), [Anudeep Ayilalath Puthalath](#) and [Farhana Tasnin Bipasha](#) for creating charts used in this report and for the web.

Our Team



Mark Boyd
Writer/Analyst/ Founder



Phuong Pham
Bank Analyst



Arjit Mathur
Fintech Analyst



Chris Phipps
Product Manager



Adrienne Fanning
Delivery Manager



Guilherme Appolinario
Designer



Alexei Garban
Lead Developer

Platformable Mission

We support open ecosystems that:

- Build economic opportunities;
- Solve complex problems;
- Enable everyone to participate and co-create their own value.



We do it by:

Building
Tools

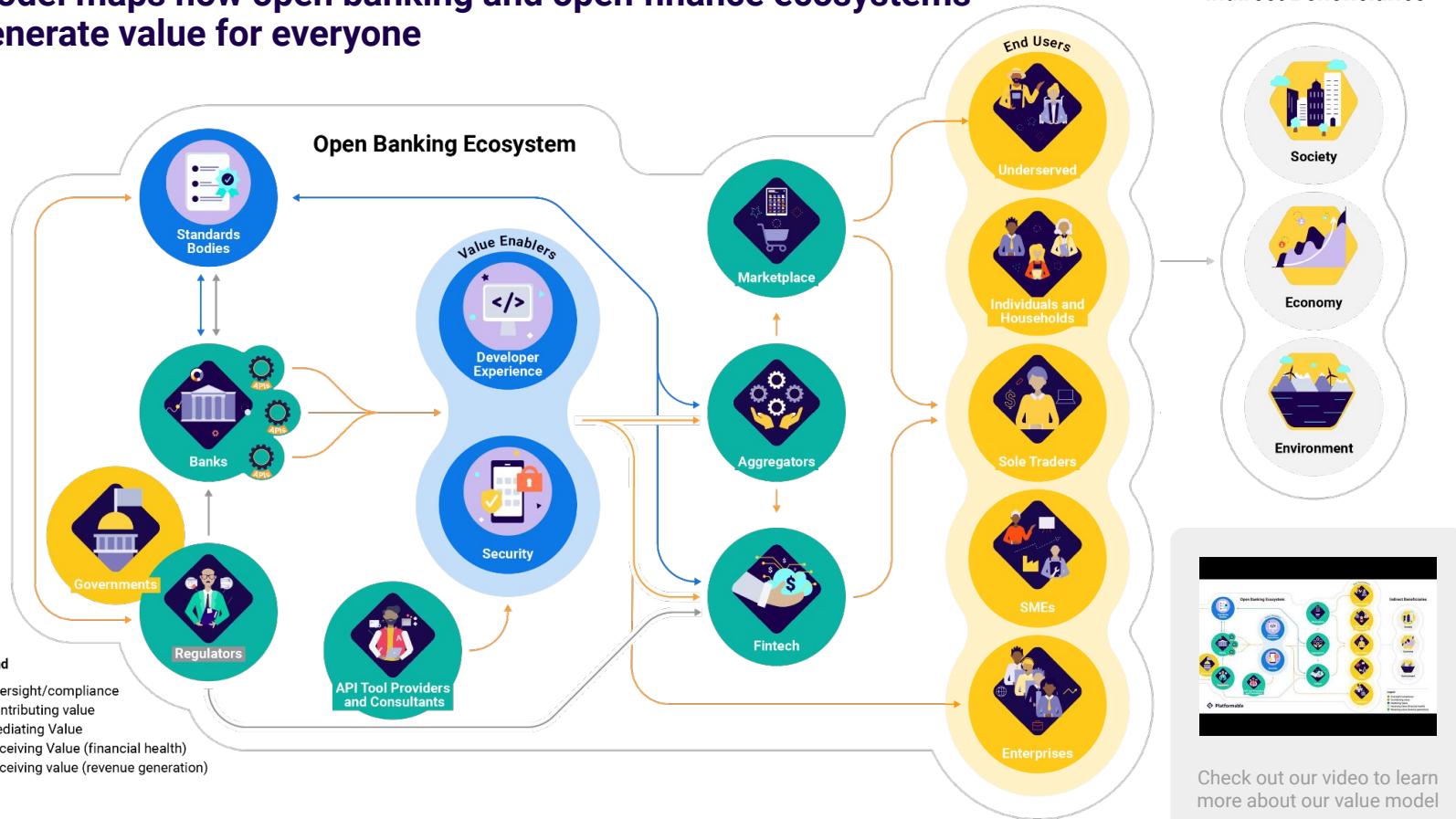
Sharing
Best Practices

Connecting
Partners

Measuring
Value



Our model maps how open banking and open finance ecosystems can generate value for everyone



Open banking and open finance ecosystems can generate value for everyone ...but do they?



Q1 2021 Key Questions



Banks

What business models are most effective?

How do we transform into a platform?

Who should we partner with?

What sort of API products should we build and how should we price them?



Fintech

Where are the greatest opportunities?

Which markets are ready to enter?

How are competitors pricing their products?

What product and feature innovations are most promising?

What is the addressable market size of fintech products?



Financial Inclusion advocates

Is open banking and open finance making a difference to financial inclusion levels?

Are vulnerable populations able to access financial services and build their financial health?

Are financial services extracting value from low and middle income countries or are they local economic enablers?

Q1 2021 Key Questions



Fintech associations

Are members able to build viable businesses by using open banking APIs?

What partnerships could members be pursuing?

Where are their greatest challenges and obstacles?



Banking regulators

Are open banking implementations meeting desired goals of the regulatory environment?

Are there any concerns?

Is everyone benefiting?

Are new open banking and open finance systems addressing wider societal benefits and enabling sustainability of economic resources?



API tool providers and consultants

What features do bank and fintech clients need in order to use my product?

Where are the opportunities to sell?

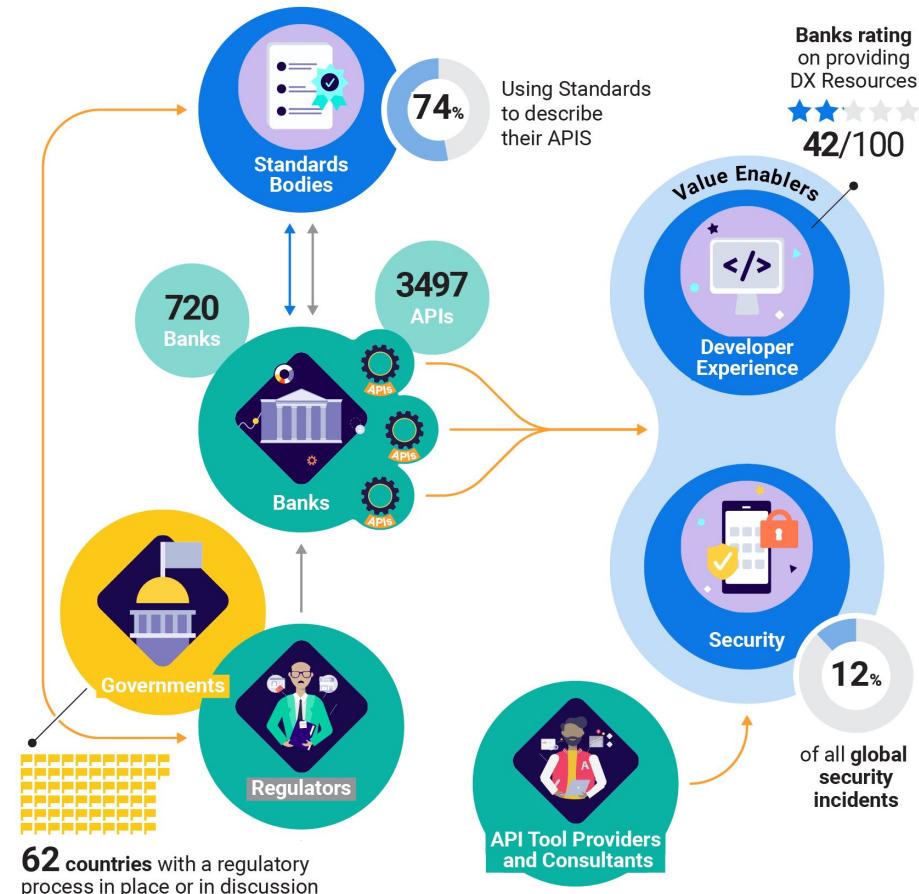
The open banking landscape

Open banking is unfolding at an annual growth rate of 367%...

...but the global movement is still just beginning.

Supply-side characteristics include:

- Regulations:** We have identified 62 countries where open banking regulations have been introduced or are under discussion. 56 are either in implementation stages or under consultative review at present.
- Standards:** Globally, 74% 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 720 banking platforms that make APIs available. Collectively, they publish 3,497 Open Banking API products as at Q1 2021, this is an annual growth rate of 367%.
- Ease of use:** Overall, however, banks are not making it easy for API consumers to use their APIs. Globally, on average, they rate at 42/100 for providing DX resources.
- Security risks:** In Q1, there were 5 security incidents involving banks and fintech, representing 12% of all industry-related security breaches.



Regulation is a key driver for the creation of open banking systems

While there is a mix of industry- and government-led open banking initiators, each quarter sees more efforts to formalise and regulate the open banking environment.

Lawmakers worldwide are pressing on with the agenda for open banking and open finance:

- Open banking regulations are now emerging in Australia, Bahrain, Brazil, Hong Kong, India, Mexico, Nigeria, Saudi Arabia, Singapore and South Korea, Canada, the US, Colombia and Indonesia have all moved forward with public consultations on open banking in Q1 2021.
- The United States has traditionally relied on industry-led standards, led by industry networks like Financial Data Exchange. A recent public consultation on proposed rulemaking for consumer access to financial records may lead to a more mandated framework.

Where open banking regulations are well established, there are still bumps in the road:

- In Europe, regulators were told in Q1 to review and ensure that their banks are not creating additional obstacles for fintech market entrants
- In the UK, regulators are considering widening open banking to open finance, an approach that is already incorporated into the regulatory thinking in newer regions like Brazil, Colombia, Indonesia and Mexico

Current progress of open banking regulations around the globe Q1 2021



Progress Status

Under discussion/Planned

Either some discussions but no concrete plan in place to progress action, or open banking regulations announced.

Current review/In progress

Either open banking consultation progress being conducted, or milestones being reached towards implementing open banking regulations.

Early implementation

Official regulation/policy in place. Stakeholders may or may not have been required to start operating in the new legislative environment.

Effective implementation

Official regulation/policy in place. Stakeholders required to meet certain requirements to operate in the new legislative environment.

Stalled

No action for the last 6 months.



Methodology: Platformable reviews progress and activities of all open banking regulations around the globe and assesses progress of all actions.

Countries in Asia Pacific, Latin America and Middle East and Africa regions all progressed their open banking regulations in Q1 2021

Key Open Banking Regulatory Development Q1 2021



Continuation of implementation of Consumer Data Right (CDR) obligations, with banks required to start opening customer data and other institutions required to share product reference data by 1 February 2021.



Larger banks mandated to open product, account and payments APIs from 1 February 2021.



Consultation on Open Banking framework closed on 22 January 2021.



The European Banking Authority (EBA) set new deadlines for national competent authorities to ensure banks remove any remaining obstacles that prevent third party providers from accessing payment accounts by 30 April 2021



Consultation on the draft Kenya National Payments System Vision and Strategy 2021 – 2025 closed on 29 January 2021.



The Central Bank of Nigeria (CBN) introduced Framework for Regulatory Sandbox and issued the Regulatory Framework for Open Banking in Nigeria in February 2021.



Launched the first phase of Instant Payment Systems Raast on 11 January 2021 Opened public consultation for Digital Bank Regulatory Framework on 26 March 2021, with digital banks required to submit an open API strategy.



Launched Fintech Sandbox in February 2021, aiming at boosting innovation.



Introduced Open Banking Policy



Unveiled its work agenda for 2021 on 18 January 2021. One of the tasks is to continue to promote the development and use of contactless financial services, including those via open banking/open finance.



Banks entered the second phase of Open Banking, which focuses on consumer accounts and transactions information.



Published feedback on the Call for Input on Open Finance on 26 March 2021. Opened public consultation on the future governance of UK Open Banking on 5 March 2021, in preparation to wind down the Open Banking Implementation Entity.



Closed public consultation on Proposed Rulemaking on Consumer Access to Financial Records, laying out initial foundation for an open banking/finance framework.

Methodology: Platformable reviews progress and activities of all open banking regulations around the globe and assesses progress of all actions

Key markets in most global regions aim to progress open banking this year

As we enter Q2, we will be keeping a close eye on some key countries and their open banking regulation timelines:

In the United States, we expect some type of consultation summary and next steps to be described by the United States Consumer Financial Protection Bureau following the advance notice of proposed rulemaking regarding Consumer Access to Financial Records. [99 entities provided feedback.](#)

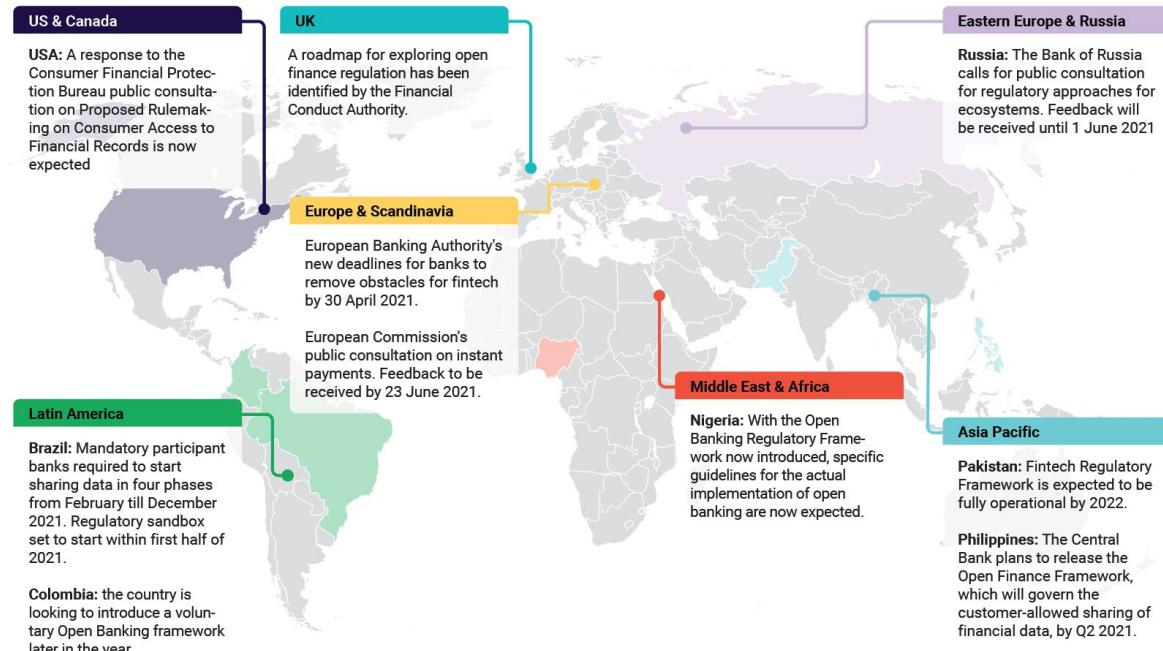
In the UK, the Financial Conduct Authority mapped out next steps to create an [open finance regulatory system](#). This will occur alongside [expected changes to the Open Banking Implementation Entity](#) which is now moving beyond a pilot phase to be a sustainably funded authority.

Nigeria's new open banking framework called for applications to [participate in sandbox implementations](#), but already wider regulatory changes are impacting fintech: Q2 started with payments startup and Stripe acquisition Paystack having to [stop its identity verification service](#).

And we are excited to see the next stages of open banking in Brazil and Colombia: [Brazil's introduction of mandatory APIs for larger banks is already seeing increased activity](#), and [Colombian banks and fintech aren't waiting](#) for an expected open banking framework later in the year.



Key Open Banking Regulatory Milestones to watch in Q2 2021-Q2 2022



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.

Berlin Group is becoming the de facto Open Banking API standard

The Berlin Group continues to lead globally as a de facto API standard, and is used at times in conjunction with country-level standards. While regulators in the Baltic region have been seeking to encourage a standardised approach by creating their own country-level standards, we expect a slight drop in use of the Czech, Polish, Slovakian and other local standards by midyear, when the large Baltic-based banking group, UniCredit, decommission use of each country's API standards in favour of the Berlin Group standard.

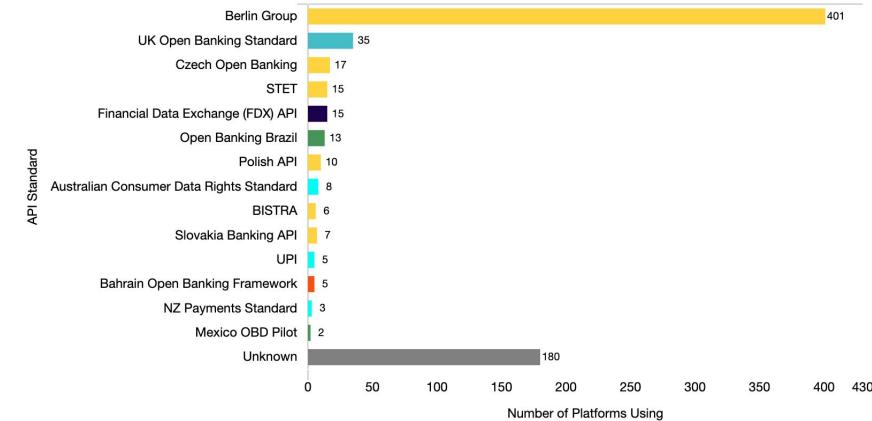
Fintech looking to build with bank APIs would do well to familiarise themselves with this standard to help understand how an individual bank's APIs are structured.

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 emerging regulatory schemes in Australia and Brazil.

It is promising to see that Brazil has established an API standard for banks. This is already encouraging banks in the country to build to open standards where possible: Latin America, for example, may only see 64% adoption of the OpenAPI Specification (OAS) amongst regional bank platforms, but all bank platforms in Brazil using the Open Banking Brazil API standard are also describing their APIs using the OAS standard. We expect this will accelerate ecosystem growth in the country in the second half of the year, in the same way that we have seen UK's Open Banking API standard act as a key driver for enabling rapid open banking and fintech ecosystem growth in the UK to date.



Global Open Banking Platforms Use of API Standards
Q1 2021 (N = 720)



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.

Proprietary standards may create complexity as they are unevenly adopted in API design

ISO standards may seem common but they are not ubiquitous, and the costs involved in their adoption may lead to some potentially unnecessary complexity. While the cost of a standards licence may be minimal, it automatically then triggers a legislative maintenance requirement to ensure a company is meeting the use of the standards licence appropriately. This differs from open standards where all stakeholders are encouraged to adopt agreed industry-led common approaches.

Using open standards offer economies of scale for new market entrants. Fintech are able to become viable businesses faster by integrating bank APIs that all have the same components like the way dates and currency are described. In turn, this can help banks grow their revenue and customer acquisition by leveraging their new open banking fintech partners who are able to get their products to market faster.

While between 45-75% of all banking platforms in Q1 2021 of open banking APIs are standardising on country codes, currency codes and date formats -. This makes it easier for fintech to build out their applications to work with any bank's APIs as they do not need to add code that parse data into a standardized format before being able to use it in operational workflows.

Global Open Banking Platforms Use of ISO Standards in API Design Q1 2021 (N = 720)



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.

Global open banking is shifting from initial creation phase to becoming a foundation for building new products and services

As at the end of Q1 2021, we are tracking 720 open banking API platforms globally (up from 154 at Q1 2020), on which 3,497 API products are made available (up from 1,417 at Q1 2020).

Europe and Scandinavia, and the UK, are the most mature markets, with 506 platforms in Europe, and 25 banking platforms in UK opening APIs.

US & Canada in particular are falling behind the open banking curve. Canada is making moves to speed up their open banking regulatory model, and this may spur banks on to open APIs sooner. But perhaps what is most surprising is that the US is fairly lacklustre in their API rollouts. What's more, 50% of the US banking platforms are investment banks focused on creating enterprise and business services. Even the retail banks like US Bank and Wells Fargo skew their API product offerings towards commercial services. Customer and small business APIs are for account information, rather than transactional processes.

Globally, however, there are now enough platforms and products that it is possible to be building market-fit, meaningful financial products and services drawing on open banking APIs.

Global Open Banking API Platforms and their API Products Q1 2021 (N = 720)

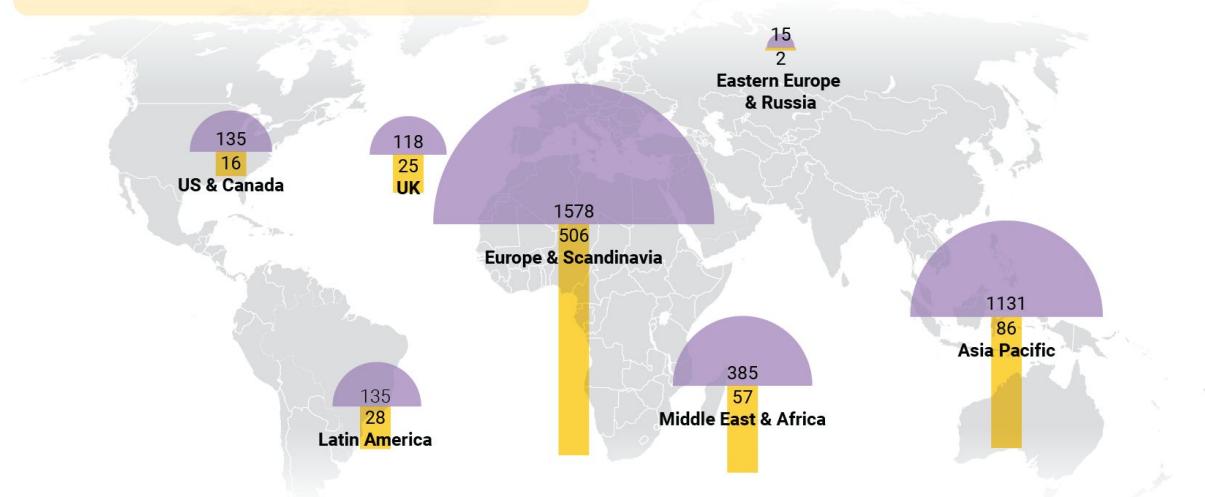
Global Summary

720 Open Banking Platforms

367% Annual Growth Rate (compared to Q1 2020)

3497 Open Banking API Products

0.45 Banking platforms per million head of population



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.



Legend:

Products n

Platforms n

Region

Open Banking platforms continue to climb

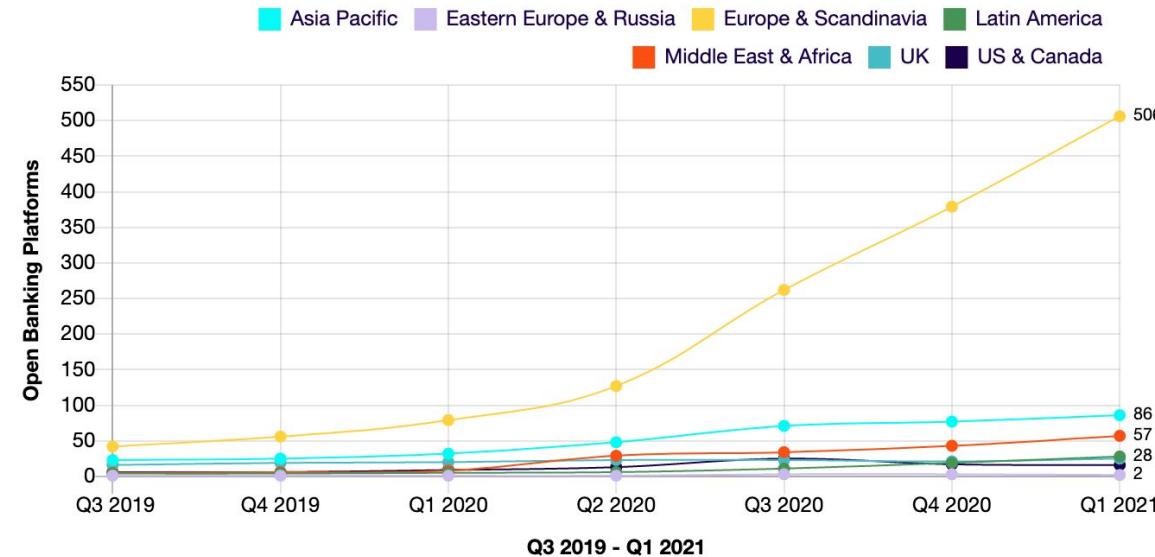
The Europe & Scandinavia region is still the strongest growing region for open banking platforms

We track new bank platforms as they are published, but we also review clusters of countries in each region every quarter to see if any banks have quietly launched a platform. This quarter, we analysed smaller banks in Germany and Italy, where regional cooperatives and savings banks have now published their API platforms. This helped contribute to our uptick in data on European and Scandinavian banks in Q1 2021.

In the rest of the world, API platform deployment has also been growing steadily. Absolute numbers may be smaller, but the jump in annual growth rates is significant.

- Of note for this quarter is Middle East & Africa, where API platforms grew over 600% year-on-year (from 8 to 57). Nigeria and Turkey have been the key leaders of this growth, as their regulators stepped closer towards mandated frameworks for open finance.
- API platforms grew 460% over Q1 2020 in Latin America (from 5 to 28), mostly attributable to mandated participant banks in Brazil working to comply with the open finance regulation introduced in May 2020 which became effective from February 2021.
- In Asia Pacific, API platforms grew 169% year-on-year in Q1 2021 (from 32 to 86), largely reflecting deployments in Thailand and South Korea.
- In North America, API platforms stood at 16 in Q1 2021, as stakeholders wait for further regulatory developments.

Open Banking Platform Growth by Region Q3 2019 - Q1 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.

API Products consolidate...

At first glance, our data appears to show a drop in API products available in Asia Pacific. In reality, we saw a consolidation of product offerings in the region, which is undergoing a move from offering granular technical functionalities to grouping financial capabilities into more use case-oriented collections. This resulted in some banks which had previously offered, for example, 50+ specific accounts-type APIs consolidating them into 10 broader account product APIs. This explains the apparent drop.

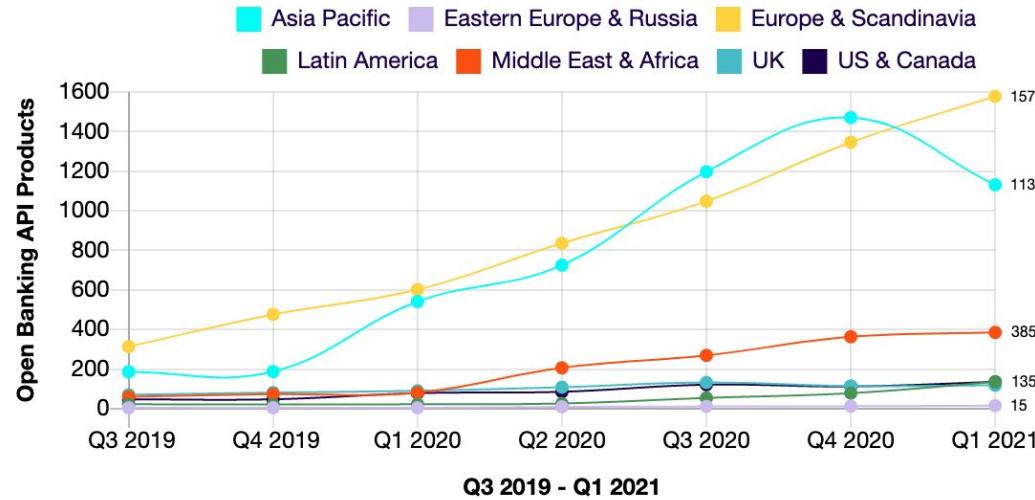
It is almost as if Asia Pacific and European API strategies are seeking out the middle ground: in Europe, growth of API products continues but, as we will see, this is now moving beyond regulatory requirements to more diverse product use cases, matching a starting point that was more common in countries from the Asia Pacific region.

In Europe, one of the expectations of open banking is that it will enable smaller market entrants to compete. This may end up being the case with fintech able to build off open banking APIs in future, but we are already seeing that it is the larger banks and cross-country banking groups that are offering more diverse API products while smaller banks are simply meeting PSD2 requirements. If this continues, larger banks will win the fintech partners, driving the smaller banks even smaller.

In Middle East & Africa, total API products is skewed slightly by Standard Chartered, which offers 86 (22%) of the region's APIs. (They offer a similar set of 3-6 APIs in each of 17 African countries.)

Open Banking API Products Growth by Region

Q3 2019 - Q1 2021



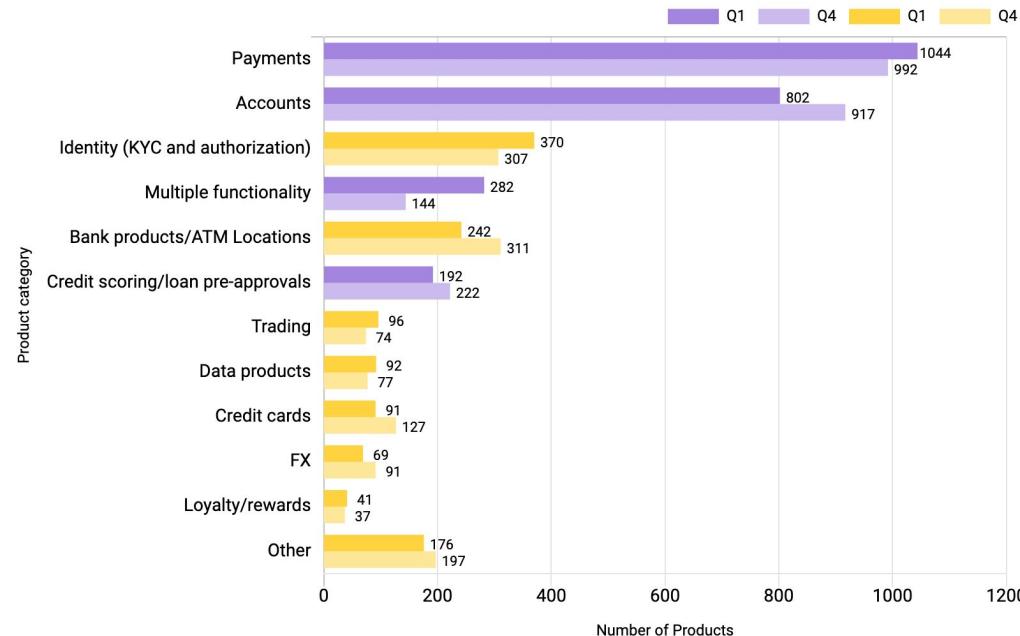
Methodology: Platformable tracks all banks globally and tallies those that have established an open API platform. We then review how many API products are made available by each bank and tally them according to category, and measure other API characteristics such as standards and specifications used,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

...and diversify as banks start taking moves beyond “regulatory requirement APIs”

Up until the end of 2020, the bulk of open banking APIs were created for payments and accounts (or APIs with both functionalities), with bank product information APIs following behind. This reflected regulatory requirements where in many regions, particularly Europe, UK, and Australia, banks were required to make these capabilities available via API. (An approach that is now being followed in Brazil.)

Our new methodology this quarter required calculating API products that reflected changes in banks from Asia Pacific, which consolidated their offerings away from granular technical functionalities into use case groupings (see previously slide). So trends in product growth categories is slightly hidden. In Q1 2021, we continued to see growth in payments products being made available (52% quarter-on-quarter growth), however, we also saw substantial uptick in quarterly growth of APIs outside regulatory requirements: identity APIs rose 63%, indicative of banks' focus on driving new customer acquisition. Trading (22% quarter-on-quarter growth) and data product APIs (15% quarter-on-quarter growth) also stood out.

Bank API products by category
Q4 2020 (N= 3496) - Q1 2021 (N=3497)



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 capacity is clearer in lesser regulated markets

Despite this new openness to creating product APIs outside regulatory requirements, the bulk of API product diversity is still occurring in markets where APIs are not regulated.

In Europe and the UK, mandated APIs account for four-fifths of the product availability, squeezing API product innovation into 20% of the offerings being made available by bank platforms.

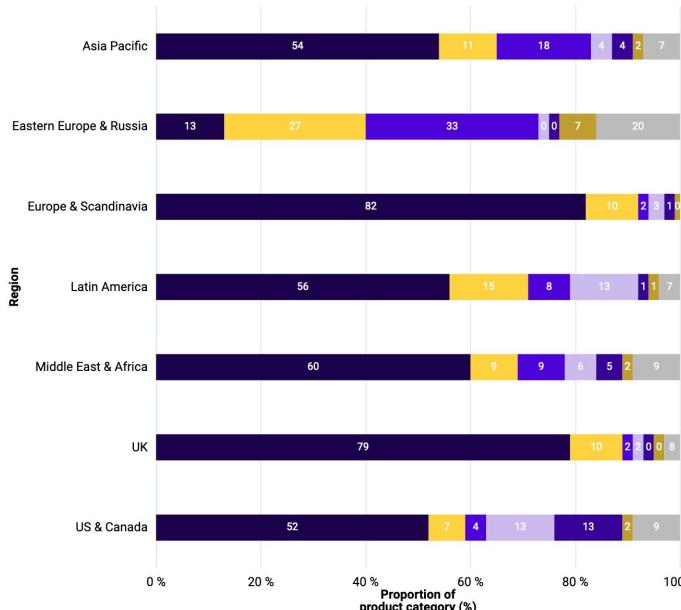
While a bulk of use cases may involve checking account balances or moving money, innovation also occurs when these functions are coupled with other capabilities like credit offerings, adding external data analysis, or enabling loyalty and rewards services.

In the US, reflecting the investment and commercial-led product offerings, products also reflect banking-as-a-service models where banks are encouraging large enterprises to offer banking and financial services to their own customers, underwritten by the bank.

Bank API products by category and region
Q1 2021 (N= 3,497)



Mandated APIs ■ Identity ■ Credit Services ■ Data Services ■ Trading ■ Loyalty/rewards ■ Other ■



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/monetization approaches. We review each bank at least once every three months.

API Specifications help improve developer experience and operational efficiency

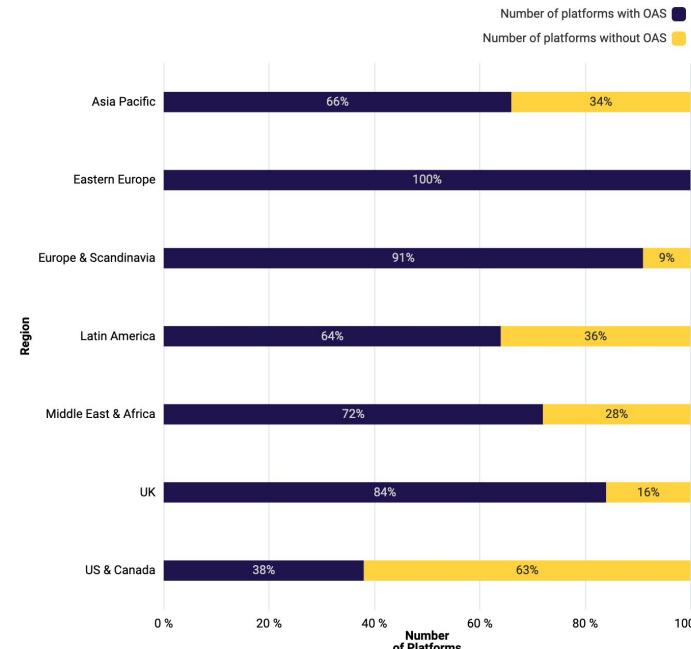
The OpenAPI Specification (OAS) is a way to describe an API in a standardised way that developers can understand. It is written in a machine-readable format so that it can be included in software development tools when fintech are building applications using a bank's open APIs.

Internally, a bank's API team can put the OAS into their API lifecycle tooling so that at testing and design stages, they can check whether the API being designed matches the original intention as described in the OAS.

When the API is made available externally, a fintech developer can then open the OpenAPI Specification file, and because it is laid out in a consistent, standardised manner, they can quickly understand the main functionalities (and any restrictions) of the API. They can also integrate the OpenAPI Specification file into their software tooling so that API endpoints (or resources) are more easily visible in their tooling, and their software development environment can alert them if they attempt to use the API in a way that is out of scope.

Encouragingly, 74% of global open banking platforms are describing their APIs using the OAS standard, although there is the opportunity to increase adoption in the US, Asia Pacific and areas of Latin America.

Global Open Banking Use of OpenAPI Specification
Q1 2021 (N=720)



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.

Banks and fintech can improve developer resources

We expected to see developer-friendly fintech platforms overtaking open banking platforms by several points, but on average we are only seeing 1-2 points difference (out of 15).

In the US, Europe, and Latin America, fintech developer experience was higher, but only the US saw a full two points on average difference. We measure scores out of 15 based on three groupings:

- onboarding support resources like a developer portal and sandbox environment;
- retention support resources like use case descriptions and getting started guides; and
- commercial support resources like clear pricing pages and marketplace opportunities to promote products built with the provider's APIs.

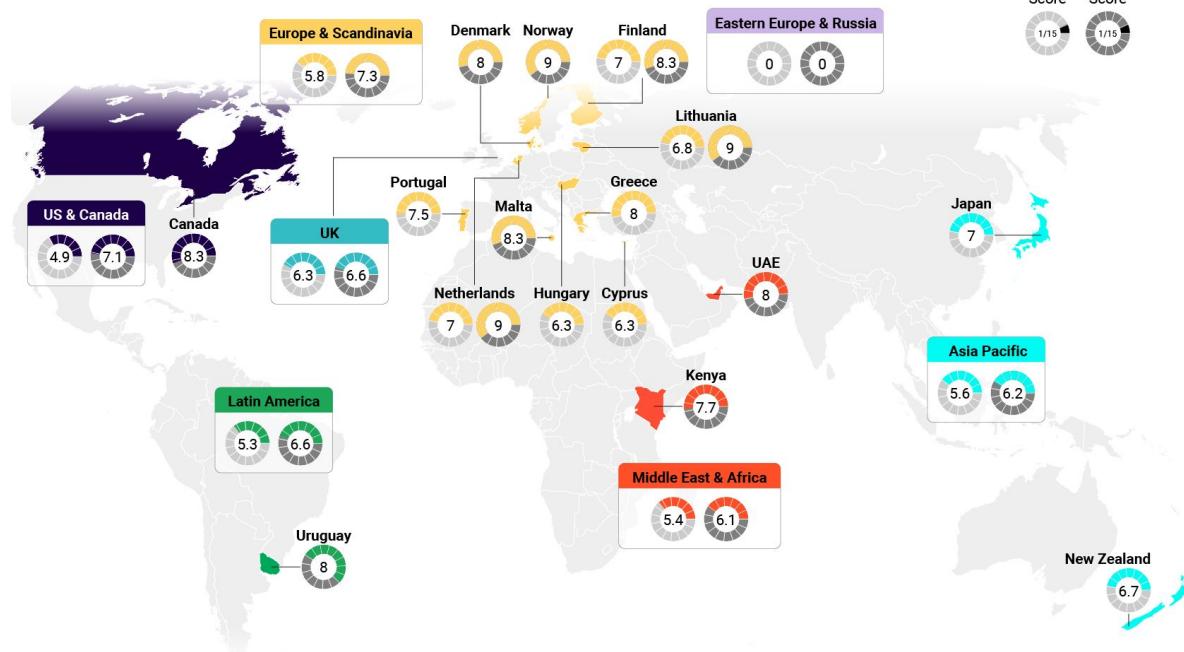
The top 10 countries with DX-friendly bank platforms included Finland, Netherlands, Lithuania, and the UK: all are known for having vibrant open banking participants. Anyone digging into the developer portals from banks in Greece, Cyprus and Hungary would immediately understand why they all feature in the top 10: they tend to have well-described use cases, onboarding guides and other developer resources. Countries with less than 3 banking platforms have been excluded from this analysis.

There is still plenty of room for open banking and open finance to differentiate on the ease with which developers could build products on their platforms.



Legend:
Region
Bank Score 1/15
Fintech Score 1/15

Average Fintech and Banks DX Score separated by region and by the top 10 countries in the world



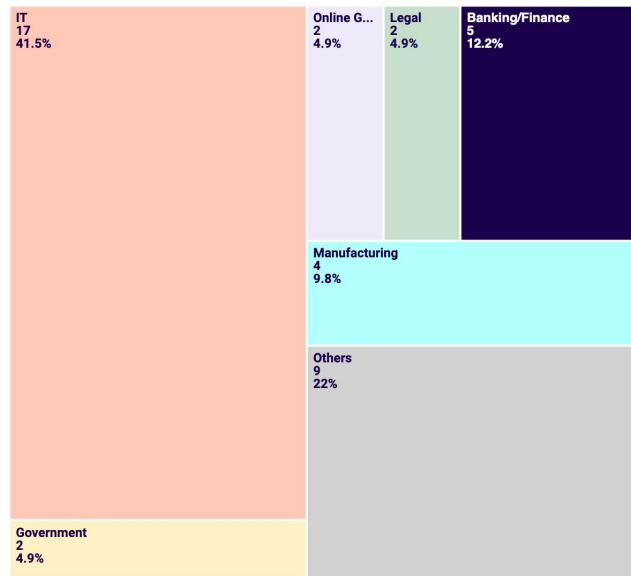
Methodology: Platformable measures developer experience by scoring it on 15 parameters. These include the presence of developer portal, OAS, Guides & Tutorials, Blogs, Changelog, Status page and other important parameters, each having a weight of 1 towards the final score.

Security incidents related to finance did not involve banking platforms in Q1 2021

Security breaches of customer data could reduce trust and willingness to participate in the open banking ecosystem. While some finance-related government authorities and some fintech were involved in security incidents in Q1 2021, there were no significant open banking platform-related breaches.

Date	Country	Entity involved	OWASP API Security Top 10 classification
12-Jan		RESERVE BANK OF NEW ZEALAND	Injection, Security misconfiguration
15-Jan		ASIC	Injection, Security misconfiguration
21-Jan		BuyUcoin	Improper assets management
3-Feb		AUTOMATIC FUNDS TRANSFER SERVICES	Security misconfiguration
19-Feb		cashalo	Improper assets management

Markets with API Security Incidents
Q1 2021 (N=41)



Methodology: Platformable tracks API-related security incidents uncovered globally on a quarterly basis, based on two key sources:
 1) Weekly API vulnerabilities blog posts from 42Crunch: [APISecurity.io](#)
 2) Data breach weekly security report from [gearbrain.com](#)

Banking incidents have not grown as a proportion of overall security risks

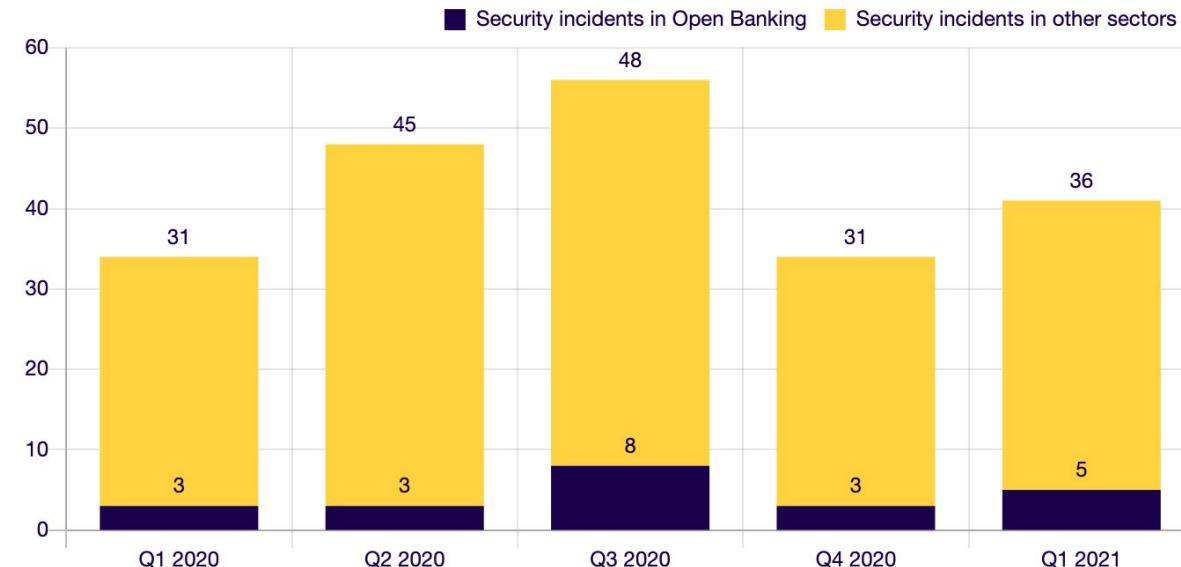
Despite this new openness to creating product APIs outside regulatory requirements, the bulk of API product diversity is still occurring in markets where APIs are not regulated.

In Europe and the UK, mandated APIs account for four-fifths of the product availability, squeezing API product innovation into 20% of the offerings being made available by bank platforms.

While a bulk of use cases may involve checking account balances or moving money, innovation also occurs when these functions are coupled with other capabilities like credit offerings, adding external data analysis, or enabling loyalty and rewards services.

In the US, reflecting the investment and commercial-led product offerings, products also reflect banking-as-a-service models where banks are encouraging large enterprises to offer banking and financial services to their own customers, underwritten by the bank.

Quarterly number of API security incidents Q1 2020 - Q1 2021



Methodology: Platformable tracks API-related security incidents uncovered globally on a quarterly basis, based on two key sources:

- 1) Weekly API vulnerabilities blog posts from 42Crunch: [APISecurity.io](https://www.apisecurity.io)
- 2) Data breach weekly security report from gearbrain.com

Authentication protocols and security technologies aren't clearly being baked into API design

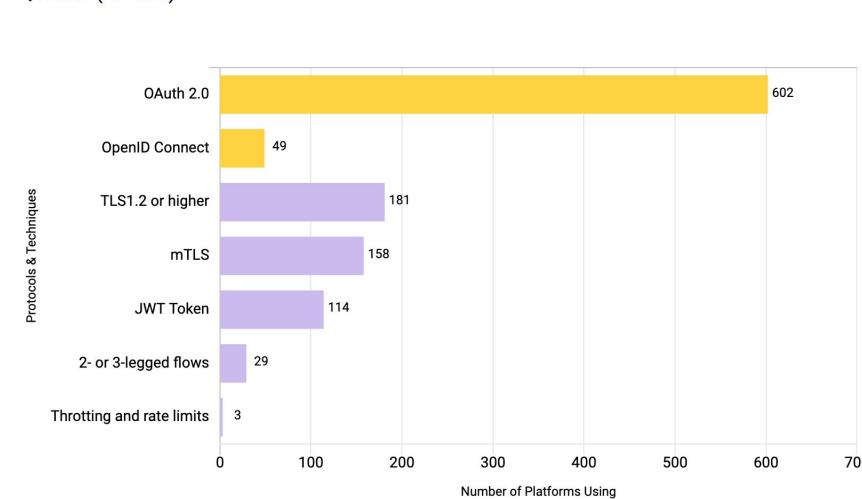
Banks can apply industry best practices during the creation and publication of open APIs to ensure that they do not expose any vulnerabilities, as described in the [Top 10 OWASP Open Web Application Security Risks](#).

Authentication is the process of ensuring that external API consumers are checked and credentialled each time they attempt to make an API call. Robust authentication and authorisation processes ensure the bank can be confident they are only sharing the agreed data with the appropriately identified API consumer. 84% of banks indicate that they use OAuth 2.0 standards for authentication processes. Most of the key standards (UK Open Banking, Berlin Group and STET) recommend using OAuth 2.0 for authentication.

Other security technologies such as two-factor authentication (mTLS, TLS1.2 or higher) can be enforced when assessing how fintech manages the customer consent flow. These security technologies can ensure that a customer knowingly gives their consent to the fintech to use a bank's APIs to connect their product to the bank's customer. While we did observe that some bank APIs describe enabling these types of security technologies, they are not widespread.

Other security measures such as rate limiting and throttling (which ensure that fintech are applying best practices when making API calls and not generating inefficient data retrievals) also help prevent brute force security attacks if an API is not protected against an excessive amount of calls or payload sizes. We saw few bank APIs specifically discussing rate limiting in API documentation.

Most Common Forms of Authorisation Protocols and Security Techniques
Q1 2021 (N = 720)



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

Bank	Country	Predominant Business Model
Sabadell	Spain	Partnerships model; Incubators/Acquisitions model
topazio	Brazil	Banking as a Service
KBC	Belgium	Open and Premium APIs
Swedbank	Sweden	Open and Premium APIs
Sterling	Nigeria	Partnerships model
OCB Ngân Hàng Phương Đông	Vietnam	Open and Premium APIs

Definition Table



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.



Banc Sabadell (Spain):

Encouraging partnerships and opening an incubator/investment track

Partnerships main focus areas

CORPORATE BANKING	CONVERSATIONAL BANKING	EFFICIENCY RATIO
Improve digital services ensuring a frictionless experience adapted to each segment	Create natural and personalized interactions with our clients through our remote channels	Increase commercial and operational optimization of the use of capital and resources
<ul style="list-style-type: none"> Financing processes Specialized offer by segment New ways of interaction New value-added services Digital onboarding: Know-Your-Business 	<ul style="list-style-type: none"> Chat and voice agents Cognitive functionalities Data enrichment Analytics and Reporting Identity and Security 	<ul style="list-style-type: none"> Digitization Automation Simplification Compliance & Regulatory Data-driven

Banc Sabadell's developer portal outlines key use case areas and target markets in which it seeks collaboration with fintech partners. In Sabadell's case, it is fascinating to see the use cases beyond generic retail apps. In each of these use case areas, Banc Sabadell is looking for fintech that will extend the value they can offer their existing customer base in areas that startups have shown already shown velocity: chat functionalities, for example.

Partners' site

Find the initial NDA needed to collaborate with Banco Sabadell and our Mock and Sandbox enablers to easily test our technology. In order to obtain access to this section, you have to share your proposal with the Partnerships team and be selected to discuss a potential collaboration.

More enablers coming soon to facilitate the collaboration process!

The screenshot shows a developer portal interface. On the left, under 'DOCUMENTATION', there is a 'Collaboration NDA' document. On the right, under 'TECH ENABLERS', there are three items: 'Anonymised dataset: accounts transactions' (with a 'Request file' button), 'Sandbox test front-end', and 'Sandbox test back-end'. The overall theme is professional and tech-oriented.

While it is greyed out on the partner/developer portal site, Banc Sabadell finds a middle ground between self-serve and individual outreach. They have indicated they have standard processes like NDAs in place and can offer anonymised, synthetic data to support fintech to build and test ideas. But fintech interested need to make an individual request to receive these documents, creating a pipeline for Banc Sabadell direct from their developer portal.

GO FURTHER Other types of collaborations

In addition to collaborating with start-ups and tech companies, Banco Sabadell partners with other third parties with the aim of improving our customer experience:

Big corporations

Banco Sabadell executes strategic agreements with large companies such as IBM that help drive the digitization process and facilitate the strategic evolution of the business.

Funds and Accelerators

Banco Sabadell has partnered with Antel VB, Base10, Ship2B and Cardumen Capital among other, both in terms of investment and support to start-ups backing the entrepreneurial ecosystem.

Investments

Banco Sabadell not only collaborates through Partnerships with companies. We also invest with three different lines of investment vehicles depending on the nature of the business and its stage level:

BStartup

Venture Capital
Spanish TIC & Digital sector
Pre-seed and seed start-ups
€1M (per year) in at least 10 start-ups

Sabadell Venture Capital

Venture Capital and Debt
Generalistic approach
Pre-series A to series B start-ups
Tickets from €0.2M up to €2M

InnoCells

Corporate Venture Capital
Strategic
Seed, Series A and B start-ups
Flexible tickets from €0.5M to €5M

All up, Banc Sabadell are offering three partnership streams:

- Use their open APIs (PSD2 regulated APIs) through the self-serve portal
- Work in partnership on identified use cases to deliver to existing Banc Sabadell customers
- And this stream: investment funds and accelerators. In Q1 2021, Banc Sabadell launched their InnoCells corporate venture capital investment vehicle, offering investments between €0.5M to €5M.



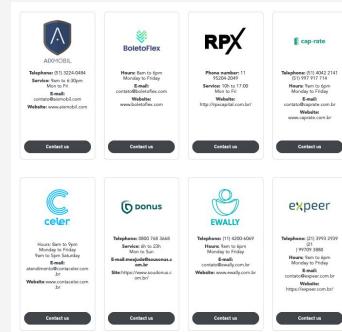


Banco Topazio (Brazil):

APIs to support business and enterprise clients be the bank for their own customers

<p>Solution development together with the partner, with facilitated integration between the development teams.</p>	<p>Freedom of creation at UX, with the client's journey defined by the partner.</p>	<p>Ease of integration through API's, with high processing capacity, security and confidentiality of processed information.</p>
Get to know our Bank as a Service solutions <ul style="list-style-type: none"> Exchange Solutions Services to meet the needs of Brokers, Remittances and Facilitators. Debt Issuance Solutions Solutions to meet the needs of Fintechs and Fund Managers. Light Banking Solution Solutions and services for E-wallets, Fintechs and Payment Institutions projects. 		

Brazil's Banco Topazio opened APIs before the open banking regulations demanded it, and have built up a niche selection of banking-as-a-service API products.



Banco Topazio promotes the fintech partners that have built products and services with their bank APIs, with customer contact details and links to sites.



- While the developer portal appears fairly minimal, [research has been shared](#) documenting the throughput and some business benefits that have been generated from the banking-as-a-service strategy. \$USD7.7 million has been generated by Banco Topazio through the business conducted on their API platforms, where 40 million API calls are made each month.



KBC (Belgium): A platform that caters to both end-consumers' and fintech partners' needs

The screenshot shows the KBC developer portal's 'Technical Integrations' section. It includes a search bar, a dropdown menu for 'Integration type' (with options like API Reference, OAuth, SSO, and Web), and a table with two rows. The first row shows 'KBC Bicycle Insurance QR' and 'KBC Employee Mobility APIs'. The second row shows 'KBC Home Loan API' and 'KBC Home Loan Widget'. On the left, there are filters for 'Service you would like to offer' (Insurance, Leasing, Lending, Payments) and 'Your industry' (Banking, Financial management, Insurance, Retail). A sidebar on the left says 'Take your business to the next level' and 'Explore our Business Solutions'.

The screenshot shows two sections from the KBC website. The top section is titled 'KBC Green Energy Loan' and features an image of wind turbines and solar panels. It describes the loan as a revolving credit facility available online and in-store. The bottom section is titled 'KBC Bicycle Insurance for in-store and online sales' and features an image of a bicycle. It describes the insurance as covering damage to bicycles and provides a link to learn more.

The screenshot shows the KBC developer portal's 'KBC partners already using our solutions' section. It lists three partners: CHAMIZO, De Meester, and iChoos. Below each partner is a 'Integrations available' section with icons for QR code, mobile, and desktop. The CHAMIZO section shows 'KBC Bicycle Insurance QR' and 'KBC Employee Mobility APIs'. The De Meester section shows 'KBC Investment Loan API'. The iChoos section shows 'KBC Investment Loan Widget'.

KBC developer portal clearly presents both "business solutions" and "technical integrations" options available to fintech partners. This reflects the bank's end-customer-focused business model as well as its understanding of the importance of enhanced developer experience. By providing different levels of integrations, the bank is also able to attract a wider network of fintech partners, which have different business models and financial positions.

KBC takes a low risk approach, when selecting commercial use case areas, in which it seeks to collaborate with fintech partners. Of note are:

- KBC Bicycle Insurance Loans APIs leverages the bank's insurance expertise to support businesses that target younger, more tech savvy, and healthy end-customers.
- KBC Green Energy Loans APIs build on market interest amongst home owners to reduce their carbon footprint and promote the circular economy. By making the APIs free to use, KBC can generate new loan customers while merchants tend to increase their sales by 20% if customers can access credit at the point of purchase.

One area of improvement is that KBC does not seem to completely embrace open ecosystem. While the bank lists its fintech partners on its developer portal, it is not possible to go directly to the partners' websites from it. This presents a missed opportunity to encourage the financial growth and viability of businesses that are building with the bank's APIs, and also reduces their own API adoption: if merchants see their competitors linked from the case study examples, they will be keen to integrate the APIs and get listed themselves.



Swedbank (Sweden, Norway, Lithuania, Latvia, Estonia): Monetised APIs for specific use cases

Swedbank Gateway
Make your accounting easier
Swedbank Gateway is a cloud-based accounting software with Swedbank services.
▪ Available account information and payment processing.
▪ Automated large volume data exchange 24/7 hour.
▪ Real-time notifications of transactions.
▪ The same solution in all 5 Baltic countries.
▪ Operator's, appointed by you, Channel.
▪ Other banks account services.

apply for consultation

Responsible for Technical integration/maintenance
Date flow
Data storage

Operator shared
Operator*
Customer – Operator ERP – Bank
Operator
Customer

Customer IT or ERP* provider
Customers ERP system – Bank
Customer

Digital Apply

* Operator – Cloud-based ERP or accounting service provider.
** ERP – Accounts receivable planning, accounting or business management software.

About How to apply Printed Security requirements Partners Other bank account services

ProductService Price, EUR
Alerting 60.00
Registering the service 60.00
Using
Monthly fee for companies 0.00 - 25.00
Monthly fee for Operators 10.00 + 0.05 per customer
Monthly fee for other bank account services in Swedbank Gateway 11.00 - 50.00
Current daily account statement request 0.00

Swedbank's Gateway API service focuses on ERP and cloud accounting software as a target market. It's great to see a bank build niche product APIs for specific target markets. This has made it easier for them to introduce a pricing model as the value proposition for the target market is clearer.

VendorLink API

VendorLink service will enable co-operation partners (vendors) to create and manage leasing financing offers for Swedbank Leasing through integrated applications.

- Leasing payment and schedule calculation
 - Application filled-in by customer at your web page
 - Instant data transfer to the bank via API
 - Sales offer upload
 - Application status flow
- Available in Baltics only

Get started with our RestFX Indicative Rates API!

RestFX Indicative Rates is a free API open for all registered developers of Swedbank Open Banking. You don't need to be a Swedbank customer to use it. It has more than 100 continuously updated exchange rates. To get started follow the steps here below. If you have any questions you can contact us at openbanking@getswedbank.com.

Step 1

Register in the [Swedbank Developer portal](#) if you have not done it already.

Step 2

Create an application for the Indicative Rates service and assign the Indicative Rates API to this Application. You can start with the Sandbox version of the API to get warmed up or go straight to the production version!

Documentation and API specifications are available online in both Swagger and PDF formats. See [Developer Documentation for Swedbank RestFX on Open Banking](#).

Step 3

To finalize the set up for the production API send an e-mail to: openbanking@getswedbank.com with a request to have the Client ID/API Key obtained in step 2 activated for the RestFX Indicative Rates service.

Once the request is processed you are good to go!

A VendorLink API service targets leasing companies offering leasing financing services. Leasing is a data-heavy service, and if a bank can clean up and simplify their data model, it is an ideal API product opportunity. We see future opportunities where vehicle leasing customers could be encouraged to shift to electric vehicles, or where the basic model could be applied for use in credit scoring and small loans in future.

Swedbank has chosen not to monetise their FX rates APIs. Instead, they are focusing on building relationships with API consumers by creating simple three-step onboarding processes. This is a low risk strategy that exposes the value of data that is being collected and not used. We hope Swedbank has established metrics and monitoring processes to make use of the consumption of this API to better understand the API consumer's perspective. Internal bank lines of business and enterprise customers should also be encouraged to make use of this API in their workflows and the API team could then track and understand what is involved in making an API best practice.



Sterling Bank (Nigeria): Appointing Chief Data Officer role in recognition of API opportunities

sterling api

Contents

BVN Request

Accepts encrypted json string and returns encrypted json response to be decrypted by the calling client.

Header Parameters	
Content-type	application/json

Request

Method	POST
URI	api/spay/BvNRequest

Nigeria's Sterling Bank has a modest range of APIs available through their sPay initiative. Developers do need to make contact and enter agreements with Sterling to make use of the APIs, rather than being available via a self-serve platform for experimentation, as is usual with an open banking platform.

Tools to connect Africans to opportunities globally

Use financial and identity data across Africa to detect fraud and automate compliance in your organisation.

Get Started > Contact Sales >

Accelerex
GLOBAL ACCELEREX

Servicing 400+ financial institutions in 7+ African countries

Our goal is to accelerate economic prosperity in Africa through homegrown financial technology

Known fintech using Sterling Bank's APIs include Appruve, a financial data and digital identity provider, Accelerex, an enterprise payments platform, and the Pan-African fintech platform AppZone, which offers digital core banking services to 18 commercial banks and 450 microfinance banks across the African continent, with a yearly transaction value of \$2bn.

sPay

sPay - Open (API) Banking

Sterling Bank was one of the first banks in Africa (and perhaps globally) to appoint a Chief Data Officer, with Olaiyinka Oni in the role. "Another trend we are seeing is embedded banking - that's an area where we're more advanced than competitors. There's no open banking standard in Nigeria yet, but we are taking API and open banking seriously," Oni told [FinTech magazine in March this year](#).



OCB (Vietnam): Premium APIs for SME and corporate clients

Better Your Business. Enhance Experiences

WHY IS OCB API'S
Easily and securely accept online payments

Fast Payment Processing
OCB API's support fast payment processing, allowing you to receive payment quickly and efficiently. This is particularly useful for businesses that require quick payment processing.

The Smart Choice for your Business
OCB API's provide a range of business products and services, including account management, payment processing, and more. These products are designed to help you manage your business more effectively and efficiently.

Plans

To start, you must create an account or sign in.

Default Plan Momo Plan Mecorp Plan Transactions View Plan Full Option Basic Economic Plan Premier Plan Ultimate Plan

**GIỚI THIỆU CUỘC THI
OCB OPEN API CHALLENGE 2020**

OCB là một trong những ngân hàng tiên phong với mô hình kinh doanh Fintech trong lĩnh vực Open API. Hiện nay, OCB đã đang triển khai và áp dụng công nghệ Fintech rộng rãi và có thể xác định rõ, xác định được xu hướng và tiềm năng phát triển.

Trong năm qua, OCB đã tổ chức nhiều cuộc thi nhằm thu hút các nhà phát triển tài năng, nhằm mục đích tìm kiếm các giải pháp ứng dụng công nghệ Fintech vào thực tiễn.

Đối tượng tham gia: Các startup, cá nhân, nhóm nghiên cứu, các trường đại học, các tổ chức khoa học, các doanh nghiệp...

Thời gian đăng ký: Từ 27/09/2020 đến 28/11/2020

PHÁT HÀNH SẢN PHẨM TÀI CHÍNH trên nền tảng Open API của OCB | 07.09.2020 - 28.11.2020 | ocbapi.com | **NHẬP BÁI ĐỰ THI**

OCB offers open APIs for accounts, payments and transfers, loan processing, client onboarding and utilities, targeting end SME and large corporate end customers. Developer portal is engaging. Documentation is provided in both English and Vietnamese, targeting both local and international developers.

Target segment landing pages focus on three audiences and describe how the product APIs could be used to work with each sector.

The bank has a clear tiered pricing strategy, with a default plan offering 1,000 calls per minutes for most APIs (except for bank product information ones). OCB states that SMEs and corporates paying for use of the bank's APIs can improve their businesses through:

- Better customer retention and new customer acquisition by giving them better payment solutions at the point of purchase.
- Improved operational efficiency from automated and streamlined business activities in customer engagements, corporate bill payments, loan portfolio and cash flow management.

OCB organises a yearly Open API Challenge to identify and recruit potential fintech partners.

However, the bank does not publish the list of the fintech partners that have built products and services with their bank APIs. We believe that if they promoted these fintech partners, with contact details and links to sites, it would help these new market entrants build their marketing collateral while also helping OCB attract a larger community to the developer portal.

The Open Finance Landscape

Fintech platforms

Fintech building with open banking APIs

How we see open banking generating value for everyone

To date, Platformable's ecosystem model has tracked fintech built with open banking APIs. As regulations and use cases extend to open finance, we have widened our model to include:

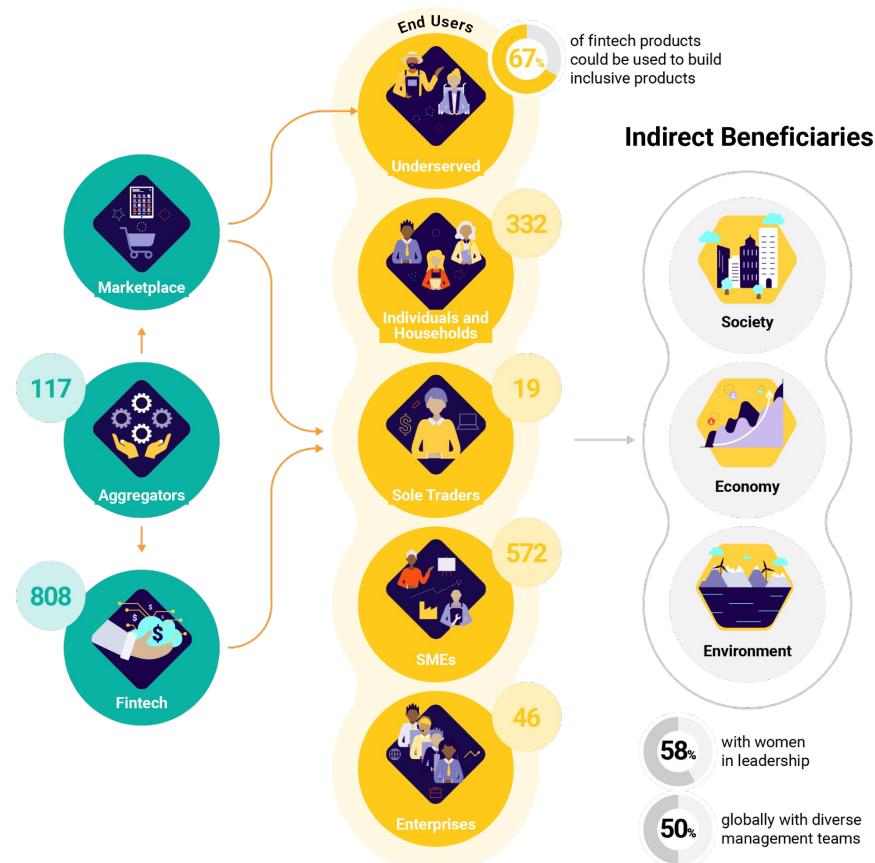
- open banking platforms,
- fintech built with open banking APIs and
- fintech that offer API platforms in their own right.

The next category we measure will be fintech and other services that build products and services with either open banking or open fintech platforms. Together, all of these stakeholders are part of the open banking/open finance ecosystem.

There are few models that comprehensively measure this entire ecosystem. We have the model, and continue to build out the datasets. We are excited to offer our Quarterly Trends subscription services, as that helps us expand our data collection and build out our data roadmap.

Demand-side characteristics include:

- **Fintech:** We currently track 925 fintech that make use of open banking APIs or that are fintech platforms in their own right.
- **Aggregators:** Of these 925, 117 are API aggregators specialising in harmonising fintech and bank APIs in order to speed up product development. We will be analysing the consumers of these aggregator platforms in our Q2 report.
- **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 (36%) of fintech built on banking and finance APIs focus on the SME market.
- **Indirect Beneficiaries:** From a societal perspective, it appears that fintech is making some impact on diversity measures, with 58% of fintech appearing to have women in leadership positions and 50% having diverse management teams. We are tracking fintech with sustainability use cases, and will release data in our May use cases report.



More mature markets are seeing 8+ fintech per million inhabitants

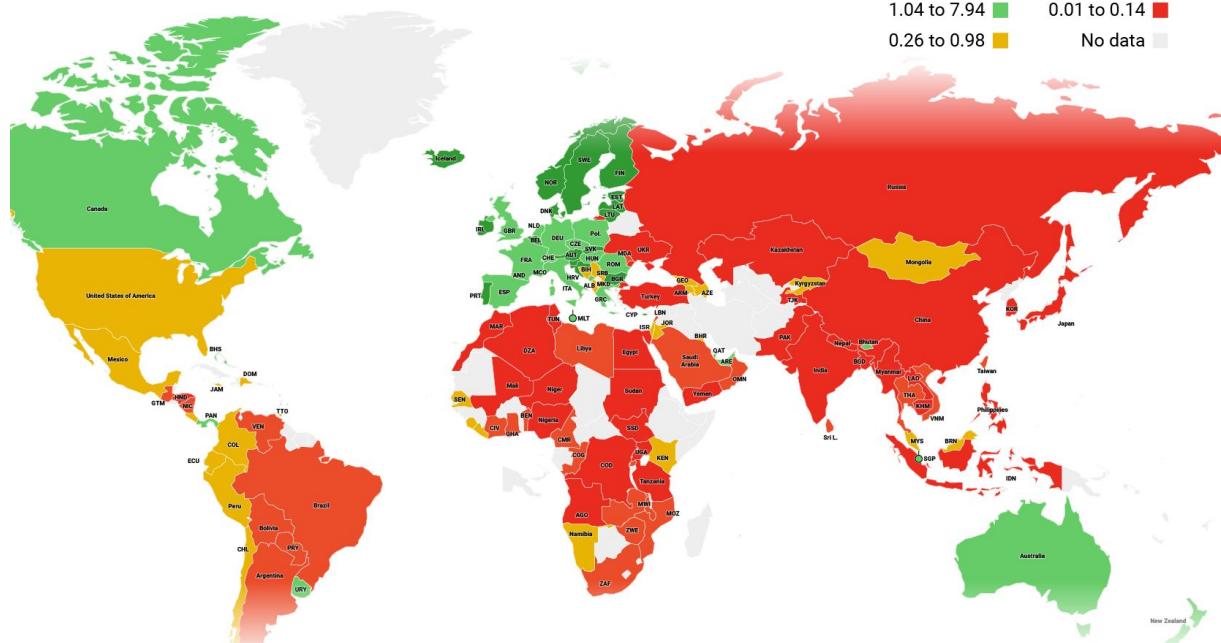
The Top 10 countries with highest number of fintechs operating within the country (per million inhabitants) are Luxembourg, Estonia, Cyprus, Latvia, Slovenia, Lithuania, Singapore, Ireland, Denmark & Croatia. However, even amongst the top 10 there is wide variance: Luxembourg counts 125 fintech per million, while Croatia tallies 17 per million. Singapore is the only non-European in the top 10, with 21 fintech per million inhabitants.

Keep an eye on the Baltic region: we think it is headed to be a future major SaaS hub for the embedded finance industry. Among these, Lithuania is definitely one to watch as a number of UK-originating fintechs have been relocating to access the European market post-Brexit.

It is challenging to compare those in the bottom 10 per million, as it includes countries with large populations like China, Pakistan, India, and Bangladesh, which by their sheer size skew indicators based on "per million inhabitants", although ideally residents would have just as much access to fintech as in less populated countries.

Countries with a population size less than 500,000 have been excluded from this analysis.

Accredited FINTECH Global
Number of fintechs operating in country per 1M head of population



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. Due to the large size of populations in countries such as China, India and Indonesia, fintech per million head of population is more challenging as a comparative indicator.

The availability of fintech built on APIs varies widely

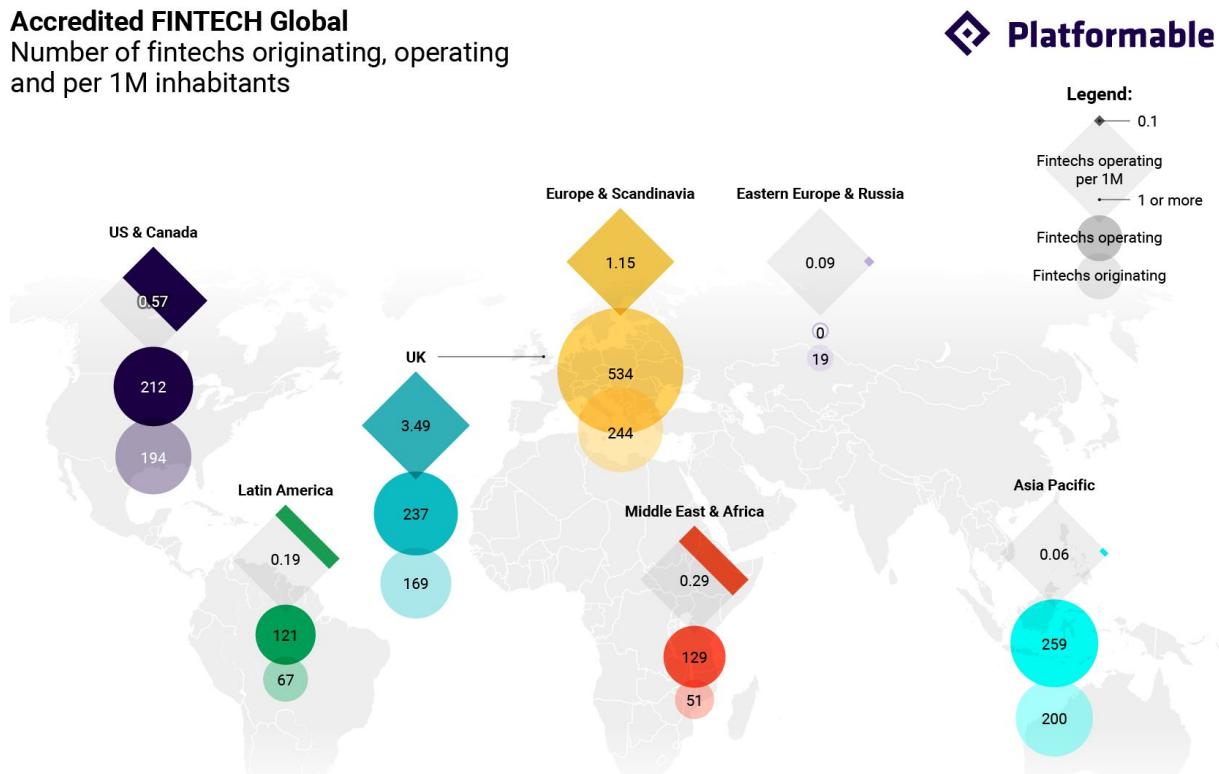
To enable comparisons across different regions, we calculate fintech in the open banking ecosystem per million inhabitants (excluding countries with populations smaller than 500,000 inhabitants).

The UK, which we also track as its own region since leaving Brexit, is the world leader with 3.49 fintech per million inhabitants. While UK has been something of a global financial services hub with a ready environment of fintech business leaders, we believe that the adherence to open API banking standards has made it much easier for fintech to build products and services for this market.

Over half (54%) of the fintech operating in Europe are from external countries, predominantly UK, with a small number from the United States. The US & Canada and the Asia Pacific also appear to be largely home-grown, or at least regional, markets.

Accredited FINTECH Global

Number of fintechs originating, operating and per 1M inhabitants



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. Fintechs per million is based on an average number of fintechs operating per million in each region deriving from our data on number of fintechs per million operating in each country. In the calculation of this, we only include the countries that have a fintech operating which gives an average number per million for each region. Due to the large size of populations in countries such as China, India and Indonesia, fintech per million head of population is more challenging as a comparative indicator.

Fintech products focus on payments, account information or API aggregation services at present

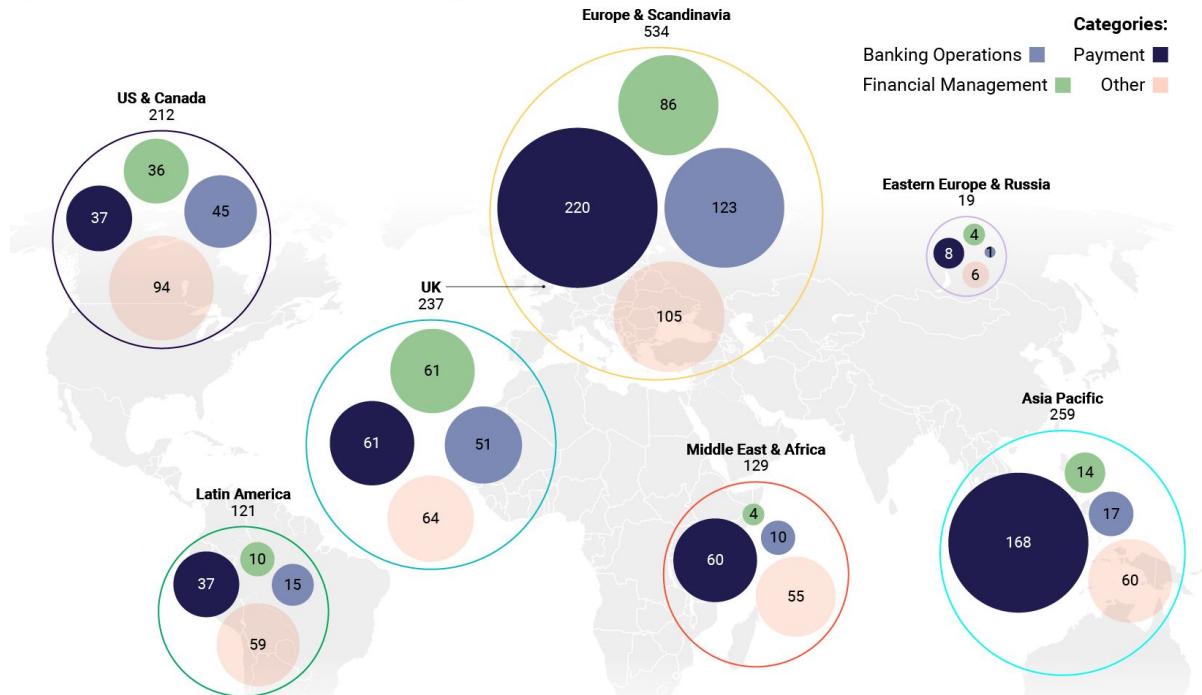
Payments and account information APIs are mandated in many regions. These functionalities are also essential to a wide range of use cases. This is why we can see in most regions, the two largest types of fintech products being built relate to payments (drawing on payments APIs, of course) or financial management (drawing on account transaction APIs).

Matching the diversity of bank APIs being made available in non-regulated markets (see slide 20), fintech built with open banking APIs moves beyond payments and financial management use cases in the US and Latin America.

As open banking accelerates, API aggregators are also entering markets to ease the complexity for fintech needing to integrate to multiple banks. We group these under the broader category of banking operations, which accounts for the third largest grouping.

This shows a different way to measure maturity: we would assume that markets where there is a wide diversity of fintech products built with bank APIs are more mature. Using this criteria, US & Canada, Middle East & Africa and Latin America are more mature, all of which to date have been largely unregulated markets.

Fintechs Operating in each region by total amount and in selected categories



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. Due to the large size of populations in countries such as China, India and Indonesia, fintech per million head of population is more challenging as a comparative indicator.

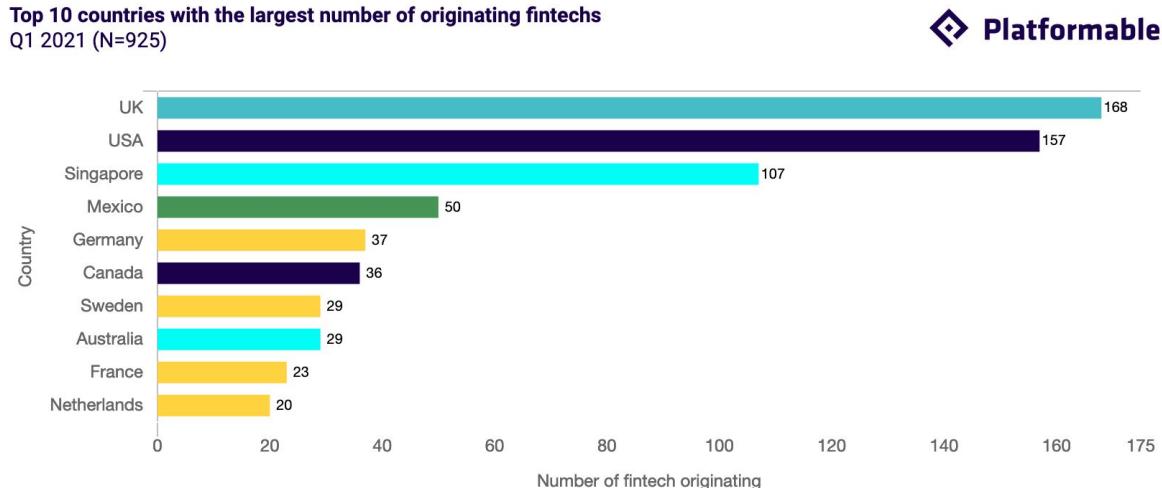
Open banking regulations are not an indicator of the potential for fintech creation

To date, Platformable's quarterly trends reports have focused on a subset of fintech, that is, the fintech that is built using open banking APIs. Given the shift towards open banking and open finance, we have now started tracking fintech that are platforms in their own right, that offer APIs for others to build off.

We believe that having a standardised API design 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, such as UK's wider financial services maturity and larger population of financial services professionals able to create their own fintech startup have also played a part). The United States' tech startup culture has helped it position well, although around half of the open banking-related fintech originating in US that we track are built on Financial Data Exchange (FDX) standard APIs, showing that building to open standards acts as an ecosystem accelerator. A few US startups may have familiar names but the majority we track are fairly new market entrants, leveraging AI-related technologies where access to bank account information is essential to have enough data to help make decisions.

Mexico's high rate of originating fintech is a reflection of their [accreditation register](#): we track all fintech that are registered to be part of the open banking ecosystem. Similarly, Singapore and Australia have accreditation databases we can analyse.

Top 10 countries with the largest number of originating fintechs
Q1 2021 (N=925)



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.

Fintech see the value of open ecosystems and move to become API platforms themselves

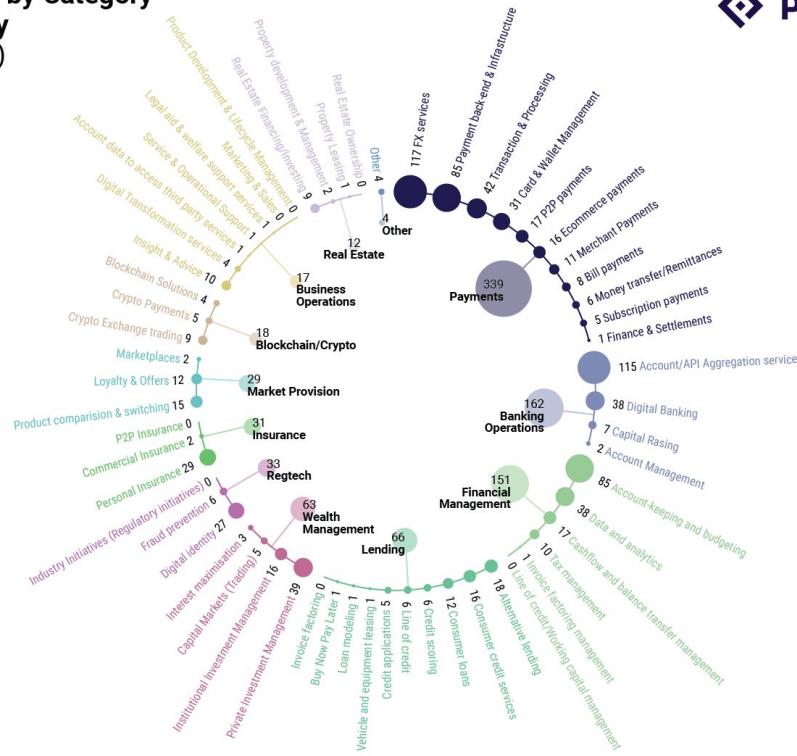
With no global fintech taxonomy available, at Platformable we have created our own, and aligned it with other models so that we can easily compare categorisation.

To date, we have focused on fintech that are built using open banking APIs, and we are now extending that model to include fintech platforms that offer their own APIs. There is a growing overlap: 22% of the fintech we track now offer APIs, and we are increasingly seeing this amongst fintech that started as bank API consumers.

Airwallex in Australia, Reflow in Europe, Pine Labs and OneMoney in Asia Pacific, and Creditas and Ebanx in Latin America are all opening up APIs to become open finance providers in their own right. They see the value of becoming platforms and building their ecosystems.

One of the big names in open finance has become [Klarna](#), which now has a bank licence. Klarna operates globally, both consumes bank APIs and is an API provider itself, and has moved 'beyond buy now pay later' services to become a payments provider and credit card supplier. This fintech phenomenon has shown how by leveraging open banking it is possible to position strongly in the embedded finance market: offering financial services at the point-of-sale and wherever digital transactions of one type or another are taking place.

Fintech Products by Category and Sub-category Q1 2021 (N=925)



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.

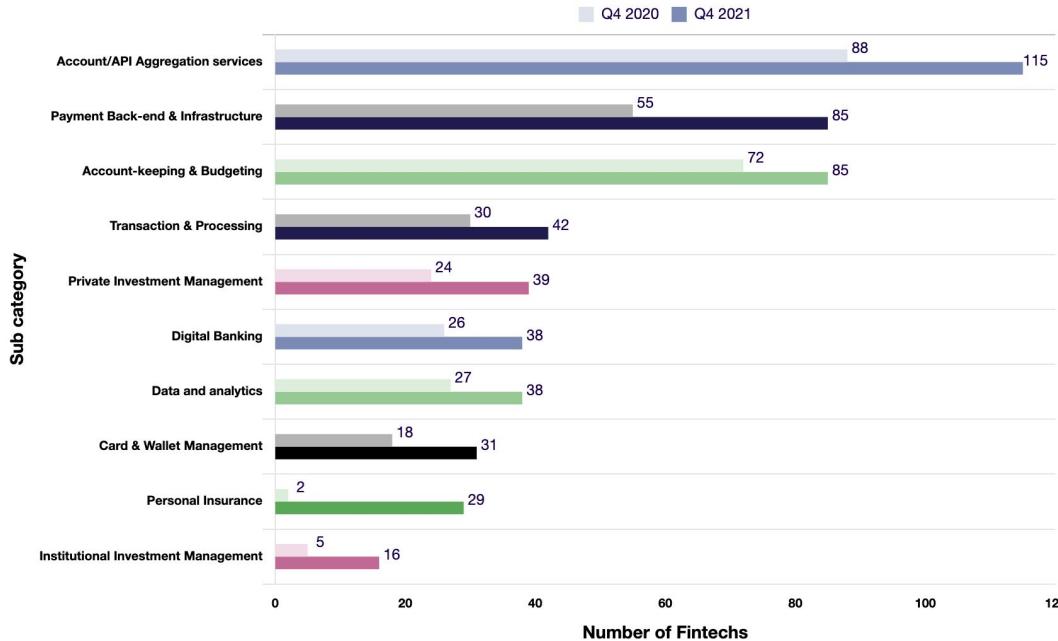
API aggregation services are the big winner in open banking use cases at present

The big winner in open banking to date are the API aggregation services: they reduce integration friction and complexity and will make open banking product innovation possible. Payment and backend infrastructure is seeing growth from similar drivers: aimed at reducing complexity and offering integration-based middleware that allows fintech to draw on a greater range of bank APIs.

API aggregation services grew from 88 in Q4 2020 to 115 in Q1 2021 (31% quarter-on-quarter growth).

While the absolute numbers for personal insurance and institutional investment management may seem small, they represent the largest quarter-on-quarter growth. Personal insurance is growing at a quarterly growth rate of 1350%. Card and wallet management at 72% quarter on quarter, and private investment management at 62.5%.

Top 10 Fintech sub-categories by growth Q1 2021



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.

Fintech business models bet on transaction volume being large enough to take a cut

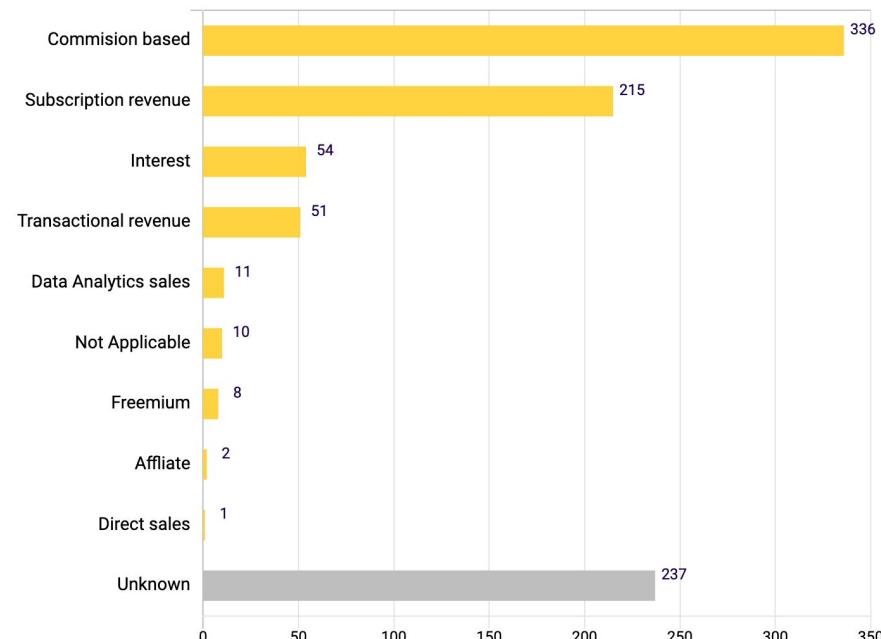
25% of all fintech do not describe their business model on their websites. Many of these fintech are venture-capital invested and may have some runway on which to focus on user experience and build a customer base first before needing to convert those customers to a revenue-generating business model.

Earning a percentage on top of transaction volume being processed is the most common business model used, reflecting a proven pricing model taken from payments processing where the sector has largely commoditised on a small flat-fee, such as 25 cents, and then a percentage of the transaction volume (usually between 1-3%) being processed.

Just over half (54%) of all the fintech products using a subscription revenue model are targeting the small to medium enterprise market.

Revenue Model

Q1 2021 (N = 925)



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.

API tool providers could do more to support banks and finance to adopt best practices and use mature API tooling

26%

API Industry with known
Bank/Finance Customers

17%

API Industry targeting content towards
Bank/Finance Customers in Q1

Drawing on Mehdi Medjaoui's [API industry landscape map](#), we track 475 API industry providers. 26% mention banking and finance customers, but only 17% released content in Q1 2021 specifically discussing how the open banking and open finance market can develop their API technical and business skills.

The only podcast dedicated to all things open banking.

As the only podcast dedicated to open banking, our podcast strives to be one of the key voices in the global open banking community. The goal of the show is to educate people on how the world of finance is being shaken up by open banking, and on giving them more power to create more money around the world to improve their financial well-being. To those building open banking, we bring the unique perspectives of technology innovators, financial leaders and key influencers, as we aim to accelerate its continued evolution.

LISTEN ON Spotify | Apple Podcasts | LinkedIn

Open banking thought leader, global industry expert, and Head of Open Banking at [Axway](#), Eyal Sivan, hosts the [Mr Open Banking podcast](#). In Q1 2021, guests included:

- Nat Sakimura, OpenID Foundation
- Carlos Kazuo Missao, GFT Group
- Faith Reynolds, Open Finance Adviser to Industry & Regulators.

Summaries of podcast interviews are also published to the [Axway API Friends site](#).

Fintech API Metrics Weekly Report: Royal Bank of Scotland Wins!

Something of interest

The Open Banking – UK – Production Fintech API metrics category is a big category. But let's look at the Top Ten, but by outliers, not by CASC score.

Rank	Provider	CASC Trend	Pass Rate	Outliers	Median Latency	More Information
1	Tide	5.00	21	100.00%	0.00%	197 ms
2	Denise Bank	5.00	21	99.00%	0.00%	288 ms
3	Tide (Multi)	5.00	21	100.00%	0.00%	195 ms
17	GSE Directory (Production Avail)	0.00	21	99.70%	1.00%	351 ms
15	Yorkshire Bank	0.00	21	99.20%	1.00%	372 ms
18	R (bank)	0.01	21	99.00%	1.00%	292 ms
19	Virgin Money	0.01	21	99.50%	1.75%	392 ms
7	TSB	0.05	21	100.00%	1.75%	359 ms
21	GSE Directory (Production)	0.00	21	99.70%	1.00%	402 ms
22	Clydesdale Bank	0.00	21	99.24%	1.00%	370 ms

[APImetrics](#) regularly releases scorecards of CASC (Cloud API Service Consistency). They have specifically developed a league table for open banking to help potential API consumers (fintech builders) to identify which bank APIs are the most reliable.



Reality check: The fintech issues of today

We kicked off the day's event by outlining five of the most pressing industry challenges fintechs faces. These include:

- Securing Data
- Securing Access to APIs
- Compliance and Regulatory Obstacles
- Thoughts on Scaling
- Adoption and Integration

Open source API service and management platform, [Tyk](#), held a fintech roundtable in mid-Q1 2021 to address and overcome common challenges faced by the industry. They recommend that when internal teams are scaling their APIs they "should consider multi-team support, role-based ethics, and role-based access controls as a starting point."

Consumer Benefits of Open Banking

The bulk of open finance products are targeting small and medium-sized enterprises

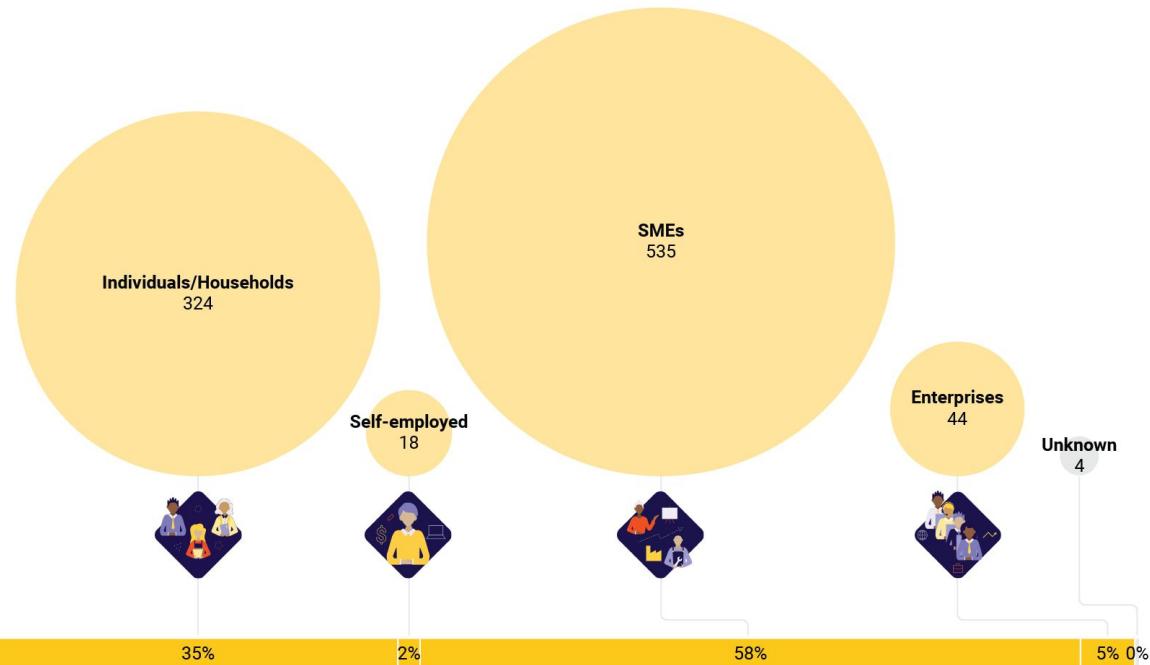
Fintech often focus on small and medium enterprises as a reliable segment with less regulatory compliance requirements than individuals and households, and potentially a more discretionary expenditure base. Account-keeping/budgeting, API aggregation, Digital identity, and E-commerce payments are the leading sub-service categories where fintech products are being built targeting SMEs.

Card and Wallet Management, Digital Banking, Personal Insurance, Private Investment Management, and Consumer Credit services are the fintech sub-service categories most often targeting individuals and household customers.

Up until Q4 2020, we were fairly disappointed with the range of fintech products being built on open banking APIs. Outside of a handful of interesting use cases, we were often seeing generic, whole-of-target market products being created.

In Q1 2021, that has begun to change and we are excited to see more fintech realise that the real benefit of building on open banking and open finance APIs is in creating more niche, customer segment targeted products and services. Some of this is because the bank product APIs being made available is diversifying, but more often it is because we see fintech finally embracing design thinking to innovate for one customer segment at a time.

Target Market
(N =925)



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.

Fintech products aimed at Individuals/households

New products aimed at Individuals/Household end users - N= 143

Payments

P2P Payments


Mobile pay

Bank/Fintech APIs used: Danske Bank
Platform APIs available: 5
Platform that enables mobile payments between individuals as well as small businesses in Denmark and Finland

Transactional revenue

Card & Wallet Management


i.saku

Bank/Fintech APIs used: Bank Rakyat Indonesia

Mobile wallet that enables bill payments, online payments, p2p payments as well as issuing new cards

Subscription Revenue

FX


Transferzero

Platform APIs available: 1

Platform that enables payments & transfers between Africa and Europe while also providing online lending and banking services

Commission based

Merchant Payments


d-local

Platform APIs available: 2

Allows online payments to merchants including online retailers, SaaS companies, online marketplaces across Latin America, Asia Pacific, Middle East and Africa

Commission based

Lending

Consumer credit Services


Krungsri Consumer

Bank/Fintech APIs used: Mitsubishi UFJ Financial Group
Platform APIs available: 3
Subsidiary of Krungsri Consumer, that offers diverse lending services for individuals as well as small businesses including consumer loans, credit cards and factoring

Interest

Alternative lending


Kiva

Bank/Fintech APIs used: Paypal

Platform APIs available: 1

Online alternative lending platform for primarily students, freelancers and self-employed.

Interest

Financial Management (Business or Personal)

Account keeping and budgeting


Young Money

Bank/Fintech APIs used: Spar Nordbank

Application aimed at young individuals that allows tracking of expenses and helps in budgeting while also giving insights to save and grow their money

Subscription Revenue

Banking Operations

Digital Banking


Wise

Bank/Fintech APIs used: BBVA USA

Allows opening of online accounts acting as a digital bank which further offers banking services like card issuance and money transfers

Subscription Revenue

Blockchain/Crypto

Crypto Exchange trading


BitBay

Platform APIs available: 2

Europe based cryptocurrency exchange for retail traders and investors offering over 30 digital currencies

Commission based

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.

Fintech products aimed at SMEs

CONSUMERS - Q1 New Products aimed at SMEs - N= 126

Financial Management (Business or Personal)

Cashflow and balance transfer management

Debito

Bank/Fintech APIs used: Spar Nord Bank



Platform for automated merchant payments, customer management, inventory management and other cashflow management services for small businesses

Subscription Revenue

Cashflow and balance transfer management

iugu

Bank/Fintech APIs used: Conta Azul



Platform to automate sending/receiving merchant payments and cashflow management for small businesses

Subscription Revenue

Regtech

Digital Identity

Approve

Bank/Fintech APIs used: Sterling Bank

Platform APIs available: 1

Platform for customer data verification and automate fraud detection and compliance across Africa

Unknown

Subscription Revenue

Digital Identity

Brick

Bank/Fintech APIs used: BCA, Mandiri, BNI, BRI

Platform APIs available: 5

Automates financial data verification for fintech developers for them to further offer financial products and services

Unknown

Subscription Revenue

Banking Operations

Account/API Aggregation services

Nordic API Gateway

Bank/Fintech APIs used: Danske Bank



Open banking platform to aggregate financial services partnering with banks in Nordic countries.

Unknown

Account/API Aggregation services

Prometeo

Bank/Fintech APIs used: Banco Bradesco, Itau Unibanco Holding, Banco del Pacifico, Citi Mexico, Santander Mexico, BBVA Mexico



Open banking platform to aggregate financial services covering banks in Argentina, Brazil, Chile, Colombia, Ecuador and other Latin American countries

Unknown

Account/API Aggregation services

Sila

Bank/Fintech APIs used: Plaid Financial

Platform APIs available: 3

Banking application to aggregate and link bank accounts to store and transfer money

Unknown

Subscription Revenue

Account/API Aggregation services

Elo

Platform APIs available: 5

Card issuing firm accepted in 185 countries which supports prepaid/credit transactions

Unknown

Account/API Aggregation services

Hubuc

Platform APIs available: 1



Banking as a service platform to aggregate financial services including issuance of debit or credit cards

Unknown

Payments

Ecommerce Payments

Pagar me

Bank/Fintech APIs used: Visa, Mastercard, American Express, elo, Diners Club, Discover, Hipercard, Aura, JCB

Platform APIs available: 4

Enables payments processing for online merchants, primarily e-commerce websites

Commission based

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.

Is Open Banking and Open Finance improving financial inclusion?

Higher income countries are leaving underserved consumers behind in open banking ecosystems

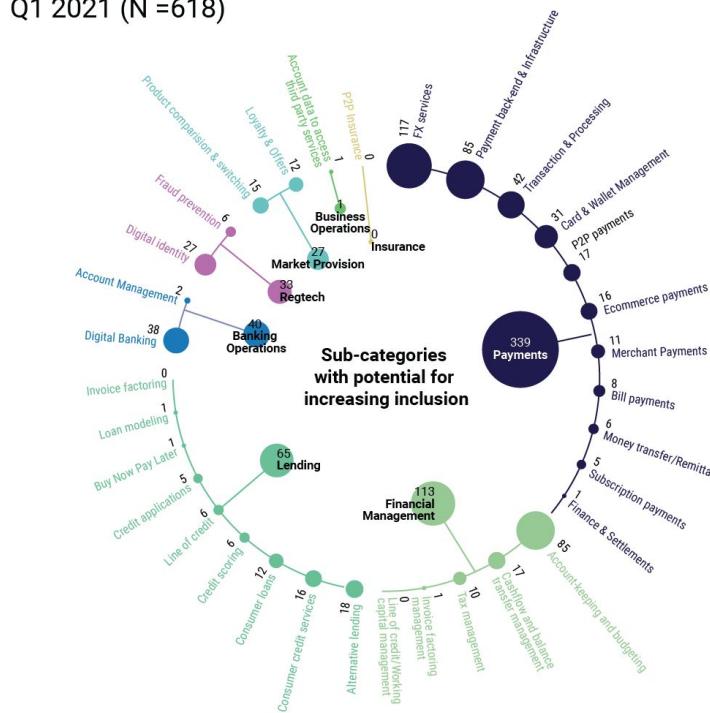
There are limited models to measure whether open banking and open finance are improving financial inclusion. 45 of the 62 global open banking regulations we currently track stipulate goals regarding financial inclusion or financial health of consumers, yet there are limited models from regulators to track whether open banking is achieving these objectives.

Our model is perhaps overly generous: we have identified that 33 of the 59 fintech product categories in our taxonomy could be used to support financial inclusion. That calculates to 67% of all fintech built with open banking and open finance APIs have the potential to reduce financial exclusion. Globally, higher income countries are seeing less products built for underserved consumers, with UK particularly worrisome given they are the world leader in fintech per million, but only 2 in 5 fintech products could serve underserved consumers.

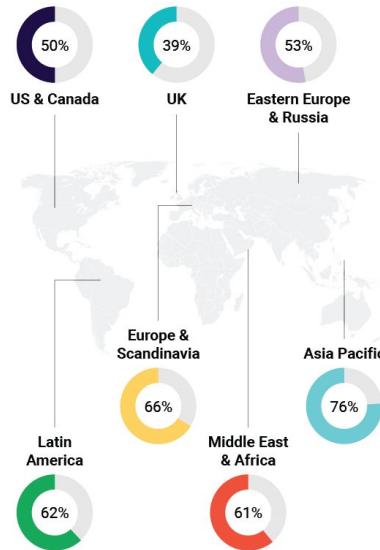
Measuring financial inclusion is only one side of the coin, so to speak. In future we would also like to track fintech that are exploiting consumers or using data and AI to further exclude or manipulate behavioral biases. We are appreciative of the work of the [Finance Innovation Lab](#) model in the UK and would love to see similar initiatives globally.

Proportion of fintech products with potential to increase financial inclusion

Q1 2021 (N =618)



Proportion of fintechs with potential for increasing financial inclusion by region



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.

There is significant value extraction from fintech operating in low and middle income countries

Every fintech being created in a low and middle income country is immediately competing against 3 fintech providers that come from higher income countries.

Inspired by Astha Kapoor & Richard Whitt's paper on [Nudging Towards Data Equity](#) and IT For Change's [Unskewing the Data Value Chain policy research project](#), we have begun calculating this value extraction that occurs in low and middle income countries when fintech operating in-country is dominated by those from high income countries. Our methodology can be improved: at present, we compare fintech originating in each country against the total fintech operating in each country and then aggregate for all countries defined as low and middle income, so we are double counting fintech that operate in more than one country. We will be improving this methodology for Q2.

Middle East & Africa and Asia Pacific regions have the least number of fintech per million inhabitants, while Latin America is comparatively higher.

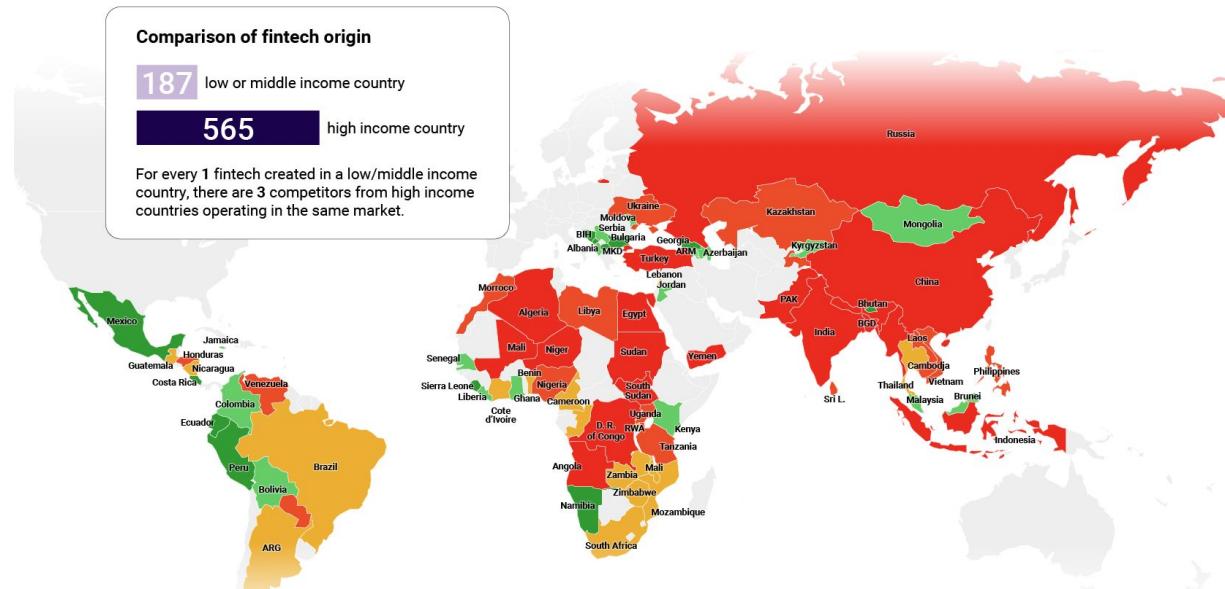
Platformable also helped build the [cgap.apidashboard.io](#) which tracks the availability of financial service APIs in low and middle income countries that could be used to help build fintech products aimed at improving financial inclusion.

Fintechs in Low/Middle Income Countries number operating per 1M head of population Q1 2021 (N =187)



Number of fintechs per million inhabitants

0.42 to 13.89	0.25 to 0.40	0.15 to 0.24
0.09 to 0.15	0.01 to 0.09	No data/not low income



Methodology: Platformable tracks all fintech operating in low and middle income countries (as categorised by World Bank) and calculates whether they originated in-country or are operating from higher income countries. Because fintech operate in more than one country in a region, these figures show total number of fintech operating in all countries in a region, and therefore may be counted twice where a fintech operates in more than one country in the region.

Is Open Banking and Open Finance creating societal benefits?

Models to measure the broader benefits of open banking and open finance are in their infancy



Society



There are some indications that fintech built on open banking and open finance could be redrawing social participation boundaries, at least within the fintech companies, with growing diversity observed amongst management teams.

In a model similar to the UK's Starling Bank, it appears that Canadian CIBC is using external APIs to create a platform of business services with products from Intuit and Xero, aimed at supporting small businesses better manage their cashflows direct from their bank accounts.



Economy



API aggregation platform Plaid [aims to increase its European workforce](#) from 40 to 100 by end of 2021, adding new jobs to the European economy.



Indian fintech API payments platform Razorpay has over 20 positions currently available, creating local employment opportunities which in turn contributes to the local economy.



Environment



Energy-switching service Switchd has an API which is used by Nationwide Building Society in the UK to help customers reduce their carbon footprint.



Enfuce's My Carbon Action API-driven product enables banks to integrate the product in open banking platforms. It draws on customer account data to measure carbon density of purchasing behaviour.



API payments platform Stripe has released Climate, which allows merchants to direct a proportion of revenue to carbon removal technologies

Key insights

Q1 2021 Key Conclusions



Banks

It is time to move beyond regulatory requirements and conduct API product ideation activities to identify new opportunities to build APIs.

Leasing, insurance, KYC/identity, and card services are all ideal lines of business to engage to start mapping what API products can be built.



Fintech

Apply design thinking to your fintech idea. Build for more targeted customer segments and grow from there. Think beyond apps and consider how users of SaaS platforms and marketplaces could make use of your products at point of transaction/engagement.

Oh, and if you are in the United States, join with us in participating in [the consultation on the use of artificial intelligence in financial services.](#)



Financial Inclusion advocate

Identify which fintech product categories have the most potential to reduce financial exclusion. Track their availability in your market.

If you work with low and middle income countries, advocate for G7, G20, and the OECD to move forward on digital taxation policies that address value extraction from low and middle income countries.

Q1 2021 Key Conclusions



Fintech associations

Measure whether fintech in your region are facing obstacles in the use of bank and fintech platform APIs.

Measure the contributions of home-grown fintech to the local economy in terms of taxation contributions and employment generation.



Banking regulators

Introduce models to measure whether open banking and open finance is widening access to financial services for the underserved. Draw on fintech taxonomies to measure the diversity of products and services being built with open banking APIs.

Ensure that barriers to fintech use of open banking APIs is reduced.

Encourage or mandate the use of open standards in open banking and open finance.



API tool providers and consultants

Create more content describing how your products and services can support open banking and open finance.

Work with existing customers to document case studies with clear quantified benefits from leveraging API infrastructures, such as increased revenue or reduced product development time.

Help your bank or fintech to enter the platform economy with our training



Rebuild and reorient your team to take advantage of the open banking evolution.

More info and sign up at our

[Training Page](#)



Self Paced



Workshop oriented

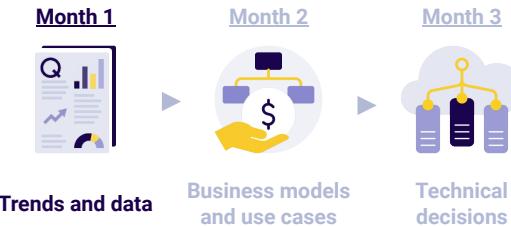


Subject-based



There is much more coming in our Quarterly Trends Reports

For every **Quarter** Platformable releases 3 reports, one each month:



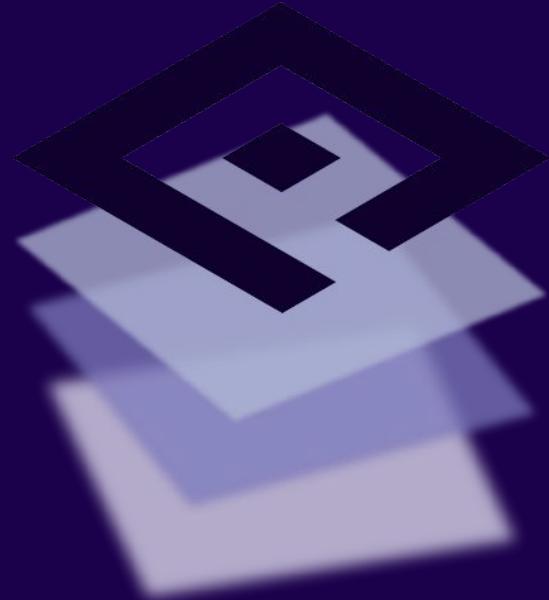
You are here

Take advantage of all our products, resources and services.
Get to know more about our Subscription Plans:



Discover full details and subscribe now at our

[Quarterly Trends Page](#)



Contact us

platformable.com
mark@platformable.com