

Open Banking/Open Finance State of the Market 2021

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Team effort!



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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

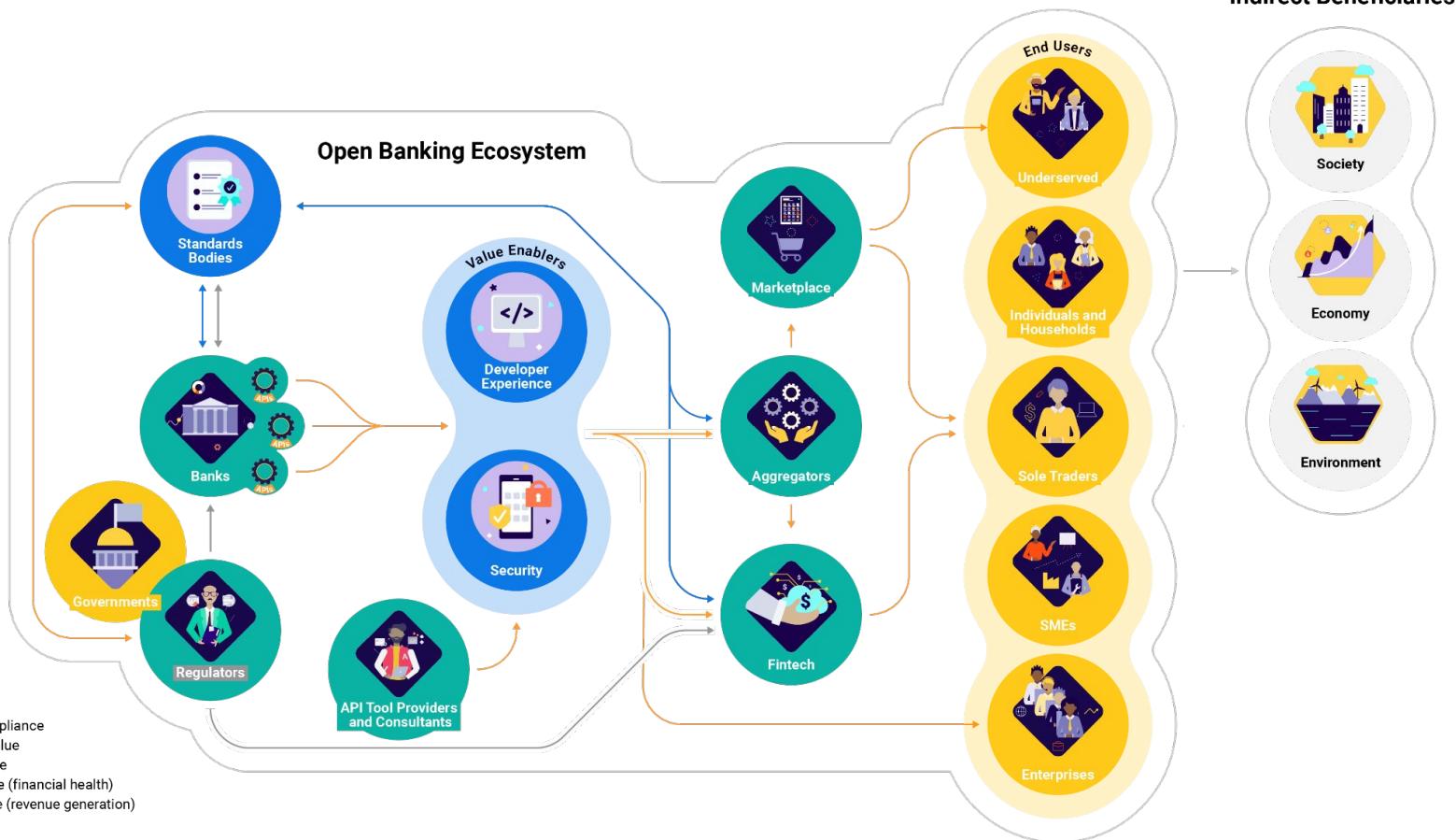


Connecting
Partners

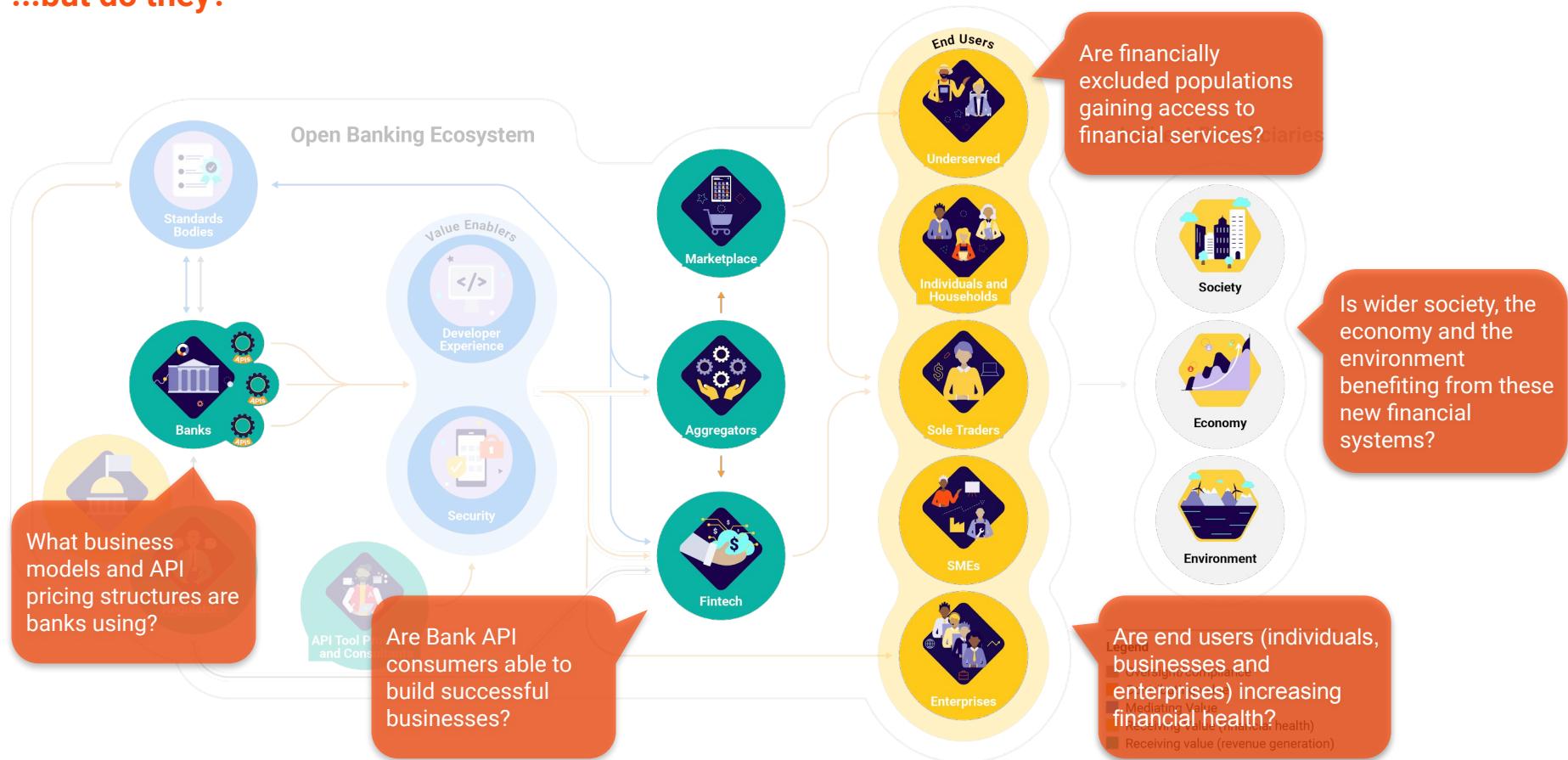


Measuring
Value

Open banking and open finance ecosystems should generate value for everyone



...but do they?



Supply-side: API providers



Open banking is growing at an annual growth rate of 489%

Global Open Banking API Platforms and their API Products Q2 2021 (N = 1455)



Legend:

Products Platforms

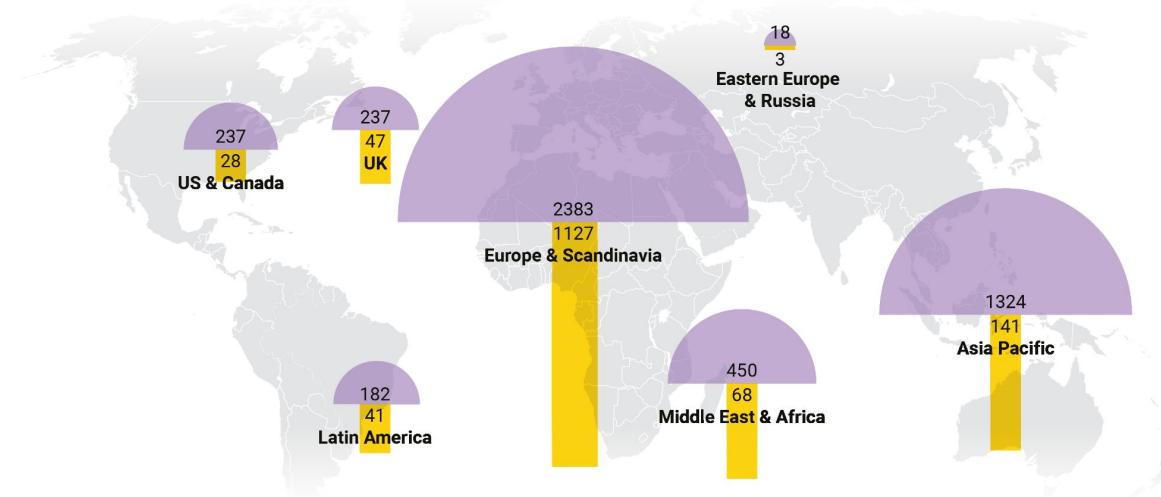
Region

Global Summary

1455 Open Banking Platforms

4831 Open Banking API Products

489% Annual Growth Rate
(compared to Q2 2020)



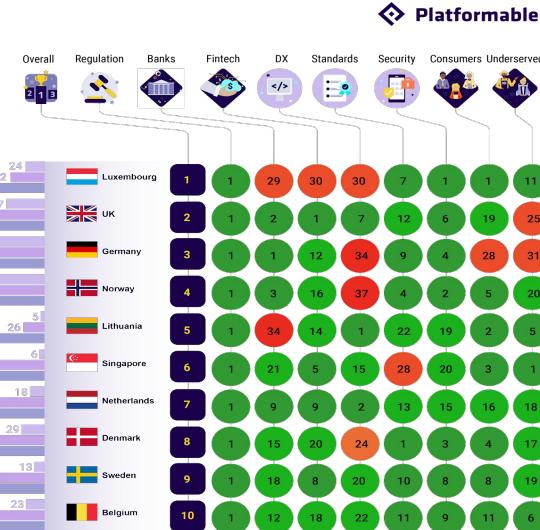
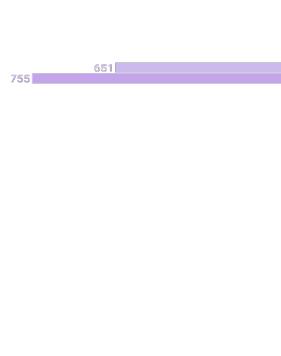
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Luxembourg has the best environment for open banking.

UK & Singapore are the only non-Europeans in top 10.

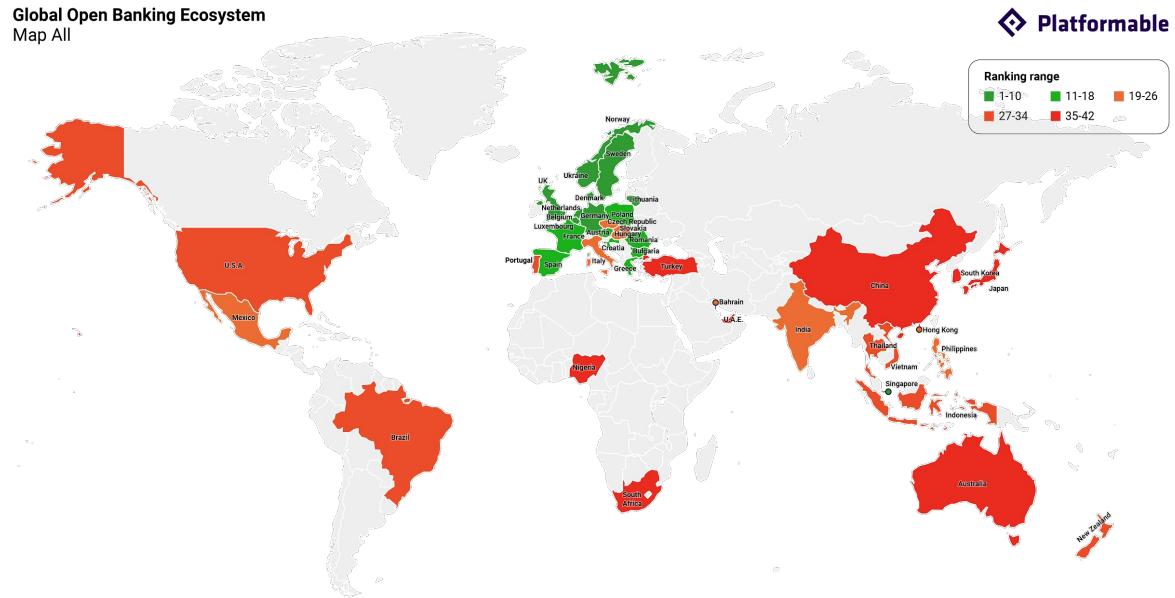
Global Open Banking Ecosystem
Top 10 Ranked Countries

of Bank platforms # of API products # of Fintech operating



Methodology: Platfromable global open banking ranking based on selected key indicators: Regulation: Development status of open banking framework. Banks: % of banks with API platforms, # of bank API products, % of banks using more than one API business model. Fintech: # of fintech originating & operating in the country, % of fintech with API platforms. DX: Average DX score for banks out of 15. Standards: % of banks using at least one API standard. Security: % of banks using OAuth 2.0 and at least one form of security technology (such as JWT). Consumers: # of API-enabled fintech per million population. Underserved: % of fintech building products in categories that could address financial inclusion.

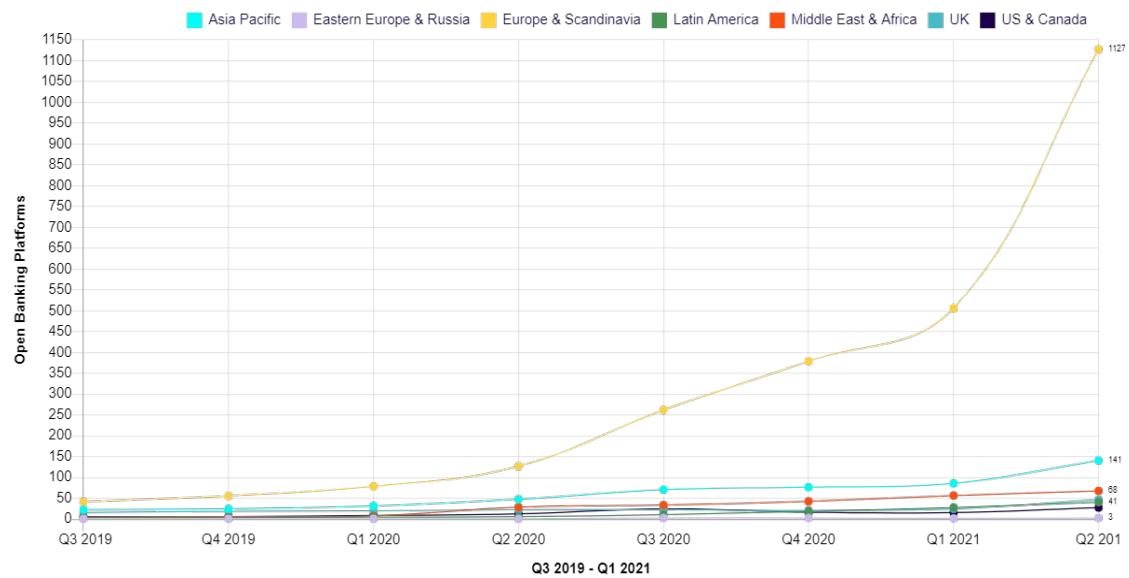
Europe dominates the top 20 for open banking maturity



Europe's growth is now generated from co-operatives and smaller banks

Open Banking Platform Growth by Region

Q3 2019 - Q2 2021

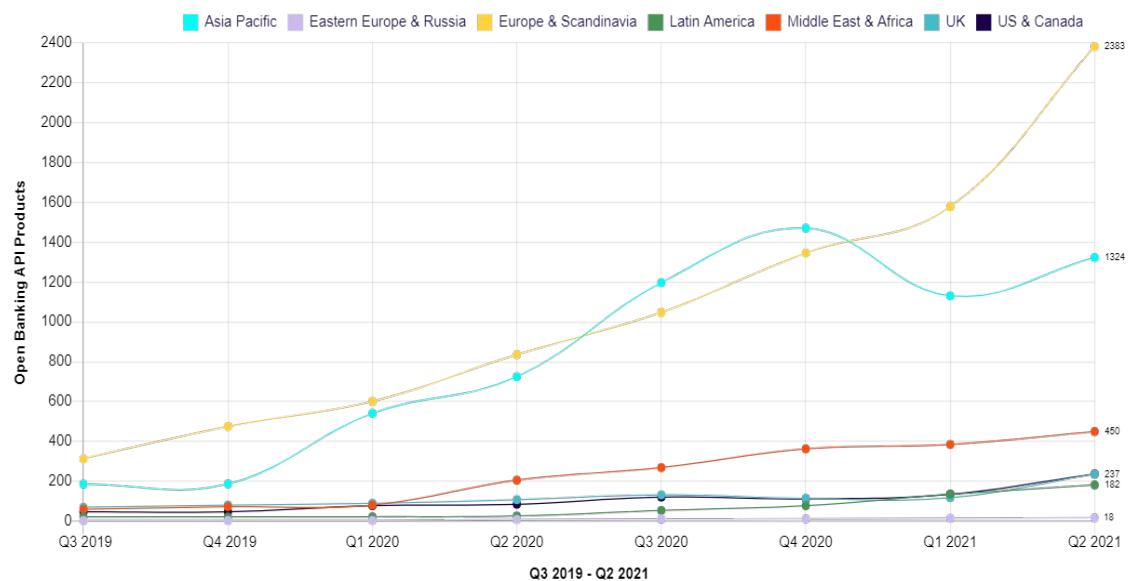


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From a product standpoint, Asia Pacific is more granular in functionality, although it has consolidated somewhat

Open Banking API Products Growth by Region

Q3 2019 - Q2 2021

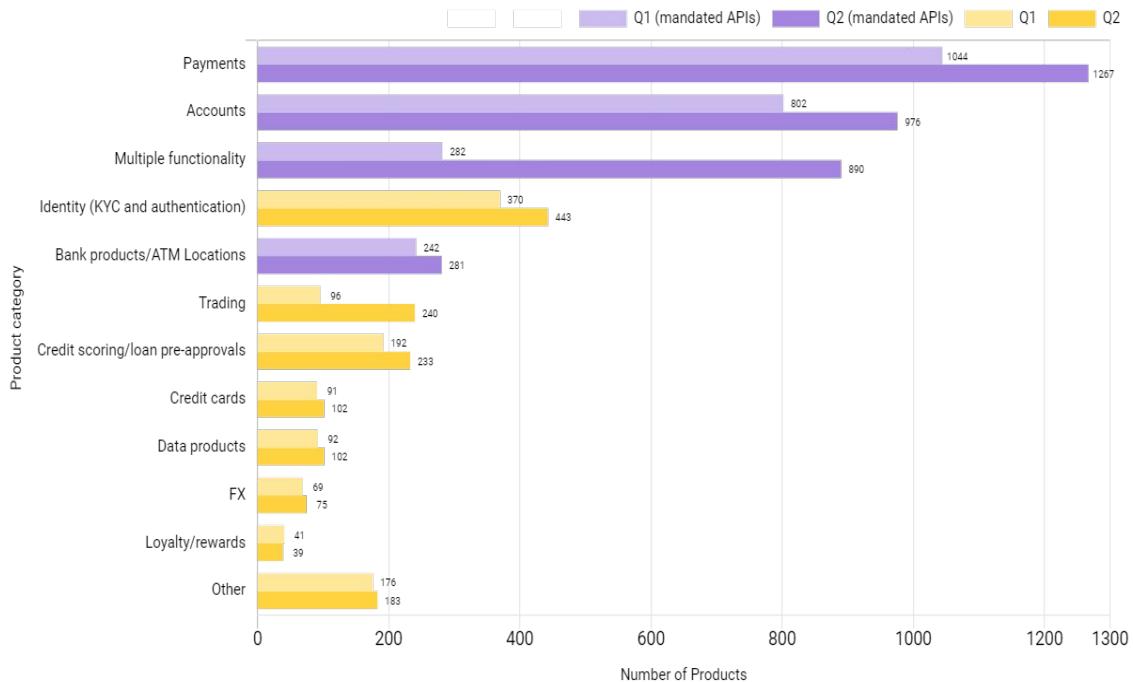


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Identity and trading functionalities are growing fastest outside of mandated API categories (payments, accounts, products)

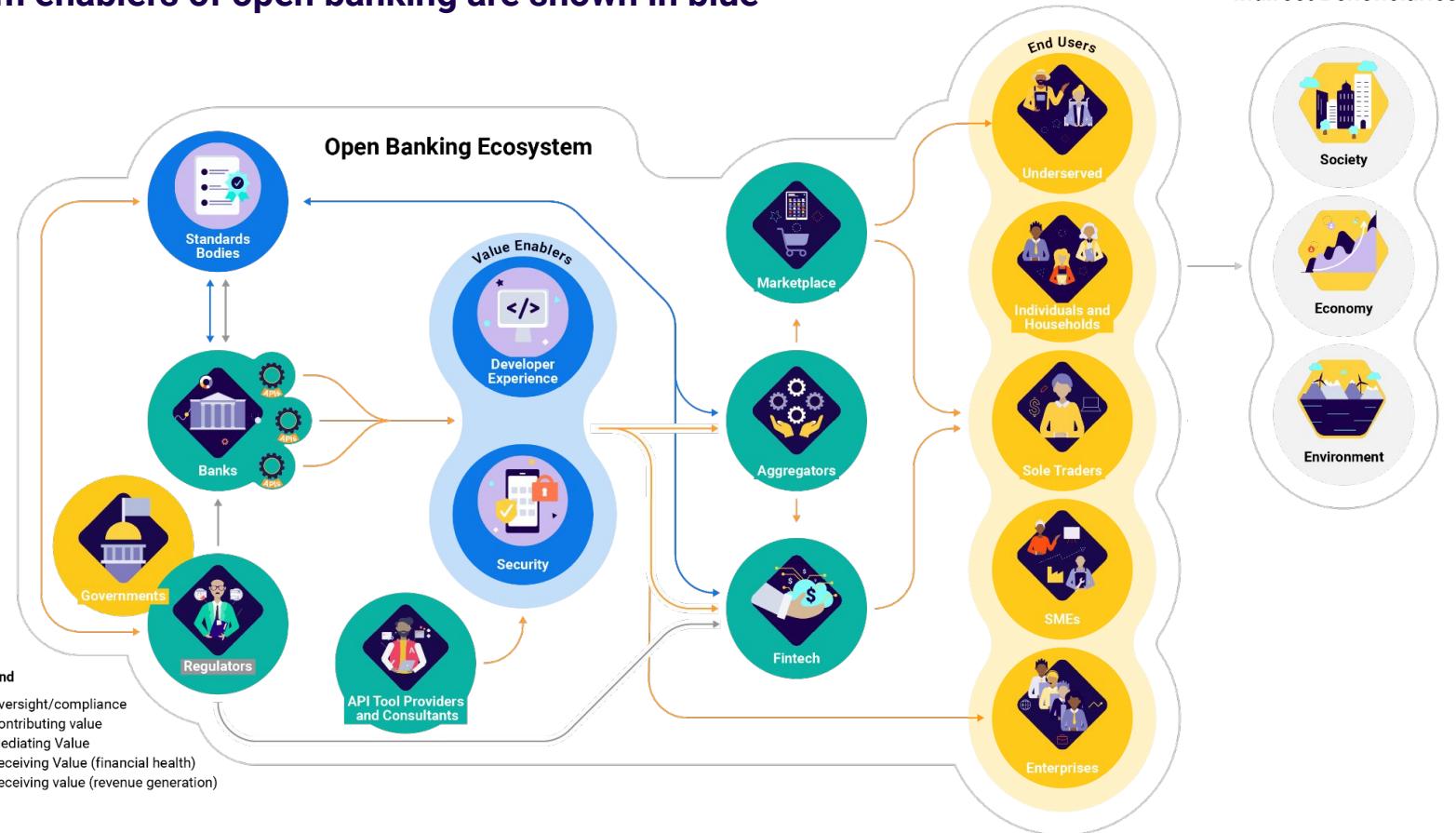
Bank API Products by Category

Q2 2021 (N = 4,831)



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System enablers of open banking are shown in blue



Regulations are being proposed or in place in 63 countries

Current progress of open banking regulations around the globe

Q2 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

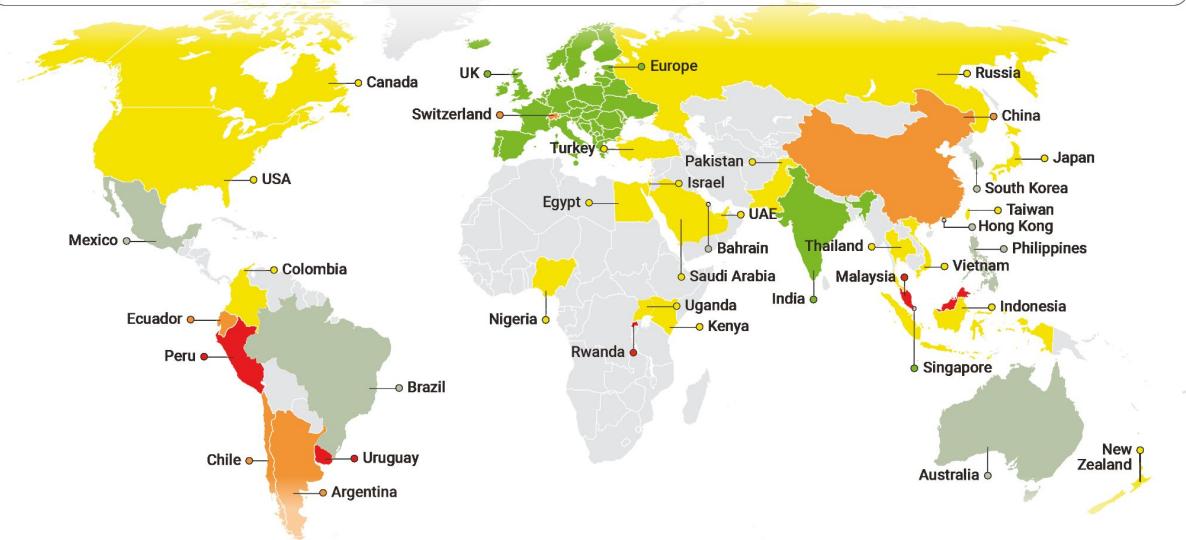
Official regulation/policy in place. Stakeholders may or may not have been required to start operating in the new legislative environment.

Effective implementation

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

Stalled/No action

No action for the last 6 months.



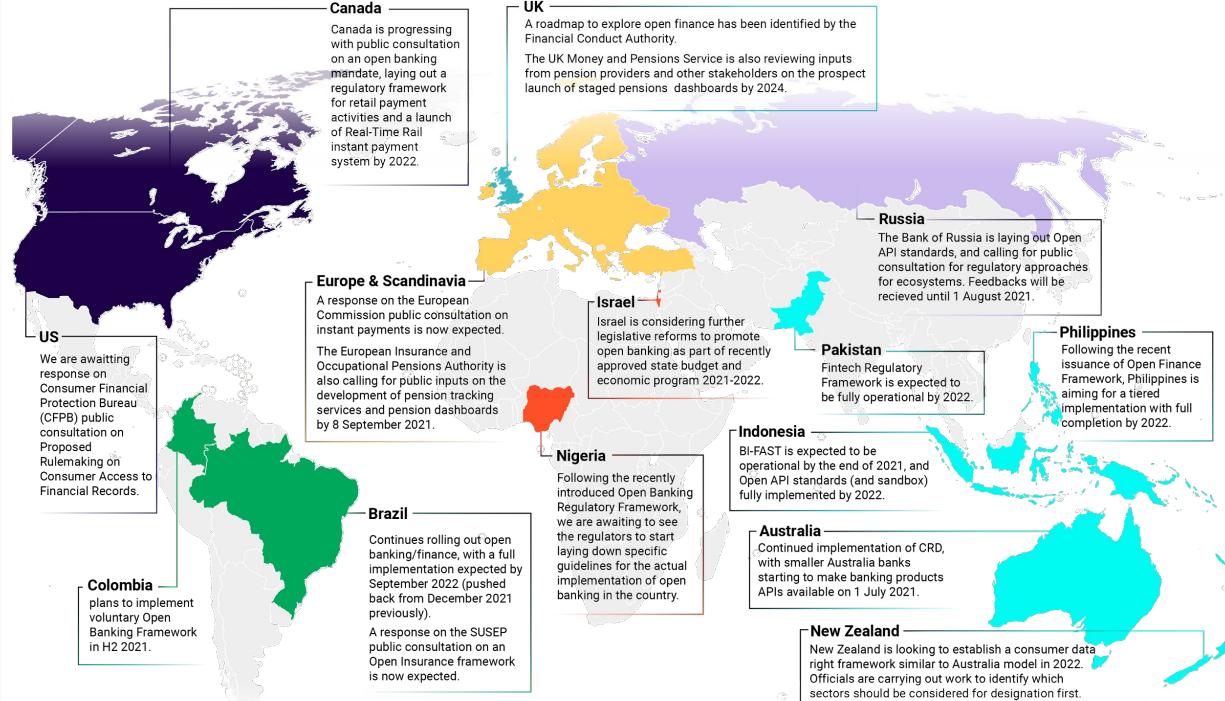
Methodology: Platformable reviews progress and activities of all open banking regulations around the globe and assesses progress of all actions.

...and there is continued regulatory activity in all regions

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



■ Asia Pacific ■ Eastern Europe & Russia ■ Europe & Scandinavia ■ Latin America ■ Middle East & Africa ■ UK ■ US & Canada



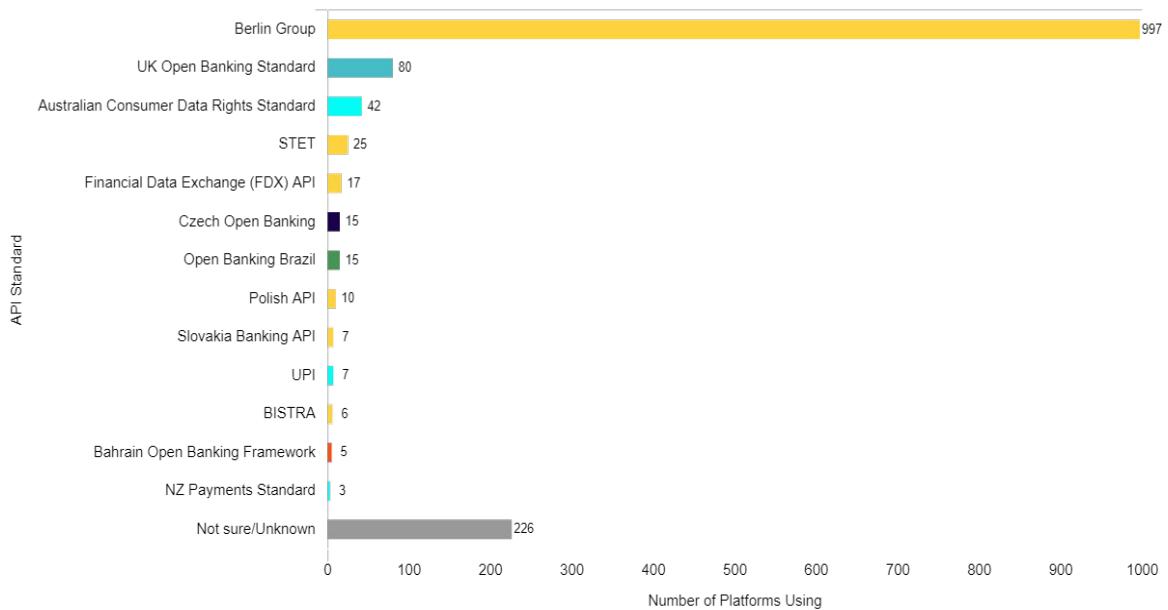
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Berlin Group is the predominant API standard

...but global metrics hide the impact of FDX in US markets

Global Open Banking Platforms Use of API Standards

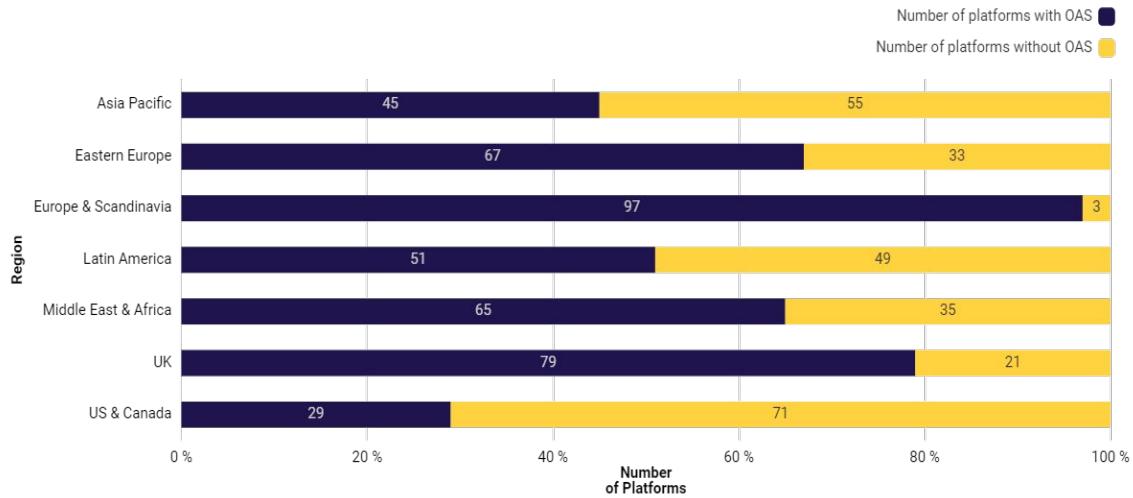
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The adoption of OpenAPI Specification to describe APIs is most common in Europe but has plenty of potential for growth

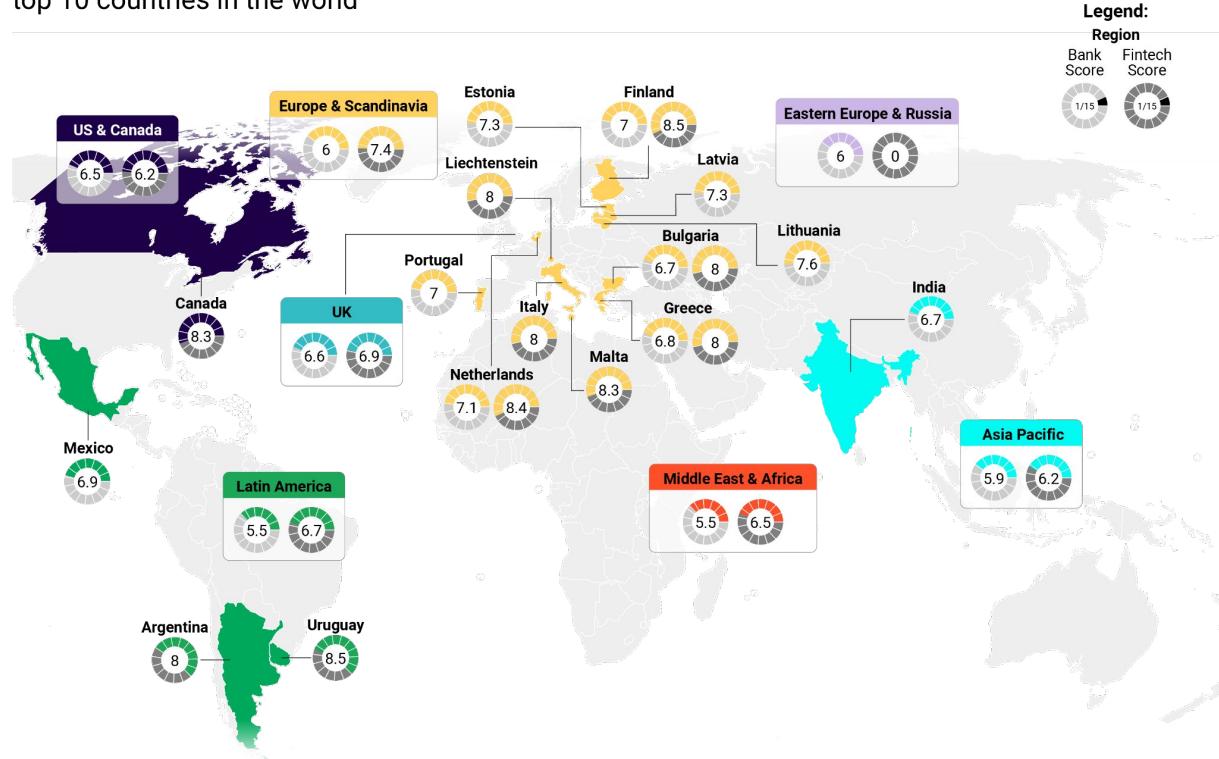
Global Open Banking Platforms Use of OpenAPI Specification Q2 2021 (N=1455)



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Fintech API platforms invest more in developer resources than banks in most regions

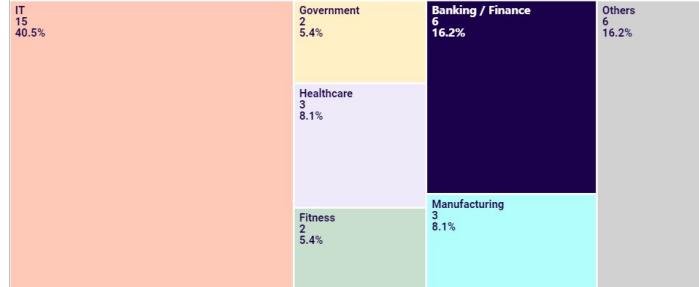
Average Fintech and Banks DX Score
separated by region and by the
top 10 countries in the world



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. Countries with less than 3 banking platforms have been excluded from this analysis.

Security incidents in banking/finance account for around 20% of all breaches

Market with API Security Incidents
Q2 2021 (N=37)

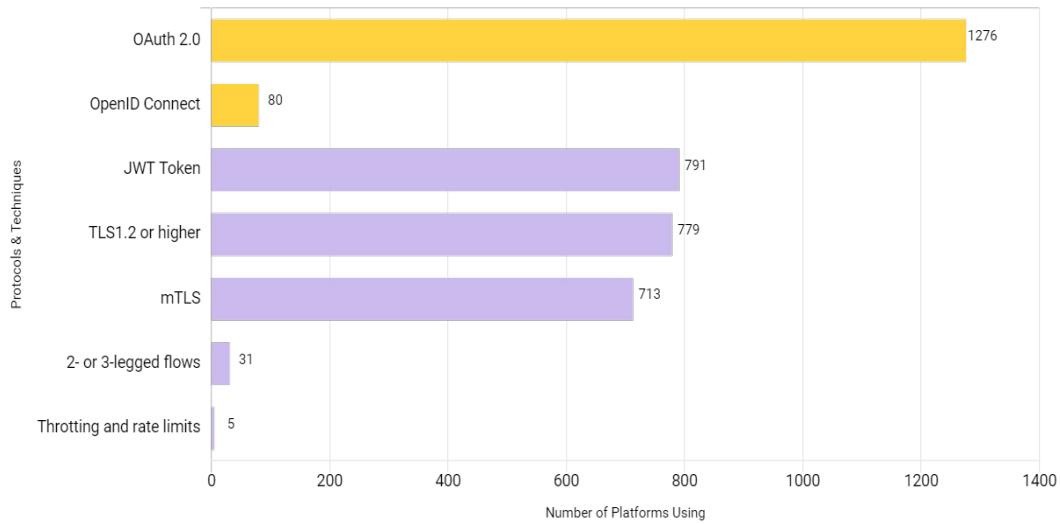


Date	Country	Entity involved	OWASP API Security Risk Top 10 classification
9 April			Broken object level authorization, Broken function level authorization
12 April			Broken object level authorization
28 April			Broken object level authorization
17 May			Security misconfiguration, Improper assets management
18 May			Security misconfiguration, Improper assets management
16 June			Broken authentication, Broken object level authorization

OAuth 2.0 is most common but security technologies are observed in around half of all banking API platforms

Most Common Forms of Authorisation Protocols and Security

Q2 2021 (N=1455)



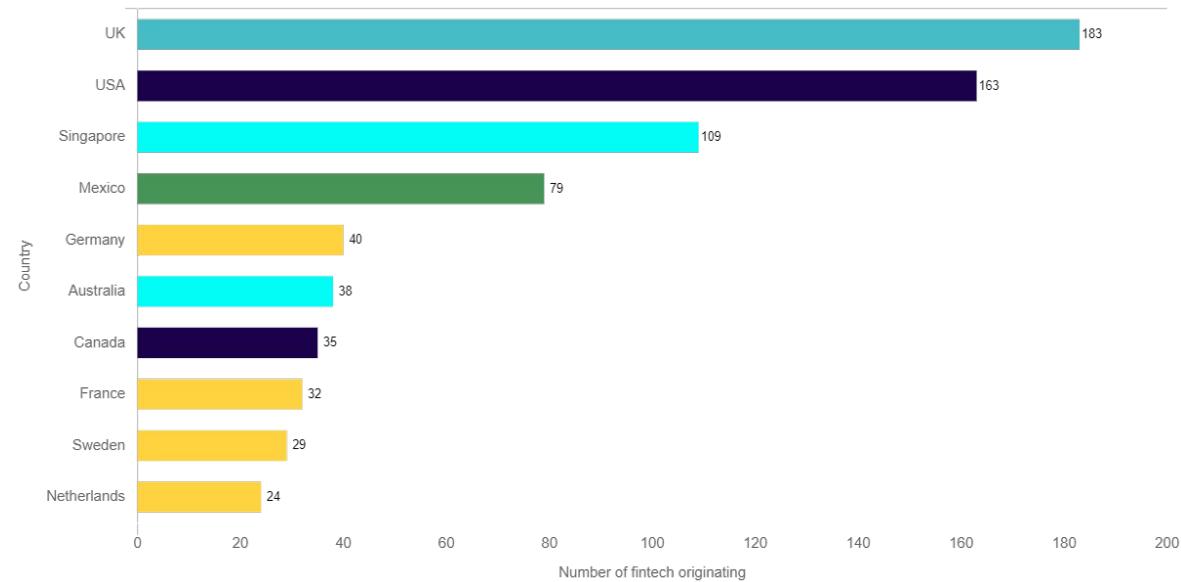
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Demand-side: API consumers



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

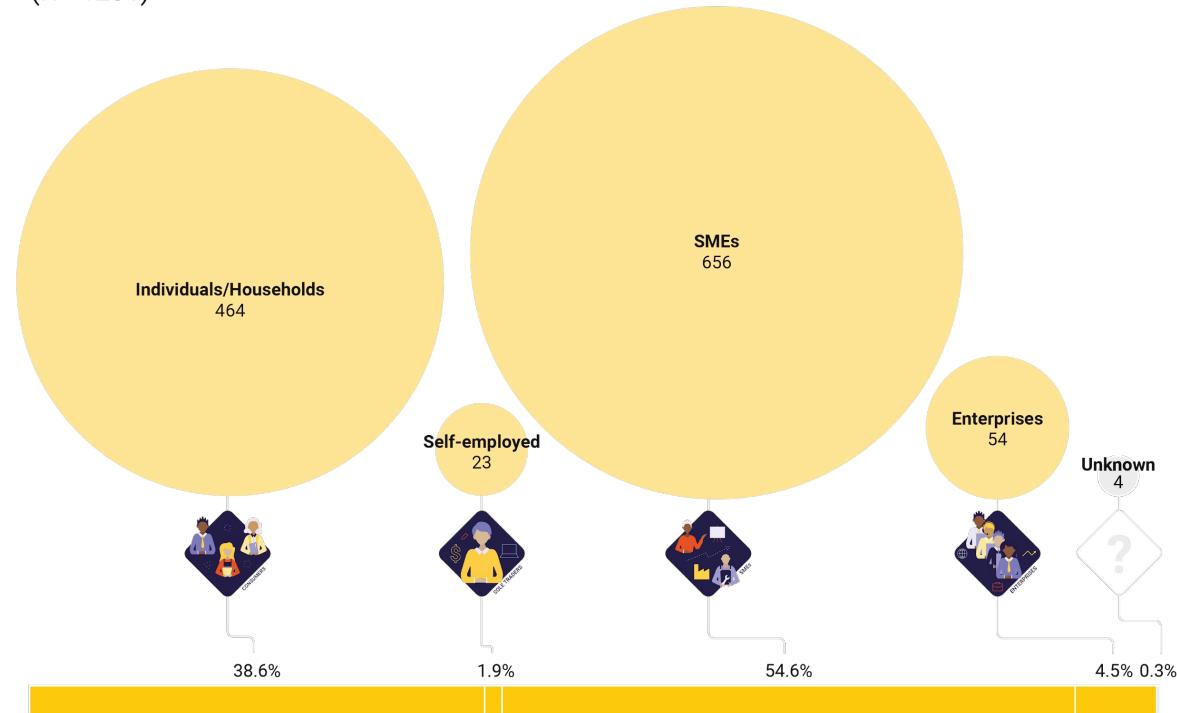
Top 10 countries with the largest number of originating fintechs Q2 2021 (N=732)



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.

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

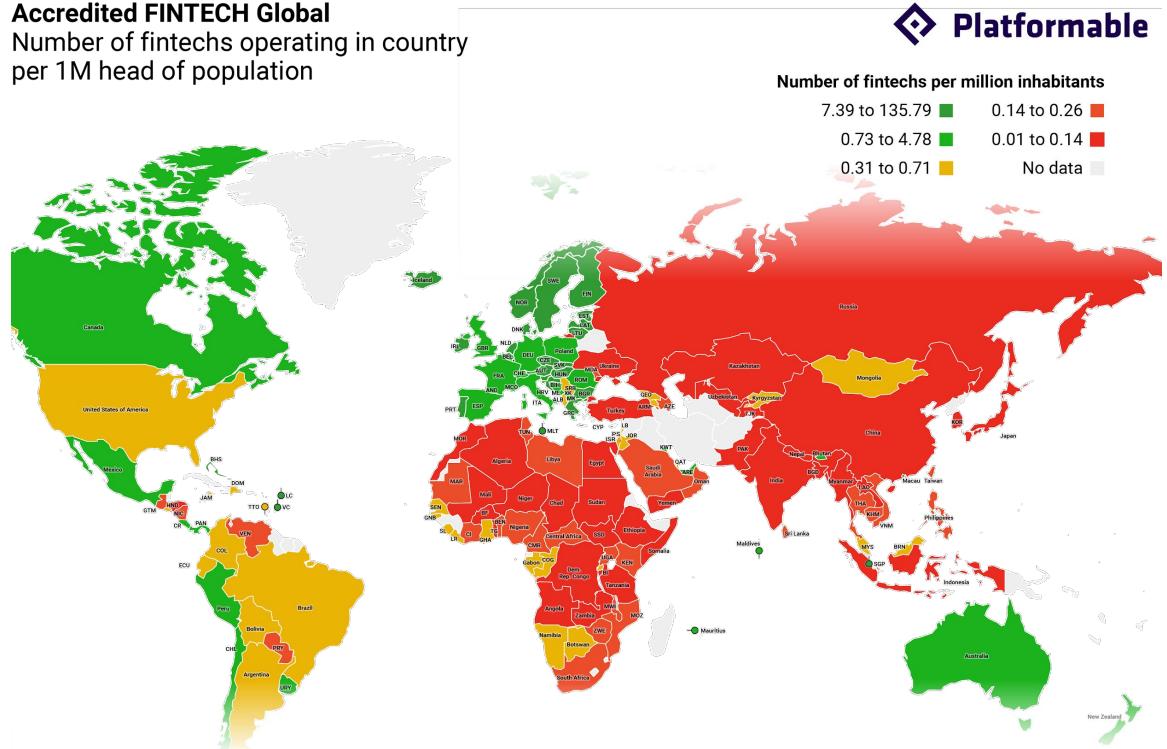
Target Market
(N = 1201)



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 growing but unevenly distributed

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



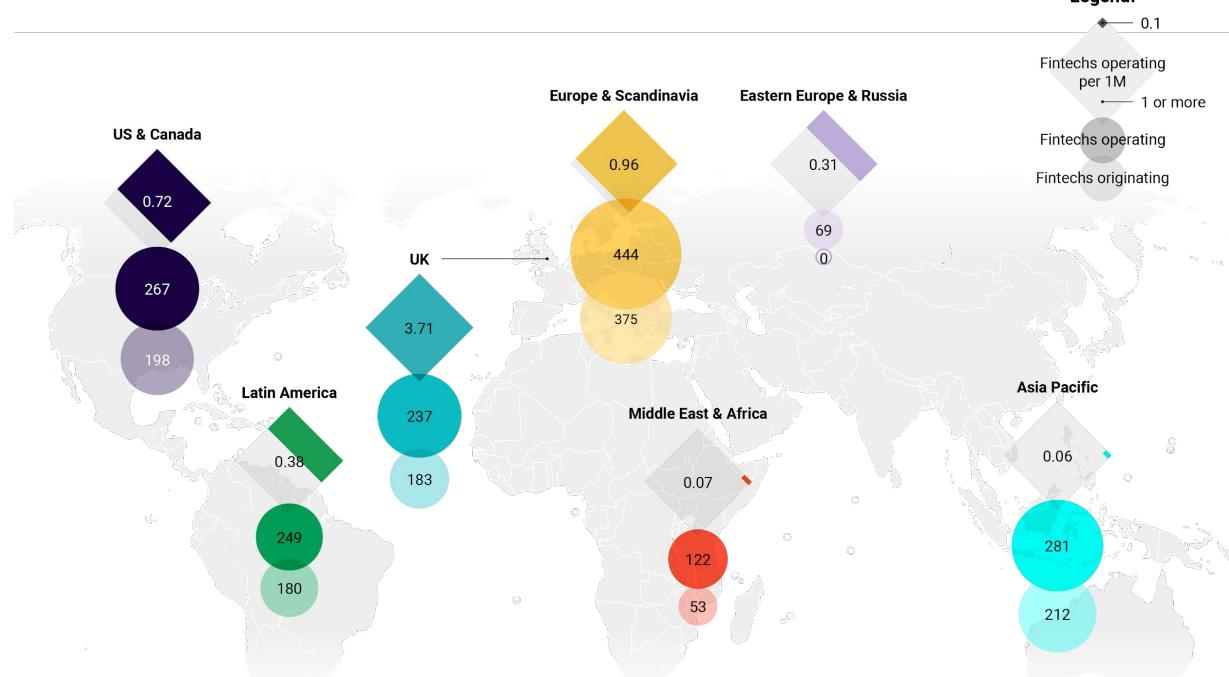
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Countries with population below 500.000 have been excluded from the rankings. Due to the large size of populations in countries such as China, India and Indonesia as well as countries with population less than 500.000, fintech per million head of population is more challenging as a comparative indicator.

Around 60% of fintech originate in region, although Africa sees significant value extraction risks

Accredited FINTECH Global

Number of fintechs originating, operating and per 1M inhabitants



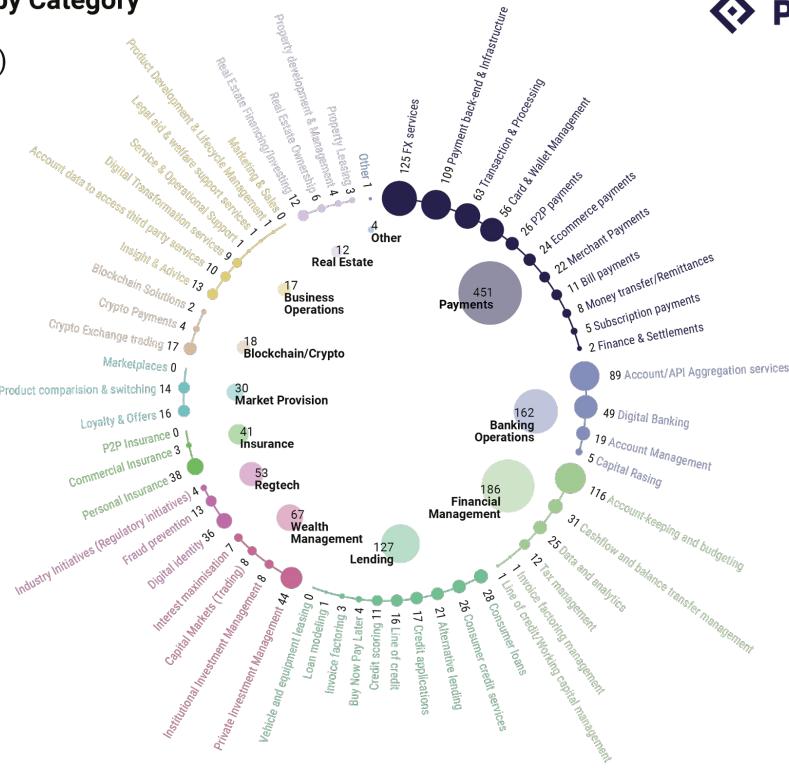
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Payments is the predominant use case for fintech products

Fintech Products by Category and Sub-category

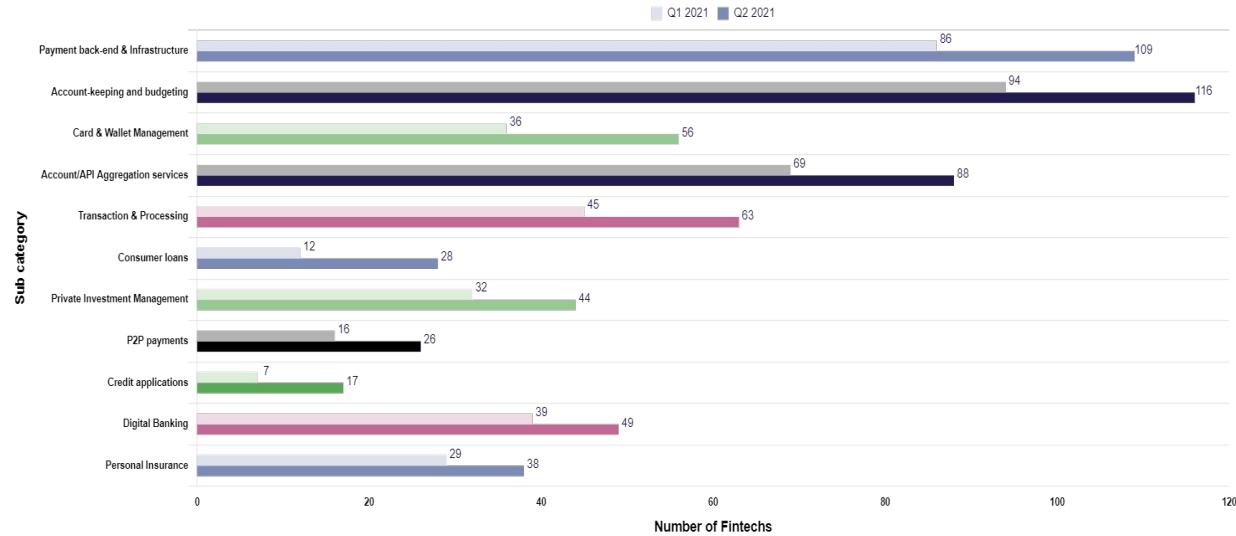
Q2 2021 (N=1201)



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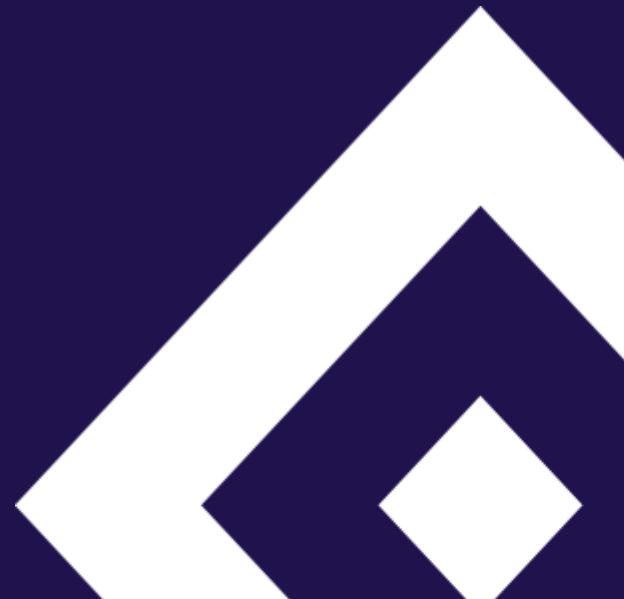
But there are a growing number of new categories of products emerging across the spectrum

Top Fintech sub-categories by growth Q2 2021 (N=1,201)



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.

2021: The rise of the use case



KBank (Thailand)

An encouraging platform initiative in a less regulated environment



Product API
System that will help you do business.
To the next level of service
[See all API products >](#)

QR Payment
The QR Code payment service with security and convenience to satisfy any kind of mobile banking
[Sign up now >](#) [See details >](#)

Bill Payment
Corporate or payment bill service. Where when to pay, with real-time transaction. Convenient to make bill payments via mobile banking applications.
[Sign up now >](#) [See details >](#)

Slip Payment
Verification and information about slip payment. Convenient reference of slip from mobile banking applications.
[Sign up now >](#) [See details >](#)

Bill Payment

Introduction

Key features

Documentation

Bill Payment Guidelines

Cross-Bank Bill Payment

How to get started on API connection ?

- When starting in API usage
- Apply for creating your API
- Get the Consumer ID and Consumer Secret for API test
- Test your API with our sandbox

Question common

What is KBank API with ?
What are benefits that our sandbox support ?
How can I find and access code for documentation of this portal ?
Does it have any limit for applying or using the FINCO API service ?

KBank offers open APIs for payments and collection, client onboarding, and remittance mostly targeting SME/merchant and individual customers.

Developer portal is engaging, and is provided in both Thai English, targeting both local and international developers.

Has a product landing page for each API, organised into introduction of the API and its use cases, and documentation (with API reference). This indicates the bank's understanding both commercial cases of an API program and the developer experience needs.

KBank does not provide the list of fintech partners that have built products with services with their APIs. Neither do they provide some specific use cases (with specific merchant customer example). This is an area for further improvement.

It's encouraging that KBank has initiated open banking despite a less supportive regulatory environment in Thailand. However, by fully embracing open ecosystem, it would be able to encourage more adoption of their APIs and hence more market-fit products provided to their bank target end customers.

Commerzbank AG (Germany)



The screenshot shows the Commerzbank API Portal landing page. It features a prominent dark banner with the text "Create the future of financial services together with us". Below the banner, a subtext states: "Our APIs provide you with the building blocks you need to quickly and easily make next generation digital experience a reality." A yellow button labeled "Discover our APIs" is visible. The main content area includes sections for "Overview", "Quickstart guide", "Authorise APIs", and "Learn to use APIs".

Commerzbank has divided its API program into two streams: PSD2 APIs and Premium APIs, which suggests revenue sharing opportunities.

Commerzbank's developer portal landing page is organised into an API catalogue, Guidelines, and Partners and Use Cases, which is engaging, both technically and commercially.

The screenshot shows the "Discover our APIs" section of the Commerzbank API Portal. It displays a grid of API categories: Accounts, Cards & Payments; Loans; Customer Information; Trades, Securities & Market Data; IT Services, Communication & Security; and Utilities. Each category has a brief description and a "View all APIs" button.

Commerzbank's developer portal organises its API products into use-case collections, which implies the bank's commercial understanding of an API platform. It also shares details of forthcoming APIs in order to assist third parties design new products and services, and provides a wide range of Banking-as-a-Service APIs to corporate customers.

The screenshot shows the Commerzbank API Portal homepage. It features a "Newsroom" section with an article titled "Commerzbank on its way into the ecosystem". The "Events" section highlights "Part events" and "Partnership events". The "Meet some of our collaboration partners" section lists "Energie Revolte" and "wealthpilot".

Commerzbank promotes the fintech partners that have built products and services with their bank APIs, with links to sites and related specific case studies.

Commerzbank's selection of commercial use case areas, in which it seeks to collaborate with fintech partners, implies the customer-focused approach of the bank's API strategy. Of note is its partnership with the pre-paid power supplier Energie Revolte, which used Commerzbank's Corporate Payments API to help enable leaner and safer payment process of its SME customers.



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 VD, 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, Ban Sabadell launched their InnoCells corporate venture capital investment vehicle, offering investments between €0.5M to €5M.



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 API'. 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, Banking, Payments) and 'Your Industry' (Retail, Financial management, Mobility, Insurance, Other). 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 developer portal. The top section is 'KBC Green Energy Loan', featuring an image of wind turbines and solar panels at sunset. It describes the loan as a revolving credit available online and in-store, with a note that it can reduce customers' energy bills by 20%. The bottom section is 'KBC Bicycle Insurance for in-store and online sales', featuring an image of a bicycle. It discusses how KBC offers insurance for electric and standard bicycles, with coverage for theft, damage, and loss.

The screenshot shows the 'KBC partners already using our solutions' section. It lists several fintech partners: CHAMIZO, De Meester, iChooos, and KBC. Below each partner is a brief description of the integration available. For example, CHAMIZO integrates with KBC Bicycle Insurance QR, while iChooos integrates with KBC Investment Loan API.

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.

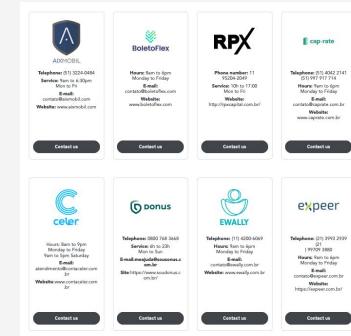


Banco Topazio (Brazil):

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

Solution development together with the partner, with facilitated integration between the development teams.	Freedom of creation at UX, with the client's journey defined by the partner.	Ease of integration through API's, with high processing capacity, security and confidentiality of processed information.
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.

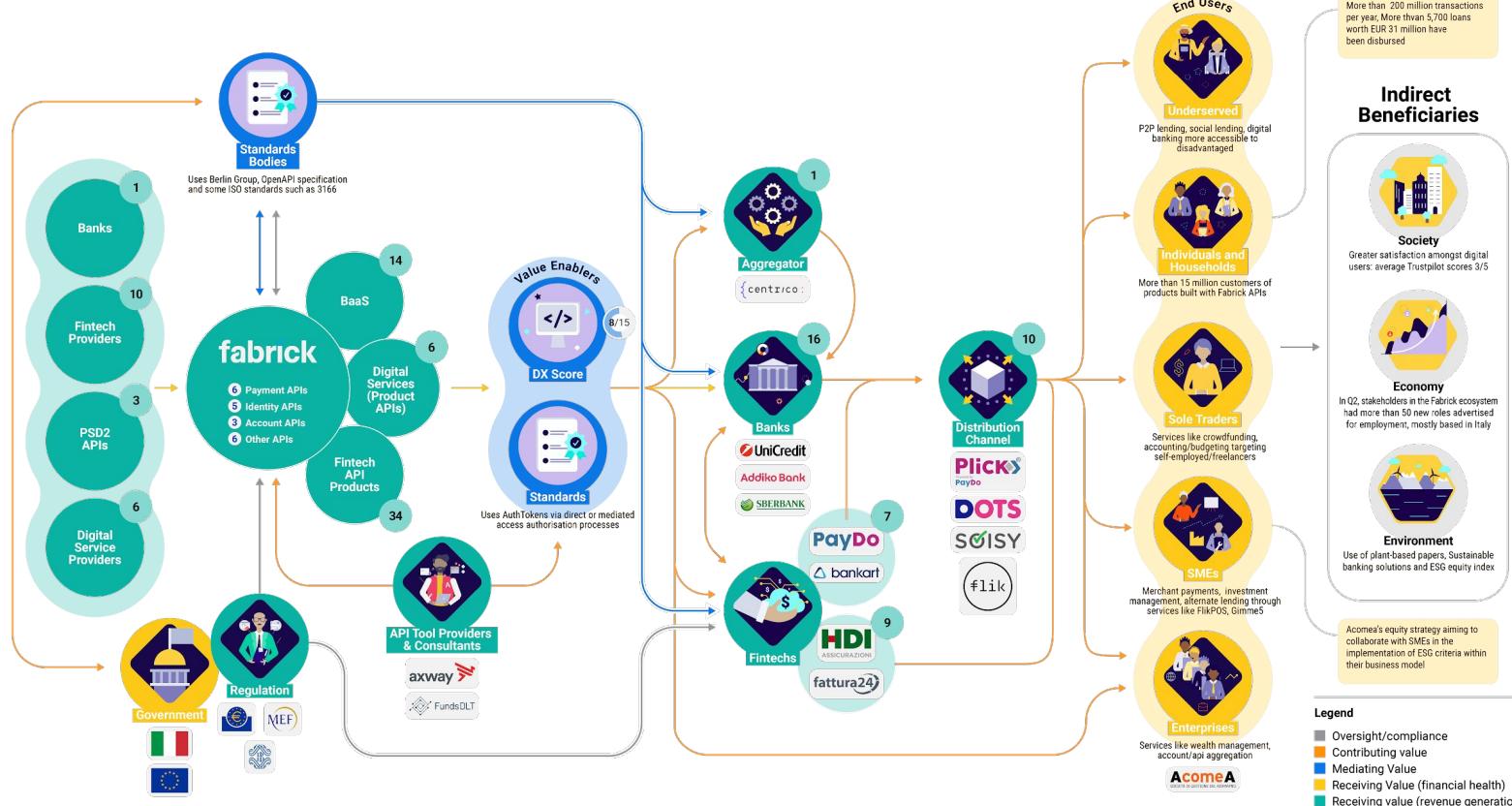


Banco Topazio promotes the fintech partners that have built products and services with their bank APIs, with customer contact details and links to sites.



- 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.

Embedded finance model: The Fabrick ecosystem

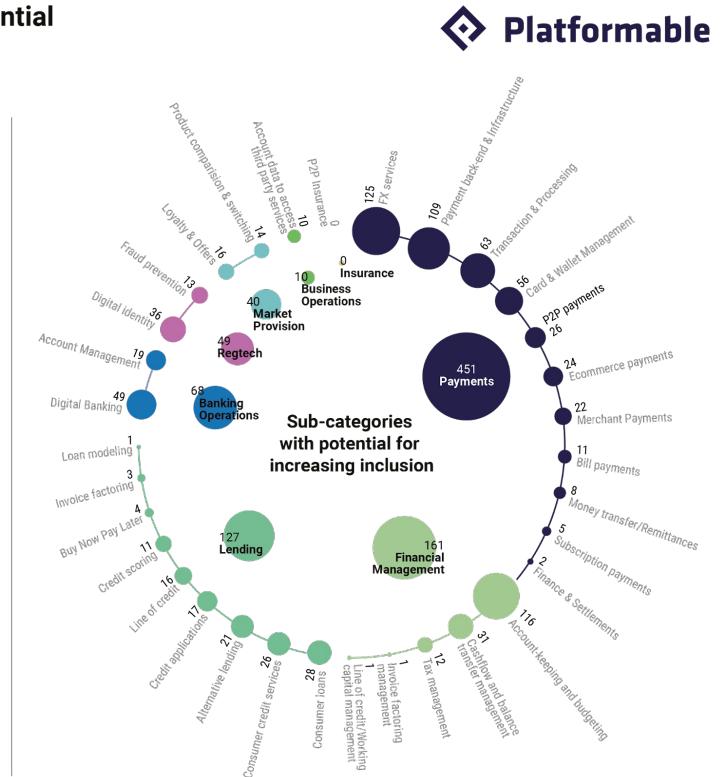
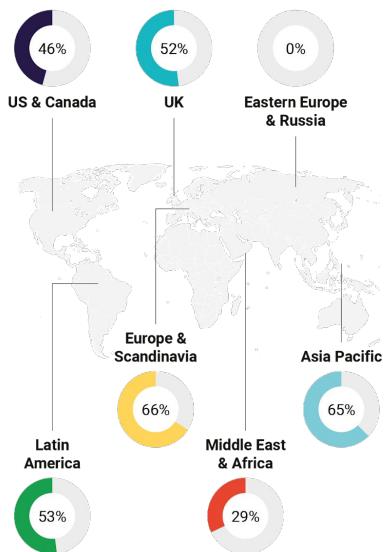


Is open banking/open finance benefiting everyone?



Financial inclusion products and services has dropped to just 53% globally

Proportion of fintech products with potential to increase financial inclusion Q2 2021 (N =896)



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.

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



Society



with women in leadership



globally with diverse management teams



BANK INDONESIA

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.

Bank Indonesia (BI) is promoting **financial inclusion** by collaborating with the financial services authority in Southeast Asia's biggest market that are formulating provisions in a new framework to welcome the open finance era, looking to achieve the **Payment System Vision of Indonesia** goals by 2025.



Economy



Southeast Asian Fintech firm **Grab** has revealed that it will be creating about **350 new jobs in Singapore** during 2021 in order to support its ongoing growth and development plans.



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



Greenly, the leader in carbon footprint tracking, joins forces with **BridgePay** network to help VSEs and SMEs analyze their emissions



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

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