

OPEN BANKING



Time to leapfrog
the competition

At a glance

45

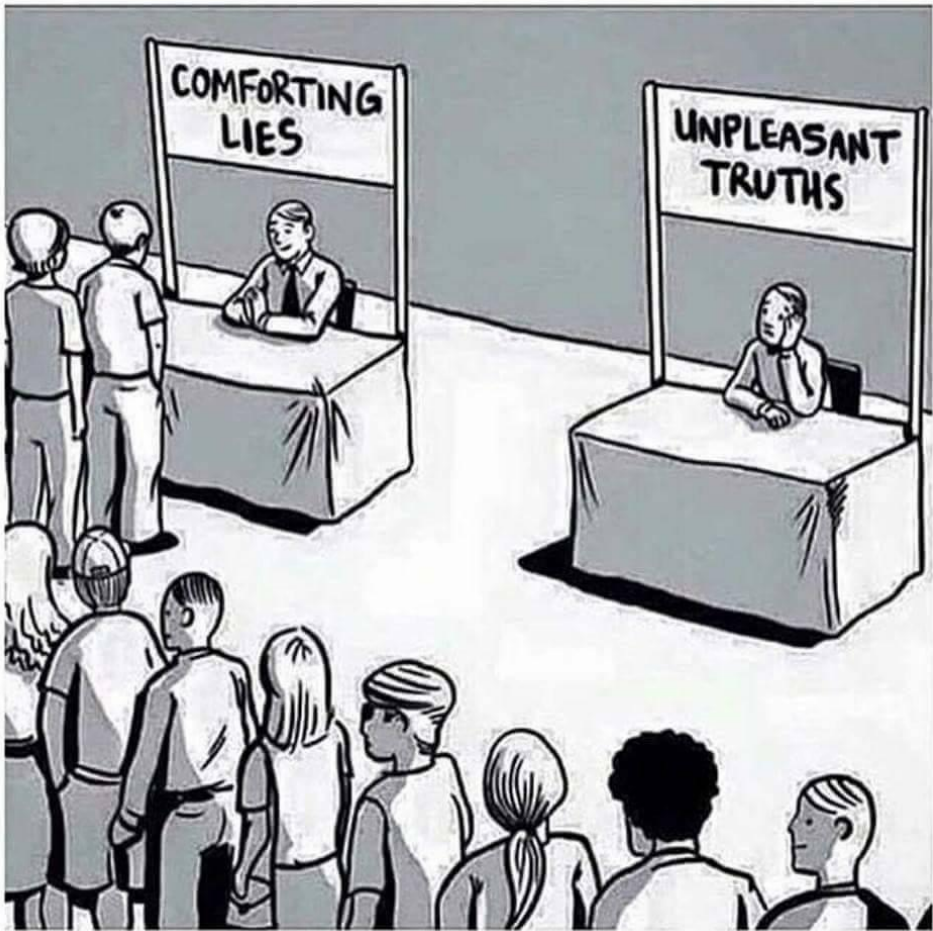
People in 3 Countries
(SF, London, Berlin)

\$35m

Investors
Largest banks in Middle East, France,
Finland + top VC funds

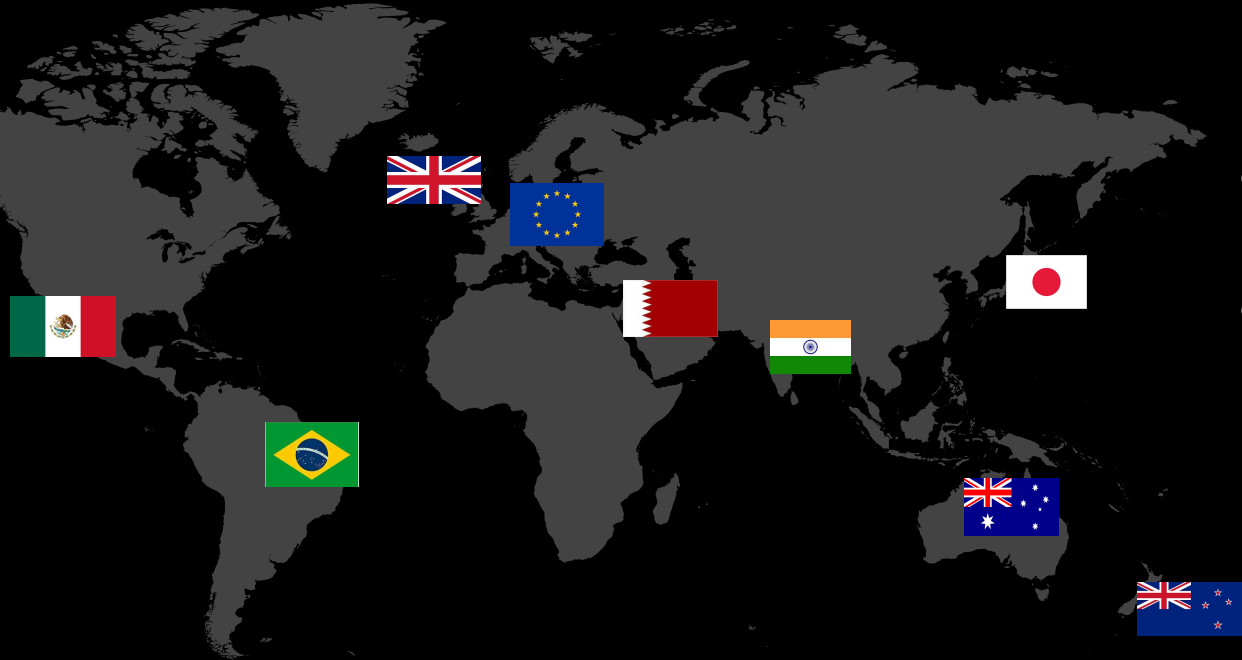
~100

Customers



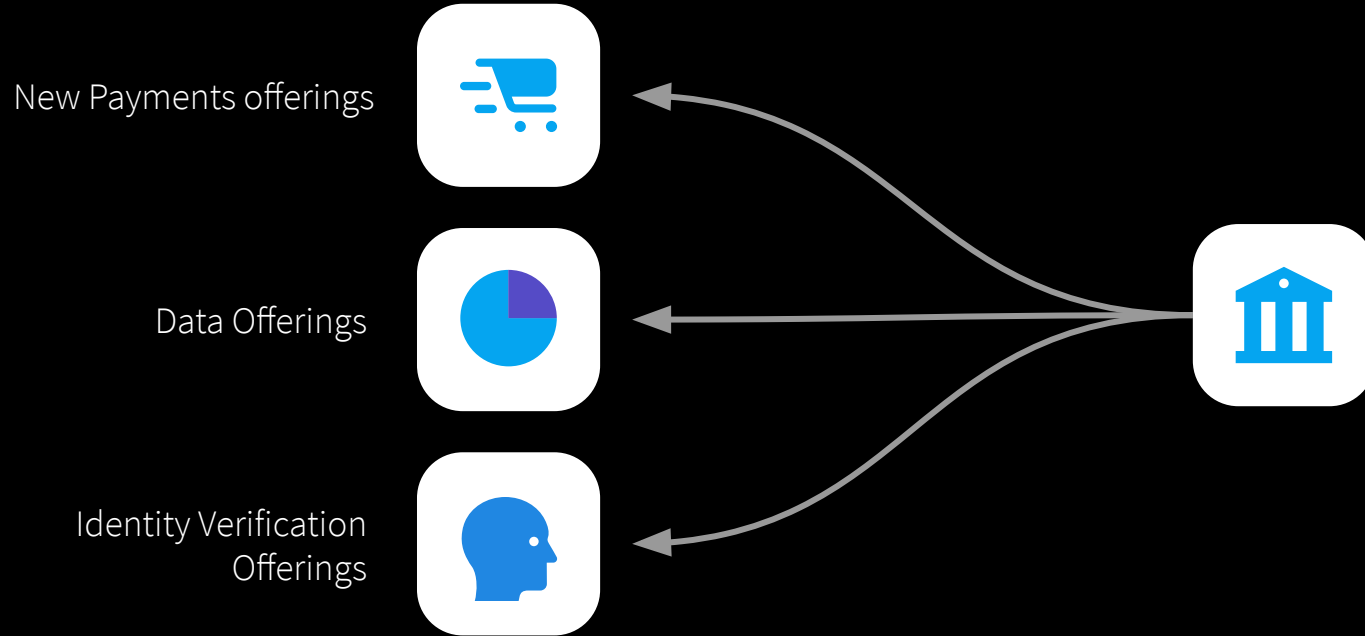
Let us begin...

Open Banking is global

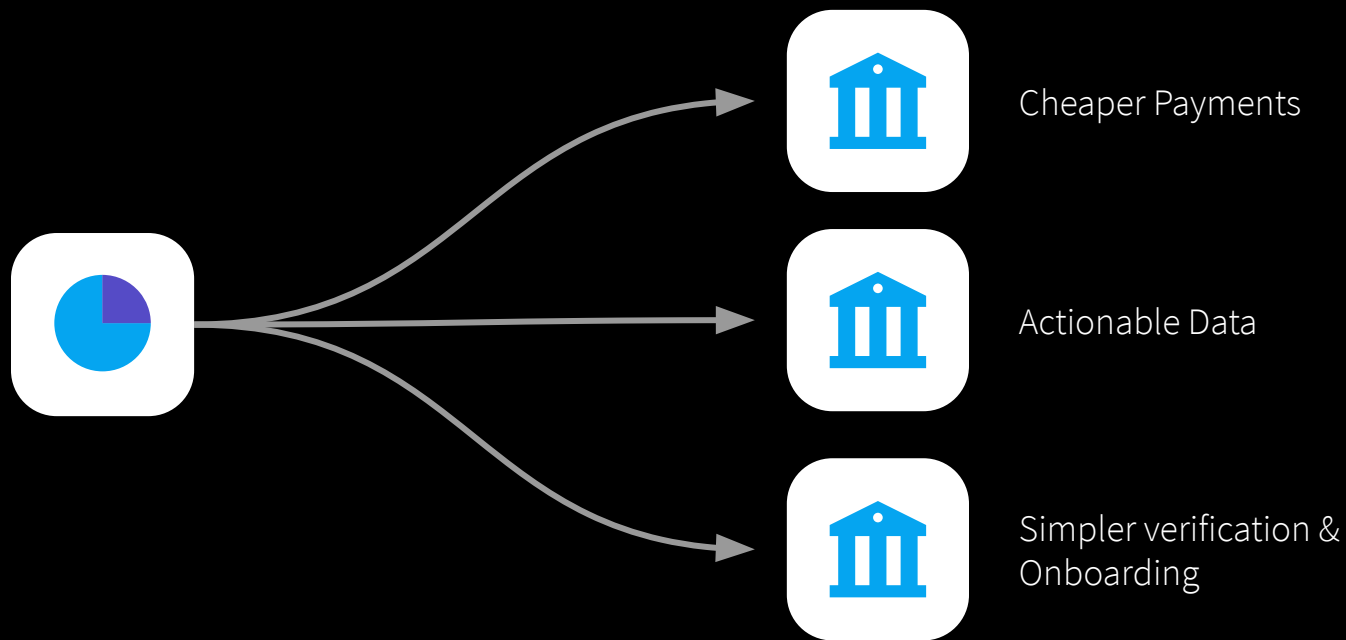


- Mandated in **35** countries
- Adopted elsewhere w/o regulation

Benefits for banks



...and for third parties



Europe is leading

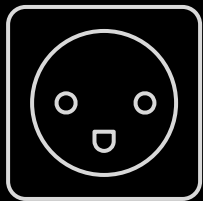


THE *Berlin* GROUP
A EUROPEAN STANDARDS INITIATIVE

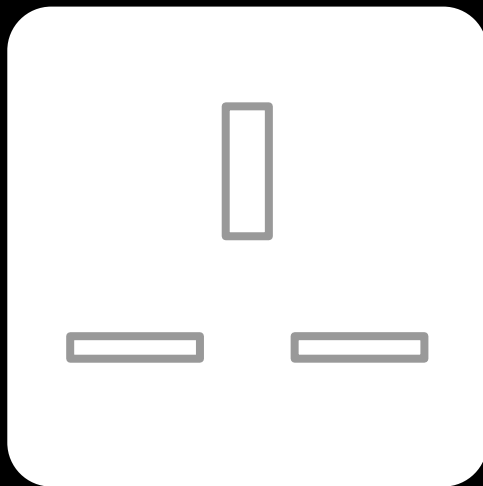
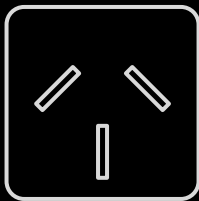


OPEN BANKING

Problem: bespoke API's



BNP PARIBAS



HSBC



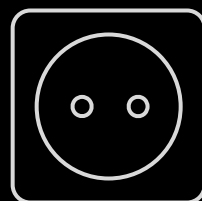
BARCLAYS



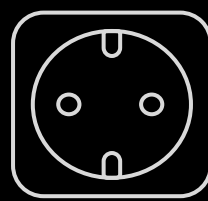
LLOYDS
BANKING
GROUP



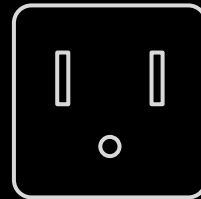
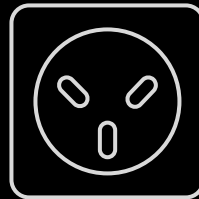
Royal Bank
of Scotland



Deutsche Bank

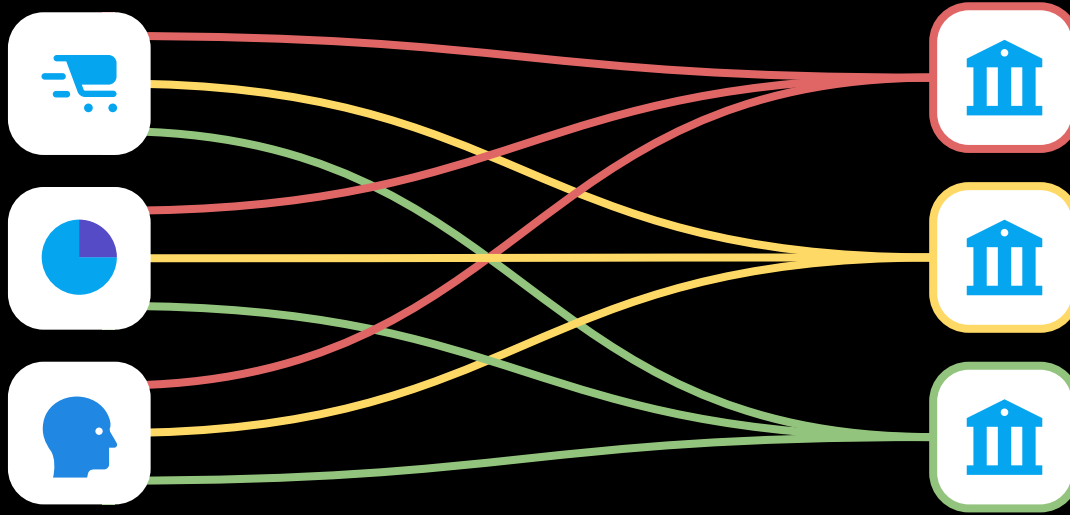


SOCIETE
GENERALE



Problem: Bespoke API's

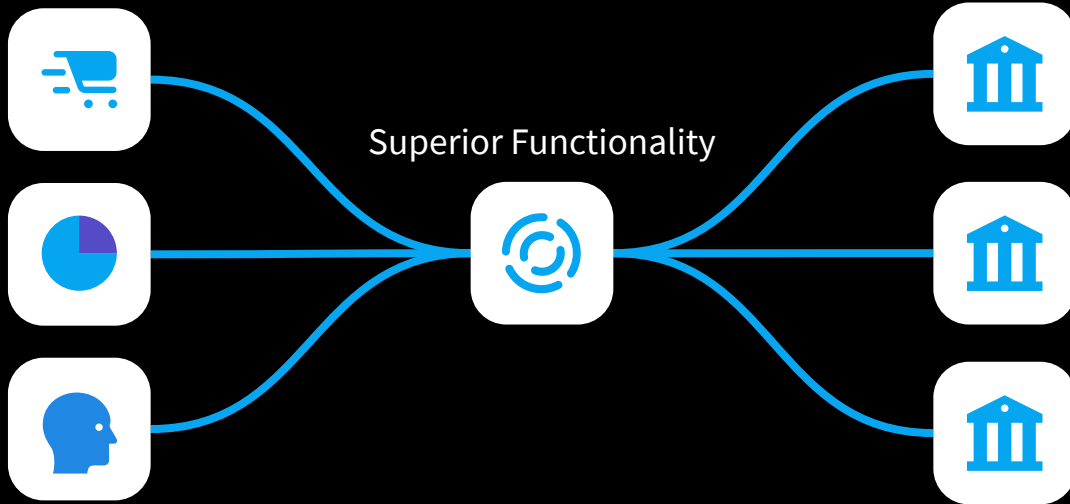
Killing the benefits



Solution: Token

Unified Access

Consistent API



A silhouette of a person standing on a rock, looking up at the Milky Way galaxy in a starry night sky. The galaxy is a bright, pinkish-purple band of stars stretching across the dark sky.

“The best is the enemy of the good”

- Voltaire

Business Models are evolving rapidly (...*for banks*)

Time for change...

Dear Optimist, Pessimist, & Realist,

While you guys were busy arguing about the glass of water, I drank it!

Sincerely,



The Opportunist (a.k.a. MENA Region)

“If opportunity doesn’t knock, build a door” ... *and open banking!*



The **MENA** region is primed and ready to take advantage of this perfect storm.

Customer Centric Models are real - Customer Experience is where it's at!



Move over AI, the real opportunities begin with feature-rich, mature APIs



The battleground for Open Banking
dominance will be won using premium APIs

Security -

Cyber crime
continues to
rise....Open
Banking with
a little 'o'



Culture -

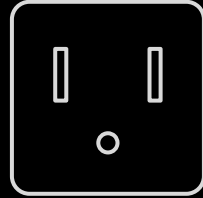
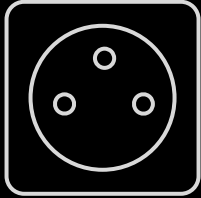
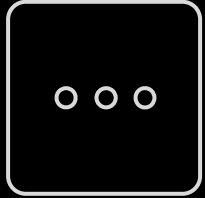
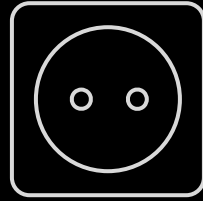
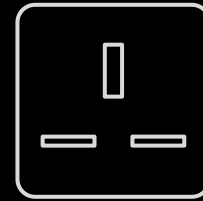
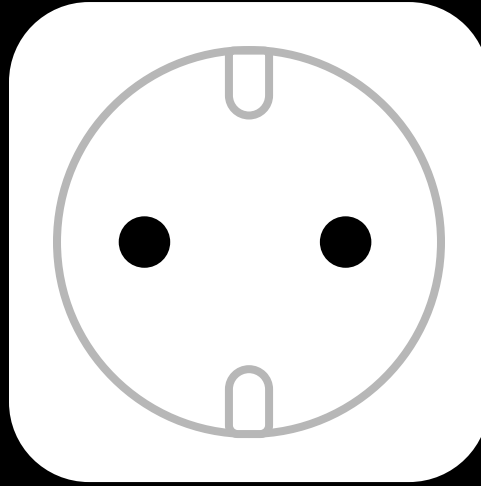
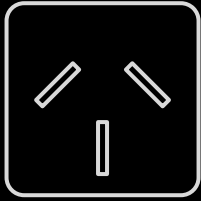
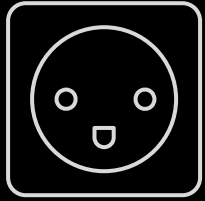
The digital natives enter the workforce. Things need to change.



Privacy -
GDPR is but
a rule book.
Banks must
prioritize
smart tech.



Are regulatory APIs today **enough** to build the ecosystem? The simple answer is no.



Think positively!

Look how far we've come...
the future is bright!

A portrait of Charles Darwin, an elderly man with a long white beard and hair, wearing a dark coat. The image is dark and serves as a background for the text.

“In the long history of humankind,
those who learned to *collaborate* and
improvise most effectively prevailed”

- Darwin

Payments
pain:
different for
everyone...

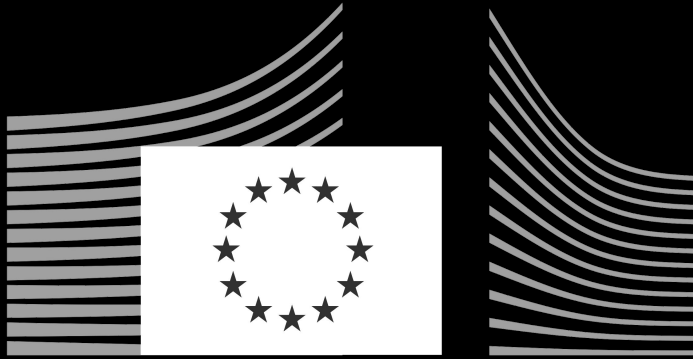
Speed
Transparency
Cost
Security
Availability
Data integrity
Data validation
Accessibility

Complexity
KYC/AML
Compliance
SWIFT issues
Counterparty details
Holds (wait for RFI)
Failure rate

Let's talk
numbers...

What gets
measured,
gets done.

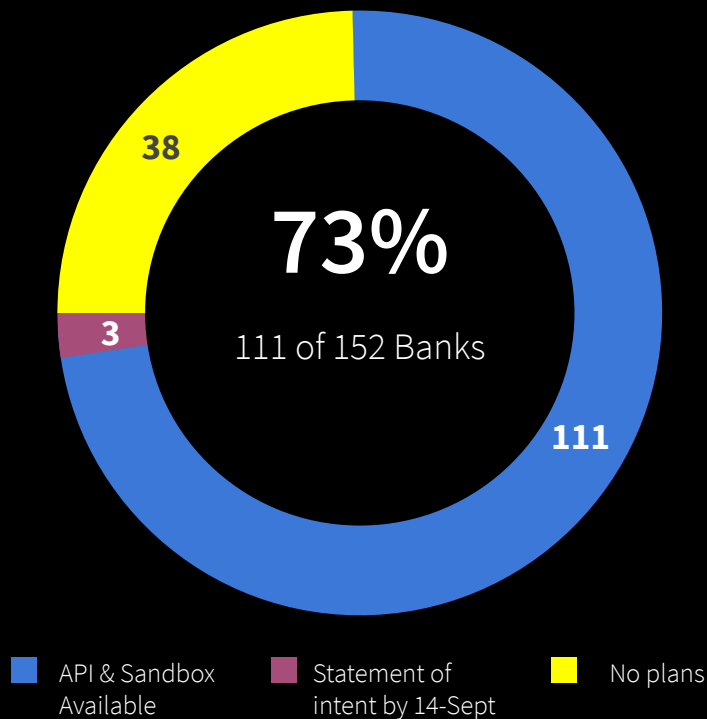
Status of API accessibility



14 March 2019

- ✓ Secure APIs
- ✓ Sandbox environment
- ✓ Documentation & support

Pan European Accessibility



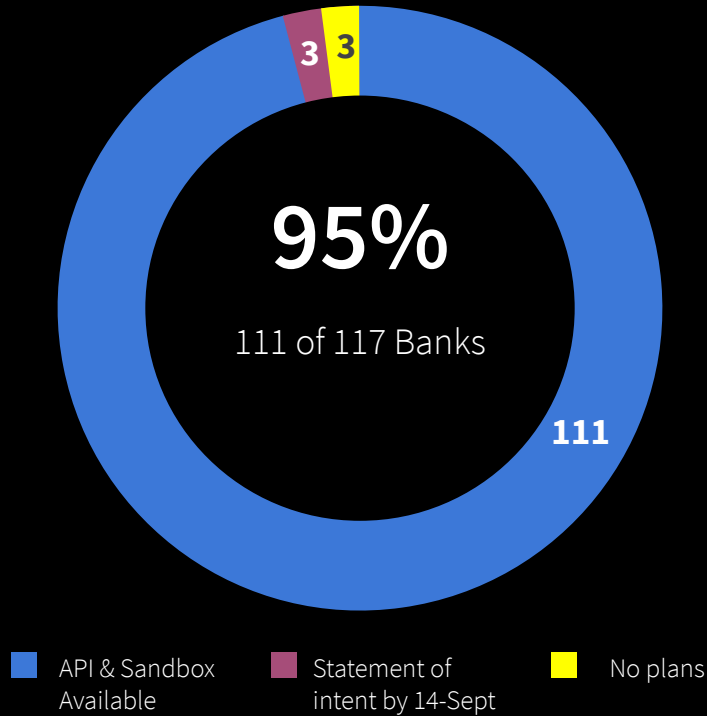
Scope

- Rank banks by assets & transactions
- 152 Totaling >80% of assets or transactions in each country

Research

- Published plans of APIs and sandbox
- Determination of standard
- Variations to the standard

Pan European Accessibility



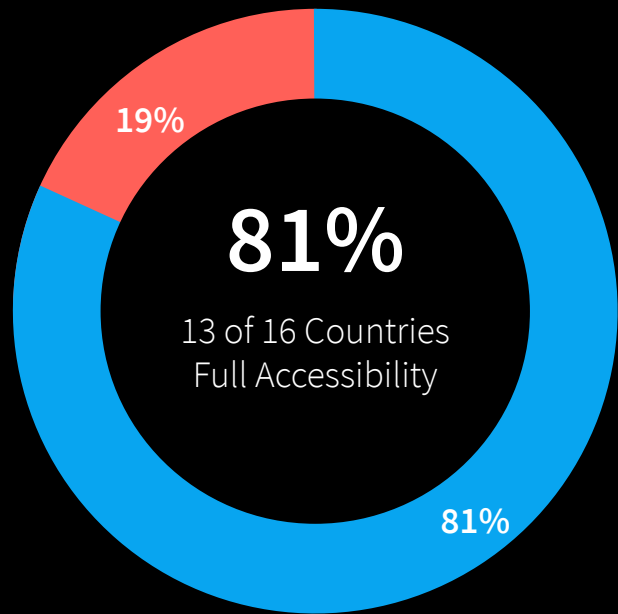
Scope

- Top Retail Banks per country
- 117 Totaling >80% of assets or transactions in each country

Research

- Published plans of APIs and sandbox
- Determination of standard
- Variations to the standard

Accessibility of largest retail banks by country

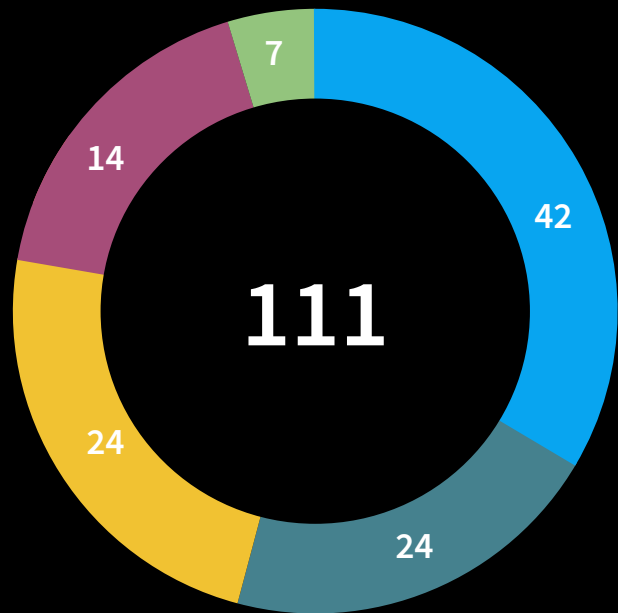


■ 100% Accessibility ■ 50% + Accessible

UK	100%
Sweden	100%
Ireland	100%
Benelux	100%
Poland	100%
Denmark	100%
Germany	100%
Italy	100%
Estonia	100%
France	100%
Austria	100%

Portugal	84%
Spain	80%
Finland	63%

Accessibility by API Standard



42	NextGen PSD2	38%
24	UK OB	22%
24	Bespoke	22%
14	Polish std	12%
7	Stet	6%

Note: Spain and Italy provide access to the biggest share of all banks with consistent API due to outsourcing to single provider

Rudimentary use cases constrained by

- ⬢ Single immediate payments
- ⬢ Single transaction consent
- ⬢ User must be “present”
- ⬢ Cumbersome authentication

Barriers to mass adoption remain



Friction in Authentication



Limited Payment Functionality

Barriers for banks to improve APIs



Cost

Conflicting Priorities

Fear of Cannibalisation

How to improve APIs?



More Regulation?

Evolving Standards?

Requiring Banks to Build?

Time to move beyond compliance

Compliance APIs

- ↓ Slow to deploy
- ↓ Limited functionality
- ↓ Poor UX
- ↓ No revenue for banks

vs

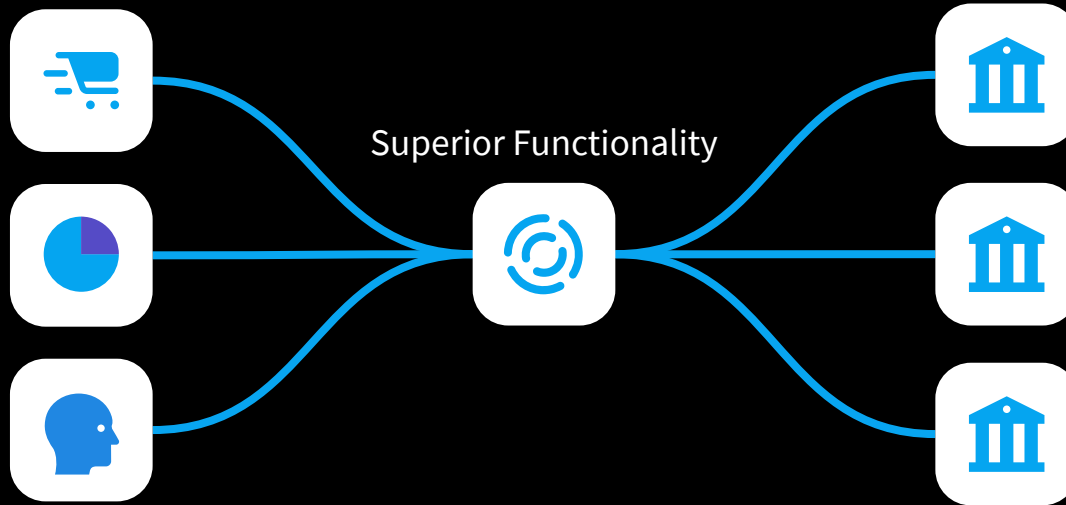
Commercial APIs

- ↑ Fast to deploy
- ↑ Rich Functionality
- ↑ Great UX
- ↑ Revenue for banks

Enabling advanced use cases

Unified Access

Consistent, Richer API



Harder than it looks

- ✓ Request-to-Pay
- ✓ Frictionless authentication
- ✓ Programmable consent
- ✓ Third party initiated

Call to action

Time to move beyond compliance and select a commercial payments API if you believe...

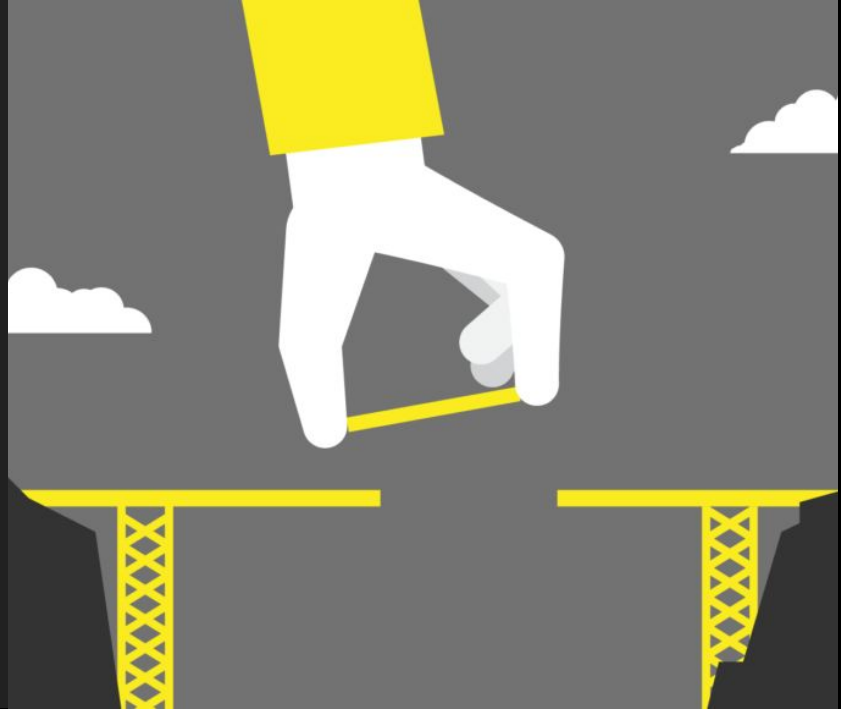
- API Banking is here to stay
- Bank payments are an attractive alternative

Call to action for banks

Become a PISP

Allow commercial API's
to connect

Charge for the service



Action for third parties



- Join the Ecosystem Token has developed
- Amplify your Voice
- Fastest path to improved APIs
- Fastest path to the future of Open Banking Payments

Bahrain got it right

Bahrain Banks are OPEN



6 months to comply



مصرف البحرين المركزي
Central Bank of Bahrain

EDB BAHRAIN
ECONOMIC DEVELOPMENT BOARD



GFiN
GLOBAL FINANCIAL INNOVATION NETWORK

First supplier

ALMOAYED
TECHNOLOGIES
Fintech

TARABUT
GATEWAY

Fast: 6 months for 26 banks

Low Cost: 95% less than UK banks

Best Open Banking landscape

Leader in Open Banking infrastructure

JUNE 2018

“Token makes first
end-to-end payment
through Open
Banking APIs”

- Open Banking UK

SEPTEMBER 2018

“Token is the first
PISP to conduct
payments with
public APIs for each
of the CMA9 banks”

- Finextra

Selected by Banks



Turnkey Compliance

Rapid deployment

Advanced Security

Payments functionality

Selected by Third Parties



Unified Access to all banks

Developer toolkit

Superior experiences

Selected by Mastercard



Mastercard Selects Token.io as a Partner for its New Open Banking Hub

Token provides pan-European access to banks, exceptional UX, enhanced security and richer functionality for businesses and consumers

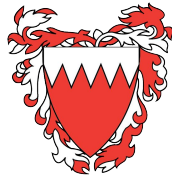
February 2019 – Turnkey open banking platform provider, Token.io Limited, today announces it has been selected by Mastercard to power the connectivity layer of its open banking hub. The hub will connect merchants, retailers and other regulated third parties to financial institutions in Europe for data and payment transactions.

Further to the announcement in June 2018, Mastercard's services will include:

1. A pan-European directory to help Financial Institutions ensure that Third Party Providers (TPPs) seeking access to a customer's account are legitimate and hold the appropriate regulatory status;
2. A dedicated dispute resolution mechanism; and
3. A connectivity hub

Jim Wadsworth, Senior Vice President, and leading the development of Mastercard's Open Banking offering, says: "Open banking has the potential to revolutionise how we all interact with financial services. Our API-led solutions will make it easier for financial institutions and third parties to act on the opportunities and create innovative banking and payments experiences for people's everyday lives. Token's work in this space will help us to deliver the vision we've set."

Selected by AT for Bahrain National Standard



مَصْرِفُ الْبَحْرَيْنِ الْمُرْكَبِي

Central Bank of Bahrain

Token brings Open Banking to MENA region

Turnkey open banking platform provider, Token.io Limited, today announces a partnership with Almoayed Technologies, the MENA region's leading technology infrastructure development company, to accelerate open banking across the Arabian Peninsula.

Ahead of the introduction of open banking regulations in Bahrain, announced yesterday*, Almoayed Technologies and Token have been working together to enable fast and simple compliance for the Kingdom's banks via the integration of Token's single API.

By offering a common platform to all banks in Bahrain, Token and Almoayed Technologies will enable banks to deliver open banking payment and information services to customers quickly and efficiently, and enable secure and frictionless access to banks for third-party providers (TPPs).

This unified approach will avoid many of the issues that are currently hampering open banking adoption in more mature markets. In the United Kingdom, for example, widespread development of proprietary APIs is causing fragmentation and integration pain, holding back the pace at which the market can develop.

Steve Kirsch, Founder and CEO, Token, comments: "Through our platform, financial...

finextra.com

Selected by the Industry



2019

Best Payments Industry
Newcomer

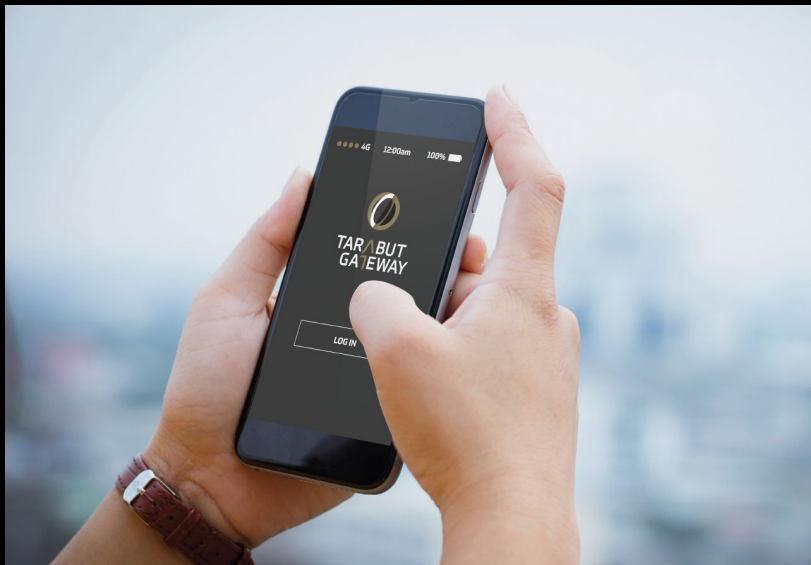
2018

Financial Innovation Awards
Open Banking Category

2018

Tech Women 100

Path to Pilot



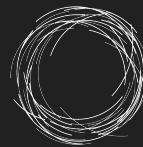
- 10 Weeks
- Installed common API at 10 banks in Bahrain
- Connected working PFM prototype
- Connected working Payment prototype

Commitment to GCC & MENA

Partner

**ALMOAYED
TECHNOLOGIES**

Investors Include



ABVENTURES

PLUGANDPLAY

Thank you

Michael O'Loughlin

michael@token.io

@euroloughlin