

APIs & GLOBAL BANKING

# How APIs can transform global banking

Business-to-business application programming interfaces are moving banks closer to clients on the value chain, but there are a host of hurdles that must be overcome first

Alex Wright

With companies expanding into new regions and doing more trade with the rest of the world than ever before, global transaction banking has become critical to their success.

Traditionally, major banks have provided these essential services, covering everything from transfers, payments, and cash and asset management, to financing and global trade.

It's a money spinner that generates almost \$1 trillion in global annual revenues and is expected to grow to \$7.2 trillion in ten years, according to industry estimates.

Previously, banks had relied on legacy systems and technologies, such as host-to-host file transfer, to integrate their services with clients' systems. However, while working well for single-step transactions, they struggle with more complicated real-time functionalities such as reconciliation, trade services, collections and supply chain finance.

In the face of increasing competition from more nimble rivals, notably fintechs and digital banks, banking institutions have had to up their game. Enter business-to-business (B2B) application programming interfaces (APIs), which enable banks to simplify transactions and provide clients with a seamless service.

But what are the key challenges involved in migrating to this new technology and how can banks overcome them? What has been the effect of regulation? And how can they capitalise on the biggest growth areas?

APIs work in closed networks that integrate banks' services with their clients' enterprise

systems and workflows. They allow banks to scale complex operations and eliminate the need for brokers or service bureaus.

Banks including Goldman Sachs, J.P. Morgan and the Bank of America have already taken the lead. Yet, as a technology, it's still in its relative infancy, with a lack of clearly defined industry standards, and is restricted by clunky infrastructure and governance protocols.

"The biggest challenge is in developing a platform that is both user friendly and compatible with clients' systems. Too many APIs, however, are let down by poor or over-complicated designs, due to lack of development expertise.

"API banking is a product with unique design constraints and challenges in the same way mobile or web banking are," says David Jarvis, co-founder and chief executive of Griffin, a banking-as-a-service provider. "You need to build out that expertise internally and none of the banks have invested in this to date."

They also need to be fully secure, well documented and meet ever-evolving regulatory changes. Then there is the considerable cost involved too, as well as overhaul of existing systems and processes.

To overcome these issues, banks must embrace technology and change, with a dedicated team focused on developing a strategy and rigorously testing their APIs. They should also collaborate with clients and partners, including fintechs, thus spreading the cost of innovation and reducing time to market.



J.P. Morgan, Goldman Sachs and Bank of America are three of the banks who have taken the lead on using APIs for global banking

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extension of this, but one that helps enable an entire market or industry vertical.”

UnitCredit has also teamed up with FinDynamic to build its platform, which allows clients to automatically view invoices through a web-based or mobile platform and approve invoices for payment. In September 2020, it launched the first open banking API with an IBAN check to enable clients to verify their customers' account details.

The move to APIs is being fuelled by open banking regulations, such as the European Union's Revised Payment Services Directive (PSD2), and the introduction of the United Payments Interface in India. PSD2 has required banks to release their data in a secure, standardised form, so it can be readily shared between authorised parties online.

"Industry needs, like smart personalisation and corporate banking, are driving the conversation beyond banking directives now," says Vikram Gupta, global vice president at Oracle Financial Services. "These capabilities need access to premium information beyond regulatory mandates that give banks an opportunity to tap into new revenue streams and provide better services to their customers as well maintain customer stickiness."

Simultaneously, artificial intelligence (AI) and automation have vastly improved risk and liquidity analytics and forecasting within treasury management systems. Blockchain and distributed ledger technologies have also driven the digitalisation of trade and supply chain finance.

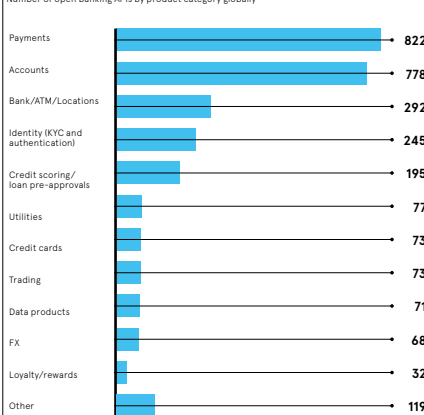
"Banks need to accept that the future of finance is decentralised and integrate blockchain and AI into their overall digital transformation strategy," says Inpay's head of financial institutions Stan Cole. "They can remain a central part of society by capitalising on the tremendous opportunities technology brings in terms of an incomparably higher speed and lower cost."

The biggest growth areas over the next three years will be cash management and trade finance. More than 85 per cent of respondents to a McKinsey survey plan to invest in cash management APIs in the next three years and almost 50 per cent want to expand their trade finance APIs.

Banks can support this by upgrading their API capabilities to allow clients to initiate self-service transactions directly. They can also cater to clients in different time zones with real-time payment processing, liquidity, risk and fraud management, cash-flow forecasting, reporting and pricing.

## WHAT ARE APIS BEING USED FOR?

Number of open banking APIs by product category globally



Awany 2020

As an absolute basic first step, banks need to invest in a digital banking platform that links their gateway and product processors and functions to enable their APIs. That platform informs all the modification, authentication, authorisation and consent-management capabilities, as well as connecting multiple information sources.

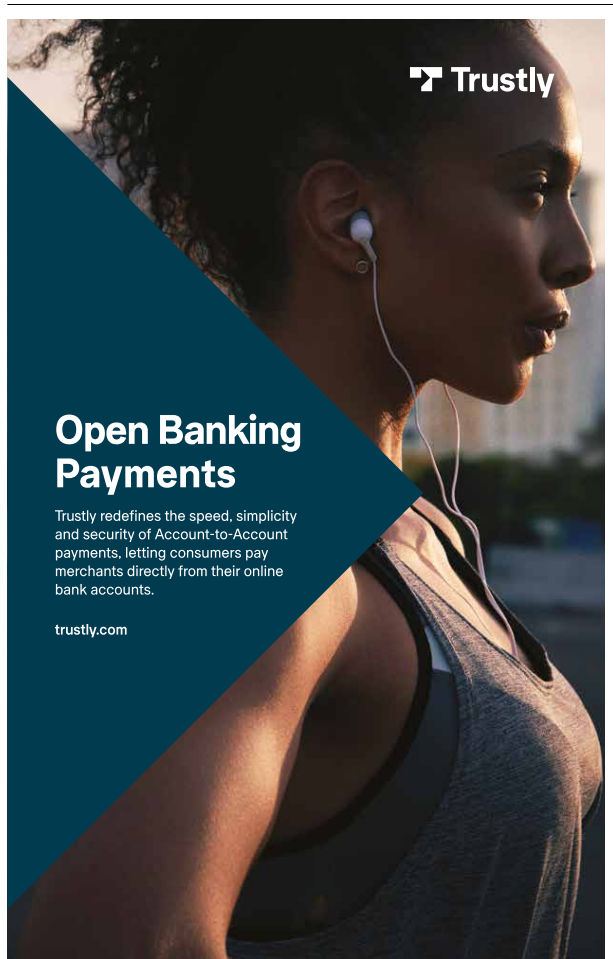
Société Générale has achieved this by building its B2B SG Markets platform. It provides everything from cash management, financing and security services to global markets and private banking.

"By implementing machine learning and combining our cash management and FX (foreign exchange) within our platform, we have created a one-stop shop," says Société Générale's head of execution platforms and UK chief digital officer Sohail Raia. "It enables clients to do everything from managing their transactions to taking cash positions on different currencies."

Citi, meanwhile, has partnered with treasury software providers including FIS, Kyriba, Oracle and SAP to embed its API functionalities into their core products. This month, its CitiConnect platform reached one billion calls from corporate clients since its launch in 2017, while API volume grew 60 per cent in 2020.

"APIs are great for real-time treasury services to enable our clients to have the most optimal digital banking experience," says Mayank Mishra, managing director and global head of digital channels at Citi treasury and trade solutions. "Open banking is an

Commercial feature



## Banking enters its era of openness

Open finance is enabling big banks to innovate and adapt at greater speed, and facilitating a new banking ecosystem, powered by APIs, that will transform the customer experience

The banking sector has had to evolve significantly over the last decade, but the pace of change is only accelerating. The global financial crisis signalled a need for something different, which combined with the emergence of powerful digital innovation triggered a surge in small startups seeking to disrupt incumbents with niche, differentiated services across the banking spectrum.

Spoiled by slick experiences from the likes of Amazon, Uber and Deliveroo, consumers desire instant gratification and personalised services from their banks too. Their expectations, however, are more likely to be met by the newer market entrants that, unbundled by legacy infrastructure or vendor lock-in, can innovate and adapt to trends in a faster, more agile way.

"Technology enables banks to deepen their relationships with consumers and create a stickier, more customer-centric service, but they need to find a way to deal with legacy," says Liad Bokovsky, open finance specialist at Awany, a tech company which gives heritage IT infrastructure new life to help organisations to digitally transform. "With lots of new competitors focusing on products like mortgages, insurance, banking or foreign exchange, big banks have to figure out how to deal

with that, viewing technology as a symbiotic relationship."

The key to innovating fast enough to keep up with customer expectations is through open finance, which is about using and sharing customer data in a holistic way to enable a better service. Open finance is a vision for a much bigger ecosystem that includes more information about the financial status of an individual, but also connects with other platforms and companies. A smartwatch, for instance, can tell you about both your health status and your spending status.

Nationwide Building Society has created an incubator programme, Open Banking for Good, to help people avoid getting into debt. By utilising data and embracing the principles of open finance, which is about achieving a 360-degree customer view, the programme enables people to better see if buying something or taking money out the bank might get them into trouble, by using tooling that can help them avoid financial traps and pitfalls.

Awany powers digital transformation by integrating all the legacy and modern technology applications in banks, with application programming interface (API) management that allows them to build marketplaces and ecosystems, which help them to grow. The company also removes complexity for developers of banking applications by automating their processes so they can concentrate on transformational frontend tasks rather than legacy integration at the backend.

Customer churn is a very expensive cost for banks. Providing a better customer experience keeps people loyal and reduces that churn," says Anthony Badger, financial services lead at Awany. "But it is very hard for big banks to introduce new innovative financial products. Many of them are not going to change their backends, those systems of records. We provide a way to integrate with them so they can adapt and respond more quickly to new trends and

customer expectations. Our middleware is an innovation layer that exposes this data to consumers."

The sheer breadth of the open finance ecosystem is exemplified by Awany's work with a leading automotive manufacturer resulting in financial integration, which means when somebody purchases a car they can simply press a button to get insurance for their first seven days, without having to provide any more information.

In the future, these drivers will also be able to subscribe to a service whereby their car can find, choose and pay for their parking space, or order and pay on their behalf when going to coffee drive-throughs. The financial ecosystem will be such that, for some customers, it might not even begin with an interaction with a financial services organisation.

"We are going to see all sorts of companies implementing different APIs in the open finance ecosystem," says Badger. "Banks will invite companies to be part of their ecosystem - a co-creation of APIs - and there will be a unified catalogue of all APIs available. But banks won't be like an island, they will also be part of other ecosystems. There will be more integrations between organisations and more offers available to consumers."

"Awany will help organisations create those catalogues and co-creation capabilities, and expose these assets in a secure way. We are part of the core journey for both the customer and the financial services companies."

For more information please visit <https://blog.awany.com/industries/banking-insurance>



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