

Operational open banking – Looking beyond the theory and regulatory compliance





Executive summary



The world is embracing open banking. Why? In some countries open banking is driven by legislation – such as PSD2 with mandatory deliverables and deadlines.

In other countries progress is slower and propelled by a convergence of factors, including changing consumer behaviour and technical innovation. However, as the monetary benefits of open banking become clearer, the global move towards open banking will accelerate.

Key benefits include:

- A more entrepreneurial banking sector that delivers customer-centric banking using a fintech approach
- The opportunity to monetise APIs, which in the UK alone is estimated to exceed £7.2Bn by 2022, with 71% of SMEs and 64% of adults participating¹
- The creation of new business models based on aggregation, integration and embedded banking.

In reality, the benefits of open banking are unlimited so they are hard to quantify precisely. Although open banking is new and evolving, open APIs have been around for decades in other industries where they have redefined what is possible and created thriving businesses. We believe that a lot can be learned from existing examples of API-driven success:

- DBS Car Marketplace has attracted more than half a million unique visits while the property marketplace has generated more than SGD 300 million in home loan requests.
- EZBob was originally a direct lending platform but transformed its business model to become the premier ‘white-labelled’ provider to banks and has withdrawn from direct lending to focus on R&D
- BBVA Compass – The BBVA Open Platform offers a suite of Banking-as-a-Service APIs throughout the US. Unlike most other open banking initiatives, BBVA Open Platform offers access to bank functionality rather than customer data.

Below you can read more about these and other open API success stories. We believe open banking is a unique opportunity to transform the industry and to align services more closely with evolving customer needs.

We hope you find our paper interesting and that it encourages you to join the discussion.

¹ The Future of Banking Is Open – How to Seize the Open Banking Opportunity, PwC 2018

Introduction



Since January 2018, UK banks have been compelled to offer standard application programming interfaces (APIs) for current account to account information service providers (AISPs). In addition, payments information must be made available to payment initiation service providers (PISPs). Similar initiatives are underway in other global locations, including the Netherlands and Sweden, US, Singapore, Brazil and Mexico.

Considering the UK example, open banking has not yet transformed the banking industry, but it is still early days.

As of March 2019, the UK had 118 regulated providers offering Open Banking services² and 42% of users of financial services platforms have more than one bank account³.

So far, many banks seem to have treated open banking as a regulatory compliance issue. While it is that, regarding open banking as simply a regulatory issue greatly underestimates its enormous potential to transform the industry and for banks to change how they interact with customers and third parties. Nevertheless, uptake has been slower than some commentators anticipated. Why?

As well as a lack of market awareness, some bank customers have shown a reluctance to share data that is inherently sensitive and personal. Many banks too

have been hesitant to participate fully and are adopting a wait-and-see stance.

However, open banking will happen and, over time, it has the potential to redefine what it means to be a bank. Here, we revisit the fundamental drivers of open banking and suggest ways that banks can seize this unique commercial opportunity. We believe that banks can learn from the experience of others, both in financial services and dissimilar sectors.

² Data provided by Open Banking Implementation Entity (OBIE), March 2019

³ Open Banking enabling the age of the 'multi-banked', Fintech Finance, 8 April 2019

What is Open Banking?*



The secure way to give third party providers access to your financial information using standardised Application Programming Interfaces (APIs)

To initiate payments and other financial transactions

The current proportion of the population that would use open banking** services. This is expected to rise



+



+

27%

=

540 million European current account holders, equating to almost 146 million people would participate in open banking services

Source: finextra 2018

Definition: *Open Banking is CMA regulation | **open banking is using open APIs to enable new financial products and services

Open banking – a new dawn?



Open banking seeks to increase competition, improve transparency and boost innovation throughout the banking value chain. As discussed in our previous paper⁴, we believe this is a critically important change in global banking that will permanently transform banking operational models and in turn the banking landscape. How?

One of the main aims of open banking is to boost competition amongst traditional banks, but it also seeks to encourage competition between banks and neo-banks or fintechs. Unencumbered by legacy technology stacks, these new arrivals offer a tech-first mindset and agile approach to banking that many traditional banks envy. However, incumbents have the

advantage of loyal customers and strong balance sheets. Inevitably, many banks are collaborating with fintechs to accelerate progress, confirming that the new age of competition is also one of collaboration.

The strategic aim of open banking is to make banking more customer-centric. In the age of the great customer experience, banking is often found to be lagging behind other sectors. Tech giants, like Facebook, Amazon and Google, have raised the bar of possibility regarding customer experience. All of these companies harness the power of customer data to deliver a great customer experience, wherever customers are located and whatever the device they use. So, ultimately open banking is about data and the ability to process it.

⁴ The Monetisation of Open Banking, GFT, 2018

Origins of open banking



Although open banking is often made possible by legislation – such as PSD2, in many respects it is a natural evolution of changes that have been underway for over two decades. In 1994, Bill Gates boldly suggested that “banking is essential, but banks are not.”⁵ In some respects, history is proving him right. People spend more time banking than ever but they seldom visit a

bank branch. When they do visit a branch it tends to be for a specific purpose rather than to transact. This is reflected in a high number of bank branch closures and the repurposing of key branches as advice centres, where customers often complete a journey that probably began online.

More recently, Ralph Hamers, CEO of ING suggested, “If you want to be a successful platform, you’ve got to be open. You have to be open to consumers and producers. You have to be open to services that are not necessarily banking

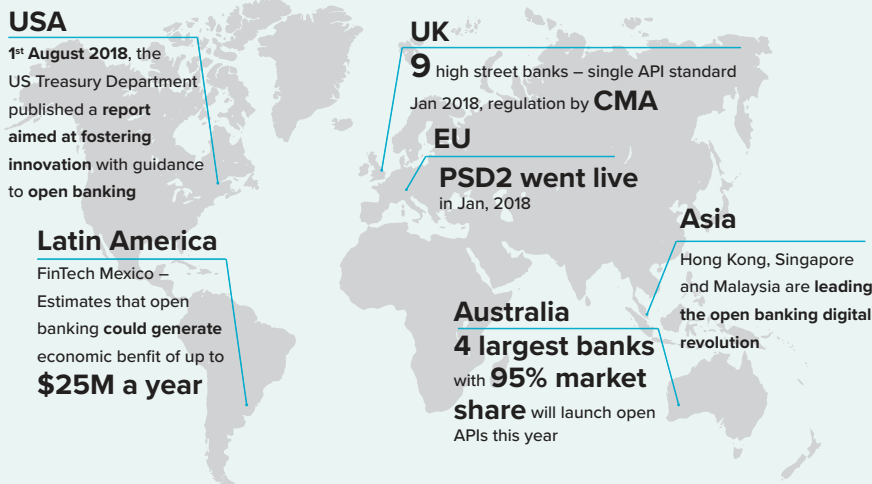
but are beyond banking. You have to be open if you really want to be a credible platform that customers come to you for financial services.”⁶

In many respects, banking is a utility that people need but, to make it interesting, it needs to be comingled with other services. Open banking enables this – banking services can be viewed, accessed and consumed along with other services. This may be welcome news for bank customers, but how can banks monetise the opportunity?

Regulation as a driver



New regulations will drive greater competition and standardise technology, encouraging innovation and facilitating increased data flow.



3 main regulatory value drivers

Security

Stability

Innovation

APIs as products



The development of open APIs will drive banking transformation. Although relatively new in banking, open APIs have been around in many other industries for decades and have played a pivotal role in delivering new services, particularly in the sharing economy. Companies like Uber depend on open APIs for their very existence and many other companies have developed APIs to

extend their market reach and to generate new revenues.

The arrival of open APIs in banking means that the banking value chain can be disaggregated into individual components, each of which can be marketed as discrete products and priced accordingly.⁷ So how big is the commercial opportunity? In the UK, open banking is estimated to have a revenue potential of at least £7.2Bn by 2022, and by that date, over 71% of SMEs are expected to adopt open banking and 64% of adults are expected to be users. With

similar open banking initiatives underway in global locations, recent research considers the market size and its likely composition, including new channels and new business models, to be substantial.

Although calculating the market opportunity necessarily involves some assumptions, the overwhelming message is clear: open banking is a unique opportunity that has the potential to transform the business of those who embrace it. There are plenty of examples to support the business case for open banking.

⁵ Disruptive technology will not kill banks, Financial Times, October 3, 2014

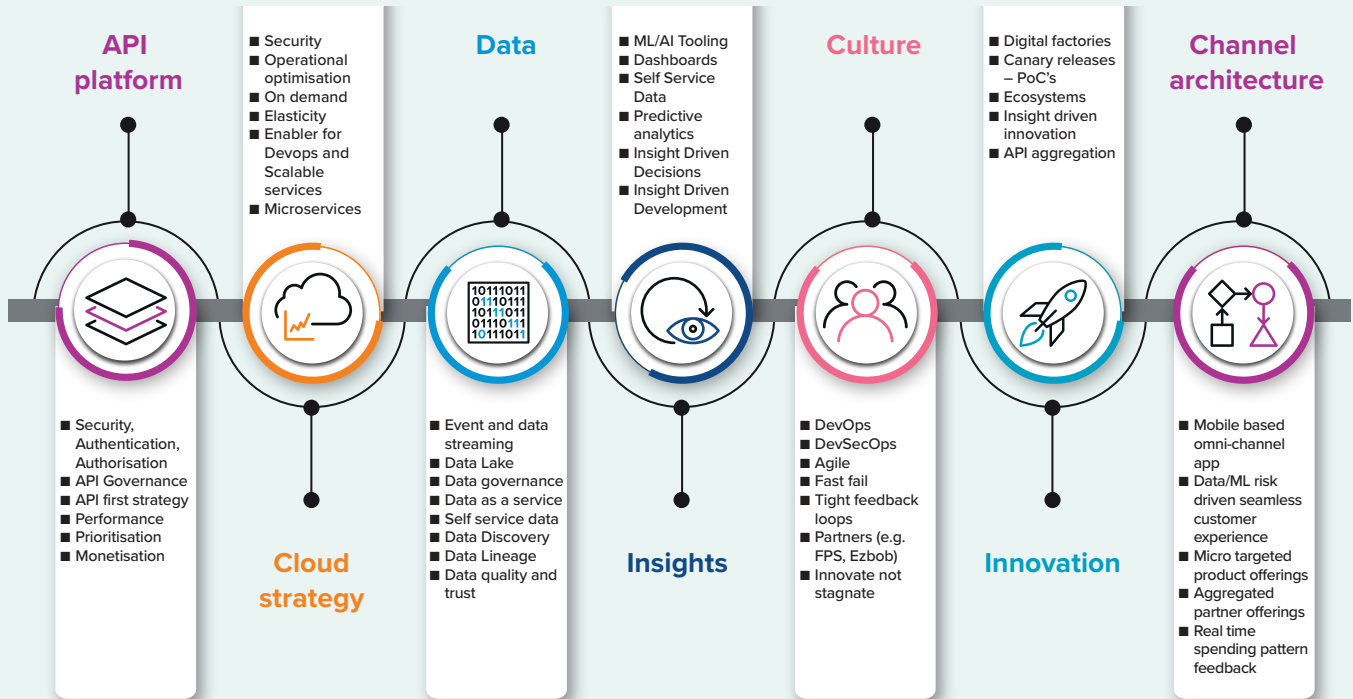
⁶ Ralph Hamers, CEO of ING, speaking at Money 20/20 Europe 2018

⁷ Pricing options for APIs are discussed in The Monetisation of Open Banking, GFT, 2018

GFT's A-Z of open banking



Moving beyond Open Banking compliance to adopt a robust open banking strategy



Learning from the experience of others



In reality, progress towards open banking has been slower than many commentators anticipated. In our experience, some banks have focused too narrowly on the compliance aspects of PSD2 rather than the business opportunity.

A lot can be learned from the success of others within financial services and beyond. Here we consider some examples of success:

DBS

One of the world's leading financial services groups, DBS, operates in 18 markets and is a front runner in digitalisation.

In November 2017, DBS bank launched a banking API developer platform. In

Although APIs have become a hot topic on the banking agenda, much of the attention has been driven by the legislation that gives it a legal foundation.

essence, the API platform offers a wide array of APIs for other brands, corporates, fintechs and software developers to plug into. This has boosted the bank's innovation and digital strategy, while improving the customer experience.

The DBS platform includes over 350 APIs across different categories, including funds transfers, rewards, PayLah! and real-time payments. This is currently one of the largest API platforms in the world.

Notable participants include McDonald's, which offers round-the-clock food delivery. By making use of DBS' banking APIs under the PayLah! payments category, McDonald's introduced the convenience of PayLah! to its McDelivery customer base this year, expanding their cashless payment options.

Another example is social enterprise Homage, a one-stop, on-demand service that offers in-home caregiving services for seniors to help them maintain their independence in old age.

By partnering with DBS, Homage's customers, who are usually family members of the seniors who need care, can redeem their credit card reward points to arrange for a care assessment by a professional Homage nurse and care specialist to determine the home care needs of their loved ones.

Working together with ecosystem partners, DBS has launched marketplaces on its website, selling cars, property and electricity. Since its introduction in August 2017, DBS Car Marketplace has attracted more than half a million unique visits,

while the property marketplace generated more than SGD 300 million in home loan requests within 12 months.

These diverse examples show how open banking can drive customer convenience by integrating banking services to deliver such services where and when people need them.

EZBob

The lending platform offered by UK software provider EZBob leverages APIs to incorporate data from over 40 sources during the loan review and approval process. The company initially offered loans directly to consumers and SMEs. Once banks such as RBS and Clydesdale Yorkshire Bank started to incorporate the solution as white label for their own loan processes, EZBob decided to pull back from direct lending to focus on R&D.

BBVA Compass

BBVA Compass is a subsidiary of the Spanish multinational banking group BBVA and operates throughout the USA.

The BBVA Open Platform offers a suite of Banking-as-a-Service APIs throughout the US. Unlike most other open banking initiatives, BBVA Open Platform offers companies access to bank functionality rather than customer data.

In this way, a company can offer banking services under its own brand while services are supported by the BBVA

infrastructure and regulatory framework. Services offered include payments, deposit accounts and debit cards. BBVA Open Banking Platform increases the reach of BBVA Compass to a new customer base that it could not easily reach directly.

Companies that have joined BBVA Open Banking include online banking services companies Simple and Azio, SaaS accounting firm Xero, payments company Modo and savings company Digit.

Google

Google Maps Platform shows how APIs can drive business value. The tech giant boasts 99% coverage of the world and maps are supported by comprehensive data for over 200 countries and territories. The maps are updated 25 million times per day and have over 1 billion users. Companies that have built success on the Google platform include the Allianz Group, a global financial services provider predominantly in the insurance and asset management business with over 88 million retail and corporate clients in 70 countries.

Allianz relies on a system called MIDAS to store information on its thousands of service providers, dispatch them to the correct location and track their progress. Although MIDAS already had digital mapping, it lacked some vital functionality to respond quickly. The move to the Google Maps platform improved data accuracy and service delivery to both metropolitan and remote areas.

WeChat

The Chinese multipurpose-messaging social media mobile payments app was developed by Tencent and became the first Chinese company to top \$500 billion market cap. It is one of the world's most popular apps and has over 1 billion monthly active users.

WeChat has experienced unparalleled growth, due the 'network effect' of its application. It reached 100 million registered users within a year and 300 million by its second anniversary. Additional functionality has been added to meet emerging user requirements and this has been achieved in record time using APIs.

From the outset, WeChat was designed as an open platform offering access to WeChat for integration with third-party apps. The number of applications is not easily counted but includes such diverse brands as China Airlines, Ten Sports, The New York Times, Airbnb and Western Union. The message is clear – WeChat made the right decision to adopt an open API strategy at the outset.

The above examples all demonstrate how APIs can redefine the scope of a business and generate new revenues that would otherwise have been unattainable. So, what about the banking industry?

The search for value



Banks face some universal business challenges. In the age of free banking, current accounts are costly to manufacture and support – it costs a bank around £100 per year to offer a current account and this cost must be recouped from somewhere. Many banks are exploring new revenue models and with open APIs, the possibilities are limited only by the imagination. Potential revenue sources include:

Advertising

New advertising revenue models are emerging, including results-driven ones,

which only cost the advertiser when a sale is made. Banks have a unique opportunity to become the advertising stream of choice, on more favourable commercial terms than many alternatives. Advertising can be non-intrusive and contextual to improve the customer experience.

Over time, banks can invite other market participants into the banking ecosystem, with offers of bespoke advertising, other offers and promotions. This can be tailored at sector/location level, such as automotive sales. A current example of this is Divido.com, which offers a retail finance platform that empowers companies to offer instant

consumer financing. This drives conversion at every stage of the purchasing funnel: attracting new customers, increasing sales and raising average orders.

Divido is in effect an aggregator that connects multiple competing lenders. The platform is omnichannel and available online, in-store or mobile and across multiple geographies. Customers benefit from low-cost finance on purchases, while the merchant gets paid in full immediately. At a time when bank liquidity for credit cards is expensive, banks must look for new lending opportunities. This is attractive for banks and their customers as it drives value for all parties.

Enlarged addressable market

US millennial lender, Upstart, has also developed a new addressable lending market while controlling risk, by using alternative sources of data, such as education, employment history and personal interest. Loan approvals increased by 186% and the company is able to offer borrowers an average 12% rate on fixed-term loans, compared to an average 22% rate on credit cards.⁸

Extended product portfolio

An API-based architecture improves integration with third parties. This makes it easier for a bank to support a broad portfolio of product options, including those provided by partners.

APIs enable a bank to diversify its product range and increase revenue. Taking the example of a mid-size bank, PwC estimates that when assuming modest penetration (10%) of new product uptake by existing customers, a mid-size bank with a return on equity (ROE) of 8.1% could look to generate incremental returns closer to 12% through digital-based product diversification.⁹

Reduced costs

Adopting an API-first architecture is not just about new revenues. It should also be about cost reduction and efficiency. For example, some banks, including Crédit Agricole and ING have provided open APIs for third party developers with the aim of increasing the number of applications developed externally. This has helped reduce internal development costs by an estimated €1.5M.

M&S Bank is one of the first banks to enable open banking assisted mortgage applications, removing the need for customers to source and supply copies of bank statements to support their mortgage application. The benefits include a simplified process for the user and a reduction in application time.

More than money

We have just considered several examples of how banks can monetise their APIs. However, banks should not expect a significant short-term payback on their open API investments. Adopting an open banking approach is above all a strategic consideration to ensure that the bank is 'future proof.' By adopting open banking, financial institutions are anticipating the arrival of a completely different, truly customer-centric banking culture.

⁸ Source: Open Banking in a New Era of Growth, PwC, June 2018

⁹ Opening the Bank for a New Era of Growth, PwC June 2018

The pivotal role of technology



For many decades, technology has been at the forefront of banking success, enabling banks to reduce costs and gain economies of scale. However, in the digital age, technology is far more than a processing engine – it is the digital manifestation of a bank's brand that supports all customer touchpoints.

Today, technology must do more than drive down processing costs and the cost of manufacturing financial products. Technology is at the heart of a great customer experience which supports 'life moments' that have financial consequences, for example, a wedding, graduation or new job.

With the right tools, a bank uses technology to support important events in a customer's life. Banks need to adopt smart technologies, such as artificial intelligence (AI) to up-sell and cross-sell. Although this technology is emerging in banking, AI is becoming mainstream in other sectors, and it should be part of every open banking strategy. Other technology considerations that must be part of a strategic approach to open banking include:

- A federated data model or operational data store to leverage the power of data and to ensure that all stakeholders can access the same data
- A strategy for cloud adoption to enable scale and near real-time processing
- API building blocks to generate new services.

Ultimately, open banking is about data and successful banks will be those that can ingest, process and distribute data efficiently.

Many of the technologies that support open banking are new and evolving quickly. Banks need to gain knowledge quickly to become self-sufficient in future. New technologies empower banks to do this but many need assistance to enable them to do more with their data.

Think outside the branch

Banks that will derive real value from open banking will be those that think 'outside the branch' and become more entrepreneurial and responsive. Open banking empowers banks to do new things but also to do things differently.

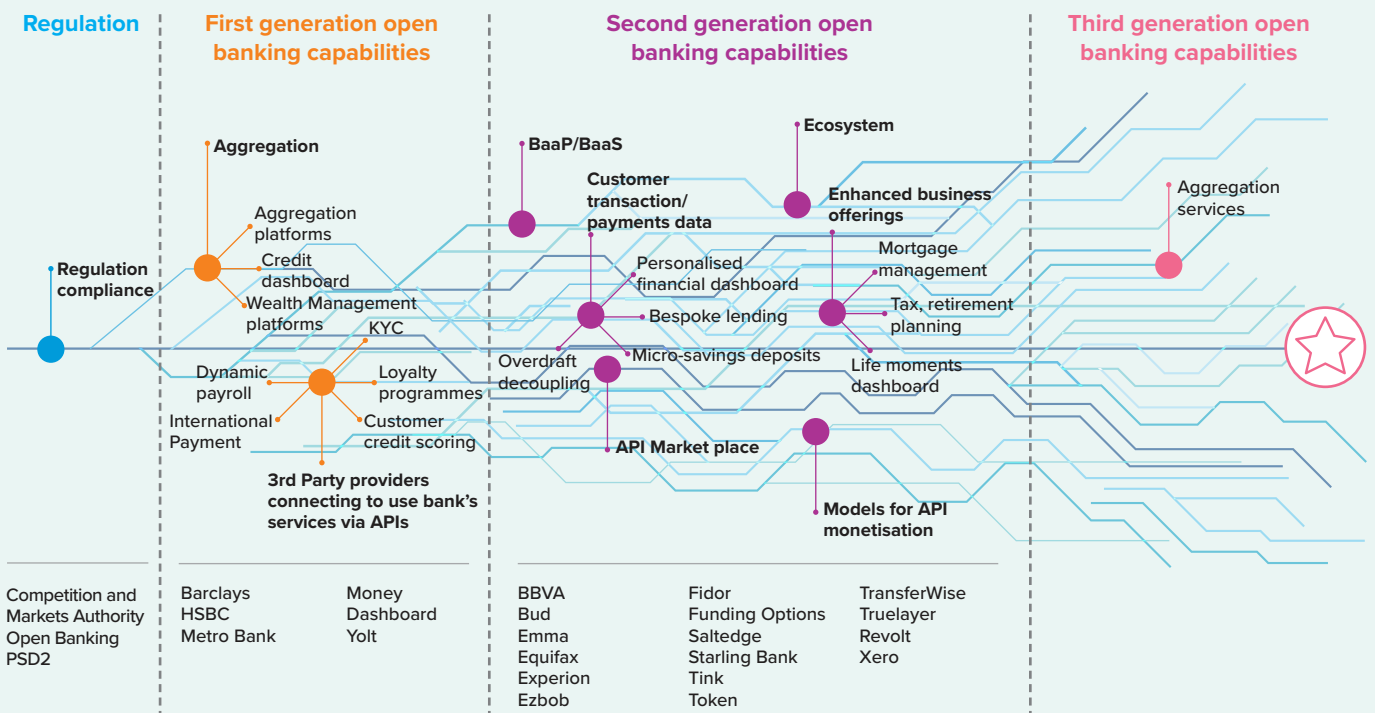
The real opportunity is not merely to renovate the existing bank and simply take on some characteristics of the emerging challengers, but to fundamentally revisit the banking business model. An open API approach, utilising Bank-as-a-Service offerings, may enable some elements of the banking value chain to be fulfilled at a fraction of the current cost. However, this is a short-term approach, and should also be a wake-up call for those banks whose cost base is fundamentally out of kilter with the new realities of a low-cost, competitive, customer-centric environment.

The successful banks of the future will be those that aim for a transformed future state enabled by open banking, where the entire organisation is mobilised around customer orchestration and servicing the personal financial needs of the customer, rather than an evolution of the current financial 'product sales' approach. Reevaluating the business model is the ultimate prize of open banking, building a future state business that is completely aligned to the needs of the customer.

We have no doubt that successful future 'banks' will look different and offer very different services than those of current financial services firms; the successful and pioneering firms of the future will be those that are able to pivot from their current position and fully embrace a customer-centric approach, with all the benefits derived from new technologies and integrated customer data.

Monetisation

Creating efficiencies from new business models to deliver new revenue streams



GFT and open banking



GFT's expertise in open banking covers a wide spectrum, ranging from purely IT: API architecture and development, to business initiatives like the launch of a neobank and the integration of banking services into other verticals.

For a large Spanish bank, GFT has worked on the definition and implementation of an identity and access management (IAM) system. We have also been involved in the creation of API developer portals for several European banks.

Our teams have participated in consultancy projects for American and European banks regarding API governance to define how business and IT should work together to define and implement APIs.

Finally, GFT delivers architecture to enable customisable front ends and apps; great examples of this being for Fidor Bank and o2 Banking, operating on the world's first open banking platform.

Mobile banking solution for o2 Banking



As a key player in the German telecommunications market with almost 43 million customers, the mobile operator Telefónica Deutschland has taken its first step into the mobile banking sector. The mobile bank account 'o2 Banking' has a clear business model: instead of traditional interest rates, customers are rewarded with variable mobile data volume.

Together with Fidor Bank, GFT worked on the realisation of this innovative banking solution. An international project team

developed native apps for iOS and Android, taking into account the specific features of each device and operating system.

The launch of Germany's first mobile-only bank account was completed in record time – with the banking solution becoming operational in summer 2016. The market response has been overwhelming: as an 'outstanding digital innovation', o2 Banking received the 'Handelsblatt' and 'Euro Forum 2016' DIAMONDSTAR Award in the Digital Banking category.

GFT open banking capability



Advisory and design-led thinking



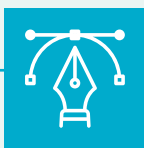
- Business and technology alignment
- API diagnostic assessment and business-led prioritisation workshops

API governance process design



- API governance design
- Open banking consent model
- API artefact generation engines
- Business capability alignment
- Identity management and security

Functional and technical design



- API specification design
- API management and gateway
- Business capability alignment
- Software lifecycle and DevOps

Established cloud partnerships



- Demonstrable cloud experience on verticals ranging from:
- Application migration factories
 - Burst compute
 - Containerisation of microservices
 - Serverless architecture
 - Machine learning and NLP
 - Near real-time data pipelines

Legacy system mainframe optimisation



- Monolithic decomposition
- System assessment and optimisation
- mainframe offloading MIPS mitigation

What now?



To learn more about how your institution can start down the road to open banking utilising GFT's expertise, visit
[› gft.com/open-banking](https://gft.com/open-banking)








About GFT



GFT is driving the digital transformation of the world's leading financial institutions. Other sectors, such as industry and insurance, also leverage GFT's strong consulting and implementation skills across all aspects of pioneering technologies, such as cloud engineering, artificial intelligence, the Internet of Things for Industry 4.0, and blockchain.

With its in-depth technological expertise, strong partnerships and scalable IT solutions, GFT increases productivity in software development. This provides clients with faster access to new IT applications and innovative business models, while also reducing risk.

-  blog.gft.com
-  twitter.com/gft_en
-  linkedin.com/company/gft-group
-  facebook.com/GFTGroup
-  [› gft.com](https://gft.com)

About the author



Christian Ball



Head of Retail Financial Services



Christian is Head of GFT Retail Financial Services, specialising in helping retail banking clients realise their strategic vision for platform banking. He brings extensive experience to this role, spearheading the GFT Retail offering.

He was previously at Meniga, one of the top performing fintech companies in Europe, before which he worked with many of the leading banks to shape their digitalisation strategies – including positions at Cap Gemini, Fiserv and Accenture, where he led the global Business Development for Accenture Software.

This report is supplied in good faith, based on information made available to GFT at the date of submission. It contains confidential information that must not be disclosed to third parties. Please note that GFT does not warrant the correctness or completion of the information contained. The client is solely responsible for the usage of the information and any decisions based upon it.