

Why 2019, is the year of open banking

What's the story?

Open banking is almost open for business in Europe. When the final part of Payment Services Directive (PSD2) legislation comes into force in September, it effectively gives a green light for businesses – who now have access to financial data with customer consent – to fundamentally change the way money is managed.

While banks across Europe are making their final push to meet the PSD2 requirements in time, the gigantic task of being regulation-ready is only half of the open banking puzzle. At the same time, banks are trying to work out how to get the most out of open banking, in order to protect their existing business and generate new revenue streams.

Banks are having to carefully balance investment in two major areas. The most significant is IT, to make sure they can actually meet the PSD2 implementation requirements and quick deadlines. The second is to invest in products and digital services that leverage the open banking opportunity, and add real value for customers and shareholders.

We believe the banks that continue to succeed will be the ones who embrace open banking. That have a relentless focus on building the best range of products for customers, alongside a seamless digital experience. If banks can use customer data to increase revenue and diversify into new markets, then they will stay ahead of the emerging competition.

We have already seen the beginnings of what open banking can offer. But in reality, the banking industry has only started to scratch the surface. 2019 is set to be the year of open banking, and the banks can be crowned champions. Here's why we think so.



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What it all means:

A list of acronyms that will help you make sense of things.

AIS Account Information Services

AISP Account Information Service Provider

API Application Programming Interface

ASPSP Account Servicing Payment Service Provider
(banks and financial institutions)

CMA Competition and Markets Authority

CSC Common and Secure Communication

EBA European Banking Authority

PFM Personal Finance Management

PIS Payment Initiation Services

PISP Payment Initiation Service Provider

PSD1 Payment Services Directive versions 1 & 2
PSD2

RTS Regulatory Technical Standards

SCA Strong Customer Authentication

Why open banking, why now?

01

Why open banking, why now?

For as long as banks have been around, people have had an exclusive relationship with them. Why? Because they protect one of our most valuable assets. Loyalty is passed down from one generation to the next. Parents open checking accounts for their children at a young age, and when that child grows up, the same bank is the first one to offer them a loan, credit card, mortgage or investment – effectively helping people realise their lifetime goals.

That sounds nice.

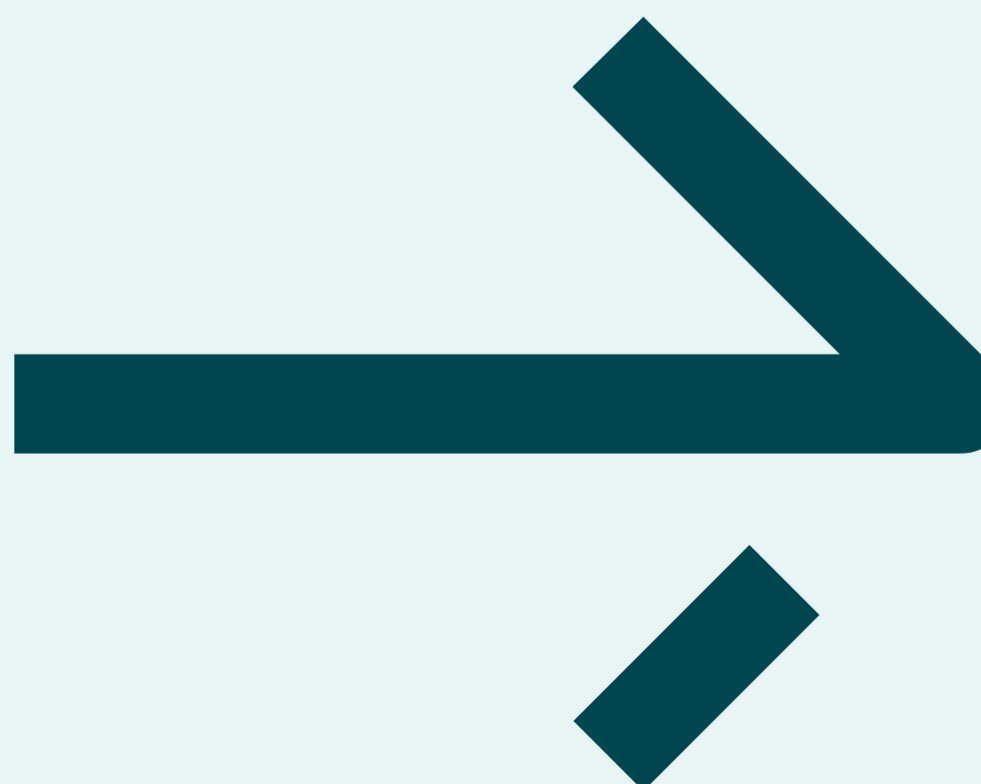
One institution looking after the whole family. But we know in reality it's not good for the customer. The truth is that there has always been very little competition or transparency in banking. Banks have owned customers' data, and the strong customer relationship has meant some people have settled for services and products that don't completely meet their needs.

Despite this, there is no real incentive to leave a bank. It can be a messy divorce. Customers end up having to keep track of whether payments have been successfully moved from one account to another, to make sure everything is up and running as it should be. Who wants to make time for that?

But now we are starting to see the power shift from the bank to the consumer. Progressive technology has fuelled open banking, along with customers' changing expectations. People who are used to a personalised experience from the likes of Netflix and Spotify no longer value a one-size-fits-all approach.

So the opportunity for banks and third parties to drive innovation and drastically transform banking for the better is huge.

Open banking will give everyone access to their financial data, and they can share it with whoever offers them the best service. That might still be their bank. But if not, customers can seamlessly switch, or use a competitor's technology to give them a better experience.



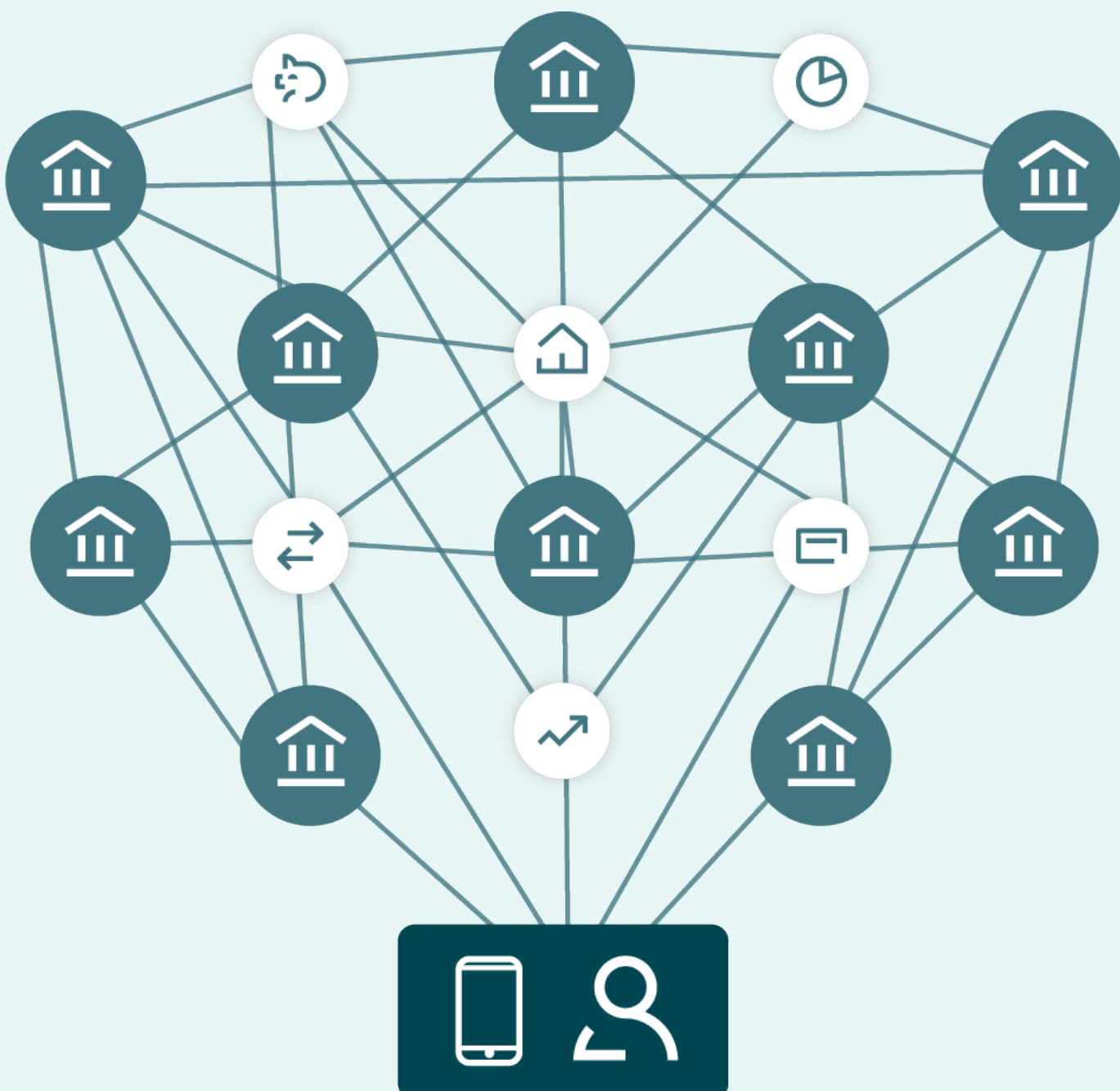
Closed banking

- Bundled value chain for financial services
- Customer and banks have limited access to data
- Monolithic relationship between customer and bank



Open banking

- Unbundled value chain for financial services
- Sharing of data between parties with consent
- Open relationship between customer and service providers



The
world is
changing
fast

002

The world is changing fast

60%

of all consumer transactions
already happen online

Consumers now spend over 11 hours online and check their phone more than 50 times on average – every single day. Our lives have been transformed by digital services. People are used to having everything they need at their fingertips, regardless of the industry with which they are engaging. And this was the catalyst for the start of Europe's open banking journey. The growing popularity of digital services – specifically in cashless payments – was what brought about the EU

regulation that is enforcing open banking today.

New online merchants, such as PayPal and SOFORT (acquired by Klarna), emerged and changed the way payments were made by using seamless digital services. Legislation had to catch up to regulate them.

Today, physically paying for things is fading into the background, and instead, payments are becoming an integrated experience. You can get in and out of a taxi without ever thinking about making a payment. The technology takes care of it. And you trust it to.

2018

2019

2020

2021

Non-cash transactions are forecast to grow by 12.7% every year.

We're not totally there with actionless payments yet, but digital transactions are the norm. According to Visa, 60% of all consumer transactions already happen online. And in-store purchases are increasingly cashless, rising to 482.6 billion transactions globally in 2016, according to the 2018 World Payments Report. This is being driven by popular e-wallet and mobile

payment options (via Alibaba, Tencent and Apple among others), and it's booming in countries such as India, China and South Africa.

Because of this, from 2018 to 2021 the number of cashless transactions is set to grow by 12.7% each year, which will nearly double the number that are processed today.

The world is changing fast

The growth of cashless transactions has an obvious link to the increased use of online and mobile banking, and the benefits of open banking. If cash is used to pay for everything, an online bank account won't show much. But if payments are digital, it becomes a valuable history of every transaction and expense.

But despite a lot of media coverage about the rise of digital banking services, public awareness of open banking is low. A 2018 survey showed fewer than one in four people in the UK had heard of open banking (or Open Banking, the UK legislation). This could

be because, from a consumer perspective, nothing has really changed yet. The promised benefits of the open banking revolution have yet to materialise. But it won't be long until they do.

The third parties looking to test their innovations for open banking will be able to do so now the 14th March PSD2 deadline has passed – when banks had to share their testing environments for their dedicated interfaces (think: APIs). We expect to see even more services start to go live from 14th September 2019, when the regulatory technical standards of PSD2 are enforced.

What this year's PSD2 deadlines mean:

14th March 2019

This is the date when banks and financial institutions had to open their dedicated interfaces (APIs being one version of this) for testing. This allows third parties to connect to a bank's system and to test the connection, as well as the functions to perform account information and payment initiation services.

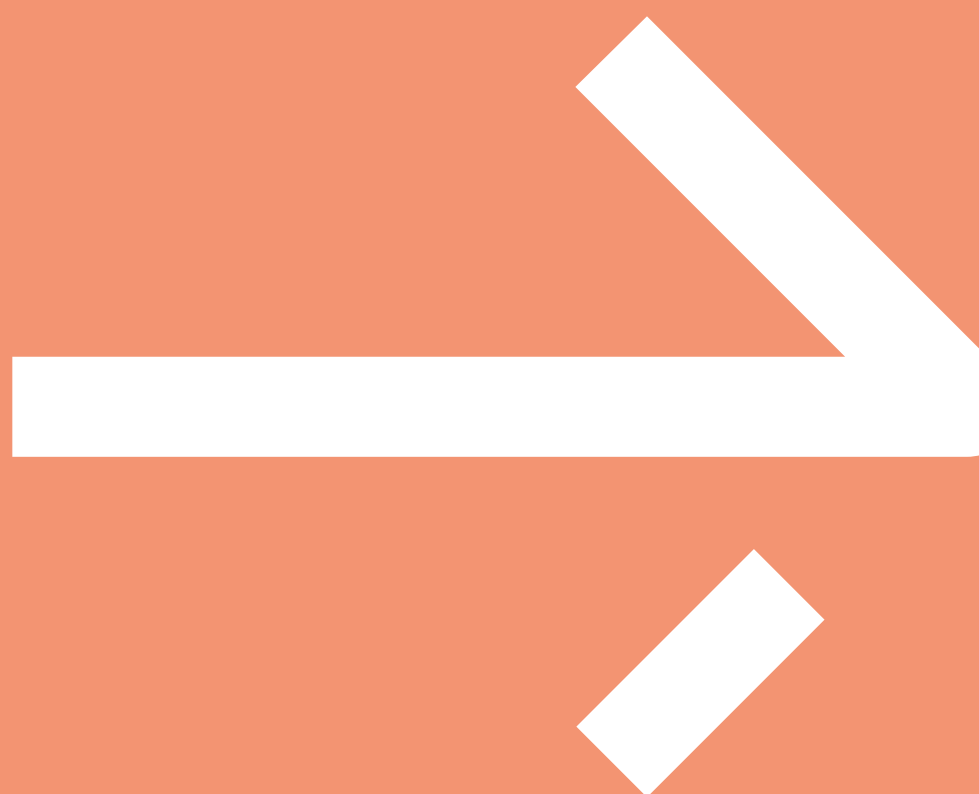
14th September 2019

Following the testing phase, this is the date when the Regulatory Technical Standards (RTS) for PSD2 are enforced for banks and financial institutions. The RTS are a set of detailed compliance criteria for areas such as customer authentication, data security, legal accountability and other core processes.



A year to work it out

As years go, 2018 was a pretty important one for banking. Around the world, banks were busy working out how to deliver open banking, while also working out how to deliver a better service to customers. At the same time, more and more regulators across the world were vocal about enforcing open banking legislation within their own markets. The open banking movement was picking up speed.



Regulation overload

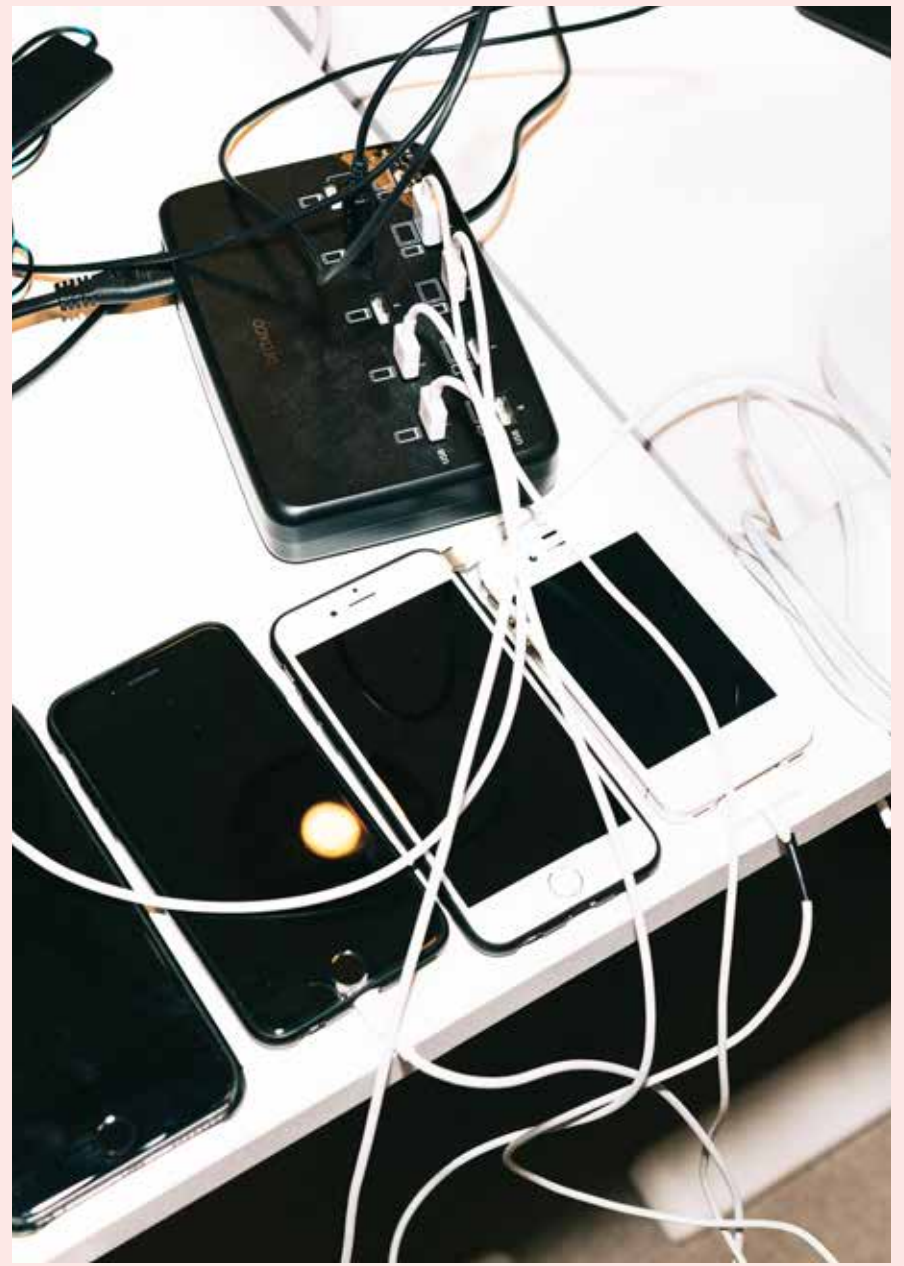
European banks were swamped by a tidal wave of significant regulations in 2018, and they all had one thing in common: exposing data to increase transparency. Banks had to prioritise their investment between data protection regulation, a money laundering directive and regulation for investment services. And that's just for starters.

There were also two important pieces of legislation helping to shape the future of banking around the world – the “Open Banking” regulations in the UK, alongside the EU's revised PSD2.

As a part of the EU, for now, the UK's Open Banking regulations have to comply with PSD2. But there are a few core differences between them. The UK has gone a step further and introduced regulations on top of PSD2. So you could say Open Banking is PSD2 plus.

The biggest difference is that the UK's Open Banking regulations give a set standard for the use of APIs – the connections that are favoured by most banks. Under PSD2 no standard technology is prescribed, which is why the deadline on 14th March 2019 for banks to submit their connections for testing was an important one.

PSD2 came about because of the rise in mobile payment technology operating outside of regulation, while Open Banking was created to increase competition for



customers between the UK's largest nine banks. But both sets of regulation share similar goals – to enhance competition, increase innovation, and give customers more choice and convenience. Now with any licenced business being able to compete, banks can no longer block third parties from accessing account data if they have the customer's permission.

The original deadline for all EU member states to implement and comply with PSD2 was 14th January 2018. But because of the numerous EU regulations due for implementation that year, local authorities, banks, and other important stakeholders had not taken a lot of time to prepare themselves. In fact, only nine member states actually managed to transpose PSD2 into national law on time. A year later, still only 23 of 28 member states had.

Regulation overload

But even though many member states were late with PSD2, during the same period in 2018 national authorities were busy licensing around 200 third parties to provide account information and payment services, with more than another 130 pending authorisation. PSD2 is also fuelling a new wave of interest in third-party service providers from investors, creating a promising outlook for open banking in Europe.

In 2018, the top 10 European countries accumulated €2.89 billion in venture capital (VC) funding across 477 financial technology (fintech) deals. The UK continues to have the most attractive fintech market for VCs, receiving more than 50% of this — €1.50 billion across 261 deals, building upon the €1.57 billion UK fintechs received in 2017.

2013

July

The European Commission publishes PSD2 proposal

2015

November

PSD2 proposal approved by European Parliament and EU Council

December

PSD2 is published in the Official Journal of the EU

2016

January

PSD2 enters into force and member states have two years to implement new legislation

2017

November

European Banking Authority (EBA) publishes draft (RTS)

2018

January

PSD2 enters into effect, with the main exception of the security measures described in the (draft) RTS

March

The European Parliament and the EU Council approve the final RTS

2019

March

Deadline for ASPSPs to have a 'dedicated interface' ready that AISP and PISP can use for testing

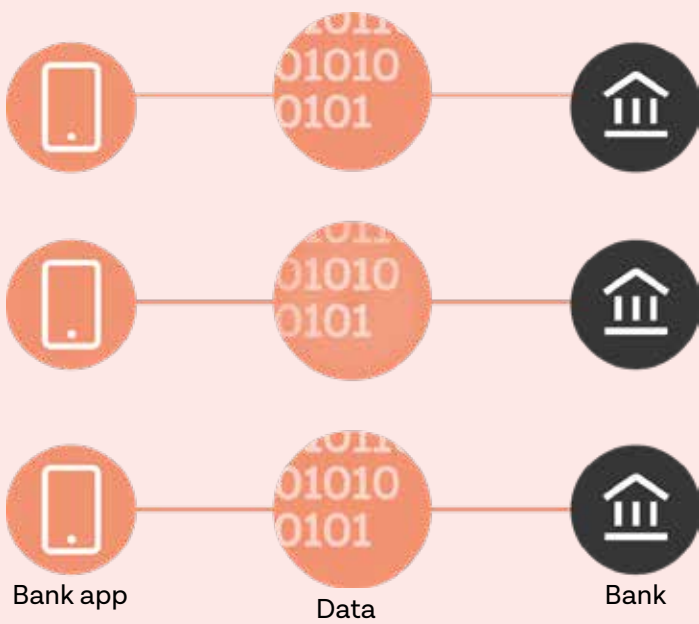
September

RTS enforced on all payment stakeholders, 18 months after publication

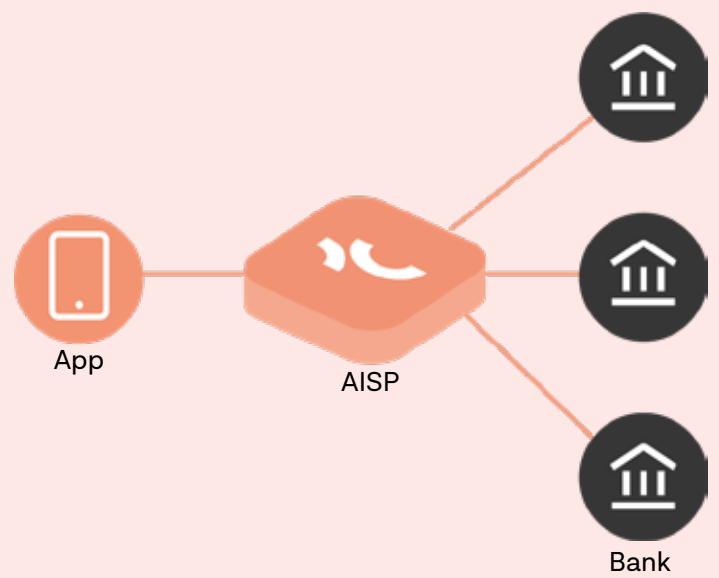
First movers and fast followers

Most banks now recognise that competing in a market where the barriers of entry are dropping requires a relentless focus on customer experience. The introduction of open banking means the data from every bank account a consumer owns can be pulled together in one service, using account aggregation. This is good for customers because it gives them a complete overview of their finances.

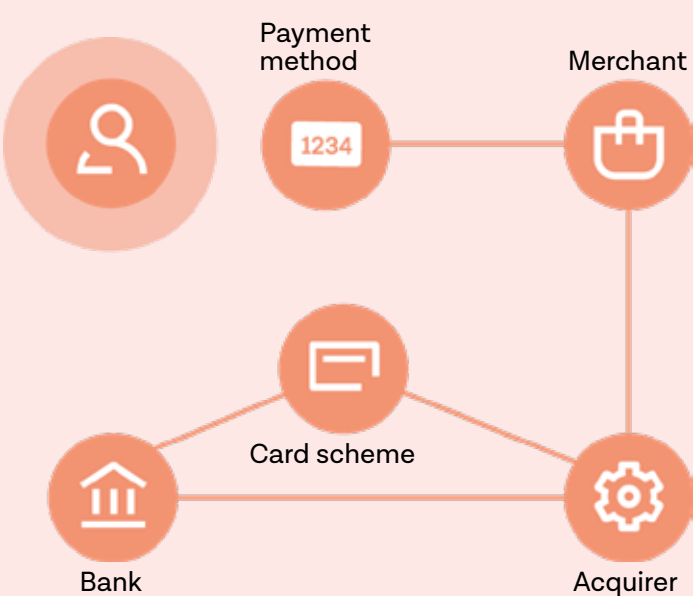
Without account aggregation



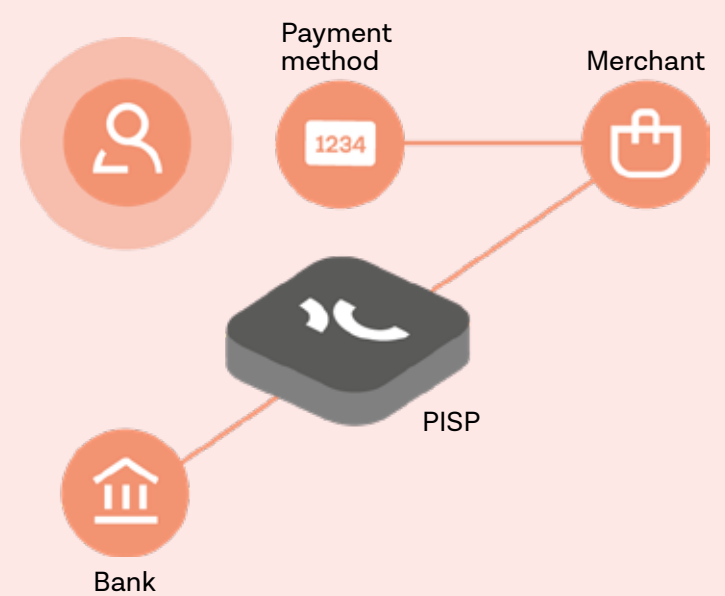
With account aggregation



Without payment initiation services



With payment initiation services



Once account information has been aggregated and can be seen in one place, then banks or third parties can introduce other services to help people manage their finances better. Like categorising transactions, so people can see what their spending patterns are; offering payment initiation services, so that people can make payments from any of the aggregated accounts in one app; offer personal finance management (PFM) services, where banks or third parties can use insight to give actionable advice, or suggest better value products for people to switch to. This could be a mortgage, loan or insurance policy, and their money could be moved seamlessly in the same app.

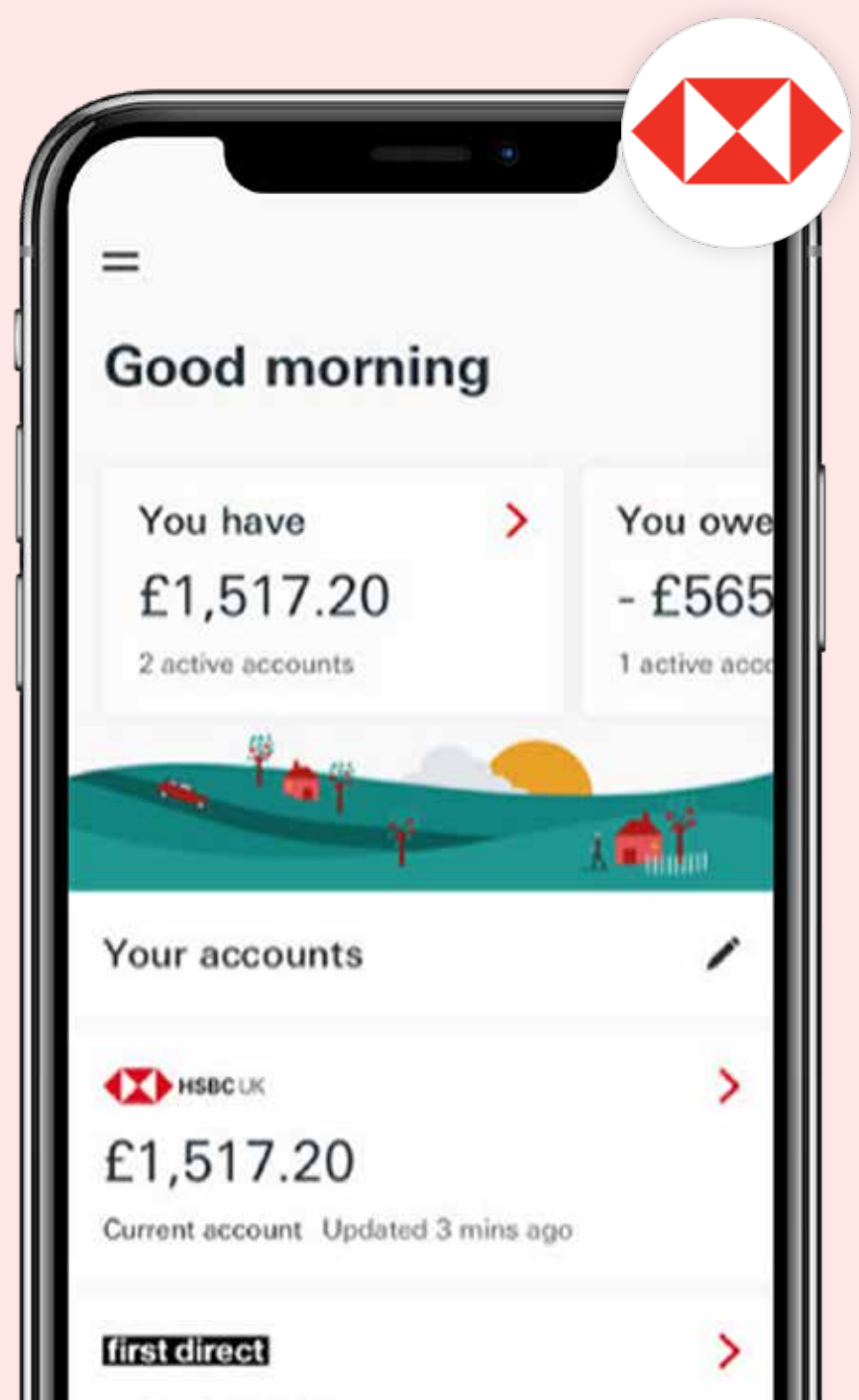
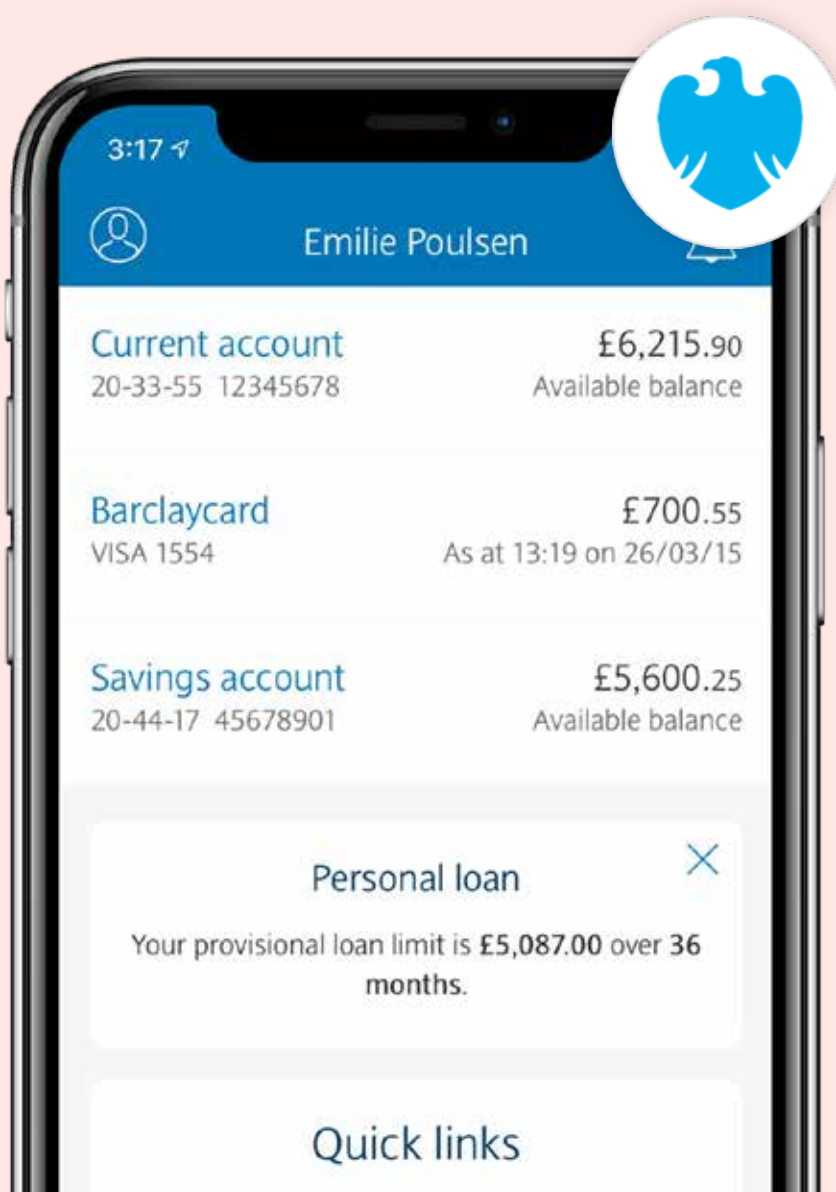
The banks have responded to this opportunity in various ways. We've seen first movers and fast followers adopt different approaches to perform account aggregation. Some banks have launched standalone apps, while others have embedded account aggregation within their core banking apps. Some banks are working with third

parties to deliver new services, while others have built the connections to published APIs in-house.

Some of the most aggressive developments have come from the UK when it comes to bank innovations. In May 2018, HSBC launched a standalone PFM app called Connected Money (only for iOS) – the first UK bank-branded app that enables its customers to view their accounts from up to 21 different banks in one place. Three months later, Barclays was the first UK bank to incorporate account aggregation services within its own core mobile banking app.

What is interesting about these two examples is that they use very different types of technology to aggregate account information. Barclays uses the UK's official Open Banking APIs, using standardised connections to get access to a bank's operating system to retrieve account data, where HSBC's Connected Money app uses screen-scraping technology.

The Barclays (left) and HSBC (right) apps showing how account aggregation can help manage money.



First movers and fast followers

A quick primer on screen-scraping: it's the process of collecting display data from one application and translating it so that another application can display it. The idea of "account aggregation" via screen scraping is not a new concept. Financial institutions used screen scraping in the UK to perform account aggregation services for their customers as early as 2002. In this scenario, personal details (username, PIN code, password, etc.) are entrusted to third parties, which logs into the online banking environment on the customer's behalf, and displays the account information centrally within a single app.

The likes of SOFORT (acquired by Klarna in 2014) have been using screen scraping to initiate payments, which has been acknowledged by the German competition authority (Bundeskartellamt) as a legitimate way of executing payments.

However, once the banks have all implemented APIs for PSD2-regulated data, current guidance from the EBA suggests that third parties will no longer be permitted to use screen scraping when an alternative interface exists. So the advantage that these first movers have enjoyed in 2018 could instantly wither away as the tech changes and the industry transitions to regulated APIs.

The deadline for this will be 14th September, when the RTS are enforced, and many apps will need to switch to the official bank APIs for PSD2-regulated data. The only exception is screen scraping for data that is not regulated by PSD2 – including loans, mortgages, credit cards, and investment accounts, that can continue as long as it doesn't conflict with any national or regional regulations.



When a regulated API is not available, Tink does not use screen scraping. Instead it applies reverse engineering by carefully studying the data used by the original mobile banking apps. In other words, Tink replicates the code used in mobile apps (usually Java), and not the HTML code as is the case with screen scraping. In essence, reverse engineering means that Tink interacts directly with the bank's server in the exact same way as the bank's app does. Doing this delivers better service performance reliability and availability – and allows us to offer access to data beyond just current accounts, as prescribed in PSD2.

Partnerships are growing

Many bank executives have been vocal about new open banking regulations giving tech start-ups an advantage over traditional banks. The uneven playing field is said to allow third parties to offer financial services without being burdened by the same regulation that traditional financial institutions face. But in the rush to tap into the new market opportunities, it did not stop banks from forming partnerships with fintechs in 2018.

Some bank executives have seen that one of the quickest ways to keep up with market developments – and to speed up their time to market with new services – is by partnering with fintechs and third parties to fill a void in terms of digital capabilities.

For example, as well as HSBC being a “first mover” with its standalone PFM app, ABN AMRO did exactly the same in 2015 when it launched its PFM app called Grip (built on Tink’s platform).

But partnerships aren’t just forming to enable aggregation and PFM services. We are also seeing partnerships being formed between banks and emerging fintechs to expand into new markets. BBVA recently announced that it will be teaming up with Fintonic – a consumer app that eases money management and savings – on its loans



platform, enabling customers to apply for a loan up to €30,000 without leaving the app, regardless of the institution providing the loan. The partnership will help BBVA compete for customers that prefer digital channels over the bank branch experience.

We are seeing similar diversification strategies outside of Europe too. In the US, JP Morgan Chase and Amazon are working together to give over 100 million Amazon Prime users Amazon-branded checking accounts. And in Asia, Standard Chartered is working with China’s Alipay to launch a digital remittance service called GCash, a mobile payments arm of Globe Telecom, for peer-to-peer transactions between Hong Kong and the Philippines.

Slower than expected progress

Despite all this activity, regulators admit that PSD2 and the UK's Open Banking legislation have not delivered the innovation they were looking for yet. Most of the innovations in 2018 centered around account aggregation services or diversifying banks' market offering.

There has also been some general confusion and resistance towards the open banking regulations. The cost of modernising legacy systems to integrate open APIs is significant for most banks. And at the same time, many banks (and third parties) have also been waiting patiently for the EBA to provide further guidance around some of the most controversial elements of the RTS – including concrete definitions of the Secure Customer Authentication (SCA) and Common and Secure Communication (CSC) requirements; SCA exemptions; fallback options for third parties; and payment confirmation.

In addition, the fact that most open banking APIs were not available during 2018 means that many services have been conceptual rather than actively used in the market. So both banks and fintechs have very few use cases to highlight the value and benefits of open banking.

In June 2018, Santander worked with fintech company Token to process



the first end-to-end payment through a public bank API. At the time, even though Santander and Token had proved the technology was available, it was still too early to launch a concrete “payment initiation” use case, because of the lack of available APIs. And it wasn't until later that year, in September, when Token managed to enable PIS with the UK's other largest banks.

Overall, one of the most important factors as to why open banking hasn't delivered on the regulators' intentions yet, is that banks have had very little time to innovate ahead of PSD2, given all of the regulations that they had to enforce in 2018.

However, we are now seeing some banks launch their own “fintech innovation hubs” to overcome this.

The year of opportunity

If 2018 was the year of transition and ironing out the bumps of open banking, then 2019 is the year of opportunity.

This is the year when we will see greater proof of what open banking can deliver, as more banks and third parties launch new services to the market.

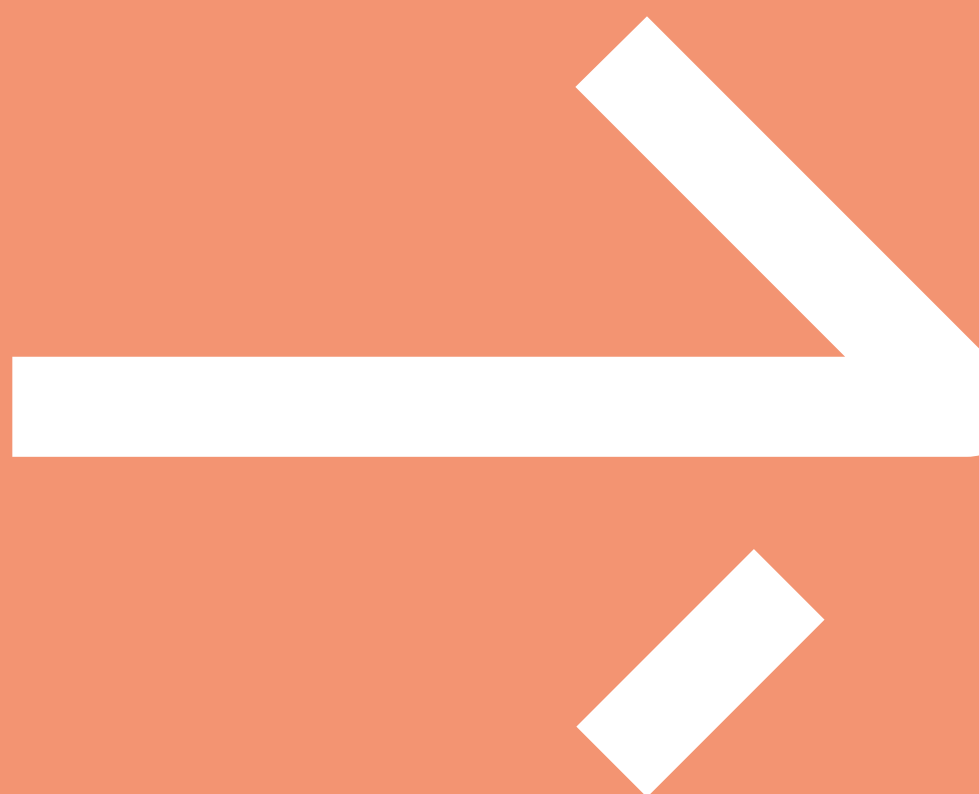
But 2019 won't be without its challenges too. The biggest being the final PSD2 legislative deadline.

Inevitably, in the run-up to September, the market will be a mix of API standards, with quality levels differing between banks.

OS

Place your bets

Banks will need to embrace a more proactive approach if they want to win the market. The real test will come as the banks focus on their short-term strategies, including customer value creation, data monetisation or innovation.



Creating customer value

The open banking movement – along with the increase in competition, shift to electronic payments, and progressive regulations – will put pressure on margins, reduce the barrier for switching banks and increase the likelihood of customers having seamlessly integrated services with several different providers.

The only way for a bank to protect its existing business is by delivering the most compelling customer experience. Ergo, the relentless focus on customer value is the only way to keep the top-line number from shrinking.

As part of this, banks need to acknowledge that their business model is no longer just about managing capital, it is also about developing and maintaining state-of-the-art software that can help customers manage their finances better. This will be a key area of differentiation for banks, and those that get it right will unlock a wealth of possibilities.

By having a complete overview of their customers' finances, banks will get a better understanding of customers' spending patterns. This allows them to tailor recommendations and sell more value-added services – either from their own products, or by partnering with third parties who operate in adjacent markets, like insurance, travel, energy and utilities.



Place your bets

Making data pay its way

Banks have not only been fighting the open banking war on a business level, but also at an operational level. Significant investment is being made in the creation of microservices and API libraries, and in the revamp of data centres with cloud architecture. To make sure they see a return on investment, banks should be exploring data monetisation strategies.

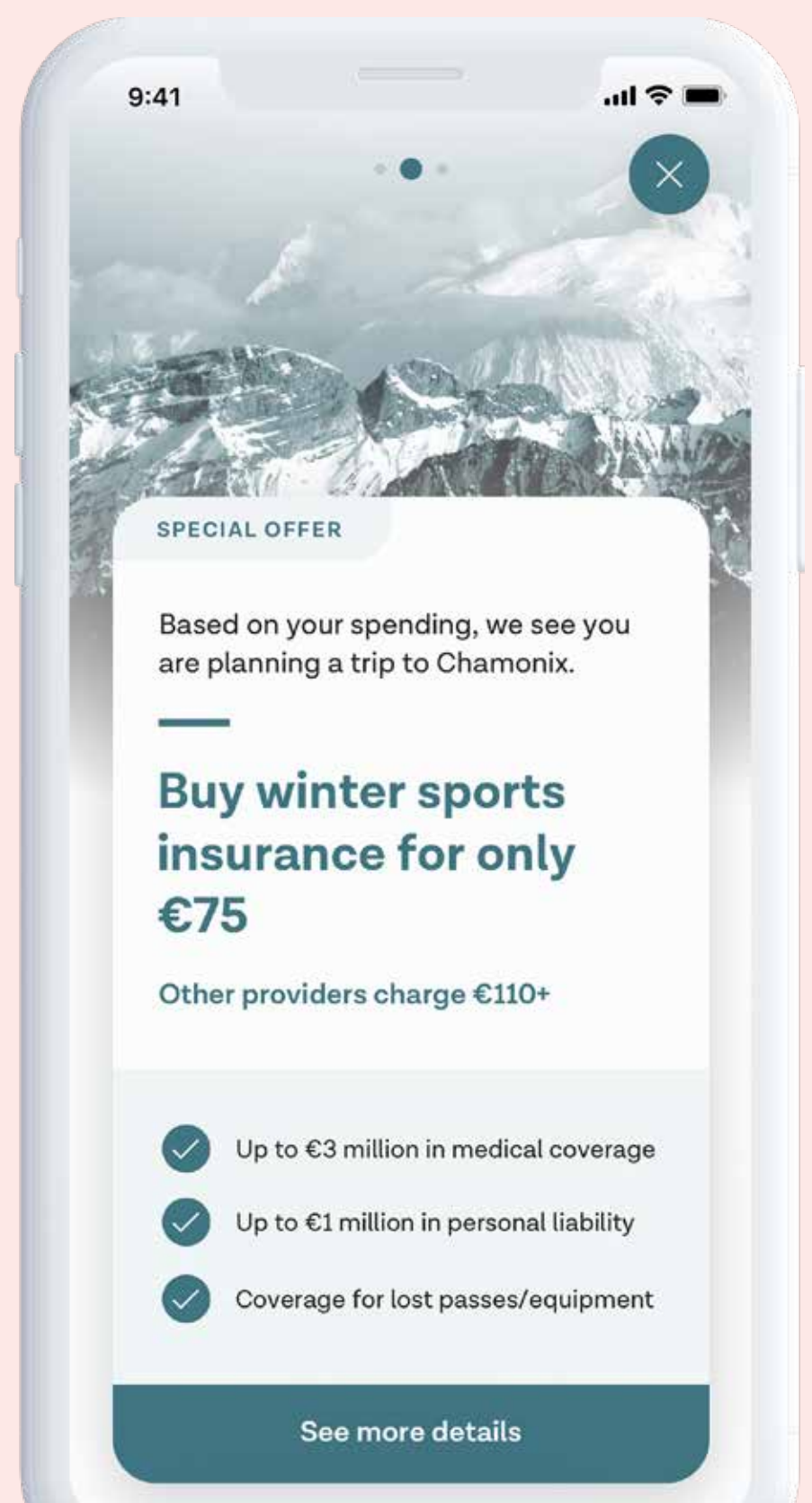
The data stored deep within the bank contains not only the potential to improve internal operations – by streamlining operations and centralising critical customer information – but also as an asset that can be monetised externally. If a bank has the technology to extract valuable insight from customer data, then it can be used to offer customers personal recommendations for the most relevant product at the right time. For instance, if transaction data shows that a customer has just booked a skiing holiday, then the bank can get in touch and offer them winter sports insurance.

Another way is for banks to gain insight into a customer's financial situation and explore which products they have with competitors – so the bank can offer a better deal from its own portfolio.

Banks can also charge third parties to access data through their APIs that isn't regulated by PSD2 – such as related risk, compliance, security and analytics data.

These new revenue streams could help offset the pressure on profit margins from the emerging competition in open banking. But to do this successfully, banks will need to beef up their data analytics capabilities by launching developer tools, including software development kits, and automated workflows. This is also known as offering banking as a service (BaaS).

Here is an example of the kind of service that could be offered using customer data.



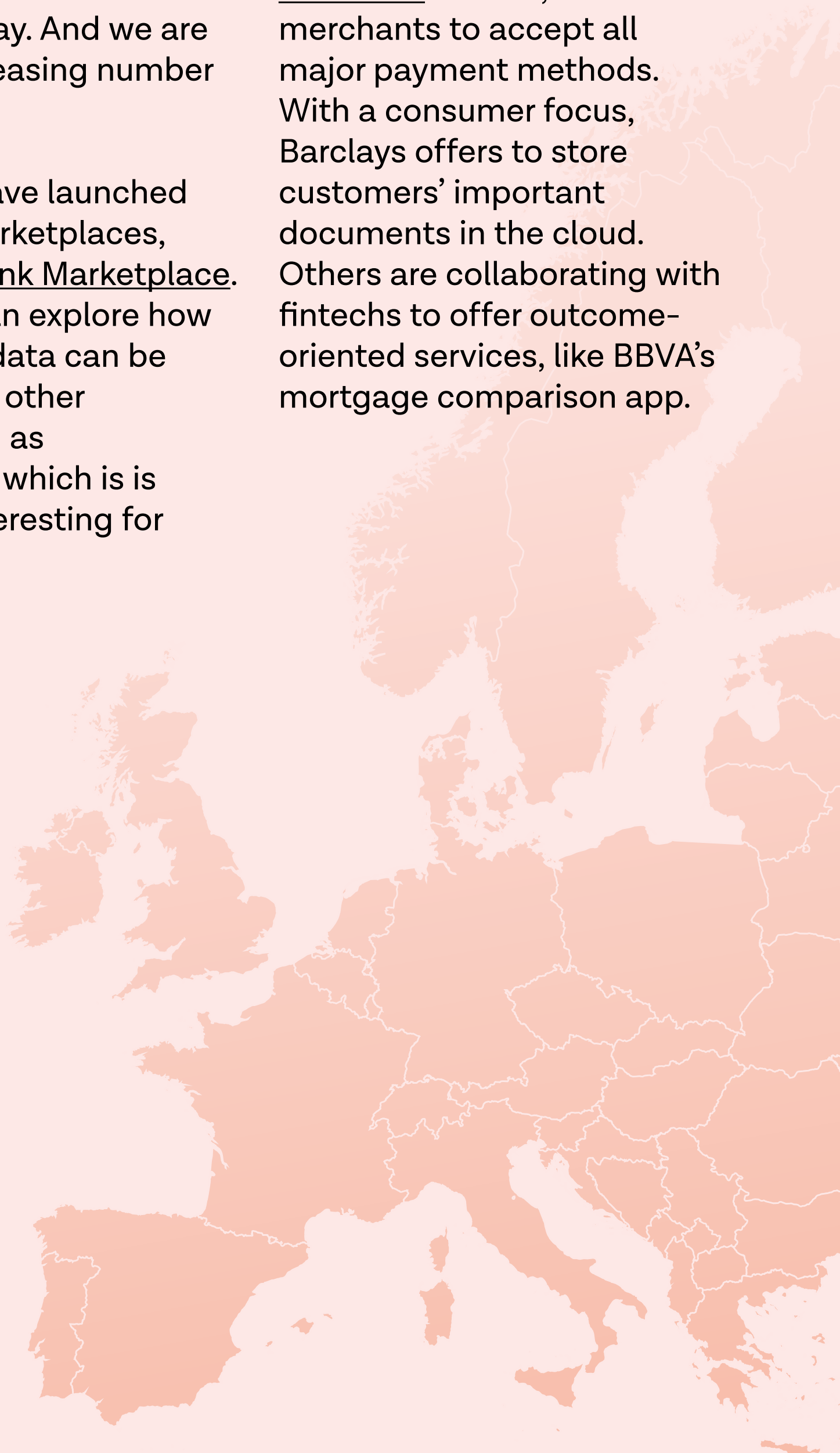
Place your bets

Developing new markets

Open banking is a huge opportunity for banks to expand into new markets and to challenge how digital services are delivered and consumed today. And we are finding an increasing number of examples.

Some banks have launched application marketplaces, like Starling Bank Marketplace. Here people can explore how their financial data can be integrated into other services – such as accountancy – which is particularly interesting for businesses.

Banks are also exploring subscription-based services. Some with a business focus, like ING's new Complete Checkout service, allow merchants to accept all major payment methods. With a consumer focus, Barclays offers to store customers' important documents in the cloud. Others are collaborating with fintechs to offer outcome-oriented services, like BBVA's mortgage comparison app.

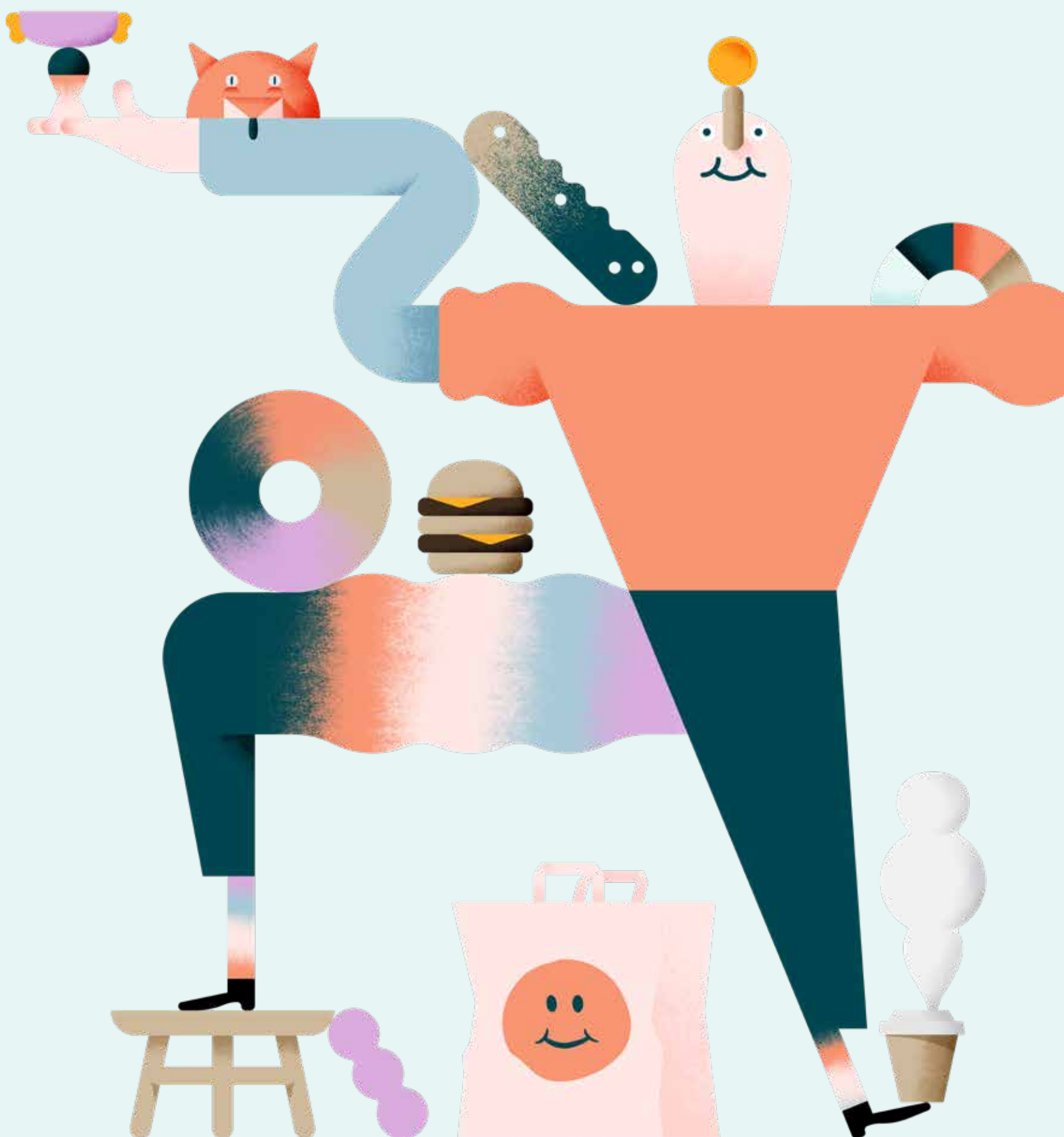


Place your bets

The winners of open banking

If banks play their open banking hand well, they can turn out to be the clear winners. But to do this, they will need to embrace new business models and feel comfortable working together with fintechs. Banks have a unique opportunity to lead the open banking transformation, which

is exactly what their customers want them to do. By taking important strategic steps now, and delivering high-performance APIs to the market, it will attract an ecosystem of partners that want to create value-added services. If banks don't do it, others will.



Thanks for reading!

Let's talk!

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Contact our sales team at partnerships@tink.com



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