



THE FUTURE OF OPEN BANKING & OPEN FINANCE

MEGA TRENDS

2022



Executive Summary

BY HELEN CHILD, FOUNDER OF OPEN BANKING EXCELLENCE

This year will be a game-changer for Open Banking. We have just celebrated our fourth anniversary of the PSD2 and the UK's Open Banking Standards. In the next 12 months, there will be many more milestones.

To help you understand the changes coming to the industry, we have collected insights from our global community of Pioneers. Our panel features experts from academia, international consultancies and the third-party providers (TPPs) and trade bodies that make up the Open Banking ecosystem. Some of the respondents work for globally recognised institutions such as Accenture or the University of Oxford as well as leading Fintech startups.

Reading their contributions genuinely inspired me. I hope you feel the same. It is a real privilege to be involved in shaping a market at this stage of its development.

In 2022, we will see further growth in the sector, with the ultimate destination being mainstream adoption. We believe that Open Banking payments should be ubiquitous.

Last year, there were 26.6 million Open Banking payments - an increase of 500% in just 12 months. **There is no logical reason why we can not add a zero here and grow this to 260 million. We have the talent and bedrock of innovation in place. It is an ambitious target, but working collectively as a community we will achieve it.**

The addressable market created by Open Banking will be worth \$416billion in the next three years, Accenture forecasted in 2021. ^{☆☆} Consumer awareness and adoption will rapidly accelerate the innovation of use cases beyond aggregation and payments. It will also enable the building of consumer-centric products and services on which banking becomes invisible. The best is yet to come.

Game-changers in 2022 will include Variable Recurring Payments (VRP), which will be introduced in the UK at the end of July 2022. NatWest is the first to go to market with this radical new payments enhancement.

We will also see the rise of embedded finance. Ryan Joyce, Head of FinTech UK&I Salesforce, has predicted that this technology will create a **"Space Race"** among leading players as they compete to launch products, build partnerships and iterate their propositions for the greatest impact.

"Embedded finance is expected to generate \$7 trillion of economic value by 2030, and promises to fuse financial services such as e-wallets, cards, lending and insurance products effortlessly within the customer journey of any company, within any industry," he said.



[☆] Open Banking (2021): UK Open Banking marks fourth year milestone with over four million users. Available at: openbanking.org.uk/news/uk-open-banking-marks-fourth-year-milestone-with-over-4-million-users/

^{☆☆} Accenture (2021): Ready to catch the Open Banking Wave? Available at: <https://www.accenture.com/dk-en/insights/banking/open-banking-moving-towards-open-data-economy>

We still have challenges to address and work on collectively. The UK has a very stable ecosystem all conforming to a common set of standards. **Interoperability** is one issue we must deal with because there is a clear need for a common set of international standards. There is also a challenge around **acquiring, training and retaining talent**.

Financial services and social capital will continue to play a key role in stimulating economies and tackling climate change. The seismic shift will be embedded finance. Accounts can now offer 360 degree views of people's finances, enabling greater financial inclusion. Financial and digital inclusion is in our DNA.

The trends are pointing towards the **adoption of Account Information Services (AIS)** across multiple industries such as insurance, wealth, retail and credit accelerating a step change in industry growth.

The UK created the blueprint for Open Banking that has inspired innovation across the world.

Read on to hear from the experts on the megatrends awaiting us all...

Exciting times ahead.



Helen Child

Founder

Open Banking Excellence (OBE)

Open Banking

In December 2021, HM Revenue and Customs announced that businesses in the UK had paid more than £2.4 billion in tax using Open Banking payments. It first introduced a “pay by bank account” option for people making online self-assessment tax returns on 24 March 2021. It has now been used in more than 500,000 individual payments and could save millions of pounds of taxpayers’ money by reducing inefficiencies.

Predictions for 2022

“We are seeing rapid development of Open Banking regulation in many markets, often following the lead of – and building upon – Europe’s PSD2. We are also seeing rapid growth in the usage of Open Banking services, where available. But typically we are still at the early stages. So we expect continued rapid usage growth as market participants learn more about how best to capitalize on Open Banking access.”



Jim Wadsworth

Senior VP Open Banking, Mastercard

| | | | |
|---|----|--|----|
| CHAPTER 1 | 5 | CHAPTER 3 | 35 |
| Predictions for 2022 and Beyond | | Open Banking Obstacles and Solutions | |
| MEGA TREND 1 | 7 | CHALLENGE 1 | 37 |
| The Cardless Future of Payments | | Legacy Technology | |
| MEGA TREND 2 | 9 | CHALLENGE 2 | 39 |
| Variable Recurring Payments Take Flight | | Regulations | |
| MEGA TREND 3 | 12 | CHALLENGE 3 | 42 |
| Mass Adoption and Education | | Education, Awareness and Building Trust | |
| MEGA TREND 4 | 14 | CHALLENGE 4 | 44 |
| Wave II of Open Banking | | Ensuring Consumer Protection | |
| MEGA TREND 5 | 17 | | |
| Sustainability and an Open Approach to ESG | | CHAPTER 4 | 46 |
| MEGA TREND 6 | 19 | Lessons for Open Banking and Finance | |
| Open Finance and Open Data | | LEARNING 1 | 48 |
| CHAPTER 2 | 22 | Regulations Must Be Enhanced | |
| New Ideas and Approaches in an Open World | | LEARNING 2 | 50 |
| OPPORTUNITY 1 | 24 | The Industry Must Focus on Public Awareness | |
| Bridging The SME Funding Gap | | LEARNING 3 | 52 |
| OPPORTUNITY 2 | 26 | Focus on Driving Adoption | |
| Personalisation | | LEARNING 4 | 55 |
| OPPORTUNITY 3 | 29 | Develop Partnerships | |
| Open Banking For Good | | LEARNING 5 | 57 |
| OPPORTUNITY 4 | 32 | Open Finance By Default | |
| Open Finance | | Conclusion | 60 |
| | | CONTRIBUTORS | 64 |

CHAPTER 1

MEGA TRENDS

Predictions for 2022

and Beyond

innovation

vrps

accounts

data

digital

payments

opportunities

cards

cbdc

co-founder

finance

open banking



We know that one trend is inevitable: Open Banking will continue to grow internationally in 2022.

Ripples cast by the emergence of Open Banking have now spread across the world, with nations such as Brazil emerging as global leaders. The stories, findings and successes of each region will be very different in 2022.

Gareth Connoly, Account Executive - Financial Services, Salesforce, summed up some of the optimism around the sector in his response, which described the opportunities for disruption as “boundless”.

“I think digital banks are likely to become more prevalent among consumers and the number of partnerships between large incumbents and smaller Fintech firms will continue to expand,” he said. “Last year, lots of big players acquired businesses to better serve their clientele. This is a trend which will likely continue.”

To reflect the current state of the industry, the OBE panel was asked: “What do you foresee being the biggest Open Banking trends in 2022?”

In their answers, the Pioneers revealed the Megatrends which are shaping Open Banking - and reshaping the entire banking industry.

MEGA TREND 1

The Cardless Future of Payments

Last year ended with a bombshell when Amazon announced that it would stop accepting UK-issued Visa credit cards from early 2022. This bold decision was reversed in January, but sparked industry discussion about a wider move away from cards towards a future in which consumers and businesses pay for goods and services directly from their bank accounts.

The global value of Open Banking payments will soar from \$4 billion to \$116 billion by 2026, Juniper Research predicted in 2021.

“Open Banking-facilitated payments, where payments are made directly from bank accounts, are a growing threat to the dominance of cards within eCommerce,” the research house wrote.

Pioneers who took part in the OBE study supported this prediction.

Roger De’Ath, UK Country Manager, TrueLayer, revealed that he was “estimating Open Banking to overtake card payments” in the wake of Amazon’s epochal decision.

“Open Banking payments will increase value for businesses and customers,” he said.

Tom Wijnen, Senior Product Marketing Manager from French multinational payment Worldline, said: “In 2022 for Open Banking we expect to see the start and quick rise of account-based payments.

“On the other side, the data related to Open Banking features will find its way into the optimization of processes in facilitating credit, loans, mortgages as well as in the provision of personalized offers.”

MEGA TREND 2

Variable Recurring Payments Take Flight

Over the past 70 years or so, cash, cheques, cards and bank transfers have been the mainstay of payments.

Open Banking is changing this and one of the most exciting innovations is Variable Recurring Payments (VRPs), which allow users to give permission for automated payments to be made from their account.

The UK is approaching an important deadline in the development of VRPs. By the end of July 2022, the CMA9 banks must implement VRPs in order to enable sweeping - the automated movement of money between accounts - following a ruling by the Competition and Markets Authority (CMA).

When the power, simplicity and security of VRPs start to become clear, consumers will start to move away from cards and embrace Open Banking.

Andy Wiggan, VP Product Management at GoCardless, a global leader in account-to-account (A2A) payments, said: "The arrival of VRP here in the UK is really exciting. It is a genuine alternative to 'card on file' arrangements and has, among other things, a great use case around payment visibility when speed absolutely matters most.

"I would expect to see big moves in this area from savings and investment organisations first, and merchant use cases where speed of payment is most important, with retailers following their lead as banks expand access."

In 2020 GoCardless took part in a VRP pilot with NatWest and other third-party providers - which is the sort of exciting collaboration between Fintechs and incumbents which will become more and more common. All the CMA9 banks are also expected to launch their own pilots in early 2022 at the latest in order to meet the July deadline. ➡

Nick Raper, Director of Nuapay, believes VRPs will be a “gamechanger”.

“They remove some of the barriers to adoption, and enable an environment where the innovative TPPs can truly control the customer experience and deliver unique propositions for consumers and SMEs alike,” he said.

“The vision of linking your accounts to Alexa, authenticating at your bank once, and then seamlessly checking balances, and moving money around between your accounts and investments by voice is now a reality.”



VRPs have been described as an example of a “Premium API” - advanced interfaces which can power sophisticated data-sharing and financial transactions.

“I think in the UK we’ll see premium APIs finally become a reality at scale with VRP being the first,” predicted Huw Davies, Co-founder and CCO of Ozone API. “The big banks are implementing the functionality, the demand from third parties is huge and well defined and the potential to deliver genuine innovation and improvement in payment and commerce journeys for customers is real.”

MEGA TREND 3

Mass Adoption and Education

Experts are expecting Open Banking to become more and more popular over the next year in all regions. This will mean growing numbers of successful API calls and payments, as well as an overall reduction in average API call response times.

Greg Storm, Co-Founder and COO of TripleBlind, the maker of an enterprise-focused virtual private data sharing solution, said:



“Open Banking adoption will continue to accelerate in 2022

but the speed and direction of adoption will remain inconsistent across regions.

“The UK has been a leader in Open Banking adoption, with a regulatory-driven approach that mandates banks to build the necessary infrastructure. After the UK, Germany has the highest adoption in terms of API acceptance. Asia follows Europe in terms of open banking

progress, but the adoption rate gap between the two regions remains significant.”

Education and awareness-raising activities are crucial to driving adoption.

“There is still work to be done to optimise Open Banking in the UK, including educating the general public about its benefits and reassuring them about the security of their data,” said Neil Kadagathur, Co-Founder and CEO, Creditspring.

James Lynn, Co-founder of Currensea, said the next year would see “enhanced awareness and consumer education around Open Banking and the widespread uses of it”.

“Many think of Open Banking purely for personal finance management (PFM) tools but its use can and should be far more widespread,” he added.

MEGA TREND 4

Wave II of Open Banking

Open Banking is going global, sparking international collaboration and fuelling innovation on a worldwide scale.

In their responses, OBE's Pioneers hailed the UK as an Open Banking leader, whilst the EU was praised for its regulatory leadership. However, the first movers may end up being outpaced by new entrants to Open Banking. Several Pioneers pointed towards the global spread of Open Banking as a huge opportunity for the sector.

Countries which are relative latecomers to the revolution are able to gain a significant head start by drawing inspiration from the examples set by regulators and business pioneers in the UK and EU. New entrants to the space also promote global competition and collaboration, driving innovation and enriching the entire industry with a diverse array of new ideas and approaches.

"The regulatory launch of Open Banking in the UK in 2018 introduced a global trend of discussions and implementation of Open Banking in several countries," said Edlayne Altheman Burr, Managing Director, Accenture.

"We are now beginning the second phase of this process in which we can foresee other sectors besides banking discussing Open Data.

"For instance, in Brazil, we are now shifting the discussions from Open Banking to Open Finance, including other sectors of the industry such as insurance, investments and Forex in the Open APIs scope. The year of 2022 will be marked by the expansion of the Open Finance discussion, the creation of regulatory frameworks that deliver more value and competition, and innovation at the intersection of financial institutions and other sectors' data."



Andra Sonea, Research Fellow at the University of Oxford's Saïd Business School, said: "Different countries are at different places on the Open Banking/Open Finance continuum, hence different things will happen to them which will all be new in their respective contexts."

The Wave Two countries that started implementing Open Banking after Europe went live will benefit from the lessons learned elsewhere



and will move much faster than those in the first wave. For example, they won't have to negotiate standards but just adopt them.

"In countries like the UK, we will see new functionality added to the Open Banking APIs. Variable Recurring Payments is just one example. Canada will work on making the open banking system 'operational' by January 2023 while open finance market-driven initiatives will continue to progress and flourish."

Currently, Open Banking rules differ between territories. But industry leaders want to see true international collaboration, so Open Banking payments can be made across borders.

Danillo Branco, Co-Founder and CEO of Finansystech, said: "We need to improve international interoperability and provide opportunities to connect financial institutions around the world."

MEGA TREND 5

Sustainability and an Open Approach to ESG

Open Banking can have a transformative effect on the financial health of individuals and businesses, allowing them to monitor cash flows and automate financially beneficial tasks. Yet it also can boost sustainability efforts and improve corporate ESG programmes.

Daniel Kjellén, Co-founder and CEO of the Open Banking platform Tink, said: "It's no surprise that one of the biggest cross-sector trends on the horizon for Open Banking is one that is still in its relative infancy - the shift towards sustainable finance. In the wake of COP26, consumers and businesses alike are under the microscope and increasingly expected to know the environmental ramifications of their financial decisions.

“With the Covid-19 pandemic catalysing the shift to digital, changes which were expected to take years were rapidly accelerated.



This is in no small part due to the groundwork laid by the Open Banking industry.”

The roll out of Open Banking payments will also offer new ways for consumers to automatically manage their spending in a sustainable manner.

Robert Courtneidge, a Payments Lawyer and industry expert, predicted: “This will help meet greener requirements for our environment by ensuring only the right amount of consumables are purchased as required, meaning the least possible fuel is used in deliveries. As smart cities emerge the ability to use Open Banking solutions will ensure the greatest efficiency as we reduce emissions and track and pay for our carbon footprint. AI will always make better decisions than humans and will make sure our payments and spending are carried out in the most efficient manner.”

MEGA TREND 6

Open Finance and Open Data

The spread of Open Banking is not just limited to Wave II. In the next 12 months, we will see more and more industries explore Open Finance and other Open Banking-inspired approaches to data in industries ranging from insurance to healthcare.

Amit Mallick, Managing Director and Global Open Banking & APIs Lead, Accenture, said:

“Through 2022 and beyond, Open Banking will evolve into Open Finance and ultimately clear the way for a shift towards an Open Data economy



- a potentially vast new ecosystem characterized by platforms that take advantage of rich data to offer customers and businesses highly relevant, personalized products and services.”

Leandro Nobrega, Open Banking & Finance, LatAm Operations Lead, Belvo, predicted the rise of a “world-as-platform” attitude among Product Managers would see the trailblazing approaches of Open Banking inspire innovative approaches in other sectors.

“Open Banking has become the precursor of a huge open data movement,” he said. “I see two valuable trends for the next year: Open Insurance and Open Investments.

“We will see from now on, more and more open agendas becoming reality and providing a cross-sectorial experience with a customer-centric business model.” ➡

A key emerging trend is embedded finance, in which financial services are built into apps that are built by non-financial organisations. Embedded finance is closely linked to the concept of the Super App, an all-in-one application offering banking services alongside other functionalities.

“Embedded Finance is popular right now, creating opportunities for non-bank providers to offer account information and payment initiation within existing customer workflows,” Nick Reid, Sales Executive at Bankifi said. “Open Finance presents opportunities for banks too. There is no reason why a banking app can’t be the next ‘Super App’ from where consumers and businesses manage all their finances. There is also a real opportunity for banks to use Open Finance to proactively identify lending opportunities.”

FINTECH MEGA TREND

Central Bank Digital Currencies

EXPLORING AN INNOVATION TAKING PLACE OUTSIDE OPEN BANKING

The crypto industry began with a bang in 2008 following the publication of a white paper setting out the framework for Bitcoin.

Now crypto has entered the mainstream, with the first Bitcoin ETF launched in 2021 and financial giants dipping their toes into this new world.

The next stage in the story of crypto is likely to involve Central Bank Digital Currencies (CBDC), which are official, state-backed digital currencies.

In the US, Accenture co-founded the launch of the Digital Dollar Project to “encourage research and public discussion on the potential advantages of a CBDC” that it described as “a new form of money designed specifically for the digital world that complements the existing forms of physical and electronic monies”.

The Bank of England is also investigating a CBDC and will launch a consultation in 2022 which will decide whether Britain should pursue the creation of a digital pound.

However, in January 2022 the House of Lords Economic Affairs Committee published a report which found that a digital pound was “a solution in search of a problem”.

Lord Forsyth of Drumlean, Chair of the House of Lords Economic Affairs Committee, said: “The introduction of a UK central bank digital currency would have far-reaching consequences for households, businesses, and the monetary system. We found the potential benefits of a digital pound, as set out by the Bank of England, to be overstated or achievable through less risky alternatives.”

The report concluded that “while a CBDC may provide some advantages, it could present significant challenges for financial stability and the protection of privacy”.[☆]

[☆] Bank of England (2021): Statement on Central Bank Digital Currency - Next Steps.

Available at: committees.parliament.uk/committee/175/economic-affairs-committee/news/160221/central-bank-digital-currencies-a-solution-in-search-of-a-problem-report-published/

CHAPTER 2

OPPORTUNITIES

New Ideas and Approaches in an Open World

credit banks economy metaverse new faster access same decisions

The Open Banking sector is young but rapidly growing, offering significant opportunities for banks and financial institutions that become early adopters.

In 2021, Accenture said revenue created in this developing sector is likely to be “captured or defended by agile players who recognize the opportunity early”[☆].

“A wave of change is coming as Open Banking initiatives and regulations mature and enable the creation of the Open Data economy,” it continued. “When the wave arrives, change will be exponential.”

So how can banks and financial institutions take advantage of new innovations? To find out, OBE asked its panel of Pioneers to discuss what opportunities will be created by Open Banking in 2022.

[☆] Accenture (2021): Ready to catch the Open Banking wave?
Available at: [accenture.com/us-en/insights/banking/open-banking-moving-towards-open-data-economy](https://www.accenture.com/us-en/insights/banking/open-banking-moving-towards-open-data-economy)



OPPORTUNITY 1

Bridging The SME Funding Gap

Data can build bridges between lenders and businesses, enabling faster access to funds through the consent-driven sharing of up-to-date, relevant information. This will have a particular impact on the SME sector, which is struggling with a funding gap of **\$5.2 trillion** every year, according to global figures from the World Bank.

When lenders have access to real-time data, they can make decisions at unprecedented speed and enable SMEs to access the funds they need to grow.

Marcus Hughes, Director of Business Development, Bottomline Technologies, said: "There's a growing realization that Small and Medium-sized Businesses are a significant market opportunity for Open Banking and Open Finance. They offer great potential for a wide range of banking services such as payments and finance, but also adjacent services."

\$5.2
trillion

OPPORTUNITY 2

Personalisation

The word “customer” came up again and again in Pioneers’ responses, reflecting a widespread expectation that the future of finance lies in data-driven personalisation. Fast and accurate data-sharing enables banks and financial institutions to build products and services that are laser-focused on the needs of consumers and business customers.

Leandro Nobrega, Open Banking & Finance, LatAm Operations Lead, Belvo, said Open Banking has created the conditions for “better financial decisions by the customers, more sellings by the retailers with frictionless experience, and more credit products personalized by many sources of historical data”.

Daniel Kjellén, Co-founder and CEO of Tink, added:

“Access to financial data has the power to unlock huge value for financial services providers, and this value can be passed on to consumers and businesses.”



For example, financial data acquired through Open Banking can give consumers and businesses a whole picture of their finances and the environmental impact of their financial decisions. In this way, Open Banking enables us to incentivise sustainable consumer behaviour.” ➡



Data-powered personalisation allows banks to serve existing clients and onboard new customers by giving them fast access to products that meet their exact needs, rather than offering them unnecessary, superfluous or inappropriate services.

Andra Sonea of Oxford University believes “we will see more propositions addressing niche customer segments” in the coming year.

“Execution, ease of use and security are key,” she said.

Kristian T. Sørensen, Founding Partner at Norfco, backed up this prediction and added: “As Open Banking services and use become more widespread, we will start to see the actual benefits for consumers and companies - this will give financial services users access to a much wider range of more tailored services.”

OPPORTUNITY 3

Open Banking For Good

Open Banking is often accessed through mobile devices, which have wide market penetration in developing nations and underprivileged communities. The development of new forms of financial services can aid inclusion, by helping unbanked people start accounts. Underfinanced people who may not have extensive credit records can also benefit from sharing data from sources that were not considered during traditional lending application journeys, such as details of regular rental payments.

“So far, we have only just scratched the surface of what is possible in terms of use cases and services,”



said, **Jim Wadsworth SVP Open Banking at Mastercard.**

“It is helping with financial inclusion, for example through enabling wider access to credit through powering lending decision-making; in turn that helps economies to grow faster – something which is going to be critical worldwide as we all emerge from the challenges of Covid.”

Tiago Aguiar, Superintendent of New Platforms at Tecban, said: “Open Banking has the power to include close to 45 million ‘underfinanced’ Brazilians - people who today do not have access to credit because they do not have sufficient financial history to provide basic data for a better risk analysis, without which they cannot obtain financing to buy, for example, a property, a car, or home appliances.

“We have already seen several initiatives led by Fintechs and focusing on the unbanked, such as person-to-person lending and credit analysis from unorthodox modelling, based on advanced algorithms, which are allowing millions of people who were previously on the margins of the financial world to be included in the credit system.” ➡

Dr Ira Sobel, Founder and CEO, Fintech For Longevity, added: “Open Data will accelerate financial inclusion, by democratizing accessibility to credit by SMBs, improving connectivity between generations (for example, multi-family bank accounts and mortgages) and faster and more secure access to social security and social rights by low-income groups.”

Open Banking may even play a role in helping the global economy emerge from the pandemic.

“Open Banking will help to create products, services and business models that are innovative, personalized and secure, in addition to providing consumers, small businesses and other segments with more choice and control over their financial data,” Michelle Beyo, CEO of Finavator, said. “As we move forward into the new normal, Open Banking will provide the opportunity to help markets recover from the impact of the Covid-19 pandemic.”

OPPORTUNITY 4

Open Finance

The lessons of Open Banking are inspiring new ideas in Open Finance and other sectors.

Amit Mallick, Managing Director and Global Open Banking & APIs Lead, Accenture, said:

“The impact of Open Banking will go much beyond regulation, and we will see Banks, FinTechs, BigTechs and even non-banks across the world use Open Banking to shape their businesses and monetise their data, products services, capabilities and platform.



A wave of change is imminent

as Open Banking initiatives and regulations mature to enable the creation of the Open Finance and, ultimately, Open Data economy.”

Open Banking Europe has now identified more than 20 use cases, including solutions for payments, wealth management, and direct access for corporate and SME clients.

“Banks are starting to realise that Open Banking is not simply a compliance issue, but instead a huge opportunity,” said John Broxis, Managing Director, Open Banking Europe, Open Banking Exchange. “To reap the rewards requires a complete business model shift. “We are moving towards an open, API economy, where finance is delivered by brands and not by banks. The benefits to the consumer are significant – seamless payments and full control of how they manage their financial data and funds.

“Offering relevant financial services to the consumer at opportune moments improves the user experience, nurtures competition, and creates an open, decentralised society.”

The blueprint set by Open Banking and Finance is inspiring the development of an emerging sector called Open Data, in which consumers and businesses allow consent-driven access to their personal data.

Samantha Seaton, CEO of Moneyhub, said: “In 2021 the conversation moved from Open Banking to Open Finance. 2022 will be about Open Data. We at Moneyhub believe that by opening up data, you open possibilities and the benefits to both consumers and businesses will be far-reaching. By looking at data across sectors, including banking, financial services, and wider data such as utilities, telecom, retail or even health, businesses can quickly and securely transform data into super-personalised offers, products, and services.

“People are already being paid to share spending data to Fintechs that can surface personalised services and products that are affordable and of interest to them. They will think nothing of sharing Google Map data and details of their spending with a Fintech when buying a car. Consumers will also consent to having their income verified in order to rent a property or qualify for a mortgage.

“But to be clear, many businesses still have to understand they don’t own any data; consumers own their data and consent is key.”

FINTECH MEGA TREND

Welcome to the Metaverse

EXPLORING AN INNOVATION TAKING PLACE OUTSIDE OPEN BANKING

In 2021, Facebook rebranded itself as Meta and announced plans to develop technology which “help people connect and explore in the metaverse”.

The Metaverse will be a collection of virtual worlds in which people meet, play and work together. This new reality offers many opportunities for the Fintech industry, ranging from the creation of new forms of crypto payments that work across borders to the provision of virtual financial services.

As The Metaverse begins to take shape, it will create a market estimated to be worth \$103.9 billion by 2026, with a compound annual growth rate of 79.2%.[☆]

The Metaverse will generate huge eCommerce revenues as consumers rush to buy digital products as well as the physical hardware that enables them to join this new alternate reality.

Fintechs will also generate new kinds of financial services and products which have never been seen before. Crypto is likely to play a significant role in The Metaverse, with Facebook working on a wallet called Novi and a digital currency called Diem.

Non-fungible tokens (NFTs) will be bought and sold in virtual worlds, allowing consumers to buy exclusive items for their avatars or digital homes.

“Mixed reality will be increasingly accessible to businesses and consumers, transforming our lives over the next few years,” said Keith Jordan, Vice President of innovation at Mastercard’s Labs as a Service business.^{☆☆} “We will move through these hybrid worlds with different experiences in different dimensions in a paradigm shift enabled by a tsunami of tech changes over the next decade.”

[☆] BusinessWire (2021): Worldwide industry for augmented and mixed reality to 2026.

Available at: [businesswire.com/news/home/20210301005716/en/Worldwide-Industry-for-Augmented-and-Mixed-Reality-to-2026---Players-Include-ABB-Apple-and-Atheer-Among-Others---ResearchAndMarkets.com](https://www.businesswire.com/news/home/20210301005716/en/Worldwide-Industry-for-Augmented-and-Mixed-Reality-to-2026---Players-Include-ABB-Apple-and-Atheer-Among-Others---ResearchAndMarkets.com)

^{☆☆} Mastercard (2021): A look into e-commerce - and more - into the metaverse.

Available at [mastercard.com/news/perspectives/2021/ecommerce-metaverse-augmented-mixed-reality/](https://www.mastercard.com/news/perspectives/2021/ecommerce-metaverse-augmented-mixed-reality/)

CHAPTER 3

CHALLENGES

Open Banking Obstacles along the journey

potential

obstacles

adoption

exchange

regulators

protection

industry

ceo

legacy

consumers

The next year is expected to see a steep rise in the adoption of Open Banking and Finance, with one study suggesting 70% of lenders will adopt Open technology by 2023.[☆]

There will be roadblocks and challenges along the way, so to help the industry understand these obstacles OBE asked its panel: “What obstacles, barriers or legislation need to change, or be addressed?”

The Pioneers were keen to stress the obstacles were surmountable challenges that would improve the sector when overcome.

Andy Wiggan, VP of Product Management at GoCardless, gave the following positive statement: “We really aren’t that far away. Huge strides have been made in the last few years to make VRP a reality here and with delivery plans due to be submitted in January 2022 and third-party testing due to start

in the first quarter of next year it looks like it will be all systems go.”



Here are some of the other obstacles facing the sector today.

[☆] Credit Kudos (2021): Open Banking adoption in lending set to hit 70% in the next two years. Available at: creditekudos.com/blog/open-banking-adoption-in-lending-set-to-hit-70-in-next-two-years



CHALLENGE 1

Legacy Technology

Banks and financial institutions are still grappling with the friction caused by old technology, which slows down processes and inhibits progress.

Daniel Kjellén, Co-founder and CEO of Tink, said:

“Legacy infrastructure and technical challenges are still the biggest obstacles to the mass-market adoption of Open Banking.”



This means the journey to Open Finance or Open Data is still relatively slow in some areas compared to what it could be. We know a slower pace of progress is to be expected to some extent, and we'd agree that it's important to get the nuts and bolts right before experimenting with more innovative use cases. However, this must be addressed if Open Banking is to deliver on its true revolutionary potential.”

John Broxis, Managing Director, Open Banking Europe, Open Banking Exchange, said the problem was not just technological.

“It is not so much legacy systems but legacy mindsets which have held back Open Banking implementation,” he stated. “Fortunately, banks are beginning to see Open Banking and Finance as an opportunity and are engaging proactively in the space.”

CHALLENGE 2

Regulations

Open Banking was built on top of game-changing regulations. But its growth could also be hampered by unwise rules or failure to move quickly enough to respond to change.

Gareth Connolly, Account Executive, Financial Services, at Salesforce, warned: “The current regulatory environment is often hamstrung by resources and can work with blanket rules to cover the status quo, not what might be around the corner. A few countries do seek to encourage innovation by providing regulatory ‘sandboxes’ and encouraging ideas and proactive help to define frameworks. This will be more important in the future. Countries which have decided to ‘ban’ or restrict changes in Open Finance and wider new financial products have often stifled innovation and encouraged capital to go abroad to more favourable environments.”

In their responses to the OBE survey, Pioneers called for collaboration between industry players and regulators.

Edlayne Altheman Burr, Managing Director, Accenture, said: “Open Finance requires a collaboration between different regulators and associations from different sectors, for instance, the intersection of Open Banking and Open Insurance requires alignment between Banking market regulators and Insurance market regulators. The key obstacle to be addressed is to avoid the creation of multiple “Open Data” for each sector, without the necessary interoperability to capture the benefits of this intersection.”

Andra Sonea, Research Fellow, Oxford University said that regulation “needs to be more technology aware” so the customer is protected and not put in a position where they are “forced to consent to share their data in exchange for a service”. ➡

“I am very wary that the huge potential for creating valuable propositions for customers is not transformed into something that puts the customers in a weaker position,” she continued.

Amit Mallick, Managing Director and Global Open Banking & APIs Lead, Accenture, called on regulators to support the introduction of standards covering APIs, security, user experience and customer authentication.

“The adoption and progress of Open Banking in each geography will depend significantly on regulators’ vision and ambition,” he said.



Without regulation to encourage organisations to open up access to their data, we are likely to see a rise in “closed connects” in which providers make private agreements to exchange information.

“Closed partnerships would likely be a benefit,” Brad McInnes, Co-Founder and Head of Product at Tapico, said. “It will get the ball rolling and they are only likely to arise if a profitable use case exists. However, it does run the risk of excluding some players. Which is not in the spirit of Open Finance.”

CHALLENGE 3

Education, Awareness and Building Trust

In 2020, an ING survey revealed that **just 30% of respondents across Europe were comfortable for companies to share their data with consent.**[☆]

Although two years is a long time in Open Banking, this figure points to a need to build trust by raising awareness and educating the market.



Gustavo Bresler, Strategy Manager of Quanto, said: “Open Finance’s introduction in the first instance requires educating the population in general. In addition, it is a constant challenge to reinforce the security of Open Finance.”

Part of the solution lies in reinforcing the use cases of Open Banking, as well as educating consumers on the security benefits and improved functionality provided by Open payments.

Mark Fisher, Founder and Head of Product, Finexos, added: “More education is required and financial institutions need to make their customers aware that their data can be used to drive better deals and offers. Regulators should insist that consumers are aware that they can move providers if they are not getting a fair deal or are being charged too much for credit.”

Creditspring has conducted research showing that 52% of people do not want to share data.

“There is still considerable work to be done by the government and financial industry to educate the general public about the benefits of Open Banking, and latterly Open Finance, and how their data will be used and protected once shared,” said Neil Kadagathur, Co-Founder and CEO. “This will be crucial to increasing levels of trust and driving adoption across a range of use cases.

“Customer trust and customer experience need to be at the heart of Open Finance to deliver better outcomes and adoption.”

[☆] ING (2020): ING Survey: We are still suspicious of Open Banking.
Available at: think.ing.com/articles/what-we-say-and-what-we-do-differ-in-a-tech-world

CHALLENGE 4

Ensuring Consumer Protection

To drive adoption, consumers and businesses need to have faith in the security and protections of Open Banking. This requires the establishment of regulations, but also education.

“For open banking-powered payments to reach their full potential, as an industry we need to address consumer protections for certain transaction types,”

advised **Jim Wadsworth, SVP Open Banking at Mastercard.**



Industry leaders also set out their advice on what protections should be available to consumers.

Todd Clyde, CEO, Token, said: "The Open Banking industry must continue to consider protection for consumers: both payment protection (ensuring resolution if something goes wrong when executing a payment) and purchase protection (insurance against the failings of a product or merchant)."

Nick Raper, Director, Nuapay, warned that the "issue of liability needs to be truly tested and resolved to deliver fair outcomes for consumers, TPPs and banks in a consistent way".

"I don't believe purchase protection should be part of A2A payments, and regulation already mandates payment protection," he continued. "However, a key challenge is educating consumers about this, as well as the need for a common dispute management mechanism."

CHAPTER 4

LEARNINGS

Lessons for Open Banking and Open Finance

regulation
collaboration
innovation
new
focus
success
director
managing
consumers
compliance
api

Open Banking is less than four years old but has already taken huge strides in adoption and innovation.

Yet the journey is only just beginning. With many successes and pitfalls ahead, what can be learned from the development of Open Banking and Finance?

OBE asked the panel of Pioneers: “What would you shift, change, improve for Open Finance to deliver better outcomes, greater adoption for business and people?”

The answers point to the future of Open Banking and celebrate its successes, as well as highlighting the need for further collaboration to drive forward new ideas, regulations and frameworks.

Amit Mallick, Managing Director and Global Open Banking & APIs Lead, Accenture, said: “Now is the time to decide whether to treat Open Banking as a potentially destructive tsunami or an opportunity to ride the surf break of a lifetime. Banks that lay a strong foundation can expect to see notable results in key areas that define the performance and success of an implemented Open Banking strategy and operating model.”



LEARNING 1

Regulations Must Be Enhanced

The PSD2 is a foundational directive that laid the groundwork for the global spread of Open Banking. However, OBE's expert panel called for more work to develop regulations - as well as more involvement from the industry.

"The foundation of any open banking or open finance service is secure, consented access to the relevant data," Jim Wadsworth, SVP Open Banking at Mastercard, said. "We have seen regulators in Australia lead the way on this, but the industry does not need to wait for regulation. Banks and other institutions should proactively enable access to wider datasets – for European financial institutions it would make sense to leverage already developed PSD2 APIs. Provided security and consent are suitably safeguarded, it is appropriate that those that make additional data available derive benefit, which means having the right commercial frameworks in place. That would also help to encourage 'critical mass' across the industry."

Bruno Loiola, Co-founder and Chief Growth Officer at Pluggy, said: "The regulator should allow all innovators to be part of their work, which is crucial for the success of Open Finance. Competition involves many players working to provide the best solutions to the end-user. I truly believe in working for the success of all players, because if one fails and the consumer stops believing in the system, all the others will suffer the consequences."

James Lynn, Co-founder of Currensea, added: "Through Open Banking we've seen the critical importance of an independent body in place to drive standards and monitor compliance."

"For Open Finance to improve on that, a more seamless join between monitoring compliance and enforcing compliance will need to be in place. As part of that, passive compliance will also need to be considered. Delivering a performing API is only part of the solution. Ensuring awareness and correct messaging across support, compliance and security teams within Open Finance providers will also prove to be a key element of success."

LEARNING 2

The Industry Must Focus on Public Awareness

In 2021, a survey revealed that just half of all Americans had heard of Open Banking.[☆] The banking industry knows about Open Banking and Finance, yet to reach the tipping point of mainstream adoption it must continue to evangelise, educate and spread the message - without shying away from addressing consumer concerns such as security.

Todd Clyde, CEO of Token, said: “The onus is on regulators, banks, merchants, and technology providers to raise consumers' overall level of awareness about Open Banking and Open Payments, and the tremendous benefits they offer.”

“The conversation around education also needs to shift from focusing on educating consumers about most basic data use cases, to engaging in a broader and richer conversation with consumers about how Open Banking payments and Open Finance will create positive outcomes across the span of their financial lives.”

[☆] Axway (2021): Survey reveals only half of Americans have ever heard of open banking.
Available at: axway.com/en/company/media/2021/press-release-survey-reveals-only-half-americans-have-ever-heard-open-banking

Andra Sonea, Research Fellow, Oxford University, called for “more public communication”.

“The discussion about Open Banking and Open Finance should not be only between experts, regulators, technology companies and banks,”



she continued. “In my view, the communication around Open Banking has been in general very poor. Most people would not be able to recognise the embedded payment initiation even in the UK where the wide range of fintech firms increased people’s awareness of payment methods and the rights associated with some of them.”

LEARNING 3

Focus on Driving Adoption

The industry should continue making the case for Open Banking and Finance, even as adoption grows, because preaching to the converted will not drive the mainstream adoption the sector needs.

Andy Wiggan, VP of Product Management at GoCardless, said: "Consumer education is the main point here again. We know that getting paid from a bank account is fundamentally better in terms of higher transaction success rates, lower costs to businesses, lower churn rates on digital subscriptions, and faster cash flow - but all of that means nothing if payers simply won't shift from their outdated payment methods. We really need to focus our efforts on bringing consumers on this journey with us, as well as businesses, and instilling in them a confidence in Open Finance."

A focus on the use cases is one way of encouraging adoption. The industry should also continue to work on security to boost confidence in the ecosystem.

John Broxis, Managing Director of Open Banking Europe and Open Banking Exchange at Konsensus, added: "Open Banking began with the technology. The assumption was that if the infrastructure was built, use cases would follow. Unfortunately, this did not happen as smoothly as expected. Use cases have taken time to develop, leading to a slower rollout."

Trust is also crucial to the Open Banking project. Consumers must believe in the security and efficiency of new forms of payments if we are to encourage widespread adoption. ➡



Brendan Jones, CCO of Konsentus, said:

"Open Finance is about creating secure trust frameworks. If the service is not secure, people won't use it – resulting in limited return on the infrastructure built. The issue is not just one of compliance; it is about privacy, about making sure that data does not fall into the wrong hands. If a bank cannot ensure the legitimacy of its transactions, it will lose the trust of customers."

When we transition to Open Finance, the consumer must be put at the centre of the conversation."



LEARNING 4

Develop Partnerships

When Fintech pioneers work together or collaborate with established incumbent players, they drive innovation and push the sector forward. A continued focus on partnership and collaboration is essential to developing the sector.

Edlayne Burr, Managing Director of Accenture, called for the creation of “even better mechanisms to foster the collaboration between different industry sectors to build together the foundations of the Open Finance APIs framework”.

Daniel Kjellén, Co-founder and CEO of Tink, added: “I would continue to encourage financial institutions to embrace partnerships with Fintechs with knowledge and expertise in this area. By doing this, together they can accelerate their Open Banking strategies and shortcut the time to market of new products. Collaborating with a smart partner can enable both the leapfrogging of legacy systems and help overcome technical challenges as expertise is shared rather than home grown.”

LEARNING 5

Open Finance By Default

Consumers are now used to traditional payment methods such as cards or direct debit. For Open Banking to push towards ubiquity, it should become the default option for consumers and businesses.

Mark Fisher, Founder and Head of Product at Finexos, said:

“Open Finance should be embedded in every credit scoring metric to provide consumers and SMEs with better access to affordable credit.”



Lenders and credit providers should inform customers that an Open Finance check has been completed prior to providing them with a price. This would drive large scale adoption within financial services.”

Nick Raper, Director of Nuapay, added: “In the insurance sector it is very common for large providers to distribute through third parties and make a winning play out of those business models. When banks see the value of being a product provider, and start focusing on developing underlying products and distributing and commercialising through value-adding APIs (rather than just delivering the bare minimum that is mandated) we will see further innovation and value for consumers and SMEs.” ➔

Amit Mallick, Managing Director and Global Open Banking & APIs Lead, Accenture, said that “organisations will need to organize their businesses differently and build new capabilities” to “rethink partnership models, re-evaluate the operating model of choice and invest in enhanced technology architecture”.

He also set out guidelines for financial institutions who were involved in Open Banking, advising them to invest in enhanced technology architecture including API and microservices platforms, as well as delivering operating model improvements including fraud, security and incident management.

Competing To Open Up

Collaboration and competition is key to the development of Open Banking. There are now several prizes dedicated to rewarding innovation and excellence, including the OBE Open Finance Appathon.

In the UK, Nesta (National Endowment for Science, Technology and the Arts), held the first Open Challenge, a competition intended to “unlock the power of open banking for UK consumers” that was backed by a £1.5 million prize fund.

Catherine Thompson, Programme Manager, Nesta Challenges, said: “Through the Open Up Challenges, we saw how much innovation open banking regulation has unlocked. Leading innovators are now driving into open finance. In 2022, we foresee a range of new products that help people manage their entire financial lives - from pensions to mortgages, insurance and beyond, using existing open banking regulation, based on data from current accounts that are at the heart of our finances.

“However, to truly unlock the potential that open finance holds, we need to hand people the keys to more of their data - and for that, I hope we see progress towards broader regulation.”

“Open Banking is already delivering huge benefits for those underserved by traditional financial services and those who don’t have easy access to financial advice. For example, one of the Open Up 2020 Challenge winners - Mojo Mortgages - helps people understand if they are mortgage ready and, if not, gives them actionable steps to improve their attractiveness to lenders based on their individual circumstances.

“Growing public awareness and trust in open banking could drive an even broader range of ever-more personalised products and services to emerge, widening access and in turn, boosting the financial wellbeing of people across the UK.”

Conclusion

credit

digital

payments

record-breaking

collaboration opportunities

director managing cards cbdc

co-founder

milliseconds

million

The progress of Open Banking has been astonishing. In 2021, the sector performed at record-breaking speed and volume.



Statistics from OBIE show that **the average API response time in 2021 was 489 milliseconds in the UK.** July 2021 was a record-breaking month, with 852.7 million API calls - a rate of 27.5 million per day. November 2021, instead, was a record-breaker for payments, with 3.03 million successful payment initiations made by third party providers using account providers' (ASPSPs) Open Banking APIs.

This impressive performance is just the beginning. In 2022, Open Banking and Finance will continue to grow, evolve and develop. Innovators working in the space will press forward to develop new ideas and extend the Open Banking approach into new sectors.

It is an exciting time for the entire banking and financial services industry. The revolution is truly Open to all.

BRAZIL IN FOCUS**The Next Global Capital of Open Banking?** 

Tiago Aguiar, Superintendent of New Platforms at Tecban, said: “Open Banking has the potential to transform the Brazilian financial system as we know it today, in addition to expanding the offer of services tailored to the needs and profile of people, including people without access to financial services, without credit and with varied incomes.

“Around the world we have already seen several initiatives with unbanked members of the public, allowing millions of people who were previously on the margins of the financial world to be included in the credit system. Initiatives such as social banks and credit societies are bringing resources to the doorstep of communities.

“The banking model of the future will be marketplace banking. Until 2021, banks worked in a vertical model of production and sales. That is, the bank created its products, distributed, and sold them through its own channels (branches, ATMs, internet and mobile banking, and correspondent banking). But with Open Banking, the distribution model will change completely.

“Financial products will be able to be distributed within an ecosystem of suppliers, using interfaces and brands distinct from producers. Thus, the traditional business model will be transformed into a platform-based, data-intensive marketplace, where multiple financial service providers will continuously compete to offer customized products at the best rates to customers. The battle will be on interface and user experience. The big issue will be: through which solution, application or website will customers operate.”

Gustavo Bresler, Strategy Manager of Quanto, described the innovation in Brazil as the “the tip of the iceberg of an entire financial market revolution”.

“We believe that a year from now our relationship with financial institutions will already be different,” he continued. “The current schedule for implementing Open Banking and Open Finance in Brazil, for example, extends until September 2022 and, by then, we will already have a glimpse of the new dynamics of contact with finance.

“At this point, we are at the learning period of what to do with so much data and we’re focused on tackling the most obvious use cases to show the market a taste of all the potential Open Finance brings.

“We mainly see the trend of unbundling - which then becomes re-bundling. This can generate two movements: the growth of the segmented bank, since it understands its client very well, and the pulverisation of the financial segment, which focuses on the client’s moment of need.

“Another trend is the growth of payments through Open Banking, replacing part of the payments by “boleto”, a traditional form of payment in Brazil that can take a few days to be confirmed. In other words, the new payment method combining payment service initiation and Pix instant payments could boost conversion. Furthermore, it will be the beginning of initiatives that combine payments through Open Banking with credit offers.”

A View from the EU

“Open banking is only gaining momentum, and over the next 12 months in Europe we will see increased adoption, higher transaction volumes and more innovative services being offered to the market,” said John Broxis, Managing Director, Open Banking Europe, Open Banking Exchange. **“We are also likely to see payment initiation taking off. But this will take time, so it is important to be realistic.**

“The European Retail Strategy has promised to present a new open finance framework by mid-2022, so legislation won’t come into effect until 2023, and consumers won’t be impacted until around 2024. In the meantime, we will see newly regulated TPPs, as well as an increase in withdrawn TPPs as the market consolidates.

“Globally, we will see regions leapfrogging Europe and going straight to open finance and open data. Mexico and Colombia are examples of countries where our international operation, Open Banking Exchange, is working with the regulators and ecosystem members to enable a more encompassing regulatory framework.” Brendan Jones, CCO of Konsentus, said: **“PSD2 open banking regulation affects the 30 countries of the EEA in varied ways. Cultural differences and diverse historic**

payment systems have influenced the rate of adoption. So, while the Nordics were quick to embrace open banking, Mediterranean countries have been slower to follow. For example, PIS and pay-by-bank transactions, which are well established in Germany and the Netherlands, are now beginning to pick up in card-based economies.

“Since PSD2 was implemented in September 2019, the share of TPPs regulated by the UK’s FCA has dropped from over 50% to 42%. The narrowing of this gap will continue as the European market grows.

“As more TPPs and unknown entities enter the space and create more complexity, cases of unauthorised account access being granted, or fraudulent transactions being made, will inevitably rise. In response, regulators are likely to take a more active role in issuing fines and enforcing PSD2 compliance.”

CONTRIBUTORS

Thank you



GIOVANNI CACCAVELLO
Head of Research & Blog Content



RAVINDRA MESHAM
Director – Strategic Alliances



AMIT MALLICK
Managing Director and Global
Open Banking & API Lead



BRAD MCINNES
Co-Founder & Head of Product
Tapico



CATHERINE THOMPSON
Programme Manager



ANDRA SONEA
Research Fellow



BRENDAN JONES
CCO



DANIEL KJELLEN
Founder & CEO



ANDY WIGGAN
VP - Product Management



BRUNO LOIOLA
Co-Founder & CGO



DANILLO BRANCO
Co-Founder & CEO





EDLAYNE BURR
Managing Director
accenture



HUW DAVIES
Co-Founder & CCO
OZONEAPI.COM



JIM WADSWORTH
Senior VP Open Banking



GARETH CONNOLLY
Account Exec - Financial Services



IRA SOBEL
Founder & CEO



JOHN BROXIS
Managing Director
OPEN BANKING EUROPE



GREG STORM
Co-Founder & CEO
TripleBl'nd



JAMES LYNN
Co-Founder
currensea



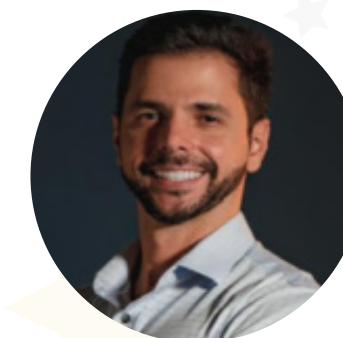
KRISTIAN T. SØRENSEN
Founding Partner
NORFICO
NORDIC FINTECH CONSULTING



GUSTAVO BRESLER
Strategy Manager
QUANTO



JASPER HAMILL
Writer



LEANDRO NOBREGA
LatAm Product Operation Leader
belvo.



MARCUS HUGHES
 Director of Business Development




NICK RAPER
 Director




SAMANTHA SEATON
 CEO





MARK FISHER
 Founder & Head of Product




NICK REID
 Sales Executive




TIAGO AGUIAR
 Superintendent of New Platforms




MICHELLE BEYO
 CEO




ROBERT COURTNEIDGE
 Independent Payments
 Industry Advisor



TODD CLYDE
 CEO




NEIL KADAGATHUR
 Co-Founder & CEO




ROGER DE'ATH
 UK Country Manager




TOM WIJNEN
 Senior Product Marketing Manager


OPEN BANKING
EXCELLENCE

