



Open Banking Nigeria

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Open
Banking



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Executive Summary

Open banking represents a shift – a movement from closed models to open systems that promote optimal value for both end-users and businesses alike. The ecosystem is fueled by seamless exchange of data based on customer consent, nevertheless in a controlled form enabled by Application Programming Interfaces (APIs). By breaking the monopoly of access to customer data previously held by incumbents, third-party providers including non-financial services players are enabled to bring innovative and contextual solutions to customers, using available resources optimally. Open banking positions customers in the driver seat, enabling more choices and specifically highlighting the actual pain points or demands of customers.

This report seeks to provide an overview of open banking, highlighting key developments across the world, evolving use cases and the trends that shaped open banking in 2020. Additionally, we further highlight key open banking developments in Nigeria, showcasing the front liners and drivers of the movement.

We understand that the journey to a mature open banking ecosystem is a continuously evolving one, hence, this report is a representation of efforts driven at advancing the course for open banking.

Overview of the Open Banking Ecosystem

As the future of financial services is continuously evolving, open banking is at the

nexus of how the story of this future unfolds – providing solutions to the unanswered questions of end-users in a contextual form. The birth of open banking was triggered by several factors – changes in consumer behaviour, increasing competition especially with the entrance of third-party players, API technology and very importantly, regulation. A deep dive into the open ecosystem, unearths key enablers and drivers in different layers such as API connectivity, consent management, end-user propositions, etc.

Open Banking Use Cases and Propositions

The acceptance of open banking principles has clearly demonstrated that possibilities for value-creation available to both end-users and business are boundless. In recent times, there has been a burst of open banking propositions and use cases that have emerged in areas such as personal financial management, SME finance, smart onboarding, financial inclusion, etc. Though these use cases are at different levels of maturity, they hold the promise of realizing an open banking future.

Open Banking – Evolving in the Wake of a Global Crisis

It is no news that the COVID-19 pandemic had a significant impact across the world, resulting in a shift from the normal to rather new realities. From an open banking perspective, the impact of the pandemic was felt by customers, financial institutions, small business, regulators, etc. End-users were

led to increase their uptake of digital solutions that are powered by open banking principles with a renewed focus on budgeting, savings, and overall financial management. For financial institutions, while there is yet more to be seen, there was an overall improvement in the disposition to open banking on a positive note. Adoption and acceptance of open banking by small businesses also increased as demonstrated by the uptake of integrated accounting and cashflow forecasting solutions. Regulators were not left behind as there were accelerated conversations on how to encourage an open banking environment. Looking back on the impact of the pandemic, it is evident that to thrive in the emerging future, players in the open banking environment must focus on articulating a robust open banking strategy, prioritise key investments required to enable open banking and establish partnerships as an integral element of their open banking strategy.

Open Banking Developments Across the World in 2020

As stated in our 2019 report, open banking developments across the world are either market-driven or regulator-driven. In this section, we shed more light on developments across different geographies such as emerging OAPI products and platforms, taking note of leading countries or regions and enablers. While Europe takes the lead in regulator-driven developments, growth in Asia on the other hand has been more organic, driven by customers willingness to share data and accelerated digital innovation. Additionally, we explored developments in the Americas, Middle East, Australia, New Zealand and Africa with the

intent of spotlighting interesting activities that are open banking focused in these places.

The Nigerian Context – Open Banking in Nigeria

Open banking in Nigeria continues to build on the efforts from previous years, primarily driven by Open Banking Nigeria (OBN). In 2020, we witnessed several developments that pushed the frontiers of the open banking journey in Nigeria further on a positive note. From the Central Bank's collaboration with Open Banking Nigeria, the identification of open banking as a critical element of the PSV 2030, the increase in API-based startups, etc. to the increasing membership of the Open Banking Nigeria advocacy cluster, it is evident that the journey to an open banking reality in Nigeria is on an accelerated pathway.

API Banking and the Nigerian Experience

A closer look at the API products by category shows that APIs focused on driving payment integration and account balance checks are by far more popular than others. In this section, we spotlight these API product categories. Additionally, we further explore the case for API-banking as a solution to the potential security breach resulting from screen scraping practices. This section also showcases the pacesetters in API-banking in Nigeria and their strides towards growth.

Open Banking Roadmap for 2021

As the face of Open banking advocacy and advancement in Nigeria, Open Banking Nigeria has articulated a clear roadmap for the year 2021 to build on the achievements in the previous years with a view to establishing a robust open banking ecosystem in Nigeria. This section showcases elements of the roadmap for the year 2021.

Abbreviations

AML	Anti-Money Laundering
API	Application Programming Interface
ATM	Automated Teller Machine
BaaS	Banking-as-a-Service
B2B	Business-to-Business
B2C	Business-to-Consumer
C2B	Consumer-to-Business
CMA	Consumer and Markets Authority
DBS	Development Bank of Singapore
EU	European Union
FaaS	Fintech-as-a-Service
FCA	Financial Conduct Authority
Fintech	Financial Technology
FX	Foreign Exchange
GDPR	General Data Protection Regulation
KaaS	KYC-as-a-Service
KYC	Know Your Customer
MAS	Money Authority of Singapore
OBIE	Open Banking Implementation Entity
OTF	Open Technology Foundation
P2P	Peer-to-Peer
PSD2	Payment Services Directive II
SCA	Strong Customer Authentication
SME	Small and Medium Enterprises
UPI	Unified Payments Interface



Overview of the Open Banking Ecosystem

Open Banking allows customers to access banking services in the context of other services mostly provided by third-parties such as Fintechs, enabled by application programming interfaces (APIs). The emergence of open banking signaled the beginning of a journey to democratize financial services, allowing secure data sharing between banks and third-party providers with customer's consent.

According to PYMNTS.com, "Open banking lays out a path and process for banks and other financial institutions to share their customers' data with third-parties (even competitors), where the data tie into apps and new products and services". This translates to a systemic shift from closed to open banking models. The open model is shaped by several emerging factors;

- **Changes in consumer behavior** – Customer needs are critical to the emergence of open banking models. These needs are defined by the increasing demand for contextual end-to-end offerings by customers, increasing levels of mobile connectivity and expectations heightened by technological advancements in everyday interactions.
- **Competition** – Increasing competition between traditional financial services players and non-traditional players such as Fintechs is another important trigger for open banking as players begin to consider new strategies to manage and enhance

customer relationships and additional avenues for revenue generation. Based on the competitive push to provide additional value to customers, new innovative service and product offerings such as those powered by open banking principles are birthed.

- **Integration** – Leveraging a solid API infrastructure allows businesses to easily develop new digital products and services with more value-adding capabilities for customers. This is emphasized by the modular nature of capabilities that are developed using API-driven technologies.
- **Regulation** – While several factors have jointly shaped the emerging open banking system, regulatory activity has been a major boost to the model. The introduction of regulatory interventions such as the PSD2 by the EU or the API specifications by the CMA in the UK are examples of specific ways regulation has spurred open banking activity.

The collective impact of these key factors driving the shift away from closed banking models raises key questions for traditional institutions bordering on –

- The role(s) they will play in the open banking ecosystem.
- The required capabilities to achieve differentiation in the new model.
- The level of transformation required from a technical architecture perspective to support the new role(s).

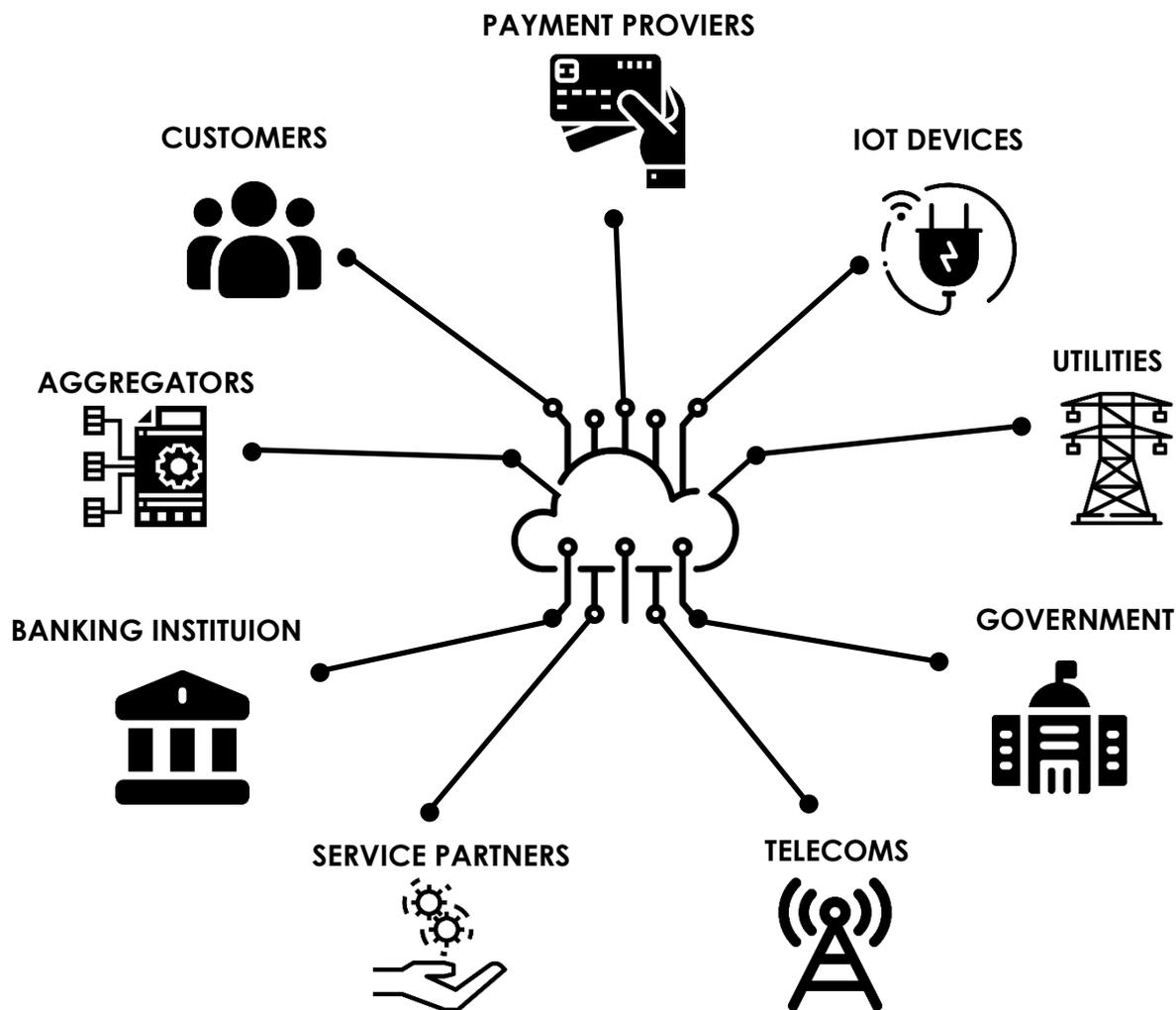
- The customer engagement strategy, considering their rapidly evolving preferences.

The open banking ecosystem represents a financial space where needs and solutions are connected by APIs – moving away from product-centric, inside-out propositions to customer-centric, outside-in value propositions. It is a financial services marketplace – offering new technology solutions to banks and new value propositions to customers in a secure environment. The engine of the ecosystem runs on the interconnectedness of multiple stakeholders

(banks, regulators, customers/end-users, etc.), data sharing mechanisms, enablers, driving forces, value propositions, standards etc.

The open banking ecosystem is fueled by **collaborations and strategic partnerships** among key stakeholders. Unlike the closed banking model, the open ecosystem is characterized by multi-directional data access and sharing, distributed business models, banks as platforms, banking-as-a-service, etc. Figure 1 below provides a view of an open ecosystem.

Figure 1. A Sample Open Ecosystem



The ecosystem participants are categorized into the following groups –

- **Third-Party Providers (TPPs)** – These are authorised service providers who integrate

with bank channels, to provide innovative services leveraging account data enabled by APIs

- **Banks** – Banks are foundational participants in the open banking

ecosystem. They hold the aggregate pool of customer data.

- **End-users** – Customer needs are essential to the development of the open banking ecosystem. Customers are the principal beneficiaries of the open banking value proposition.
- **Regulators** – Interactions in the evolving ecosystem are controlled and monitored by regulators. They play the essential role of ensuring that the integrity of the financial ecosystem is maintained while promoting better financial services for end-users.
- **Other non-bank companies** – These are organizations that leverage on TPPs to build innovative add-on solutions for end-users. Examples include Telcos, Utility providers, Credit bureaus, Accounting software providers, etc.

Furthermore, the open banking ecosystem is characterized by different layers of interactions between different players.

According to a report by The Paypers, the lineup of players in open banking can be broadly classified into the following layers;

- **Open Banking Enablers** – In this category, the focus of these players is to provide PSD2 compliance support – assisting banks to publish PSD2 compliant interfaces in addition to building valuable open banking use cases.
- **API connectivity for payment initiation** – These players offer inter-and intra-API-led connectivity services i.e., enabling applications to connect to data through reusable and purposeful APIs. These APIs are developed for specific purposes.
- **API connectivity for data retrieval & value-added data solutions and services** – In this category, these players aggregate bank transaction data and analyse them to provide actionable

insights for banks on their client's behaviours and footprint. Examples of services provided here include – transaction categorization, data presentation, transaction enrichment, credit scoring etc.

- **Consent management** – Consent management is essential to the operability of open banking concepts. Players in this space provide solutions for financial institutions that enable external parties to only access customer data under the conditions that consent is given. Hence, they enable banks to facilitate a seamless permission process.
- **Third-party providers checking & repository** – In this layer, these players offer third-party identity verification and accreditation solutions including AML compliance in the open banking context.
- **End-user solutions and propositions** – Players in this category provide last mile solutions to end-users such as account aggregation, personal finance management services, cash management, credit scoring, savings and investment services, etc.
- **Fraud/risk/security** – The interactions between banks and third-parties to provide more tailored offerings to customers via API integration increases the risks of fraudulent activities. Hence, players in this category provide services aimed at detecting fraud or securing these interactions such as transaction monitoring, API security, etc.
- **Bank in the box/banking-as-a-service/core banking infrastructure** – In this category, players provide white-label solutions including core banking modules, channels, etc. which are tailored to meet the operational needs of a bank in an open banking environment.

Open banking use cases and propositions

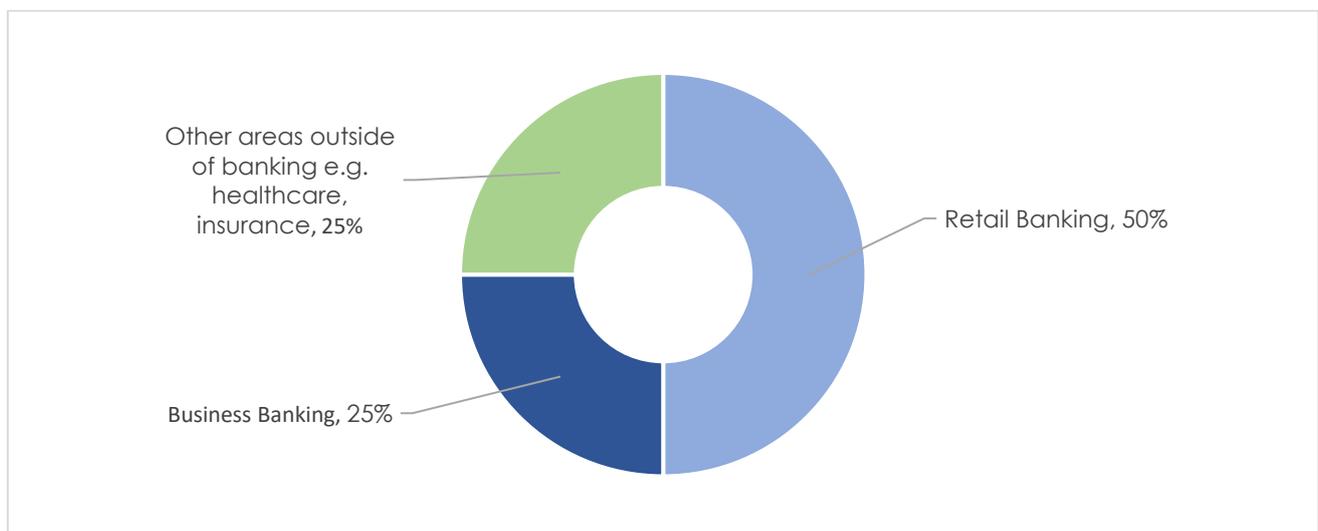
As the key pieces of the open banking puzzle fall into place, stakeholders are beginning to realise the enormous opportunities that it holds. Open Banking is set to make a significant impact both on consumers, financial institutions, and other non-bank third-parties. Leveraging financial data under established interoperable standards, open banking points to a new era of possibilities, yielding value to both consumers and businesses. Since inception, there are quick wins that have been established from the adoption of open banking initiatives such as account aggregation or consolidation for end users. With the upsurge of technology-led innovations and increasing stakeholder awareness of open banking and its

potential benefits, the conversation has now evolved beyond the lowest hanging fruits to more robust propositions.

Across the globe, we see new opportunities emerge – from the fundamental use cases to more complex propositions. Through its various applications and use cases, open banking has become the vanguard of disruption in financial services.

Among stakeholders, expectations on the applicability of open banking to address practical challenges vary. Referencing a poll conducted by Zuhlke Engineering, the figure below demonstrates that the majority of stakeholders are keen on exploring more use cases that are retail-focused, among others.

Q: Which area of Open Banking use cases are you most interested to learn about?

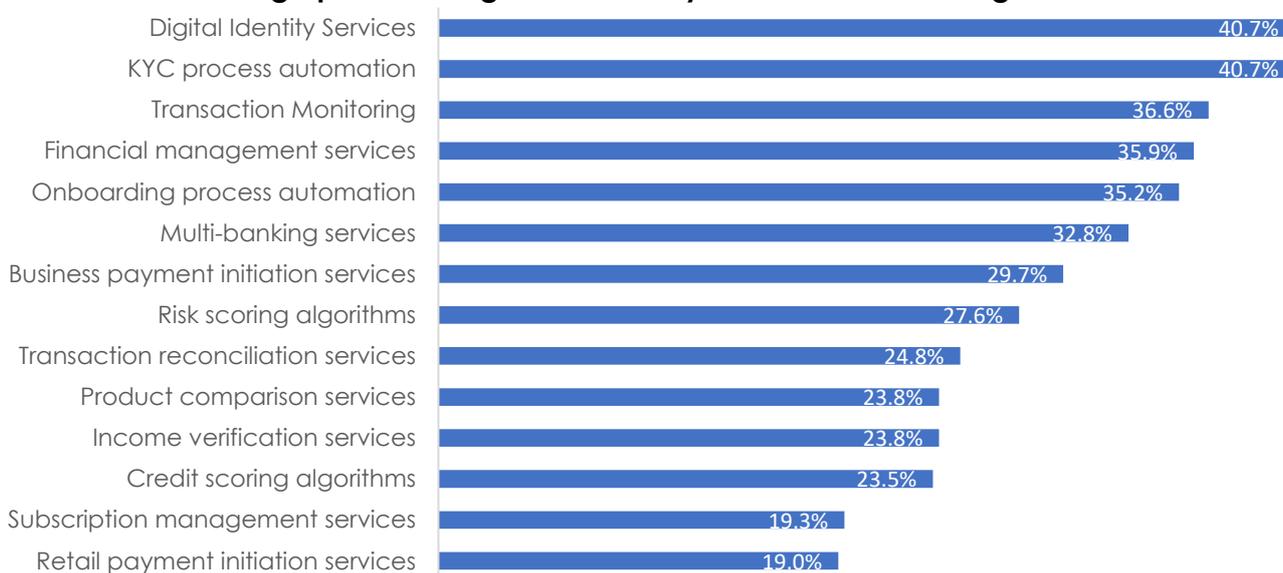


Source: Zuhlke Engineering

On a related note, a survey conducted by Tink and YouGov in 2020 showcases the relative importance of open banking to

executives in financial institutions as shown below;

Q. Which of the following open banking use cases is your business investing in?



A closer look at the responses in the chart above reveals that the use cases executives are investing in are largely dimensioned between **compliance-related use cases** and use cases tailored towards **improving customer experience**. This emphasizes the need for financial institutions to balance the pursuit of avenues to improve overall customer experience through open banking opportunities and compliance to regulations. Additionally, the responses re-echo some of the key objectives of open banking which are focused on provision of digital customer services and generation of additional revenue streams for financial institutions both from new and existing customers.

Let us explore the Open Banking use cases in further detail.

Financial inclusion

Open banking holds the promise of widening the access to financial services for underserved segments – providing both

existing products and bringing new offerings onboard for these segments.

By consolidating data from unconventional sources such as phone data recharge transactions, social media activity, online footprint, etc., through API integrations, open banking builds a bridge between the underserved and mainstream financial services – thus enabling the poor underserved segments to build proxy profiles which can be leveraged for financial purposes such as lending.

This will significantly shift the approach to credit appraisal and scoring for the unbanked population – fund providers will have access to more behavior-based insights which will drive credit processes. As a result, the unbanked population with minimal access to formal documentation requirements are given a chance to build credible credit capacity. Hence, people who are typically ignored by tier 1 financial institutions would be able to access services provided by Fintechs or microfinance institutions.

Smart onboarding

For institutions that are retail-focused (financial and non-financial), open banking has the potential to yield significant value in the area of onboarding, cutting across various activities such as KYC process automation including auto filling of forms, verification of accounts, etc. Through open banking, the existing constructions presented by manual activities in the customer acquisition process are removed – thus, accelerating value creation for businesses. Consider the following scenarios where Open Banking is being explored by institutions to make onboarding smarter.

- **KYC process automation** – With open banking, financial institutions can easily verify customer's information without going through the hurdles of manually uploading required documentation. By leveraging available data, customer credentials are speedily verified.
- **Auto-filling forms** – One of the contributors to customer drop-off during the onboarding process of certain services such as loan applications is the laborious nature of documentation. However, through Open APIs, the drop-off rate can be significantly reduced as required customer information is automatically aggregated.
- **Account verification** – In cases where customer account ownership verification is required, this can be done easily without unnecessary administrative hurdles.
- **Affordability checks** – In situations where customer income is needed to determine if they are eligible for a service, Open Banking provides an opportunity for a quick income versus expenditure matching to be carried out, by leveraging available financial

data. This is also considered as an extension of the risk assessment process.

SME finance

Small businesses are not left out in the conversation around proven use cases of Open Banking. Among the use cases of open banking for small and medium businesses, these are predominant;

- **Account Management** – Through open banking powered applications, small businesses are able to not only manage their bank accounts but also have good oversight of their banking transactions through the API-driven aggregation of accounts.
- **Automated Accounting** – In the accounting software space, there has been the emergence of new products by providers which allows real-time access to business accounts. Through APIs, these softwares access transaction data from bank accounts and automatically classify them for tax and accounting purposes for SMEs.

Personalised financial management

Open banking use cases bordered on personal financial management are prevalent. Consider the following sample use cases

- **Personal financial dashboards** – Through open banking account aggregation, users can link multiple bank accounts to one application, creating a unified view. The key value-add in this case is that the offering positions users in the driver's seat of their finances – thus providing control and oversight.
- **Smart budgeting** – Through algorithmic analysis of user behaviour, open

banking platforms provide users the opportunity to track their financial transactions and make more informed decisions. Additionally, users are provided with budgeting tips based on their behaviour. They can also set limits to their spend, essentially managing their finances better.

- **Auto-saving** – Open banking provides features such as “auto-saving” – allowing users to set savings goals and automatically set money aside to meet these goals. Additionally, users have access to insights and can also track progress or performance on their goals.

Credit administration

Beyond value propositions tailored to customers and small businesses, open banking also has the potential to yield massive commercial impact in the area of credit risk management and decision making. The activity of credit assessment and modelling is heavily reliant on data. Quality outcomes from a credit assessment process has a direct correlation to the quality and volume of data inputs available from initiation. Therefore, through the availability of data made possible by API integrations, the underwriting process for loans, credit risk assessments procedures, fraud management, etc., can become not only smoother but also more cost effective for financial institutions.

Availability of data-driven insights through an API-powered process builds the confidence required for decision making, fast tracks the processing turnaround time and ultimately leads to more productive use of resources by financial institutions.

Driving the credit administration processes through open banking has considerable advantages to financial institutions. Some

of these include;

- **Improved customer engagement** – It improves customer engagement as customers do not have to wait excessively to confirm their eligibility for loan products or the status of their loan applications. Additionally, access to contextual customer data allows the financial institution to appreciate customer needs and consequently offer differentiated loan products. This in turn drives up customer loyalty levels.
- **Better management of employee time** – It reduces the undue time spent by skilled professionals sifting through manual documents to gain the required information to either onboard customers or reach a decision on loan applications.
- **Insights for Decision making** – Compared to the traditional approach, leveraging financial data provided via open APIs affords financial institutions insights which may be more difficult to glean from examining a ton of manual documents. Additionally, through this insight-driven approach, more informed decisions are not only made but also these insights match the speed of decision making.
- **Fraud management** – Leveraging data provided via Open APIs reduces the risk of fraud resulting from document tampering in the credit underwriting and assessment process. It provides more than a single source of verification as data is drawn and compared across different data pools.

Open banking brings a revolutionary reform to the credit infrastructure and approach in the financial services industry. It holds the promise of filling the void where previous credit administration methods have failed – providing a seamless fusion of the art and science of credit modelling, leveraging data extensively.





Open banking – evolving in the wake of a global crisis

The year 2020 was truly unforgettable – the financial services landscape was significantly altered by the COVID-19 pandemic, regardless of the level of digital maturity and readiness of institutions and businesses. At the onset of the pandemic, we saw what seemed like a health predicament quickly morph into a global crisis, significantly impacting individuals, businesses and governments across all spheres. As is the case with other sectors, the financial services space will experience lasting implications of the pandemic on customer behaviours, product and service offerings, operating models, go-to-market strategies, etc

While open banking maturity is a long-term play, the pandemic stirred the financial services landscape, moving many institutions from a state of inertia and indifference to open banking concepts to one of acceptance and position disposition to open banking.

Open banking: Rising to the realities of the pandemic

As stated earlier, the pandemic rattled the foundations of predominant models and systems in the pre-COVID-19 era. As with other sectors, the financial services space was not left behind – the ripple effects of the pandemic, though not comparable to the magnitude witnessed in other sectors were evidenced by the impact on customers, small businesses, financial institutions, regulators, etc.

Customers – The global pandemic accelerated changes in customer behaviors', evidenced by overwhelming increase in the uptake of digital solutions powered by open banking principles compared to the pre-covid era. Due to the pressing realities of the pandemic, there was increased demand for products focused on budgeting, savings and overall financial management. Mastercard's "chronicles of the new normal" series articulated the following customer trends attributable to the pandemic;

- Increased levels of comfort with contactless shopping and payments. As health concerns over contact-driven means of payment such as cash, cheques, card payments grew, it became imperative to adopt these digital means.
- Upsurge in online shopping including notable increase in adoption levels by baby boomers. The closure of brick-and-mortar locations during the declared lockdowns accelerated this significantly.
- New consumption patterns demonstrated by changes in spend mix.

These customer trends triggered by the pandemic have the potential to serve as a surfboard for financial services providers to ride the new wave and capitalize on the open banking opportunities.

Financial Institutions - Across financial institutions, there have been notable shifts in attitude towards acceptance of open banking initiatives as a result of the pandemic. A research by Tink in 2020 revealed that about “61% of financial institutions across Europe are more positive about open banking than before”.

For lenders, open banking took on new relevance as it provided tools for assessing affordability and customer suitability for certain loan products. It enabled lenders to obtain an accurate view of customers' financial situation in order to arrive at informed credit decisions. Additionally, it helped with tailoring the right products to customer needs.

Small Businesses – Beyond the immediate benefits provided to individuals by open banking powered initiatives, the pandemic positioned open banking as a beneficial undertaking for small businesses. A study by Open Banking Implementation Further efficiency added to these businesses is the elimination of manual processes of data importation and transaction reconciliation.

Another important use case where businesses derived value from open banking during the pandemic was in the area of cash flow forecasting. In parts of Europe and Asia, accounting platforms which were enabled to make API calls for bank account transactions, bills and invoices were rolled out to enable efficient cash flow predictions. Hence businesses were able to appreciate the impact of their existing bills and invoices on their cash flows.

From a financing perspective, businesses which already had integrated accounting solutions with their bank transactions were more positioned to access loans and grants from fund providers by simply providing their accounting data.

Entity (OBIE) revealed that since the outbreak of the pandemic and the lockdowns imposed as a result, half of the UK's small business community have increased their usage of open banking powered services. According to the poll, three out of five businesses adopted open banking services as a direct result of COVID-19.

Several use cases of open banking for small businesses such as automated accounting were accelerated as a result of the pandemic. According to the study by OBIE, the most popular products were cloud-based accounting tools (24 percent of SMEs) and cash flow prediction tools (21 percent of SMEs). For example, in the UK and Australia, small business accounting platforms were automated to receive real time transaction data from banks, thus giving business owners a good view of their business performance per time.

According to BAI, in Australia, businesses had access to unsecured credit of up to \$360,000 from a variety of bank and non-bank lenders by sharing information from their accounting platforms – this also accelerated the speed of credit decisions by the lenders.

Overall, we see that the pandemic drove small business owners to embrace digital solutions powered by open banking faster than anticipated.

Regulators – From a regulatory standpoint, the speed of changes in the financial ecosystem especially around digital transactions (contactless and online transactions), nudged regulators to re-examine the rules and standards guiding these digital transactions to ensure the integrity and security of the financial ecosystem is upheld. For example, due to the pandemic, the Financial Conduct Authority (FCA) in the UK in its bid to

provide some flexibility, extended the expected compliance deadline for Strong Customer Authentication (SCA) implementation for online shopping card payments till September 2021. In a related instance, authorities in the UK and other parts of Europe increased the threshold for contactless payments.

Getting Ahead of the Curve

The shift towards digital financial solutions accelerated by the COVID-19 pandemic poses several questions to financial institutions, one of which is – what can we do to get ahead of the curve and stay relevant? Many financial institutions are yet to find answers to this question and more. However, while the near term and long-term open banking future is still unfolding, financial institutions can take several actions to avoid being left behind.

- **Articulate an open banking strategy –** According to Michael Porter, strategy is clearly about making choices and tradeoffs, deliberately choosing to be different. Therefore, considering the radical changes in customer behaviour and accelerated developments in digital solutions, it is clear that any financial institution that pays lip service to open banking i.e., adopting a “do nothing” approach risks its own survival. Now is the time for financial institutions to re-evaluate their models in order to position to take on the opportunities offered by open banking. With a clear strategy, financial institutions can graduate from exploring basic open banking uses to more complex ones over time. One of the many reasons why financial institutions should entertain open banking is that it offers the opportunity to reposition as a trusted partner for customers to explore a range of innovative offerings beyond

the traditional storefront offerings they are known for.

- **Prioritise Investments in Open Banking –** A look at the research outcomes by Tink shows that about 45% of financial institutions in Europe surveyed are ramping up on their Open Banking investments with spend reaching as much as €100m on the average. Beyond the size of the budget, the key insight here for financial institutions is to begin to prioritize investments in Open Banking to make the most of the commercial opportunities available as a result.
- **Establish strong partnerships –** Again to get ahead of the curve, financial institutions must begin to reconsider their appetite and approach to partnerships with third-party providers such as Fintechs. These partnerships have the potential to accelerate the pace of innovation and open banking value creation for financial institutions. Tink reveals that in Europe, 69% of financial institutions increased their number of partnerships with Fintechs in 2020.

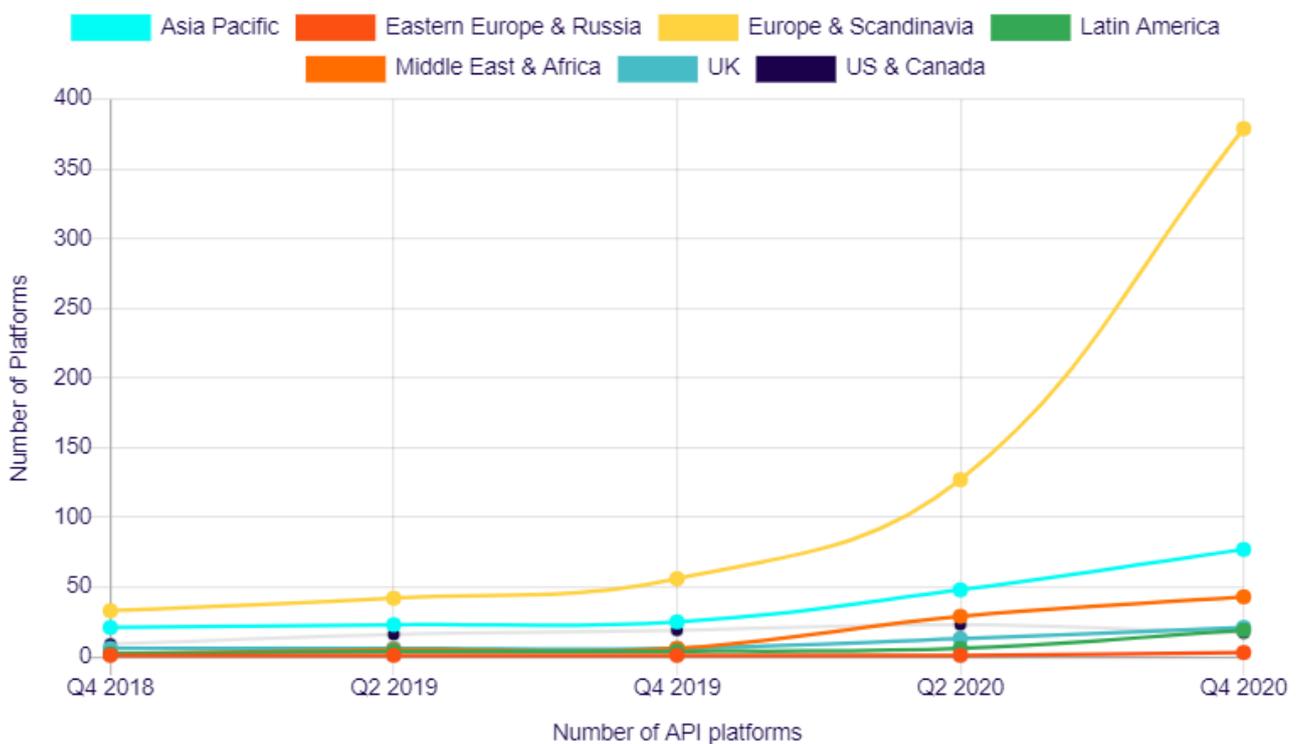
Over the last few years, the strong footings for open banking take-off have been laid. The impact of the pandemic has accelerated innovation, adoption and acceptance in this regard – hence, open banking is set to play a starring role in the emerging financial services space.

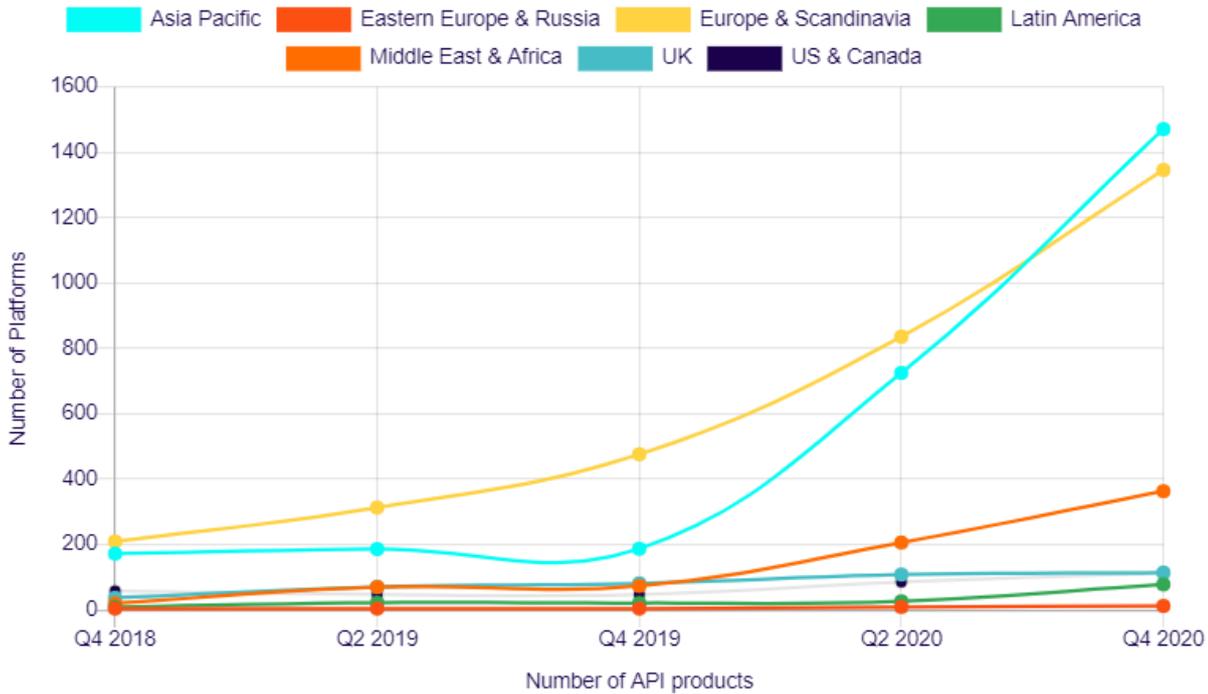
As events unfold and new developments such as the COVID-19 vaccine emerge and lockdown rules are relaxed, it will be fascinating to see the turn open banking initiatives will take. Overall, we are optimistic that adoption and acceptance of open banking concepts will continue to demonstrate an upward trajectory, away from the pre-COVID-19 levels.

Open banking developments across the world in

As the COVID-19 pandemic disrupts economies and individual work/life patterns, fintech and banking organisations are rapidly adjusting to a changing ecosystem of customer needs and preferred channels for product and service delivery. This has manifested in accelerated changes in infrastructure to support staff working from home and increased call center activity including requests from end users of financial products.

A further impact within certain countries has been the requirement for banks and financial service organisations to adapt to new regulations for stimulus and loans shared as a pandemic response. With a greater corporate focus on crisis management globally, there has been less emphasis on external collaboration between banks and fintechs, however, the development of fintech products remains healthy with open banking outcomes further embraced as digital transformation accelerates due to the various waves of physical lockdowns.





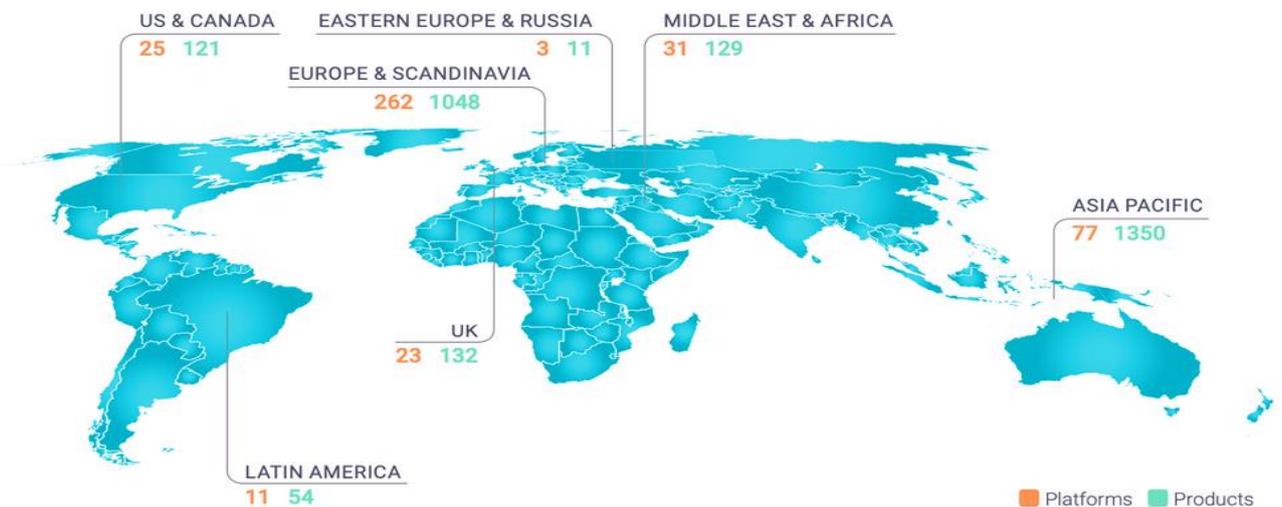
Source: Open Banking APIs State of the Market Report 2020

Europe continues to take the lead in open banking platforms and products driven by regulatory mandates while in Asia a microservices architecture has resulted in

more granular APIs being available. The US, Middle East and Africa have also shown appreciable growth in both products and platforms in the past year.



GLOBAL OPEN BANKING API PLATFORMS AND THEIR API PRODUCTS, Q3 2020 (N=423 PLATFORMS)



Europe

Market focus in Europe has centered on digitizing existing banking products via multiple channels with the top banks all offering open banking API platforms. Europe has over 60% of the global open banking platforms at over 260 platforms and growing. Most digitized products offered in Europe are the Accounts and Payment APIs (80%) with new products still in early growth stages.

The number of European open banking platforms and products more doubled in the past year showing over 200% growth with APIs created to comply with regulatory mandates being the main driver of product growth. For example, some custom open APIs that assist with mortgage calculation have enabled developers to build real estate investment platforms linking customer identity, accounts, mortgage data and payments all using a bank's open APIs.

These models focus on bank partnership rather than competition with fintechs and opening up solutions that are valuable for banks' online customers resulting in higher website and app visits, new account generation from 3rd party providers and increased revenue from API Partnership programs.

The UK

The UK maintains a strong position in Open Banking globally with over 200 entities delivering services powered by Open Banking to over 1 million users. In 2018 the first Open Banking standard was created, and the Open Banking Implementation Entity (OBIE) set up and funded by the 9 largest banks in the UK to drive open banking developments.

Further steps were taken with oversight by the Competition and Markets Authority (CMA) on the implementation roadmap and future vision.

An approved roadmap for the final stages of Open Banking Implementation in the UK was published in May 2020. This includes a high level roll out plan through December 2021 consisting of industry consultations, testing and implementation of various payment technologies and services, customer consent and access dashboards, evaluation framework, monitoring/development of standards, performance improvement plans and customer protection amongst other activities.

An Open Banking Future State Report was issued in Q2 of 2020 by UK Finance outlining recommendations for future models in provision of open banking services following publication of the final open banking roadmap. The core ideas of the proposed future model include:

- i.** Standardisation to drive end user benefit, security, competition and innovation.
- ii.** Industry ownership and governance transitioning from a CMA Special Purpose Vehicle to being market led.
- iii.** Open banking participants should pay equitably and fairly for the assets and services of open banking.

The UK government further announced a payments landscape review which acknowledges the transformative potential of Open Banking and in Q3 2020 released feedback on Open Finance.

As stated earlier, the survey by the OBIE detailed API product usage during the pandemic. 50% of UK small businesses have increased their use of open Banking

enabled tools in a bid to modernise their business operations. The most popular products were Cloud Accounting (24% of SMEs adopted) followed by Cashflow forecasting tools (21%) leveraging AI to predict cash flow over set time periods. Given the macro economic conditions, 46% of SMEs took out loans with Open Banking assisting lenders with evaluating businesses and SMEs identifying suitable loan products. Based on the survey, 3 in 5 SMEs began using these services in Q1 and Q2 of 2020 as a direct result of COVID-19 with overwhelmingly positive feedback on the benefits of Open Banking services to their businesses.

Asia

With developments in the digital ecosystem and regulatory guidelines and laws maturing, Asia as a region continues to drive rapid development in the Open Banking space with this region now surpassing Europe's 1048 API products with a total of 1350 financial API products launched by just 77 API platforms by Q3 2020. Beyond regulatory moves, open banking is greatly propelled by consumer willingness to share data and high digital innovation and adoption rates.

Organisations such as DBS, Standard Chartered as well as Citi stand out as early adopters of open banking in Asia. DBS has a developer hub offering 200+ APIs being used by over 50 companies. Citi's ecosystem includes 147 APIs, which are so far used by around 580 clients.

China

China pushed towards Open Banking Regulations in Q1 2020, however many banks are building out data infrastructure even without regulatory influence. Market leaders such as Ali Pay, used by over 1 billion people with over 50% of China's \$29 trillion digital payments market and

WeChat Pay are driving trillions of dollars in transactions. "Alipay is not just using APIs to connect to other banks and fintechs, but to all merchants and corporates in order to enable one coherent, smooth B2B, B2C, C2B, P2P, etc. customer journey." – Maso Arai, Advisor at Ross Republic". China's Tencent and Ant Group are focused in developing their own API driven fintech businesses with Ant Group venturing into online consumer loans and is currently the largest online lender in China.

2020 Regional Highlights:

- Singapore: The Monetary Authority of Singapore (MAS) had previously published an "API Playbook" to encourage banks to open their services and systems. Additionally, an API exchange APIX has been set up to enable market players connect, design and deploy creative new digital solutions. E.g., McDonalds serves over 1.2million customers a week in Singapore and is leveraging the DBS API to speed up its customer payments process.
- Hong Kong remains a progressive Open Banking market with advanced data-based transformation and growing cloud technology adoption. Over 20 banks in Hong Kong have launched 500+ Open APIs for product information, loans, credit cards, and other applications. HSBC Hong Kong has partnered with the Hong Kong Science and Technology Parks Corporation to identify potential fintechs to build products with, tailored to existing and new customers. Under the new API EcoBooster program, the HSBC digital team offers mentoring services to successful fintech applicants.
- South Korea passed the Credit Information Use and Protection Act,

and this took effect in Q3 2020. This allows for monetization of individuals data for consumers to receive financial advice and asset management.

- India established regulations for payment aggregators and gateways and finished the Personal Data Protection Bill Consultation. Banks operate through the Unified Payments Interface (UPI) with 150 banks nationwide facilitating interbank transfers and retail payments via various mobile apps.
- Japan mandated banks to open transaction APIs to accelerate adoption.

North America

The US market, being driven more through competition than regulation has seen further interplay between fintechs and banks. The region experienced 300%+ annual growth in platforms (from 6 to 25) and 138% increase in products (from 47 to 121). Eight (8) of the top 12 banks in the US have an open banking platform. In terms of regulation this is done on a state-by-state basis rather than a global regulation like Europe's (GDPR) with only a few states having specific data privacy laws.

With a dearth of legislative policies and laws as a lever, demand for innovative financial services enabled via API integration will continue to be market driven and accelerated by the pandemic as individuals and small businesses have need for services delivered in remote work and lockdown settings. In the US more APIs are also becoming available as commercial banks move towards banking-as-a-service for their corporate customers.

Sending and receiving payments more than ever needs to be seamless, friction between financial institutions must be

reduced and further disruption of the banking status quo is necessary for Open Banking to develop and deliver its value.

In Q1 2020, Canada released a review on Open Banking, terming it 'Consumer Directed Finance' and is looking to develop and implement a regulatory framework in 2021. "In both Canada and the US, the influential nonprofit industry standards body, Financial Data Exchange, works with fintech and banks to encourage use of an industry-agreed open banking API standard. This has helped facilitate partnerships and led to the creation of new digital financial services products that customers can link directly to their bank accounts."

South America

Development of open banking varies amongst South American countries with nations like Peru, Chile, Argentina and Colombia at inception stages and discussions still ongoing to set initial direction. Mexico and Brazil on the other hand have taken the lead with clear developmental steps and roadmaps for progression.

Brazil

The Central Bank of Brazil held a public consultation in Q4, 2019 receiving inputs from stakeholders through January 2020. The Open Banking law and its implementation schedule along with CMN (the National Monetary Council) was released in May 2020. Broadly the implementation schedule for Open Banking has been spread into 4 Phases with an oversight structure including the regulator, trade associations and an independent advisor defining the governance and working groups.

Phase 1: Open Data Phase: focused on information sharing and due by Q4, 2020.

Phase 2: Sharing of customer and transactional data with client consent. Due Q2, 2021.

Phase 3: Payments initiation integrated with PIX and operation of PISPs by Q3, 2021.

Phase 4: Implementation of broader sharing including pensions, foreign exchange, insurance, investment products etc. an “Open Finance” phase due by Q3 2021.

Brazil also planned to publish its open banking regulation standard and enforce a General Law on Personal Data Protection. Regulatory sandboxes and instant payment systems like PIX are driving financial market transformation, increasing competition, reducing the use of cash, and driving new business models as well as improving financial inclusion.

Mexico

Mexico had released a Fintech Law framework for the sector in 2018 with the secondary laws to drive Open Banking Implementation released by CNBV (the National Banking and Securities Commission) in June 2020. The initial guidelines focus on data for services and products offered by financial institutions in the country including ATM and bank branch locations. Aggregated Data by institutions and customer transactional data is to be addressed in 2021.

Australia and New Zealand

Q1 of 2020 saw Australia release an inquiry into future directions for Consumer Data Rights with the Consumer Data Right Act becoming law in July 2020. By Q2 2020, banking products, transaction and credit

data were all mandated to be made available via APIs and in Q4, Mortgage and personal loan data were further mandated for all banks to expose with APIs. As an outcome, the largest Australian banks must all share their customers data on request.

“Frollo, the first fintech in Australia to receive Open Banking accreditation, helps customers find new ways to save through features such as a bill comparison tool, that allows end users to compare and switch utility providers by uploading a bill “. In addition, Australia is leading in the use of cloud for customer facing activities and the strong regulatory push for Open Banking has helped its market develop.

In Q2 2020, New Zealand opened public consultations on Consumer Data Rights. Its financial and fintech entities had previously formed a stakeholder body called ‘Payments NZ’ to explore development of common APIs and successfully released two APIs for payment initiation and account information from a common API Center platform.

Africa

Africa saw promising developments in 2020 across various countries in market led and regulatory driven efforts. With 31 Open Banking platforms and over 120 API products, growth is occurring across the continent.

The National Bank of Rwanda published a regulation on digital customer data with standards to follow, modelled on the EU’s PSD2 and featuring the creation of a regulatory sandbox for testing new financial products and services. The regulation addresses data sharing and portability encouraging innovation, efficiency and development of new products.

South Africa

With highly regulated markets, protection and data legislation for financial institutions in place, a regulated approach to Open Banking suits this environment. SA players are implementing Open Banking concepts where financial organisations allow access to client data through APIs and will likely modify their offerings as guidelines and a clear regulatory framework emerges.

MTN recently launched its API marketplace in August 2020, Chenosis (<https://chenosis.io/>) promising to provide access to a broad range of API products and services across telecommunications, health, government, financial services, entertainment, and more. APIs in categories like messaging, e-commerce, identity, authentication, payments, collections, location, weather and more can be found in a growing library.

Kenya

Kenya, though extremely well placed to embrace new technologies in banking, has no formal legal policy framework. A draft document was released by its Central Bank in December 2020

highlighting a 5-year vision titled Kenya National Payments System Vision and Strategy 2021 – 2025 embracing open banking and looking to establish standards to drive innovation. Private sector players are partnering to develop applications based on open banking principles and further development and growth will take place as this space matures. This early growth stage is similar to Egypt which in Q1 2020 published its first draft of fintech regulations.

Safaricom, the largest mobile operator in Kenya, has signed a partnership deal with payments giant Visa to develop new products for the M-Pesa platform. M-Pesa is the largest payments platform on the African continent with 40 million active users and claims to process more than one billion transactions every month. The deal will see collaboration on the development of new products and services supporting digital payment for customers of Safaricom's M-Pesa micro-finance and payments platform. The partnership will cover over 24 million M-Pesa customers, more than 173,000 M-Pesa merchants from Safaricom and more than 61 million merchants on Visa's network.



The Nigerian Context – Open Banking in Nigeria

Developments and milestones before 2020

Open Banking in Nigeria has primarily been driven by the private sector and facilitated by Open Banking Nigeria. The organization was established with key objectives in mind:

- To foster innovation in the financial service industry
- Work collaboratively with industry stakeholders to develop open banking API standards
- Define an open set of APIs
- Provide a sandbox and suite of testing tools for certification.

With significant milestones achieved, Nigeria has positioned itself as one of the leading markets for Open Banking in Africa. The Central Bank of Nigeria has acknowledged the importance of this transformation and included Open Banking as part of the Payment Services Vision (PSV 2030). Increasing registration and membership of major financial institutions and industry leaders as part of Open Banking Nigeria stakeholders has been a key development.

In 2018 the first draft of API standards was published and in 2019 OBN developed the API standard version 1, completing documentation in December 2019.

Nigeria further represented on the global stage as the first African country invited by SWIFT and Citi Bank to be part of the global Open Banking API standard. With various thought leadership articles published and industry presentations to stakeholders Open Banking Nigeria has been at the forefront of developments to advance the ecosystem in Nigeria since 2017 with significant progress and laudable growth.

2020 Highlights

Impact of the COVID-19 pandemic on Nigeria's emerging open banking ecosystem

While the economic and health impacts of the pandemic have been shocks to the Nigerian economy, 2020 has seen some positives in Open Banking with fintechs like Okra (launched in 2019) and Mono (launched in 2020) raising funds from eager investors at \$1 million and \$500k respectively. The API based startups have focused on connecting individual bank accounts to third-party applications with Mono adopting a pay-as-you-go pricing model where clients are charged N19 (\$0.05) per API call. These developments are further driving customer insight and will fuel financial innovation in the API ecosystem.

In Q4 2020, Stripe acquired Nigerian payments startup Paystack for \$200 million,

a landmark deal for the Nigerian payment ecosystem. Paystack grew rapidly amongst Nigerian businesses and aggregates large amounts of online commerce data in a region “growing 21% year-over-year, 75% faster than the global average”, according to Stripe. With Paystack planning to build new products, innovation and expansion into further markets are on the horizon.

On the regulatory end, Open Banking Nigeria is working with CBN on launching an open API framework in Nigeria with contributions from industry stakeholders completed and development in progress.

Raidiam, a UK provider of digital connectivity, identity and access

management services, became a corporate member of Open Banking Nigeria. Other organisations that joined Open Banking Nigeria also include the San Francisco based Pngme, HGS Digital, cross-industry leaders in customer experience management; TrueLayer, a global open banking transaction processor; and Sparkle, a digital bank for the retail sector all driving the rich ecosystem forward.

As the ecosystem continues to mature with positive steps by all stakeholders from the banking, third-party application providers, regulators and investors in response to market needs, 2020 activities indicate a region poised for accelerated growth.



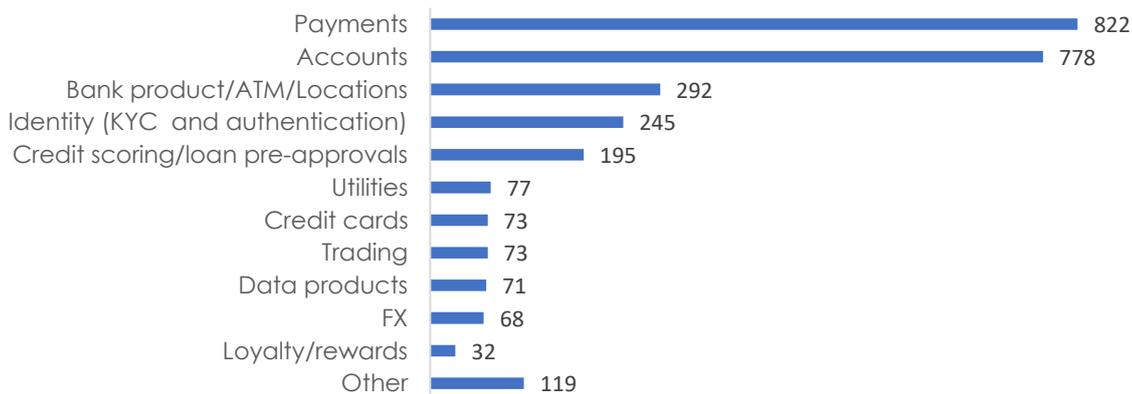
API Banking and the Nigerian experience

How the need for open APIs is transforming APIs in Nigeria. The emergence of API players

Key drivers for the demand for APIs

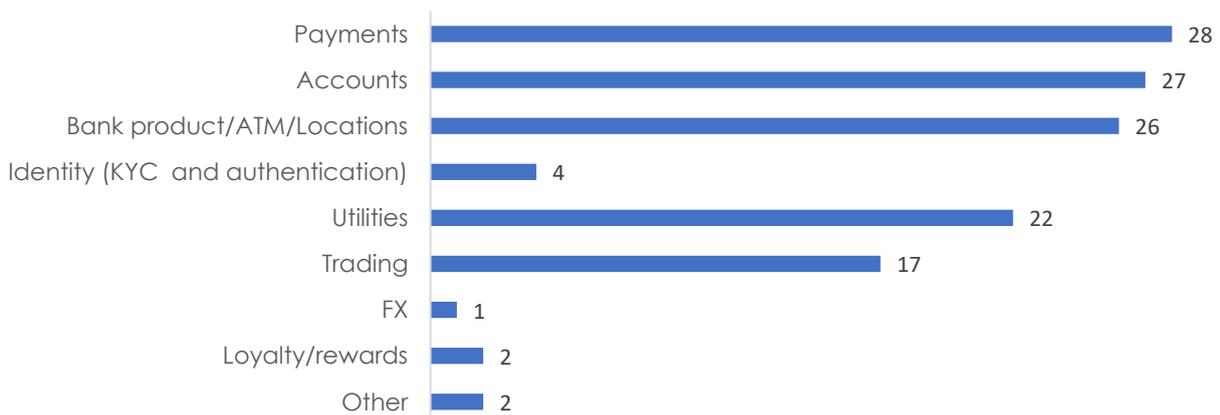
Open banking continues to grow globally and locally with banks positioning to take advantage of this transformation needing to provide APIs that attract enterprise customers. The major API product categories are shown below.

Open Banking by product Category (N=2845)

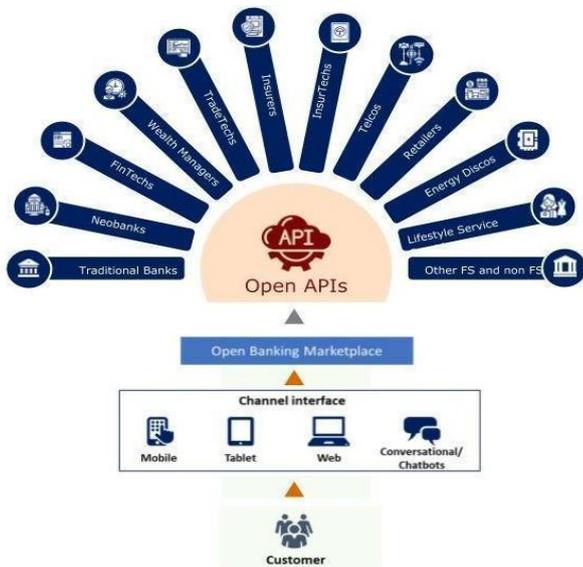


Source: Global Open Banking APIs State of the Market Report 2020

Open Banking API Product by Category: Middle East & Africa (N=129)



The highest number of API products available are in the payments integration category and those enabling account balance checks. The next three most popular service categories globally are those confirming bank products and ATM locations, Identity Authentication and Credit Scores/Loan approvals with the remaining categories being evenly split amongst utilities, credit cards, data products, FX, trading, loyalty/reward cards and others. These drivers are also aligned locally with the same broad trends across categories observed. It is mandatory to make Banking product catalogues available via API in the UK and Australia. This regulation increased the numbers measured of this API category. Since this data also has minimal risk with no sensitive customer or bank information, implementation of these APIs are quick wins.



Source: openbanking.ng

Silicon Valley and screen scrapers

Screen Scraping is a common way for third-party companies to access customer data. As customers log into apps or 3rd party sites with their banking details, their information gets “Screen scraped” by the site being accessed and stored for reuse. This way the app can log into the customer bank account and retrieve account data when necessary.

There is some risk here, as if the app is hacked, then the customer bank account is also made vulnerable to identity fraud.

Most banks are against the password sharing this approach results in; and more recently another interest group, Silicon Valley stakeholders, have joined the debate.

An advocacy group that represents Amazon, Apple, Google, Intuit, and PayPal stated, “We think it’s really important that access to bank account data not be blocked. It’s up to the consumer to decide what technology they want to use and what level of privacy and security they want.”

Open APIs solve a potential security breach given that screen scrapers download data in unencrypted form. APIs employ end-to-end encryption and provide faster, more reliable data. With the input of this influential group, the global debate on channels of access to customer data and the complexity in regulating methods of data access continues. As the debate matures, safety of customer data amongst various third-parties must be paramount.

Regulatory grey areas regarding APIs

Open Banking Nigeria, according to Adedeji Olowe a trustee, is working with the Central Bank of Nigeria to bring a framework for API regulation to life and this should assist to clear up some of regulatory grey areas. These areas include but are not limited to compliance with data protection laws locally and internationally, consumer protection, dispute resolution and the range of appropriate sanctions to be considered and applied for non-compliance and data breaches.

One of these areas is clarity on screen scraping which is not equivalent to an open API acting as a trusted broker of customer

information and as such robust discussion about this method of fetching customers data from banks when requested by clients must be facilitated by industry stakeholders and a clear path forward for regulation created.

A further area which needs to be further defined is that of 3rd party legal disclosure requirements to customers i.e., the need to disclose whether they are licensed or registered to operate and channels for resolving disputes.

Additionally, how joint accounts are treated in terms of permission to share data is an area to be explored and detailed within the regulatory framework. This extends to differentiation if needed between how personal accounts and business accounts are treated will need clarification.

Use and transfer of user data across national borders is a key area which will need to be carefully reviewed to ensure security and safety of consumers in both cases where the data is individual or aggregated and anonymised.

Data privacy and other issues

Customers granting consent is the foundation of data privacy and protection, hence customers are presented with terms and conditions before accessing new digital products and services. When APIs are used, customer consent is needed to share data with third-parties. Consent is further complicated when this data is shared with multiple parties not visible to the customer after the initial transaction.

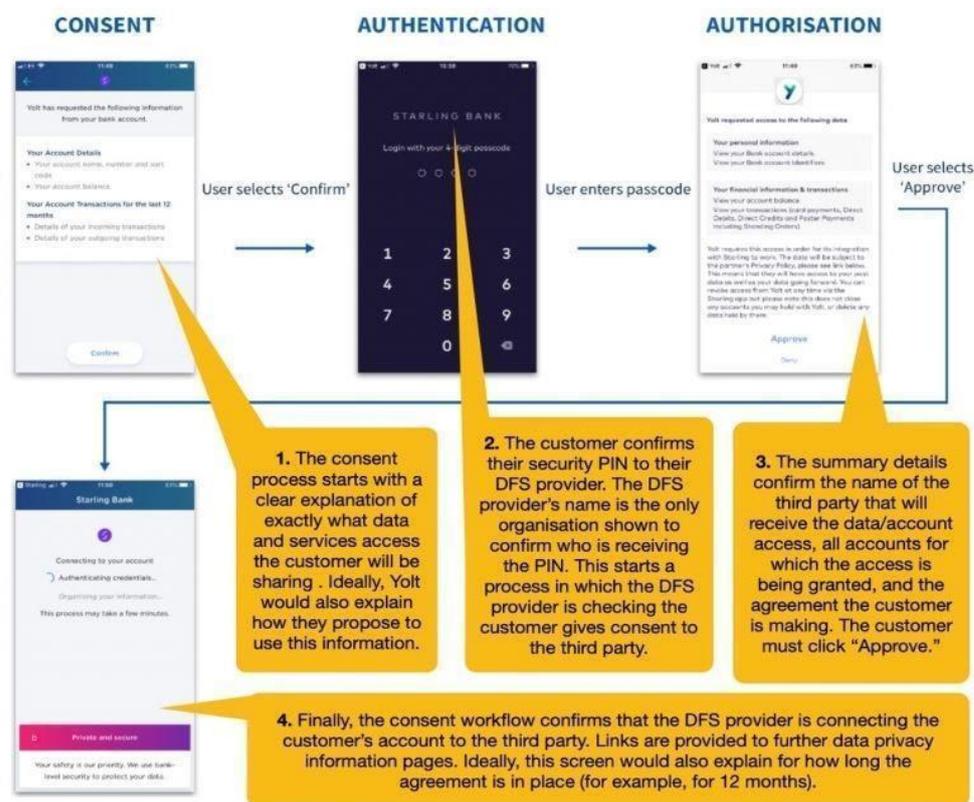
Fintechs and solution providers need to create a simple, clear and concise customer consent workflow. Research has also shown that even low-income customers are willing to pay double for services with data privacy features (CGAAP research).

Information should be provided on the type of account or data access being agreed to, length of time the data will be used, how the data will be used and the process to revoke rights to access by the customer.

Some regulators have suggested the establishment of Tiered access: multiple security and access levels for data being shared with third-parties. Low risk data like bank branch location and products may not require consent, however individual customer transaction information which may be used for a credit score may require a higher level of informed customer consent. When transactions like payments are expected by third-parties a further level of customer consent may be necessary before any payments and transfers are initiated.

Customers should have the ability to revoke access to their data at any time. Thus, consent should have an expiry date to which customers are prompted if they wish to extend sharing with third-parties or not. This approach protects the customer by preventing long unused apps on their devices having continued access to their bank records.

“Though open banking and data privacy can seem to be at odds with each other, both have an important common factor: They require that customers have more control over their data.” - [3]



Source: Graphic adapted from Scott Logic blog.

API banking pacesetters

Mono

Mono helps digital businesses in Africa access their customers' financial accounts for data and payments. Launched in August 2020, 1 month later, Mono closed a pre-seed funding of \$500,000 and is focused on growth working with Y Combinator to accelerate their business in 2021.

Nigerian digital businesses found it difficult sourcing financial data about their customers from banks. Thus, Mono was started to give these businesses tools to access customer bank accounts, obtain statements, and set up recurring payments through direct debit. With Carbon and Flutterwave among their current users, they plan to extend their presence beyond Nigeria to Ghana and Kenya. Mono uses a pay-as you use model for fees where clients are charged N19 or \$0.05 per API call.

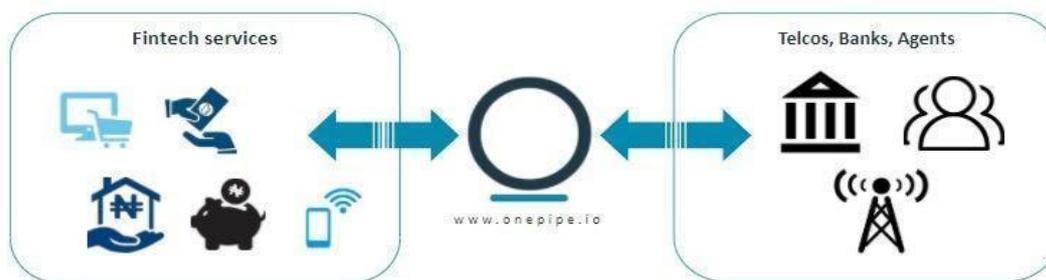
Okra

Okra, founded in June 2019 is a Nigerian startup that helps individuals to connect their bank accounts to lending and banking apps, and serves businesses by facilitating services like direct debits. Okra has connected its API with 22 commercial banks and companies including Interswitch, Wakanow, AllCO insurance, Branch, Bamboo, Renmoney and others. TlCom Capital, a Kenyan based VC firm invested \$1 million in Okra.

OnePipe

OnePipe focuses on connecting banks to other banks and fintech products. CEO Ope Adeoye launched in 2018 after spending 11 years at Interswitch Nigeria and is also a trustee at Open Banking Nigeria. As a B2B solution, its goal is to create a unified channel for banks and financial institutions to exchange data with a goal of covering every financial service API as a 'super-aggregator'.

With OnePipe, fintechs and banks can collaborate closely to achieve mutual growth rather than compete.



Source: OnePipe.io

OnePipe pools APIs from multiple parties into a single gateway and has customers such as Flutterwave, Paystack, Quickteller, Fidelity Bank, Providus Bank, Polaris Bank, SunTrust Bank amongst others. Subscribing financial organisations that publish their APIs with OnePipe charge a fee to clients with a portion of the fee going to the OnePipe.

Rubies

Rubies is a digital banking platform, offering zero fee banking targeted at millennials, young professionals, SMEs, and fintechs. (10) Rubies brings innovation to banking via technology leveraging Cloud, AI and analytics. Rubies was launched in June 2019 by Rubies Microfinance Bank and by simplifying bank processes and systems into APIs, aims to disrupt and transform by allowing individuals and businesses to do anything a bank can do. Thus, it offers Fintech-as-a-Service (FaaS), KYC-as-a-Service (KaaS), and Banking-as-a-Service (BaaS).

Rubies provides some Unique features and personalized offerings:

- Account numbers and debit cards can be personalised (with some people using their phone numbers and nicknames).
- Proximity Transfer – Sending money using location (The new Bluetooth for money transfer).

- Rubies further allows customers earn money by bringing to the market a feature which allows anyone, become an Independent banker. i.e., Rubies serves as the platform for individuals to on-board their own "banking customers" and every time a customer does a transaction, the individual earns money.

Pngme

Pngme is a financial data platform that captures and analyzes data points from customers' phones, enabling banks, fintechs and developers to leverage this data via an open API to provide financial products including loans in emerging markets. Pngme offers credit modelling, loan origination, KYC, and disbursement and while US based, is seeking to expand across Africa.

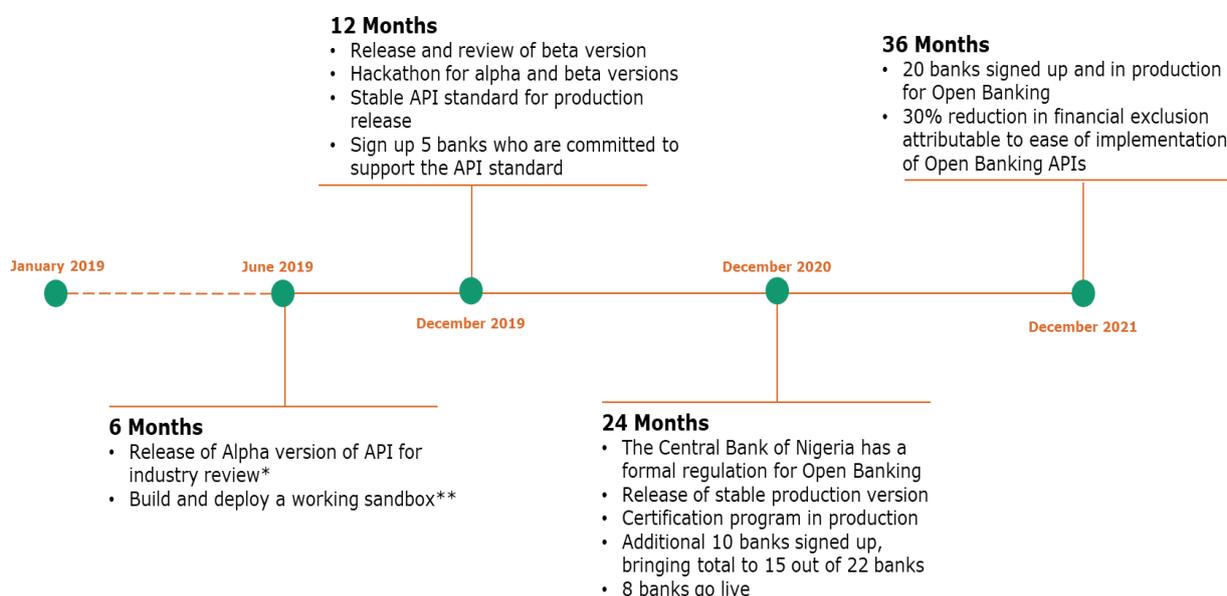
Pngme received a \$3million investment in Q3 2020 and plans to grow its Lagos and Nairobi teams. Though starting out as a lending platform, upon realizing there was a gap in the market concerning data for loan risk assessment it pivoted to address this issue. Some of its customers include ReadyCash, CashTopUp, and RigoMicrofinance. Pngme's focus on USSD channels helps to differentiate it from other players giving it wider coverage.

Open Banking roadmap for 2021

The Future of Open Banking in Nigeria – The roadmap beyond 2021

The foundations laid today are crucial to the advancement of Open Banking in Nigeria in the coming years. As innovation in the financial services sector is moving at breakneck speed, certain actions are imperative to secure the future of the financial services space in Nigeria.

- Industry stakeholders – CBN, banks, Fintechs, consumer protection stakeholders, etc. - must chart a clear roadmap towards publishing a future ready API standard, leveraging the best global plans and frameworks, adapted to the local context.
- Banks must begin to measure the use and value of external APIs to refine their business models. Additionally, they must reimagine the approach to customer engagement to deliver more value to customers.
- Customer choice and control of data must be prioritized and use of data in ways that clearly benefit and add value to the Nigerian customer. Thus, consumer education on the scope of Open Banking and its benefits is crucial.
- Banks must consider enhancing their digital and data analytics capabilities. Furthermore, they must increase their partner ecosystems to improve personalised and more value-added services for end-users.



Appendix

Corporate members of Open Banking Nigeria

The Open Banking Nigeria network is an expanding ecosystem of stakeholders focused on building a vibrant open banking ecosystem in Nigeria. The network comprises banks, fintechs, professional services firms and other partners.

Banks



Fidelity Bank is a full-fledged commercial bank operating in Nigeria with over 4.2 million customers who are serviced across its 231 business offices and various digital banking channels.



Heritage Bank Plc is a large financial services provider in Nigeria. Licensed as a national bank, it provides banking and financial services.



Sterling Bank Plc, "Your one-customer bank" is a full service national commercial bank in Nigeria.



Union Bank of Nigeria is one of Nigeria's long-standing and most respected financial institutions, offering a portfolio of banking services to individuals, SMEs, commercial and corporate clients.



FCMB is a full-fledged commercial bank operating in Nigeria, with over 4.2 million customers who are serviced across its 231 business offices and various other digital.



First Bank of Nigeria Limited (FirstBank) is Nigeria's premier commercial bank and most valuable banking brand.



Kuda bank is designed for your smartphone, free of ridiculous charges and great at helping you budget, spend smartly and save more.



Rubies is a fully digital banking platform, offering zero fee banking targeted at millennials, young professionals, SMEs, quasi-financial institutions and FinTech companies.

FinTechs



Appzone is a leading provider of software solutions to financial institutions in Africa.



Flutterwave provides the easiest way to make and accept payments from customers everywhere in the world.



Global Accelerex is a leading provider of electronic payment and financial technology solutions in Nigeria.



A community of passionate software developers and enthusiasts across Africa.



Interswitch is an Africa-focused integrated digital payments and commerce company that facilitates electronic circulation of money as well as the exchange of value between individuals and organizations on a timely and consistent basis.



Centric Gateway offers an integrated Payments Platform that is more efficient, economical, convenient and secure, by maximizing the power of emerging technologies.



Lendsqr is an advanced loan management platform for individuals, microfinance banks and cooperatives to easily manage loans without writing a single line of code.



Wallets makes payments accessible by enabling users to send, receive money, and make payments through a phone.



OnePipe helps to integrate the services of various banks, incumbents and fintechs into one unified API.



Raidiam is a UK pioneering provider of digital connectivity, identity and access management services.



TrueLayer builds intelligent infrastructure that puts fintech at people's fingertips.



Sparkle is a lifestyle and retail digital bank in Nigeria.



Pngme is a lending platform and open API solutions provider.



OPay designs a mobile payment service and consumer platform for users to send and receive money, pay bills, and order food and groceries.



ITEX is an innovative FinTech company that designs and deploys secured solutions. Their wide range of innovative products and services are tailored to meet your unique transactional needs.



Unicorn Capital Limited is a Financial Services Firm, offering diverse financial solutions to its clients in all sectors of the economy.



VerifyMe is trusted identity verification for seamless customer and employee on-boarding.



Carbon® lets you control your finances with a few clicks. You can get instant short-term loans for urgent needs, invest money to earn high-interest rates.



SystemSpecs focuses on provision of qualitative delivery of a leading e-Payment application and human capital management solutions.



Smile Identity solve identity for banks, telecoms, financial services and shared economy applications in Africa and beyond.



Carma is a one-stop shop for lenders and revenue-generating assets for any organization.



Cowrywise, a wealth management platform that enables users to plan and manage finances, save money, and invest in mutual funds easily.

Professional Services Firms



EY provides advisory, assurance, tax and transaction services that help challenges and build a better working world for all.



PWC Nigeria supports businesses to achieve their goals. Their purpose is built trust in society and solve important problems.



KPMG provides audit, tax and advisory services. They work closely with clients, helping them to mitigate risks and maximize opportunities.



Duale, Ovia & Alex-Adedipe ("the Firm") is a bespoke full-service commercial law firm in Nigeria.



RAIDIAM

Raidiam is a UK pioneering provider of digital connectivity, identity and access management services.



HGS digital is a digital transformation company and industry leader in customer experience management.



XtraDot's mission is to be the final resource for e-business consulting, aesthetics, innovative technologies and technically complete application design.

Other Partners



Committee of e-Business Industry Heads is an association of electronic business industry leaders in Nigeria with the major objective of promoting electronic banking services in Nigeria in line with global best practices.



About Open Banking

Our Ambition

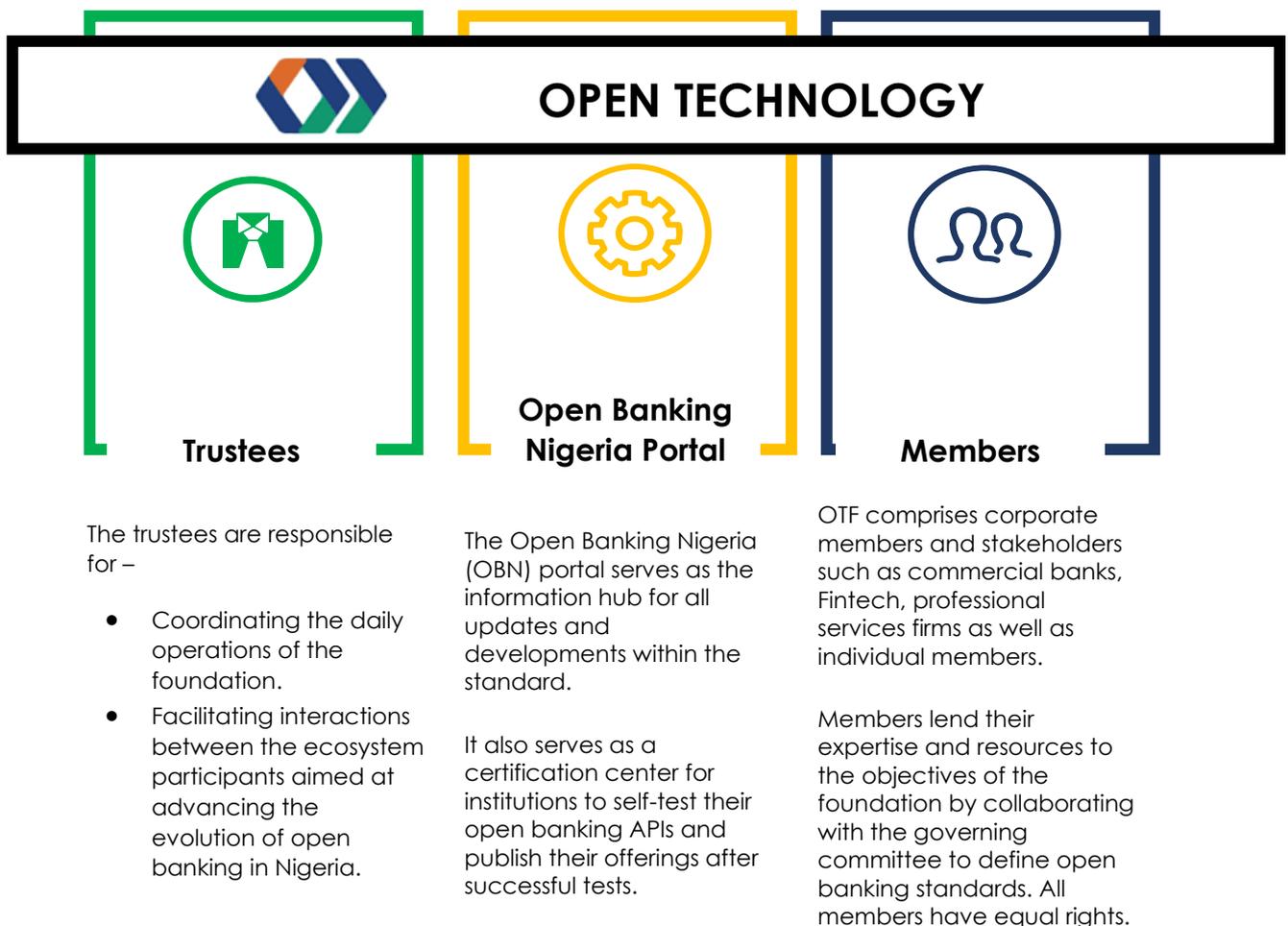
Open Banking Nigeria a non-profit organization poised to unlock the opportunities of open banking in Nigeria. Since June 2017, we have pushed the frontiers of the open banking journey in the country – engaging extensively with stakeholders across all levels. We recognize the huge potential open banking holds to jumpstart the next level of growth in Nigeria's financial sector. Hence, our activities are aimed at

establishing an open collaborative platform for players in the financial space.

Our moonshot goal is to boost the country's economy through the reduction of barriers to innovation and consumer's access to essential financial products and services.

Governance structure and Leadership

The governance model of Open Technology Foundation is captured below.





Open Technology Foundation (OTF) represents corporate and individual efforts to promote an open banking system in Nigeria. OTF defines, maintains, and promotes open banking standards consisting of API specifications and accompanying security and process

End Notes

Overview of the Open Banking Ecosystem

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1. <https://www.bobsguide.com/guide/news/2020/Feb/11/six-use-cases-for-open-banking-that-will-change-how-you-view-it/>
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8. <https://knowledge.fintecsystems.com/en/blog/b2b-use-cases-open-banking>
9. <https://blog.mondato.com/open-banking-api-use-cases/>
10. <https://www.clayfin.com/five-open-banking-use-cases-beyond-account-aggregation/>
11. <https://www.manilatimes.net/2020/12/12/business/columnists-business/open-banking-and-real-world-use-cases-for-smes/808801/>
12. <https://www.openbankingproject.ch/en/open-banking/use-cases/>
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Data Methodology

We used a combination of sources and methods to support the data for the report to maintain the highest level of data integrity. Data sources are split into two main areas: globally recognized, publicly available databases and resources; and our experience in the open banking space.

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