



SUSTAINING NETWORKS IN THE NEW AGE: TRUNING OPEN BANKING INTO A SUSTAINABLE COMPETITIVE ADVANTAGE

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1. INTRODUCTION

The world of banking is changing and very fast too. The emerging alignment of consumer, competitive, technological innovation and ultimately regulatory forces is fast-tracking a move towards an open financial system. The European financial market is taking a lead in this regard and the passage of the Payment Services Directive 2 (PSD2) signals the dawn of the open banking era. The PSD2 which comes into effect in January 2018 is in effect a requirement for banks to grant third-party providers (TPPs) access to their customer's accounts in a regulated and secure way. This rule mandates banks or other account-holding payment service providers (PSPs) to facilitate secure access via application programming interfaces (APIs).

While other regions of the world may not yet be at par with their European peers at present, it is expected that this move will send strong signals and kick-start the transformation of banking and financial services in other jurisdictions. Either via regulation or competitive forces, the rest of the world including Africa will soon follow to maintain parity.

The new paradigm of open banking brings with it significant challenges, risks and disruption to the current business models of traditional banks. Some anticipated risks include disintermediation leading to significant loss of revenue, potential loss of primary ownership of clients, fears around data security and control among others. These fears are magnified even more given that a number of traditional banks today still have very weak innovation cultures, legacy systems and continue to work in siloed and complex structures.

Banks on the other hand also have a unique opportunity to stay relevant and even grow their business by considering new approaches to transform products and optimize operations. By considering new partnership models with Fintech players, they can continue to stay competitive and be able to protect, engage, retain and grow their customer base as well as revenue streams.

A core part of the open banking world is the utility and dependence on Application Programming Interfaces i.e. APIs. The imperative for banks is to leverage API integration and their existing customer relationships to develop and grow their customer value ecosystems.

A critical enabler for success in the new age of banking is leadership that understands the importance of sustaining key networks to ensure survival and growth of banks.

Given Africa's relatively young population with their growing needs for convenience, simplicity and value for money, the growing acceptance of fintech players, and the convergence of global regulatory thinking, it is expected that by 2025, Open Banking will be prevalent in Africa.

Whether banks will remain relevant in this new financial services space and turn this phenomenon into a comparative advantage or swiftly pale into oblivion will depend on how leadership anticipate, react and prepare for the inevitable today.

2. OPEN BANKING DEFINED

2.1 What is Open Banking?

Technology has significantly changed the way humans interact with companies. Over the past few years, the likes of Uber, Airbnb and Amazon have disrupted many an industry. The business model for the banking industry has however remained relatively unchanged. It is however unlikely that the status quo will remain so for much longer. The world of open banking otherwise nicknamed "à la carte" banking by PwC will see consumers taking more control over their financial matters than the banking institutions that manage their accounts. Platforms developed by financial technology firms (FinTech) will enable consumers to act on data from multiple financial services companies, all aggregated and be able to move money easily among institutions without friction or perhaps at no or significantly reduced cost.

Due mainly to consumer expectations, competition, technology and backed by regulatory forces, the world of open banking will soon become a norm and this is seen as one of the most significant disruptors to the banking model as known today.

Open Banking is a system that provides a user with a network of financial institutions' data through the use of application programming interfaces, better known as APIs. The Open Banking Standard defines how financial data should be created, shared and accessed. By relying on networks instead of centralization, open banking helps financial services customers to securely share their financial data with other financial institutions. Benefits include more easily transferring funds and comparing product offerings to create a banking experience that best meets each user's needs in the most cost effective way.

The pace of adoption is varied among the different regions of the world. The European financial market has however taken a lead in this movement and the passage of the Payment Services Directive 2 (PSD2) signals the dawn of the open banking era.

On October 8, 2015, the European Parliament adopted the European Commission's proposal for the revised Directive on Payment Services (PSD2). In January 2018, the regulatory driven PSD2 comes into effect. It essentially mandates all banks within Europe to open up their systems to allow for third party access.

Third party access will be enabled via public application programming interfaces (APIs).

The use of public APIs comes with significant threats to traditional banking as they exist today. They are however also expected to lead to significant digital transformation within the financial services industry.

Banking portability, the ability to retain account numbers even when transferring accounts to new providers is expected to be the next frontier and that will exacerbate the threat.

When consumers can manage a variety of financial products and services from different institutions with one application, it will facilitate the movement of money and accounts across institutions and will dramatically improve the flexibility of consumers to pick and choose products seamlessly at competing providers. Consumers will also be able to see and act on their full financial profile at a glance, thereby allowing them to make better-informed decisions.

2.2 Factors driving adoption

There are a number of factors driving the adoption of Open Banking but four key ones stand out. These are Customer expectations; Competition; Technology and lastly Regulation, with the latter being the catalyst mandating the adoption.

Customer Expectations

Customer expectations have changed rapidly and continue to do so. Customers, especially the young and tech-savvy ones, welcome digital innovations. Having gotten used to the likes of big-tech firms like Google, Apple, Facebook and Amazon, they have come to expect speed, personalization, and instant gratification when using online

or mobile devices. As the Millennial population expands and even the older generations become more comfortable with technology, banks like all other service industries will continue to come under intense pressure to deliver compelling experiences with their banking products.

Recent surveys suggest that tech-driven financial services providers deliver slightly better customer experiences than banks. In North America, Fintechs are delivering positive experiences to 57.8% of customers, compared to 49.5% for banks.

A similar correlation between higher FinTech/digital bank activity and positive customer experience is emerging in the other top Fintech hubs (India, United Arab Emirates, China, and Netherlands)

Competition

Banks are no strangers to competition, having faced incursions from credit unions, post offices, brokerages, internet-only banks, and other entities seeking a piece of the multi-billion-dollar global retail banking market. However, the variety and severity of forces disrupting traditional banking are now reaching a new pitch, threatening to dismantle long-held ways of doing business.

Most significant is the advancement of much tougher, technology-driven competition. The new wave of digital banks and FinTech companies are wisely putting their efforts into the front-end customer-facing experience, knowing that winning the customer interface puts them in pole position to also win over customer relationships, loyalty, and fees.

Hitherto, many consumers interact with only one or two financial institutions because opening new accounts can be a painful process. This consumer inertia historically has provided banks with excellent customer retention and cross-selling potential, but the possibility of frictionless movement of money among accounts at different institutions may diminish that advantage.

Today's high street banks have evolved numerous layers of organisation, process and technology designed to maintain stability and minimise risk.

When all around you behave similarly, this status quo is maintained. However, these rules will not be followed by new banking entrants without the legacy, fintechs that specialise or don't fall under the same regulatory scrutiny, and disruptive entrants from other markets.

Most of this new competition will compete and disrupt directly on agility and customer focus and this could be attractive enough to affect market share dynamics. Competition in the banking industry will now come from three key areas: Fintech, Challenger banks and non-traditional.

Fintech's technology infrastructures are brand new and tend to be more efficient and cheaper to operate than banks' legacy systems. Their services are flexible, customisable and often cater to individuals and businesses who are deemed ineligible by traditional banks.

Challenger banks are brand new digital-native banks with banking licenses who use their unconditional focus on customers' digital experience to convince customers to leave their old bank.

Other non-traditional banks are starting to offer banking and financial services too. Retail giant change to Walmart has obtained a banking license in Canada; Norwegian supermarket chain Rema 1000 sells insurance products; and Square, has just recently applied for a US banking license.

According to the World Retail Report 2017, non-traditional firms are gaining increased acceptance, with nearly one-third of banking customers (29.4%) using products and services from them. More than half (52.4%) of customers engaging with non-traditional firms have a relationship with three or more of them.

Technology

Recent advances in technology including immediate payment infrastructures, blockchain, mobile authentication, AI, predictive analysis and the 'Internet of Things' (IoT) are creating new ways to pay and a digitised end-to-end value chain.

Regardless of the technology, easing customer journeys, automating the tedious, providing just in-time and access-anywhere information and services are the promise of the new normal today. Before long, even this list will become commonplace or obsolete and replaced by new innovation capturing the attention of fintechs and consumers alike. Ultimately, it is the flexibility to rapidly experiment with, adapt to and adopt emerging technologies that will allow for continued relevance in the marketplace.

Regulations

The old regulatory barriers that had kept competitors at bay no longer seem to work. Some emerging competitors have demonstrated that they do not care about existing regulation and have set out to exist outside it. Bitcoin/Blockchain technology has built a whole new payment ecosystem outside existing regulatory frameworks. Other crowdsourcing and p2p platforms have also emerged and are growing outside mainstream regulations.

Rather than coming to the banks' aid with new types of protection, regulators have thus far encouraged competitors, with measures such as PSD2, and the US Office of the Controller of the Currency's proposed fintech charter. Unbundling of banking services has become yet another tool for the prudential regulator to employ in combating moral hazard.

In the emerging and developing worlds, the regulator is often keen to encourage financial inclusion and they see innovation in the fintech space as the tool to achieve that goal.

3 OPEN BANKING IN AFRICA – A POSSIBILITY?

Banks around the world are at various stages on the path to open banking adoption as they navigate new regulations and customer demands. It is expected that regulation will be the catalyst to adoption.

Even as financial technology initiatives rapidly accelerate adoption in developed markets, there is a huge opportunity in emerging markets that would greatly benefit from an open banking standard. In Latin America for example only 51% of adults have bank accounts. So, instead of promoting switching between banks, there should be a stronger focus on helping those interested in banking services find suitable products.

A recent survey of Latin Americans in Chile and Mexico suggest that they are eager for technological advancements in the finance industry. So much so that almost half of Chileans and over one-third of Mexicans think physical wallet won't exist in five years' time demonstrating their preference toward mobile payment

apps. Establishing the Open Banking Standard in an emerging market could drastically increase the banking population and finally provide consumers with access to credit, loans, investment opportunities and more.



Source: BI Intelligence

3.1 Current banking landscape

In order to fully appreciate the journey towards open banking in Africa, it is useful to understand the current banking landscape across the region.

As reported in the AFDB's 2015 Africa Economic Brief titled 'The Banking System in Africa - Main Facts and Challenges', financial penetration on the continent still remains low. Less than a quarter of sub-Saharan Africa's population has access to a formal bank account. As shown in Table 1 below, with about 21% of adult population having access to a bank account, sub-Saharan Africa has the lowest level of financial penetrations. In other developing regions such as Latin American and the Caribbean, the share increases to 34%, whereas in OECD countries the average is 90%. Another measure of the extent of bank access is the number of bank accounts per 1000 adult population. Sub-Saharan Africa falls short relative to other regions. For any given 1000 adult population, almost twice as many have bank accounts in North Africa and Latin America & Caribbean as in sub-Saharan Africa. Compared with the OECD average where a typical adult has more than one bank account, the difference is four times as much.

Cumbersome processes and requirements in obtaining a bank account may be one of the key impediments to financial inclusion especially in underserved regions and communities.

Region/Sub-Region		Share of population with bank account	Bank accounts per 1000 adults
Africa		24.7	450
of which	Sub-Saharan Africa	20.9	334.5
	North Africa	28.5	565.1
	East Africa	21.1	242.2
	West Africa	13.7	337.3
	West Africa without Nigeria	11.7	252.5
	Southern Africa	36.7	308.7
	Southern Africa without South Africa	37.9	380.7
Southern Africa without South Africa		33.7	635.2
High income: OECD		90.1	1456.2
Low income group including Africa		13.2	546.8
Low income group excluding Africa		21.1	584.8

Source: AEB Volume 6 Issue 5 2015. The Banking System in Africa: Main Facts and Challenges

Many banks across the continent have moved from manual banking systems in the 1980s and 1990s to front office digital services. They have spent the last decade investing in banking infrastructure including online banking and electronic transactions systems. Such use of digital infrastructures has not only allowed domestic banks to efficiently reach higher number of clients and compete with large foreign competitors, but also improved banks' margins by reducing operations cost.

In East Africa in particular, expanding mobile communication networks and access to mobile phones in rural areas have created path to banking innovation technology that challenge conventional ATM machines and electronic payments. Rather than installing ATMs that require regular maintenance, liquidity balancing and security, in rural underserved communities, banks are now coordinating with telecommunication companies to pioneer mobile banking systems that bring financial services to the door steps of clients.

Mobile banking however has been more successful in East Africa than elsewhere, notably in Kenya where the M-PESA money transfer and payment system developed by Safaricom in 2007 now serves over 17 million clients with more than 40 000 agents across the country.

Kenya's success in mobile banking technology is often attributed to a combination of factors. First is the first-mover advantage of Safaricom and then the regulatory system that allowed the mobile company to develop the system largely unscathed before authorities moved in with regulations to further allow the system to function efficiently afterwards. The use of local community agents also allowed rural communities with little trust in formal banking institutions to enjoy a form of "personal banking" through agents they are familiar with. The system has also benefited from the quick adaptation of the private sector to mobile payments, allowing users and firms to pay salaries and bills using mobile money.

3.2 Future banking in Africa

At present, Africa seems to be behind the curve but there are signs that there is potential to explore open banking. There are already a number of banks taking the lead towards open APIs.

Absa Bank, a subsidiary of the Barclays Africa Group, went live with an open API platform in June 2016. According to the bank, the platform provides external parties with

access to its products and services, while enabling it to play a more proactive role in Africa's developing fintech environment. The banking-as-a-service solution enables any external organisation such as a fintech venture or start-up to take advantage of Absa services such as biometric identification, transactional capabilities, ATM locators and more.

Global bank Standard Chartered unveiled its Open Banking API Developer Portal for transaction banking in February of this year. The launch is part of the bank's 'digitisation agenda' and aligns with its aims to collaborate more with corporates, fintech firms and developer communities. At the moment, the portal provides a repository of API services focused on cash management, but it plans to roll out more API services for its other business areas in the future.

As many more global regulators and banking advisory committees push for a move towards open banking, it is expected that African regulators will follow suit to primarily drive inclusive banking and also to encourage innovation and increased competition in the market, to benefit the customer.

Compared to other regions, Africa has the youngest population with a median age of 19.7 years whereas the global average sits at 30.4 years. Younger, more techsavvy customers are the most likely to embrace financial services from non-traditional providers. In emerging economies such as China and India, more than half of Gen Y customers have relationships with non-traditional firms, the highest percentages globally. The appetite for the Gen Y in Africa to take up services from non-traditional players is likely to fuel the drive towards open banking.

4 CHALLENGES / THREATS TO BANKS

Open banking comes with a number of threats and challenges to the banking industry. Post the financial crisis, traditional Banks have been constrained by the need to comply with more burdensome regulations that continue to eat up time, capital and are costly to implement.

Added to that, aging legacy systems and red tape remain in full force, thereby bloating IT spending and hindering efforts to integrate new technologies. And a cultural resistance toward change blunts many banks' digital and social media efforts. All of these challenges, combined with a continued low interest rate environment, have prevented

banks from effectively addressing customer expectations and services, the very area where challenger banks and FinTechs are making their mark.

Security Risks

Open banking and publishing open APIs give rise to many concerns around security and potential loss of control for banks.

"The inherent purpose of an open API is that anyone can request to view data from the API," says Evry's open banking whitepaper. "While a regular user would do no harm, the data is at risk from black-hat hackers who might use the data accessed from the API for criminal purposes, such as fraud and identity theft."

Loss of Control

"Publishing open APIs can also make it harder for banks to control the end-user experience," Evry's whitepaper adds. "Banks cannot always assume that third-parties will maintain the corporate branding when they publish APIs on a bank's platform. However, by consciously giving up control and actively collaborating with third-parties, banks can build strong partnerships that materialise positive outcomes for everyone involved – enabling interested participants to access their platform and co-create with the bank."

Conduct Risks

Open banking does not come without conduct risks. With the recent reports of cross-selling controversies in the US and misselling of Payment Protection Insurances (PPIs) recently in the UK, it will be difficult for banks to gain customer confidence and comply with regulations such as GDPR and PSD2. This depends on customers, who may or may not provide consent to use their data for developing new products and services.

An open banking ecosystem serves as a platform for various participants such as data providers, third-party providers, customers, regulators and government agencies to engage for the betterment of consumer services. As many stakeholders are involved, friction due to information asymmetry might emerge between the counterparties involved in a contract that makes use of customer data. The risk of information asymmetry is therefore inherent. For example, in predatory lending, financial institutions target financially unsophisticated borrowers to forcibly opt for the firm's financial products.

Cyber Security

Though identity verification and fraud prevention are important opportunities for banks' open API initiatives, there are risks associated with data loss, identity theft, data protection violations, money laundering and financing terrorism. With banks aiming to go fully digital, their operations will be completely managed over the web; this itself creates an environment for higher chances of fraudulent activities.

Accessing customer banking data has always been on hackers' wish list. In open banking, aggregated customer data such as transactions and balances held in the third-party provider's infrastructure and servers (open APIs) pose a significant risk to cyber security.

Loss of Fees from Card-Based Transactions

In Europe, the recent Interchange Fee regulation which capped interchange fees, has already reduced the fees generated from card-based transactions in Europe, with the UK retail industry trade association, estimating that merchants in the UK alone stand to save £480 million per annum.

In regulating PISPs, PSD2 contemplates a simplified payments value chain in which the card network can be fully disintermediated. In such a transaction, payment is initiated by the PISP directly from the customer's bank account via an API call to the originating bank. In this scenario, all interchange fees and acquirer fees currently received by the issuing and acquiring bank could be fully displaced, as could all fees received by the processor and card network.

This model can also impact the current revenue streams from dynamic currency conversion and foreign exchange on card transactions, with the emergence of new opportunities for a redistribution of ownership of this activity within the value chain.

Interbank transfers and the PISP model are also applicable to physical point-of-sale (POS) transactions where the PISP is integrated to a contactless mobile wallet app. It is entirely possible that mobile wallet providers including the likes of Apple Pay may consider a transition to a PISP model in the future. These developments will further reduce the volume of card-based transactions within Europe and the related Interchange and Acquirer revenue streams for banks.

Loss of Customer 'Ownership' and Insight

For any business to build loyalty, cross-sell successfully and deliver a rewarding customer experience, the minimum requirement is to have an opportunity to engage with the customer. While banks have traditionally played a central role in their customers' lives, this relationship has changed dramatically in recent times. Generally, the role of banks has moved through three phases—firstly from physical, person-to-person interactions, then to online banking services, and in the past few years to mobile and real-time payments and product applications. Until recently, this evolution has not threatened the relationship between bank and customers, or the sense of customer 'ownership' that banks obtained through regular interactions. The advent of PSD2 and the path towards open APIs fundamentally changes this dynamic.

With the opening-up of access to payment initiation services via APIs, the bank is at risk of losing a direct relationship with the customer and becoming a utility-type service used by new TPPs. Likewise, access to customer account data enables a scenario whereby customers could fulfil their typical banking needs such as viewing transaction histories, account balances and initiating payments, all from a third party online portal with no meaningful engagement with, or even visibility of, the bank's brand.

A further evolution of this threat is the potential breakup or 'atomisation' of banking services, as customers exercise their ability to use multiple digital banking products provided by different financial and non-financial institutions.

New digital competition in the form of (i) FinTech entrants, (ii) technology giants such as Apple and Google and (iii) traditional financial services companies is beginning to see the emergence of enhanced products and user experiences tailored to niche customer needs. A TPP already acting as a PISP and AISP under PSD2 could theoretically aggregate and integrate these new services through extended API integration.

This scenario would present a significant threat to incumbent banks by acting as a virtual consolidation of the FinTech industry. Via a single platform, the customer could access multiple stand-alone financial services products, all integrated with their existing account and transactional data. In addition to removing the opportunity for banks to cross-sell and engage their customers, this would also represent a loss of customer insight and data for banks.

With less customer data, the banks would enter a negative feedback loop in which their ability to compete would steadily decline, eroding a key competitive advantage that banks currently enjoy through their wealth of customer data and insight.

5 OPPORTUNITIES / BENEFITS TO BANKS

Rather than feeling threatened by fintechs and new market entrants, banks should take advantage of open banking to gain additional clients, new business and new revenue streams.

New Products and Services

The future of open banking and APIs does not need to be limited to simply a vertical enhancement of what already exists. In fact, the potential of open banking APIs extends far beyond traditional banking, to include all of the services a consumer may want in a digital world. As mentioned in the WRBR, "Banks that open up their APIs to a global community of web developers can tap into a stunning amount of innovation."

Open banking presents opportunities for creating and distributing a wide variety of both financial and non-financial products and services – with the banking retaining the customer relationship – but greatly expanding the number and variety of services to improve the customer's quality of life. In an open banking model, an unlimited number of partners could insert themselves into the relationship development process.

Cross-selling benefits

The benefits to incumbent banks are immense. Crossselling remains a high-margin activity for them. Financial services industry statistics suggest that households with 6.6 banking products on average generate twice the revenue of customers with the standard average of 2.7 products. The most prolific customers—those with an average of 16.6 products, which usually include both personal and small business-related accounts—generate nearly 17 times the revenue of a standard two-product customer. The ability to capture more business from existing customers might be the biggest driver of growth and profitability at any given financial institution, and FinTech startups, particularly "enablers" of the à la carte movement, could well disrupt this status quo. If the ability of banks to retain customers effortlessly is compromised, this will naturally add to the pressure for new customer acquisition—which is an expensive activity and an area where innovation at FinTech companies is often superior. Wireless network operators faced a similar challenge in 2003 when full mobile number portability was implemented in the United States. This allowed consumers to move their mobile number between carriers at no fee. The industry experienced immediate price compression and consolidation. To compete, carriers had to redefine their business model, with some operators creating and owning content instead of simply delivering it. Companies that did not foresee this change were relegated to "dumb pipe" commodity status—a scenario that banks will want to avoid

The bank that is most embedded in Facebook, Skype, Xbox, WhatsApp, Auto Trader, JustGiving and others, that facilitates these scenario-based customer journeys, will establish first mover advantage, mindshare and scale.

This 'presence' will soon be matched by others and the progression will be to banks that can automatically create value chains personalised to the customer's buying requirement. Imagine this as an emerging real-time spot market, in which multiple potential suppliers transparently bid for a link in the chain to meet your specific needs.

Banks will play different roles, as they do today, but those that act in the 'Intel inside' or 'powered by Visa' role in this new distribution model will retain some brand presence, access to data and the ability to aggregate and serve additional value. As customers come back to their traditional banking channels for higher touch services such as wealth advice, taxation or mortgages, this insight will enrich the customer experience and brand value and so diminish the threat of disintermediation.

Access to Data

Maintaining access to data will become critical to participate in the largely untapped channel of access to personal financial data. The huge wealth of deep insight into customer behaviour that can be gained through analysis of spending history, financial health and financial products owned could be a lucrative source of income for those controlling access to it. There are of course enormous privacy issues to overcome before this becomes a widespread reality, but recognition of and preparation for this potential future can only be a smart move. Conversely banks will also be able to access external data sets for added consumer insight. New revenue streams will arise from selling access to a bank's core systems.

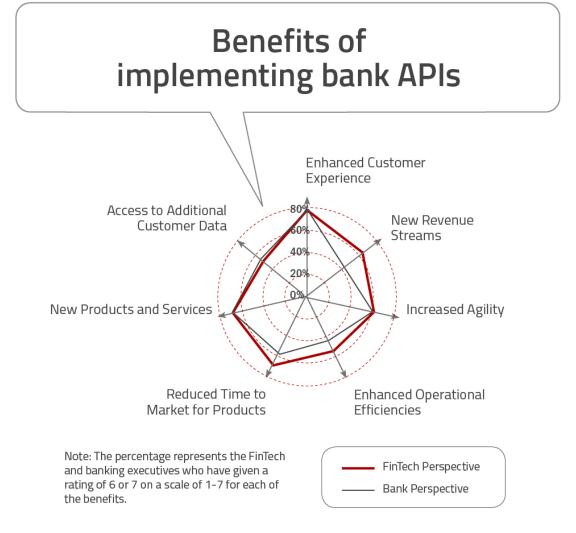
Banks can access data at the point of origination to improve risk analysis and inform credit decisions (e.g. in agriculture, banks could partner across the value chain with farmers to see their usage of pesticides, fuel, water etc. to anticipate drought and effect on yields, which would impact loan serviceability).

Expanded Customer Ecosystem

Banks can become aggregators for consumers with multiple relationships and also crowdsourcing of new products will let banks meet the needs of a fragmented market. They can thus boost customer acquisition and reduce attrition by becoming one-stop shops.

Smaller banks can offer their customers access to a wider range of products. In wealth management, many small pools of wealth are left unserviced due to the high cost. Banks acting as aggregators could provide efficient models to connect these customers with low cost advice and improved returns.

Integration of products from incubator and accelerator programs will be easier for banks.



6 TURNING OPEN BANKING INTO A COMPETITIVE ADVANTAGE

Given all the risks and benefits highlighted it is imperative that banks prepare an appropriate API strategy to minimize the risks and optimize the potential upsides and thereby turn open banking into a competitive advantage.

Banks have historically struggled with the notion of agility. They are built for size and scale and their architectures and development process reflects that rigidity. Realizing

the value of open banking will come by understanding and leveraging this legacy architecture with modern tools and approaches and introducing modern, open solutions and infrastructure can accelerate the adoption of APIs.

According to an IDC study from 2016, six out of ten global banks are open to partnering with FINTECH startups. This shift from seeing startups as partners rather than

competitors, means banks need to find more collaborative ways to work and share data with FINTECH partners.

- For example banks could create their own AISPs to provide their customers access to their other banks and payment methods, all within one branded mobile app.
- These changes will usher customer control. With appropriate permissions, customers will be able to centralize their account information and payment options into one unified mobile application, enabling them to conduct day-to-day banking on the platform of their choice, provided by their bank or an innovative FinTech.
- Alternatively Banks could partner with Fintechs and use their data to identify trends and create new targeted customer propositions.
- The number and types of internet-capable devices are multiplying every day. Companies can leverage knowledge about a person's location to unlock some incredible marketing opportunities.
- Or explore ways to sell information to the retailers and other third parties.
- Open APIs facilitate co-development opportunities, data sharing and continual innovation by giving developers on both sides access to data, architectures and code. Retail customers, SMEs and even corporate clients will have more choice and access to data and to banking infrastructure through APIs

7 THE API STRATEGY

APIs are the cornerstone that powers APPs and digital platforms on which companies rely upon. To meet boundless digital demand and capitalize on the digital value chain, APIs are needed to connect customers or employee facing apps with enterprise data. Using APIs to digitize business leads to internal efficiency, corporate agility, improved customer experience and greater brand loyalty.

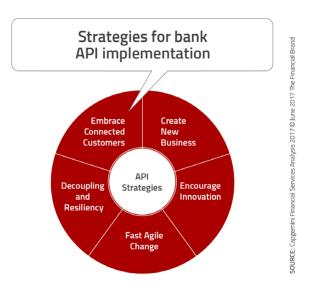
In today's technology and start-up culture, APIs are a primary mechanism for building open architectures and platforms. From Yahoo to Facebook, Google, Amazon and more, industry vanguards and emerging companies alike have allowed third parties to access and build upon their codes and platforms via APIs.

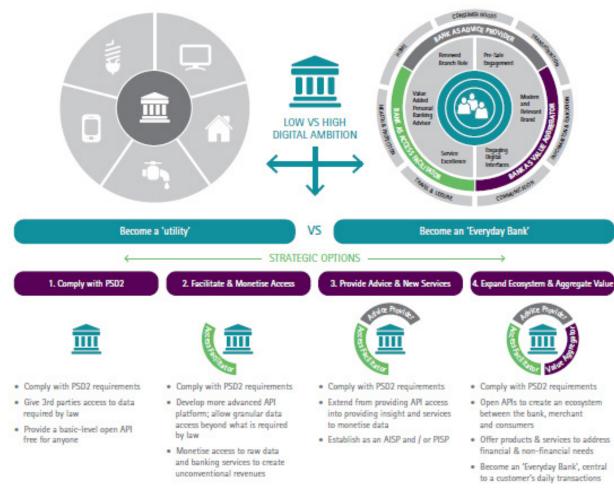
Recently Evans Data performed a study of 18.2million developers worldwide. According to this study, 49% of these developers publish APIs for internal use only. Internal APIs enable companies to operate more efficiently while external APIs improve connectivity to the world. While giving peers and competitors access into a company's platform and data might seem counterintuitive, the results are remarkable. Companies that have open APIs such as Amazon have seen continuous, rapid innovation, continued product development and an open ecosystem of knowledge sharing.

APIs are vital to collaboration and evolution of future business models. They have gained popularity because of the low barrier to entry in using them. Ease of use facilitates adoption and cycle time, shrinking the time required to integrate across channels.

According to the Capgemini Financial Service Analysis 2017, API strategies and benefits could include the following:

- Create new businesses: Increase the reach and depth of product lines or segments
- Encourage innovation: Facilitate innovation not possible with internal resources
- Increase speed of change: By breaking down silos, APIs can improve speed to market
- Decoupling platforms: Rejoining platforms through APIs reduces cost of development
- Embrace IoT future: APIs can allow for a future where the consumer is identified by their device





Source: Accenture Banking Opportunities, EU, PSD2

Accenture in their Banking – Opportunities, EU, PSD2 review, outline 4 key strategic options available to banks facing open banking.

According to them a bank can adopt **Strategic Option 1**, which is essentially to do enough to comply with mandatory Open banking rules. This bank risks disintermediation and a loss in volume and quality of customer interactions. However, as competition intensifies in the financial services industry, banks must prioritise their investment and have a clear strategy for developing and maintaining their core business. For some banks, a valid decision may be to narrow the focus of their business model towards the provision of liquidity and infrastructure services. In such cases, the bank becomes a 'utility' managing underlying customer accounts, processing payment transactions, and providing liquidity and credit services which are offered to the customer through a TPP who owns the customer experience.

Strategic Option 2 defines a response where banks *Facilitate & Monetise Access*.

Although aspects of open banking mandate the opening of certain bank APIs, these are restricted to payment account transaction and balance data, Credit Transfer initiation and account identity verification. Access via APIs to additional customer data in relation to non-payment accounts, customer demographics, identity documentation and direct debit mandates is entirely optional.

This means banks have a choice over whether to extend their API development beyond the minimum requirements and enable a customer to retrieve additional data sets as described above. Banks could also extend development to enable the creation of Standing Orders and Direct Debit Mandates or the completion of product applications via API. By taking this step, banks gain opportunities to monetise these additional APIs as well as to collaborate

with third parties to create new products and services based on these data sets and niche customer needs. An example of such a service would be the sharing of a customer's mortgage data and identity documents with a home insurance provider (with the customer's consent).

Strategic Option 3 prescribes a situation where banks *Provide Advice & New Services - Monetise Insight*

Leveraging customer insight empowers the bank to provide a highly customer-centric, digital banking portal, and create a customer value ecosystem consisting of symbiotic or mutually beneficial relationships between the bank and TPP that create value for the customer. Such services can enhance customer loyalty as well as open new revenue opportunities for both bank and TPP.

A bank could significantly improve its ability to sell customer insight by offering PISP and AISP services as well, due to the increased availability of customer data and touch points. However API integration is not strictly necessary with referral-based partners.

Strategic Option 4 option now looks to *Expand the Ecosystem & Aggregate Value for banks*

Beyond the monetisation of APIs and customer insight, investment in open APIs could present opportunities for more integrated partnerships between banks and third party companies within and outside of the financial services industry. Such partnerships could manifest themselves in two ways:

- i. Consolidation of services—new products/services owned by third parties but offered via the bank's online portal
- Consolidation of data—customer data stored on third party systems but presented on the bank's online portal, subject to obtaining necessary consents and authorizations.

An open API infrastructure and the consolidation of customer data from multiple third party sources transforms the online banking portal into a platform reflecting the customer's everyday needs and transactions. By establishing itself at the centre of this ecosystem of both financial and non-financial services, the bank can become a pivotal part of a customer's daily life, acting as:

 Advice Provider: Providing specific buying suggestions, based on deep customer knowledge and purchasing algorithms

- Value Aggregator: Assembling components (financial and non-financial, own and third parties') to create an integrated solution for 'real world' customer needs
- Access Facilitator: Supporting the customer in 'everyday/everywhere' buying processes (shopping, access to daily services)

8 NEW LEADERSHIP IMPERATIVES TO SUCCEED IN OPEN BANKING

Jeff Bezos and his leadership in Amazon pioneered the API first strategy and the successes thereof are clearly visible. To succeed in the new age, the role of leadership is pivotal. Leaders will have to realize and implement some basic truths:

- Begin an innovation culture by utilizing existing infrastructure to create APIs for internal purposes. By creating an open banking focused cross functional internal community of developers, programmers, banks will begin to identify new opportunities for efficiency and collaboration internally.
- They should actively engage an external API community. This can be through hackathons or developer hubs, which gives smart and talented external developers access to build APIs that will lead to new services, products and features for the bank. Citibank recently announced the launch of its Global API developer HUB which gives developers access to build APIs across eight usage categories. In turn Citi will have access to new services, products, features built through the developer hub.
- The recruitment philosophy and training needs for banks will have to evolve. Increasingly banks will have to recruit data scientists, programmers and social entrepreneurs. They will also need to hire experts to manage partnerships and build new ecosystems as well as innovation experts. Similarly training needs have to be rechanneled to focus on creativity, system and design thinking and coding among others.
- Given the significant cyber security as well as data privacy concerns that open banking brings, bank leadership will have to invest in appropriate technology and as well as data security experts while also championing industry wide controls and standards.

Banks cannot go it alone and MUST partner and collaborate with the Fintech industry to drive innovation, maintain agility and drive customer centric solutions. The engagement model with Fintechs can either be via Investment, Collaboration, Mergers or Acquisitions. Each bank will need to access the model that works best for specific needs and purposes.

9 CONCLUSION

The concept of Open Banking has indeed begun and will as a matter of certainty become prevalent in Africa in the not too distant future. It is therefore imperative that African Banks take an active interest in the conversation now to fully understand the implications and take active steps to reorient their organisations not only as a survival mechanism, but more as a tool to gain competitive advantage.

We recommend that banks take advantage of Open Banking to expand the current banking ecosystem and look to aggregate value. By actively investing in open APIs, banks will not only be creating opportunities to monetize these APIs and gain additional customer insights, but will also open avenues for partnerships with third party firms within and outside the financial services industry. Such partnerships would lead to the creation and consolidation of new products/services owned by third parties but offered via the bank's online portal and secondly consolidation of customer data stored on third party systems but presented on the bank's online portal.

An open API infrastructure and the consolidation of customer data from third party sources comes to transform the online banking portal into a platform reflecting the customer's everyday needs and transactions.

The bank that is able to establish itself at the centre of the client's financial and non-financial ecosystem and therefore become an integral part of their everyday life will not be easily dislodged and will indeed reap significant benefits.

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