

Financial Services & Banking

Retail Banking Transformation — Trends and the Future

September 2022



PERSPECTIVES

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Over the past 10 years, retail banking has experienced a new wave of digital transformation. We have seen the rise of FinTechs and TechFins, which have brought integrated and faster financial services to their customers, whether banked or unbanked. With more advanced and agile technology solutions, and potentially less restrictive regulations, these challengers were able to boom in both developed and developing markets. Nowadays, retail customers are increasingly asking for one-stop shops and seamless customer experiences after having experienced the super-apps. With the global pandemic over the past two years, this trend has only accelerated.

Against this backdrop, traditional retail banks are not left with much choice but to undertake necessary digital transformations to meet their customers' expectations. Many have done so in the past few years, and the rest are certainly at least planning to do so in the near future.

Today, the industry is evolving rapidly. Open banking and APIs are driving the development of new ecosystems for financial services, in which multiple players, traditional and non-traditional alike, are competing against each other.

In this article, we will discuss the key trends in the retail banking industry, followed by an analysis of the future of traditional retail banks and digital banks.

Many retail banking transformations are happening in the market. We can broadly categorise them into three types: (1) data enablement, advanced

analytics and data-driven business decision-making, (2) customer experience 2.0 and (3) automation of end-to-end services (i.e. adoption of

technology for on-boarding, e-KYC, risk management, internal controls, etc.).

Figure 1 Key trends in retail banking transformation



Source: Accuracy analysis

TREND 1: DATA ENABLEMENT, ADVANCED ANALYTICS AND DATA-DRIVEN BUSINESS DECISION-MAKING

Decision-making processes in retail banking are making increasing use of big data as well as AI & machine learning. This trend has disrupted almost all aspects of banking, from how banks on-board customers to how they empower them. Meanwhile, this trend also serves as the cornerstone of other transformation and innovation trends that are reshaping the retail banking landscape.

It is clear to see that technological advancement has been the driving force behind retail banking evolution. The advent of modern computers significantly accelerated banking processes and enabled computations that had been impossible beforehand. The use of the internet, which facilitates

information communication and flattens the financial world, represents another huge technological leap in the retail banking industry. And most recently, over the last decade, the penetration rate of smartphones has been rising significantly, resulting in the proliferation of mobile banking. In the future, we believe that big data and AI & machine learning will drive new waves of transformation.

Big data use case – customer segmentation. One such example is micro-segmentation. With the increased use of data and advanced AI capability, retail banks can generate dynamic and granular client segments. The development of big data analytics and the increasing awareness and accessibility

of alternative data have gradually enabled banks to make use of more valuable data in a cost-effective way. Retail banking has long been a data-driven business, where data is generated at every stage of the customer journey. However, in the past, most banks did not have an efficient process or the necessary IT infrastructure to realise the data's potential. But traditional data use was just the tip of the iceberg. Huge amounts of alternative data, whether structured or unstructured, are generated every second from various data sources internally and externally. The value of data can be further 'mined' if it is combined with AI and machine learning techniques. Granular segmentation of customers can help the development and marketing of hyper-personalised

products and services, as well as the optimisation of product pricing.

Alternative data use case – tapping into underserved segments. The use of alternative data not only improves customer segmentation but also enables banks to assess the creditworthiness of untapped customer segments. This helps to extend financial services to the two billion unbanked adults globally. Another opportunity lies in the SME market. Currently, many SMEs are underserved by traditional banks or are often subject to unsatisfactory credit terms. As a result, many FinTech and TechFin firms embrace the opportunity to provide alternative financing to SMEs. Kabbage, which was acquired by American Express in 2020, uses an automated lending platform to provide finance to small businesses and consumers. The FinTech company uses

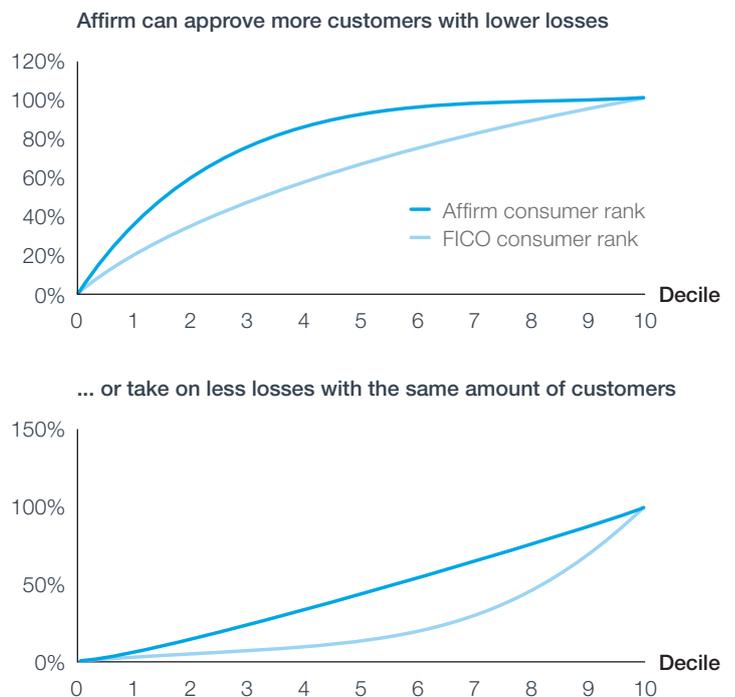
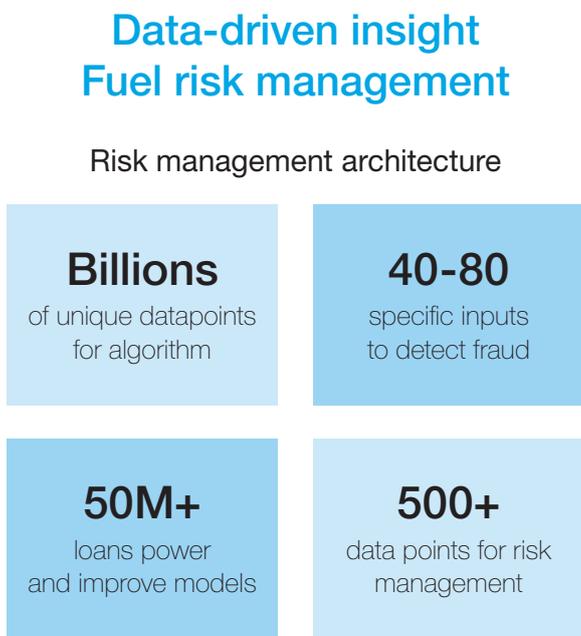
alternative data, such as business volume, transaction volume, time in business, statistics from e-commerce platforms or even social media activity to approve the funding. Additional benefits provided by digital SME cash flow solutions also include simplicity, speed, and transparent and real-time monitoring for small businesses.

Machine learning use case – credit decision-making. Another trend is leveraging machine-learning models to optimise business decision-making. The best way to imagine machine learning is to think of it as a replacement for traditional rule-based models. One real-world example of a rule-based model is a credit scorecard. Traditionally, a scorecard is developed by picking risk factors with high predictive power from a full list of human-determined risk factor candidates. The scorecard

is a static, rule-based model for banks to make credit decisions. However, these mechanisms are not designed to capture complicated relationships and can become outdated if not enhanced frequently.

Nevertheless, a machine-learning model requires much more data for training. The calculation algorithm might also explore more complicated and non-trivial relationships between data. These are the underlying reasons why ML models can outperform traditional ones. By way of illustration, several FinTech start-ups in retail lending, such as Affirm and Upstart in the US, have developed ML models that, according to their analysis, can outperform their FICO counterparts by a wide margin (approving more customers with lower losses or incurring fewer losses with the same amount of customers).

Figure 2 Affirm ML modelling example



Note
For a given level of risk, our proprietary model is capable of accepting significantly more applications when compared to FICO's scoring methods through a superior ability to price risk. Alternatively, for any given consumer sub-segment, our model produced lower risk outcomes than FICO scoring.

Source: Affirm Investor Presentation (March 2022)

Other use cases. A number of other areas exist where banks can make use of AI and machine learning. In retail banking, advertising optimisation, customer segmentation, fraud detection, advanced risk analytics and data-driven decision-making, to name but a few, naturally come to mind as the transformations are already happening. Considering the wider picture, machine

learning can also help asset pricing, market making, recruitment, procurement and more. In total, as long as banks have quality data to work with, use cases for ML models can be very broad.

Banks are increasingly devoting more resources to developing analytics toolkits and improving their AI and machine

learning capabilities. These help boost revenue, lower costs and improve overall efficiency. In addition to big data and AI & machine learning, other sub-trends in powering new technologies, such as shifting to the cloud and the expanding use of APIs to unleash digital potential, are unfolding.

TREND 2: CUSTOMER EXPERIENCE 2.0

In an increasingly challenging, dynamic and uncertain business environment for retail banks, where regulations are continually changing, interest rates are consistently low, competition is fierce and consumer behaviours and expectations are shifting, bespoke customer services to deepen customer relationships have become essential.

Moving from a product-centric model to a customer-centric model. A shift to a more customer-centric strategy is critical for retail banks to thrive. One key reason for adopting a customer-centric approach is the growing number of millennial and Generation Z customers, who, compared with older generations, have different expectations. For example, they want to have total control over banking information, a seamless and digital banking experience, and more diverse and innovative financial and banking product offers. Because of growing and shifting expectations, retail banks have been forced to pivot strategically, such as through the creation of new banking channels, product innovation and even the implementation of new organisation charts (e.g. creating new positions such as head of digital banking and head of customer lifecycle management).

Another key aspect here is to organise data around customers instead of products. In the past, banks usually stored data according to product types (i.e. credit cards, loans, etc.); however, with the help of advanced data analytics,

banks now focus more on building a holistic view of their customers by leveraging both traditional and alternative data.

In delivering a superior customer-centric approach, banks should develop and monitor their client-centric key performance indicators ("KPIs"), which would help streamline customer experience metrics and accurately identify areas for improvement. For instance, client-centric KPIs about retail banking products can cover monthly active users per product, app use duration per product, time taken to obtain funding, etc. These metrics focus more on the customer's use and engagement experience, instead of the traditional product-oriented focus (e.g. number of loans per year).

Another important aspect of a customer-centric approach is advisory service. As financial services become digital, it is vital for banks to maintain the human element and a constant connection with their customers. Banks need to ensure quick or even real-time interactions, which could be enabled by a combination of robotic advisers and human advisers. Furthermore, a new trend is coming to light in which clients demand more individualised budgeting, spending, and even investing advice, which can be seen as a critical field for banks to differentiate themselves. For example, Singapore's OCBC bank has launched its robotic investment service, RoboInvest, to offer its customers a

simple and digital investment advisory experience.

Enhanced super-app experience.

With rapid transformations already under way, banks need to move beyond the surface of digitalisation. A growing trend is to enrich the service offerings provided in mobile apps. The ultimate goal is to develop a one-stop shop, like a "super app" platform, to cater to customers' holistic financial needs and other needs in their daily lives. One example is the WeChat app from China. It has grown from a simple messaging app to a super app with a plethora of services ranging from digital wallet services, money transfers, payments, finance and investing, taxi and transportation services, hotel and tour booking services, ecommerce, social life and even gaming.

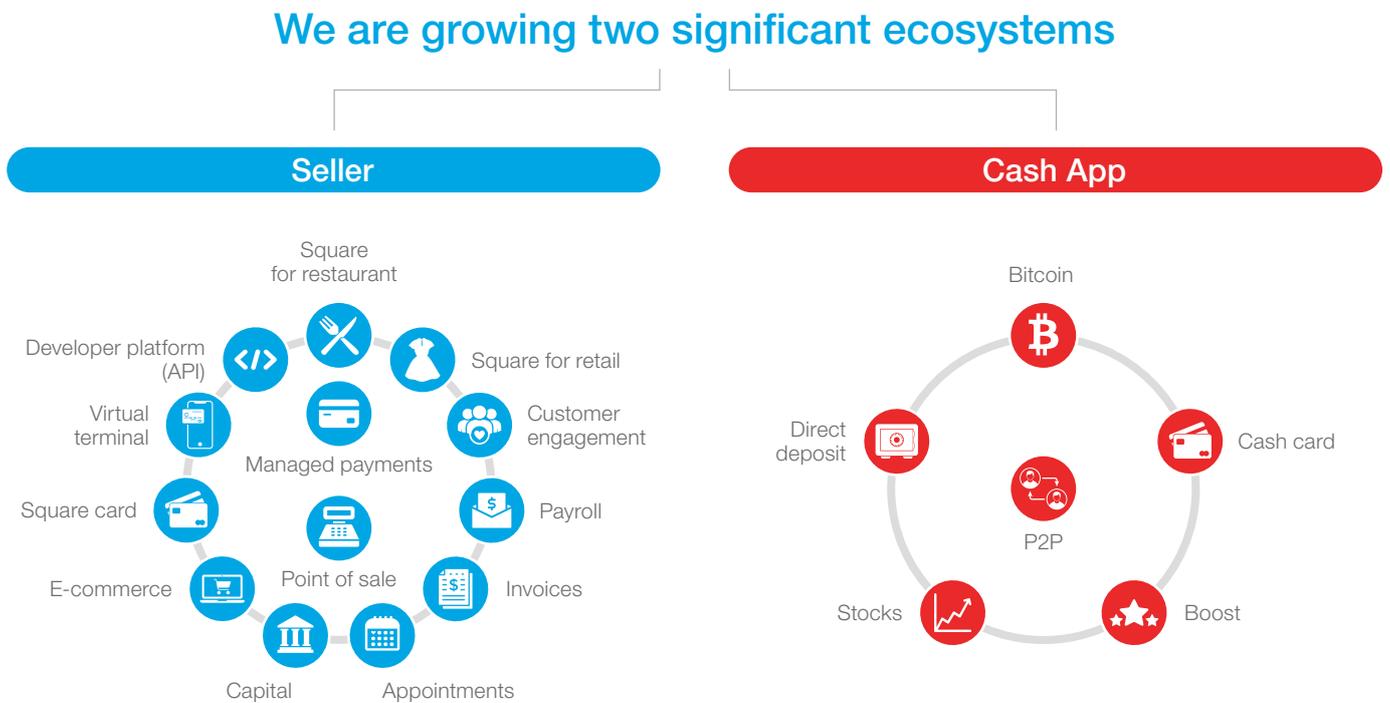
Whilst it is not necessary for all banks to create a super app, it is clear that the concept of moving money from one's bank account to other places seamlessly is gaining traction. As a result, core features such as banking, financing and investment and payments should be integrated into the retail banking experience. For example, customers may wish to invest in funds, stocks or even crypto/ NFTs within their banking apps. They also need easy access to loans within the apps. Payment services, which traditional retail banks paid less attention to, are also essential for a seamless digital experience. Several disruptions

in the payment field can be observed. For example, with the need for contactless payments amid the pandemic, the industry has seen increasing adoption of digital payment methods (i.e. Apple Pay and Google Pay). The ecommerce trend also serves as a strong tailwind for digital payment. In addition, in terms of credit cards, there is a growing trend of buy now pay later (BNPL) solutions.

Overall, with banking, financing and investment and payment experiences going digital, the industry has seen a convergence in these services in one super app. One well-known example of a super finance app is the Cash App ecosystem developed by Block, Inc. (formerly known as Square). Starting from supporting seller activities, the FinTech giant has expanded to a

consumer ecosystem and launched the cash app. With an impeccable digital experience provided within one single app, Cash App has become one of the leaders in consumer financial apps in the industry.

Figure 3 Square's seller and cash app ecosystem



Source: Square's Investor Presentation (September 2020)

There are multiple benefits to offering an enhanced digital experience and even a super app. First, a good digital experience can increase customer loyalty and reduce churn rate. Second, it acts as a marketing tool to attract new customers and create a network effect

among friends and colleagues. Third, the more a customer's financial journey occurs within the app, the more data is collected to generate valuable business insights. Fourth, banks can cross-sell new products or expand to new markets, further monetising the customer

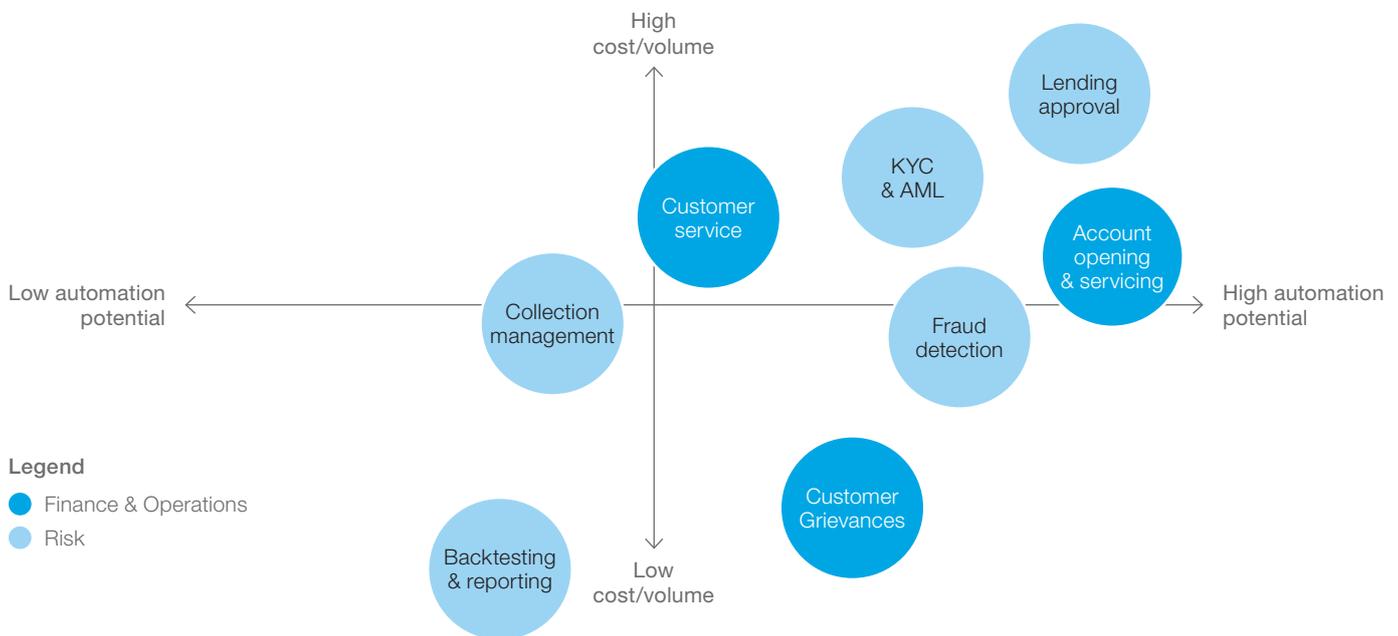
base. Finally, the partnership with companies in the broader ecosystem (e.g. loyalty reward schemes with partners) can also unlock enormous business potential.

TREND 3: AUTOMATION OF END-TO-END SERVICES AND THE USE OF BLOCKCHAIN TECHNOLOGY

The third major trend in the retail banking industry is automation. The ultimate goal for automation is to reduce decision time, save costs, improve productivity and efficiency for banks and provide a faster banking experience

for customers. In the following figure, we can see the most common areas with potential for automation and their respective cost/volume considerations at the banks' risk and finance & operations functions.

Figure 4 Key processes for automation in the retail banking industry



Source: Accuracy

Banks should ask themselves which procedures, whether customer-facing or internal, can be automated across the customer lifecycle. Many banks are currently aiming to automate as many manual procedures as possible, such as loan application approval, funding, fraud detection and document verification. The advantages of automation can be numerous. It allows for significant cost saving, increased volumes, faster decision-making, improved customer services and reduced risk of human error. However, one factor worth bearing in mind is that, despite the automation, the decision engines of retail banks

should retain some degree of flexibility in order to navigate the dynamic environment successfully and deal with unexpected bespoke demand.

Blockchain or distributed ledger technology (DLT) is another trend that is revolutionising the banking industry by streamlining end-to-end business workflows. This technology can provide automation, trust and security for banks and their customers. The most common use cases include trade finance, cross-border transactions, insurance, payment and settlement, and asset tokenisation, among others. For

example, Contour is a decentralised platform developed by a consortium of eight banks (Bangkok Bank, BNP Paribas, Citi, CTBC Holding, HSBC, ING, SEB and Standard Chartered) and three delivery partners (Bain Consulting, CryptoBLK and R3). It is a global digital trade finance network that uses blockchain technology to provide end-to-end trade-related services connecting businesses, lenders and partners seamlessly and securely in real time. Although blockchain technology is currently used mostly in corporate banking, it is expected that the use case will gradually spread to retail banking.

The majority of banking activities now take place online; more and more people are familiar with internet banking and mobile banking. However, in the post-pandemic era, the reality is that having a mobile app that simply moves the traditional banking experience to a digital format or having some degree of automation is not enough. In the future, banks must rethink their entire business model to take their customers' experience to the next level. With

all of the transformations taking place, retail banking will never be the same. Traditional retail banks and virtual banks must identify and capitalise on their respective strengths while attempting to mitigate their weaknesses.

Future of traditional retail banks

We believe that banks should view innovation and digital transformation as a growth engine instead of simply

reacting to the disruption brought by FinTechs and TechFins. Traditional players have advantages in terms of bigger customer bases and the amount of resources they can invest in technology infrastructure. They also have a broader range of products and solutions for their customers, and stronger brand names to gain customers' trust. When compared with younger and less experienced digital banks, these make a significant difference.

Figure 5 Key benefits of traditional banks



Source: Accuracy

Traditional banks have their weaknesses too. The main concern is the customer experience. In today's fast-paced environment, customers often find traditional banks to be slow. There always appears to be a long queue at the branch. Applications are always time-consuming and the paperwork seems endless. Despite some degree of digitisation, when it comes to speed, traditional banks lag behind their digital

counterparts. When compared with services offered by technological players, the gaps are even wider.

Another concern is resistance to change. Just as traditional carmakers are hesitant to commit fully to electric vehicles for fear of cannibalising the pipeline of their current vehicles, traditional banks are reluctant to move their distribution channels online, which may

compromise their current success.

High running costs are another disadvantage. Traditional banks incur large costs associated with physical premises (such as branches and ATMs), which represent a significant burden when clients no longer visit these facilities. The army of staff becomes costly as well. In addition, the lack of agility of legacy systems also hampers business

3 Retail banks in the future [...]

transformation. Often, there is limited room for manoeuvre to reduce staff or implement massive cost reduction programmes. Regulatory and political surveillance also limits the options for such actions.

In the future, traditional players need to deploy strategies that maximise their strengths and minimise their weaknesses; speed to adopt transformations will become key.

Greater concentration and restructuring is also likely in the future of retail banking. Concentration aims to sell all businesses that are far from the banks' main markets in order to be as large as possible domestically (e.g. sale of Bank of the West by BNPP, sale of French retail banking by HSBC). Restructuring, particularly in Spain but also in France (e.g.

the merger between SG and CDN), aims to lower a bank's breakeven point. Further, a trend whereby traditional retail banks acquire or partner with emerging FinTech players has come to light, in order to build specialised businesses rapidly. For example, J.P. Morgan acquired OpenInvest, a leading FinTech start-up that assists professionals in providing tailored value-based investment solutions, benefitting the bank's Private Bank and Wealth Management advisory service offerings. Another is the leading AI lending FinTech Upstart, which partners with several US regional banks to help them grow their customer lending portfolios with seamless digital experiences.

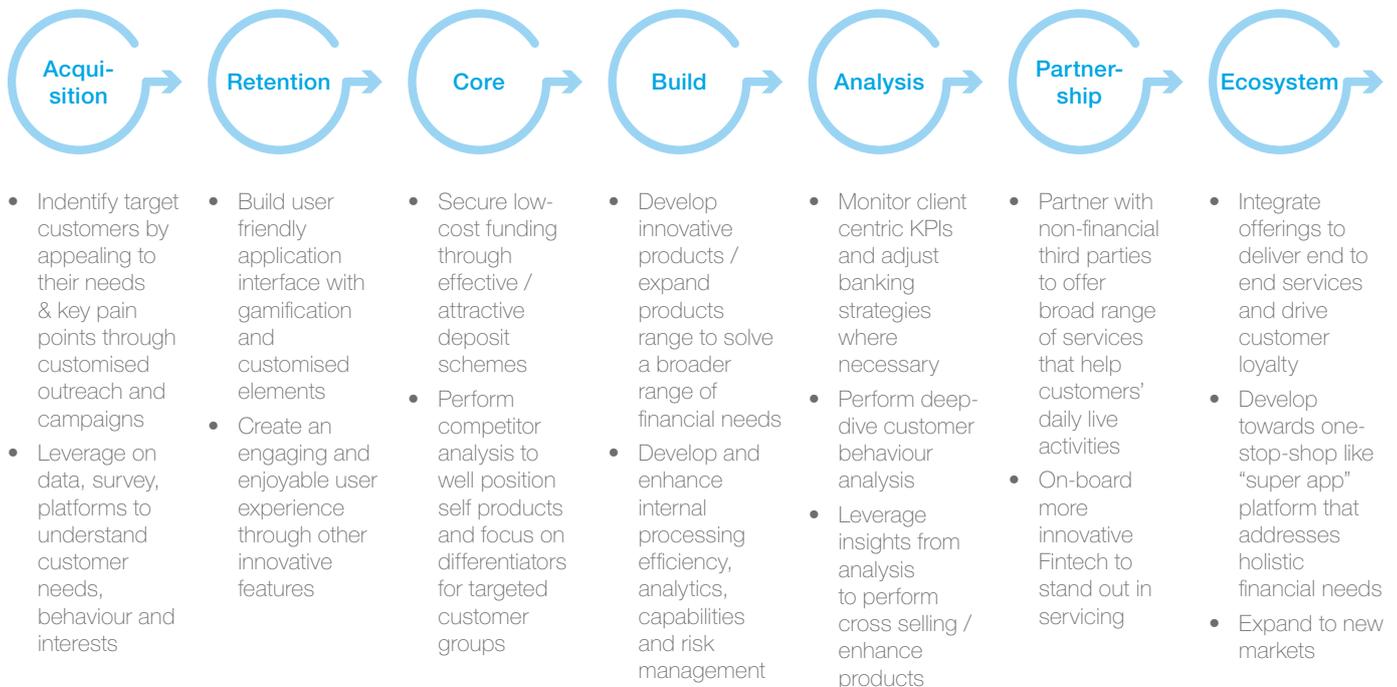
Meanwhile, traditional players will have to rethink their distribution models in light of digitisation and convergence of

services. Such convergence leads to embedded finance, which integrates financial products directly into the customer's purchase journey.

Future of digital banks

Digital banks, or virtual banks, are FinTech companies that provide mobile and online banking solutions via apps, software and other technologies. They are digitally based, with no physical facilities. They typically specialise in certain financial products and services, catering to specific customer segments. For a digital bank, there are several key steps to consider for continual business success.

Figure 6 Key steps in a digital bank's business development



Source: Accuracy

Digital banks have several advantages over traditional players. The first stems from their technological foundation. They are digital natives who build the required IT infrastructure from the ground up and are able to provide the right level of customer experience with more flexibility (e.g. 24/7 services). In

addition, smaller digital banks typically specialise in certain segments and can provide a more tailor-made customer experience, which is difficult for large generalist banks. They can also add some features such as budgeting and personal financial planning to enhance the customer experience. In terms

of operating costs, their smaller size allows them to be more agile than their traditional counterparts, both in terms of labour costs and fixed costs, as they have no physical branches. The nature of being virtual also makes this new type of bank more eco-friendly.

Figure 7 Key advantages of digital banks

Digital banks are available 24/7 with transactions designed to be made online or over mobile devices. They provide faster and more efficient digital banking services

Flexibility



Virtual banks often specialise in certain segments and can provide more tailor-made services. They can also offer various tools (e.g. budgeting tool) in addition to traditional banking services

Customer experience

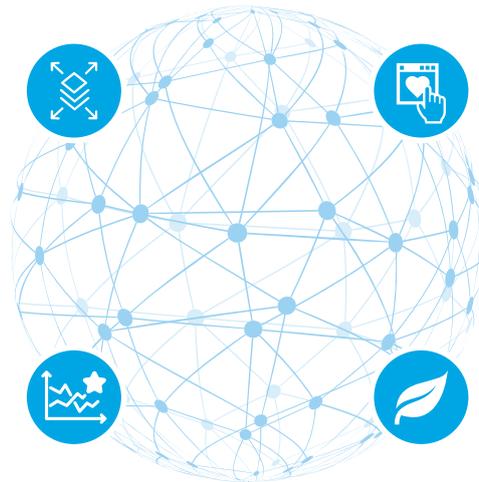
Competitive rate



Environmentally friendly

With lower operating costs such as labour costs and fixed costs, virtual banks can price their services more competitively

With all operations run digitally, digital banks are more eco-friendly



Source: Accuracy

Their disadvantages frequently stand in direct opposition to their strengths. The limited service offering allows digital banks to focus on and better meet specific needs; however, in a world where technology allows for the emergence of multi-service platforms and customers expect increasingly simple answers and one-stop shops, addressing only part of the financial services needs is not necessarily the right direction in the long term. One of the major consequences of this limited supply is the inability to capture the most profitable customers of retail banking: the premier banking accounts. This explains their low income, which peaks at EUR 20 per customer against EUR 300 to 400 for traditional banks in Europe.

But this does not necessarily rule out a bright future for digital banks. As they shift their focus from growth to profitability, they need to act quickly in terms of rolling out new products and establishing partnerships.

One thing of note is that the digital banking landscapes in developed and developing countries differ significantly. The road is often wide open for them in underbanked countries. For example, Nubank, a Brazilian digital bank, has around 54 million customers in Brazil, Colombia and Mexico and has a market capitalisation of USD 37 billion.

The situation is different in ultra-banked countries like France. Digital banks there are frequently forced to make difficult

choices due to low profitability and a trend towards convergence in financial needs. They can quickly broaden their range of products to meet more customers' needs or partner with merchants to offer unique products. They can also explore selling their business to traditional players or even technology giants who are eager to tap into the field.

Regulatory support

Increasing regulatory support for both traditional and digital banks is a crucial driver of banking transformation. For example, the United Kingdom has launched the Open Banking standard in order to improve customers' banking experiences and to encourage competition and innovation in the industry. The standard covers five core components: API specifications, security profiles, customer experience guidelines, operational guidelines and a reference library. Since its inception in 2017, over 230 third-party service providers and more than 90 payment service providers have joined the Open Banking ecosystem.

The concept of a FinTech sandbox is also critical in the industry to facilitate FinTech innovations. It allows industry players to experiment with creative ideas, collect real-life data and perform pilot testing in a safe environment. This also helps speed up product launches (without full regulatory compliance), reduce development costs and refine

the consequence of failures. The Hong Kong Monetary Authority (HKMA) introduced the Fintech Supervisory Sandbox (FSS) in 2016, which was upgraded to FSS 3.0 in November 2021. The Monetary Authority of Singapore (MAS) has also established the FinTech Regulatory Sandbox framework since 2016.

Final remarks

The battle will only become more fierce in the next 10 years. Apart from traditional players and digital players, there are also formidable contenders joining the game: technology companies (e.g. Apple launched Apple Pay and Apple Card), retailers (e.g. Walmart acquired several FinTech start-ups to develop an all-in-one app for consumers to manage their money) and even blockchain technology (e.g. Bitcoin surpassed PayPal in transaction volume). Looking ahead, we believe that in a world filled with both opportunities and challenges, both traditional retail banks and digital banks will need to accelerate their transformation. They will have to constantly reshape themselves and rethink the business models to suit the needs of their customers, staff and society as a whole.

What Accuracy does

For clients who need to navigate the digital transformation in the retail banking industry, Accuracy is well-positioned to work with you on the following tasks:

- Adopting big data analytics, machine learning and other advanced techniques to improve data-driven business decision making;
- Implementing customer centric solutions to retain and grow the retail banking business;

- Performing automation on the end-to-end customer journey for greater efficiencies; and
- Overall strategic shaping of retail banking transformation.

At Accuracy, our financial services industry experts work with banks and non-bank financial institutions on mergers and acquisitions, strategic transformations, quantitative modelling and adoption of technology solutions. We

have been working closely with both global financial institutions and small to medium sized ones over the past two decades.



Accuracy is a wholly independent international consulting firm providing advice to company management and shareholders for their strategic or critical decisions, notably in transactions, disputes and crises.

Accuracy's strength is to connect strategy, facts and figures. Accuracy's teams are international and multicultural, combining various skills to provide bespoke services to our clients. We recruit consultants from the best.

Accuracy is present in 13 countries in Europe, North America, Asia, Middle East and Africa and leads engagements all over the world.

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