

**Deloitte.**



**How to flourish in an  
uncertain future**  
Open banking

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# Foreword

Retail banking has faced a number of disruptive threats in the past, but each time the traditional banks have adapted and grown stronger. Key events include the introduction of telephone banking in the late 80s and online banking in the 90s, the impact of 2008's global financial crisis and the more recent FinTech explosion.

In addition, a number of new 'direct' banks emerged in both the 80s and 90s, seeking to exploit their lack of a branch network as a competitive cost advantage. Although there were select successes, these new entrants were largely unable to make significant dents in incumbents' market share.

Each of these new developments led some market commentators at the time to predict the imminent demise of banking as we know it.

However, while telephone and online banking have caused customers to migrate<sup>i</sup> from the bank branch to new channels, the traditional banking business model arguably remains broadly unchanged. This is despite the great technological advances of recent decades.

Retail banks still take deposits and lend money, predominantly earning their revenue from the net interest margin this generates. Banks continue to retain ownership of the customer relationship, and, crucially, of customer data. And FinTechs are yet to make significant inroads into the UK retail banking space.

So it would be easy to dismiss all the current talk of disruption in the marketplace. However, we believe it really is different this time.

Why? Because of the potentially significant impact of open banking, driven by regulation and enabled by advances in technology.

The phrase 'open banking'<sup>ii</sup> is used to describe the shift from a closed model to one in which data is shared between different members of the banking ecosystem with authorisation from the customer.

So open banking demands a fundamental rethink of the traditional banking business model, enabling banking to become more customer-centric. The exchange of customer data looks set to level the playing field between incumbents and new entrants, increasing competition.

Even more importantly, open banking will facilitate the creation of new products and services that were previously impossible to imagine.

The possibilities are innumerable. In this paper, we explain what open banking really means and lay out scenarios for the future that it will create.

The Competition and Markets Authority's (CMA's) open banking initiatives stem from its investigation into personal current accounts, business current accounts and small and medium-sized enterprise (SME) loans. To find out what consumers and SMEs truly want from digital banking, Deloitte has also commissioned YouGov to conduct surveys of both these segments.

Our research shows that the threat to the traditional banking business model is real. But while the threats to incumbent banks are greater than ever, so are the opportunities.

In an extreme scenario, some banks could be relegated to the background as infrastructure providers while other entities – FinTechs, tech giants and price-comparison websites (PCWs), for example – could come to own the customer relationship. As a result, these could potentially become the leading brands in banking – without ever taking customer deposits or lending onto their own balance sheets.

However, incumbent banks that embrace open banking to create new sources of revenue and new propositions may enjoy a significant advantage, given their access to existing customers, strong brands and expertise. As a result, incumbent banks have a real opportunity to win the battle for the customer interface and, therefore, the customer relationship.

The future of banking is far from certain. However, we hope this paper will spark a debate. We plan to explore the various implications for banks in further detail throughout the coming year.



**Neil Tomlinson**  
Head of UK Banking

<sup>i</sup> The number of branch visits in the UK fell from 476 million in 2011 to 278 million in 2016, while over the same period the number of mobile banking logins increased from 169 million to 1,191 million. The Changing Face of Channel Usage, CACI, 6 July 2016. See also: [https://www.caci.co.uk/sites/default/files/resources/IanGoodliffe\\_The\\_Changing\\_Face\\_of\\_Channel\\_Usage.pdf](https://www.caci.co.uk/sites/default/files/resources/IanGoodliffe_The_Changing_Face_of_Channel_Usage.pdf)

<sup>ii</sup> "Open Banking enables personal customers and small businesses to share their data securely with other banks and third parties, allowing them to compare products on the basis of their own requirements and to manage their accounts without having to use their bank." The Initiative, Open Banking. See also: <https://www.openbanking.org.uk/about/the-initiative-open-banking/>

# Executive summary

UK retail banks have faced headwinds since the global financial crisis. Low growth rates have prompted central banks to slash interest rates, putting pressure on banks' margins. More stringent regulatory capital requirements, high remediation provisions and increased ongoing compliance costs have also contributed to a tough backdrop that has caused European banks to earn returns below their cost of equity since 2008.

During this period, UK retail banks have also been facing increased competition from innovative financial technology firms ('FinTechs') focusing on niches within the retail banking value chain. Such firms have been enabled by advances in technology and a favourable UK regulatory stance towards them – the same factors that are now facilitating the entry into the market of mobile-only banks looking to compete directly with the incumbents.

That's not all. Regulation has been concurrently driving what we believe will bring about a revolution in UK retail banking – open banking. In this development, regulators are seeking to drive increased competition and innovation by opening up customer banking data to third parties. This is taking place at two levels:

- across the EU, in the form of the revised Payment Services Directive (PSD2)
- in the UK, with the Competition and Markets Authority (CMA) mandating the UK's largest banks to adopt the Open Banking Standard.

Opening up bank data carries an inherent threat of commoditisation for incumbent banks. This is because it potentially enables third parties to own the primary customer relationship, by allowing accounts from different providers to be accessed via a single interface that isn't necessarily owned by an incumbent. It also potentially heightens competition by enabling more personalised comparisons between accounts held at different providers.

However, incumbents are also in a position to enhance customer loyalty and engagement by harnessing this additional data to provide, for example, a more personalised customer experience and develop innovative new propositions.

Open banking has also been made possible by advances in technology that provide new functionality for consumers and banking entrants alike. The most notable of these – the application programming interface (API), which allows developers to incorporate third-party data and services into their applications – has played a particularly important part in allowing regulators to mandate the sharing of bank data.

Such developments would have little impact were there no demand from customers. However, recent Deloitte research, conducted by YouGov among consumers and SMEs, suggests there is an appetite for new propositions. For example, 58 per cent of consumers with a mobile banking app could be persuaded to switch to a mobile-only bank to gain the 'ability to perform a greater number of banking-related actions through the mobile banking app'.

Consumers are also open to accessing their banking services via a third-party interface from a non-traditional provider; of consumers with a mobile banking app, 49 per cent would trust a digital payments provider to provide this, while 43 per cent would trust a traditional retailer to do so.

We believe that the opening up of banking data, technology-enabled innovation and changing customer preferences will, in the longer term, lead to a UK retail banking future in which banking products, services and functions are opened up to third parties. This is likely to lead to an uncoupling of products from distribution.

In the 'marketplace' model that would result from this, customers will be able to use a single banking interface to access products and services from a multitude of players, including incumbent banks, challengers and FinTechs. This interface would both give customers a holistic overview and use cognitive analytics to help them manage and optimise their finances.

We believe that in this environment, incumbent banks can choose from four non-mutually exclusive operating models:

- **full-service provider:** continue with a full-service offering, delivering proprietary products via a proprietary distribution network with little or no integration with third parties via APIs
- **utility:** relinquish ownership of products and distribution to operate as a utility, providing other players with infrastructure and non-customer-facing services
- **supplier:** continue to offer proprietary products but relinquish distribution to third-party interfaces
- **interface:** concentrate on distribution by creating a marketplace interface through which third parties can provide products and services.

The optimal strategy for incumbents is likely to be a combination of these models, under which they continue to provide the infrastructure and offer banking products and services to customers both via third-party interfaces and their proprietary user interface, which would also offer third-party products and services.

The implied shift from a product-centric to a customer-centric model may also blur industry boundaries, giving incumbent banks opportunities to serve adjacent consumer needs. For example, banks could establish an ecosystem of different providers to provide an interface via which customers can perform all stages of a process such as buying a home. Some banks could even decide to focus entirely on providing such services, and may no longer even choose to be engaged in traditional banking.

Whichever strategic choices they make, incumbents clearly have much to consider if they are to thrive in a marketplace-banking landscape. But what is clear is that they cannot afford to stand still if they do not want to become bystanders to the future of their industry.

Banks will need to ensure they can optimise their use of proprietary and external data to improve their service to customers. They will also have to align their leadership, culture and organisational structure to a more digital mindset: one that is suited to operating in a multi-provider ecosystem and that is more agile in its response to customer needs and competitor activity.

Introducing a 'fail fast and learn quickly' culture, wherein employees are encouraged to be innovative and even disruptive, is essential for incumbent banks faced with a period of unprecedented uncertainty. Partnering and collaborating with FinTechs will enable banks to experiment with new services and solutions.

Incumbents that are able to achieve this will be faced with an unprecedented array of opportunities, driven by technological advancement and strategic collaboration. They will then be in a position to capture the ultimate prize – a deeper and more engaged relationship with their customer.

Regulation has been concurrently driving what we believe will bring about a revolution in UK retail banking – open banking. In this development, regulators are seeking to drive increased competition and innovation by opening up customer banking data to third parties.

# Chapter 1 – Market context

Banks are finding it harder to generate revenue. This is due to the combination of low margins in a 'lower-for-longer' interest rate environment and tougher risk and regulatory compliance requirements. On aggregate, European banks have been unable to generate returns above their cost of equity since before the global financial crisis. Analysts estimate that profits will continue to lag behind cost of equity until 2019 (see Figure 1).

**Figure 1. European banks' return on equity (RoE), %, analysts' estimates, 1995 – 2019E**



Source: Deutsche Bank analysts' estimates, March 2017; European Banking Authority, January 2017; Deloitte analysis

## FinTechs in bloom

As banks contend with a suboptimal macroeconomic environment, their value chain is simultaneously coming under threat from a range of new entrants.

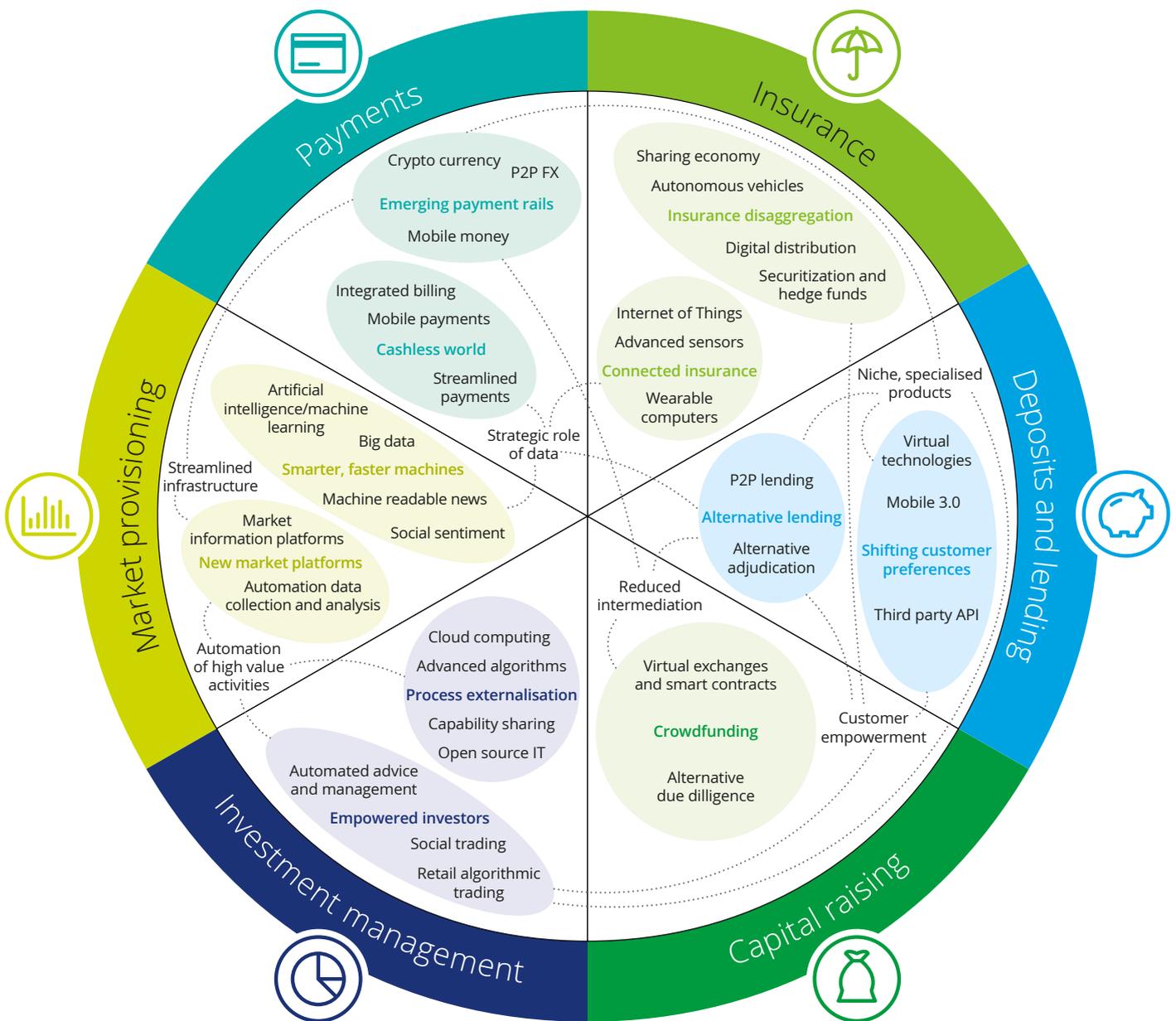
The UK's pro-innovation regulatory environment and advances in digital technology have driven an upsurge in the number of financial technology firms (FinTechs) in recent years. These have tended to focus on individual segments of the banking value chain. The Financial Conduct Authority (FCA) has launched 'Project Innovate' to help FinTechs navigate regulation and to foster innovation within the financial services sector.<sup>1</sup>

As explored in Deloitte's work with the World Economic Forum,<sup>2</sup> FinTechs are likely to concentrate on those value-chain segments where the greatest sources of customer inconvenience meet the largest profit pools, such as SME loans.

In the financial services context, the innovations mostly likely to succeed are those with the greatest ability to make use of customer data, that are easily deployed across platforms and do not require an onerous amount of regulatory capital. These developments and the fragmentation of certain key markets, such as payments, could see FinTechs appropriating or reducing large profit streams at banks.

Our research with the World Economic Forum has identified 11 clusters of innovation that are exerting pressure on traditional financial services business models (see Figure 2). As James O'Riordan, Deloitte UK's Head of Financial Services, said in his keynote speech at the 2017 *Innovate Finance Global Summit*, the sheer growth and breadth of the industry make it clear that FinTechs will not be a flash in the pan.<sup>3</sup>

Figure 2. The 11 clusters of innovation in financial services



Source: The Future of Financial Services – How disruptive innovations are reshaping the way financial services are structured, provisioned and consumed, World Economic Forum and Deloitte, June 2015, p.12. See also: [http://www3.weforum.org/docs/WEF\\_The\\_future\\_of\\_financial\\_services.pdf](http://www3.weforum.org/docs/WEF_The_future_of_financial_services.pdf)

FinTechs are concentrating on specific niches at both the banking front and back-ends, including:

- **consumer and SME lending:** marketplace lenders (or peer-to-peer [P2P] lenders) such as Funding Circle, RateSetter and Zopa
- **wealth management:** digital platforms such as Moneybox and Nutmeg
- **cross-border payments:** payment providers such as TransferWise, CurrencyFair, Revolut and Azimo
- **payment acquisition:** mobile point-of-sale solutions such as Square and iZettle
- **distributed ledger technologies:** companies such as Ripple and BitPay.

These FinTechs tend to prioritise speed, convenience and cost. Our research into the UK marketplace lending market revealed that aspects of a pleasant user experience, such as an 'easy/quick application process', 'fast decision-making' and the 'convenience of an online platform' were the strongest drivers of consumer borrowing from marketplace lenders. All of these trumped 'competitive rates', traditionally the main tool of competition among banks.<sup>4</sup>

However, the factors that led to the initial growth in the FinTech sector are now fostering the growth of a new type of FinTech – one that offers 'whole of market' customer propositions: mobile-only banks centred around smartphone apps.

These new players are prioritising customer experience and the user interface. For example, by allowing consumers to customise their app, they can provide a more tailored and personalised service. And by delivering improved speed and convenience, they hope to reduce (or even eliminate) some of the common 'pain points' in banking around issues such as account opening and on-boarding.

While previous FinTech innovations have targeted select services within a bank's overall offering, these newer entrants are targeting banks' core customer relationships by seeking to capture the customer interface.

The digital banks we spoke to stress that solving customer problems is a guiding principle behind their businesses. As Starling Bank's founder and CEO, Anne Boden, told Deloitte, "Innovation is all about addressing real issues customers have and delivering something they want".

Monzo co-founder and CEO Tom Blomfield imagines a future where retail reward schemes are integrated with banking apps. As he told Deloitte, rather than having to carry separate physical reward cards for different retailers, "what if your bank just said, "we notice you have been to this hairdresser eight times, have a free haircut"?"

He also believes that mobile apps could use data integration to "submit expenses to your employer... all the data is in the app, [so customers could] tag and get the money back straightaway". Alternatively, "it could say you forgot to tap out [on the London Underground] because there are no barriers. What if your bank looked out for you and just gave you the money back?" (See Monzo case study).

So it is clear that UK retail banks are already operating in a difficult environment, both in terms of macroeconomics and technology-enabled competition.

But now a new regulatory-driven development is about to take disruption one step further, by enabling completely new retail banking business models.

This development is 'open banking'.

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# Chapter 2 – Open banking

One objective of regulation at both an EU and a UK level is to level the playing field for new market entrants. This has led to two key pieces of regulation, which will open up bank-held customer transaction data to third parties. We believe this development has the potential to transform the banking landscape radically.

Bank ownership of this data has long given incumbents a competitive advantage in terms of pricing and risk scoring. This may now be eroded as data is increasingly shared with third parties. That's not all – this data could also potentially be used to provide consumers with innovative value-added banking services.

Critically, by offering services that use customer banking data to give consumers additional value, third parties may disintermediate banks' interaction with customers.

The story begins with regulation from the European Commission in the form of the revised Payment Services Directive – more commonly known as PSD2.

## PSD2 – not just payments anymore

PSD2 came into force on 13 January 2016, from which date member states had two years to transpose it into national law.<sup>5</sup>

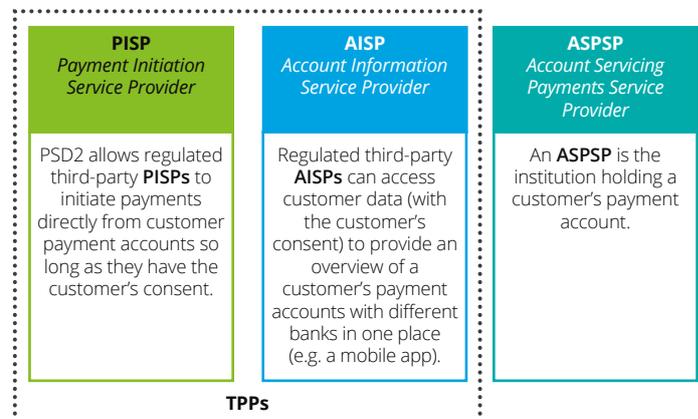
According to the European Commission, PSD2's main aims are to:

- contribute to a more integrated and efficient European payments market
- level the playing field for payment service providers (including new players)
- make payments safer and more secure
- protect consumers
- encourage lower prices for payments.<sup>6</sup>

PSD2 is significantly broader in scope than its 2007 predecessor, as it also covers third-party providers (TPPs).<sup>7</sup> In future, banks will be required to grant TPPs access to customer payment accounts, known as XS2A (Access to Account).

PSD2 outlines two types of regulated TPP that will be granted direct access to customer accounts (see Figure 3).

**Figure 3. Institutions outlined in PSD2**



Source: The Second Payment Services Directive (PSD2) – A briefing from Payments UK, Payments UK, July 2016. See also: <https://www.paymentsuk.org.uk/sites/default/files/PSD2%20report%20June%202016.pdf>; Deloitte analysis

Under PSD2, institutions wishing to act as Payment Initiation Service Providers (PISPs) or Account Information Service Providers (AISPs) must be authorised payment service providers (PSPs). The regulatory technical standards for XS2A are expected to be in place by early 2019.

While ostensibly a payments-focused directive, PSD2's greatest impact will arguably be the opening up of bank-held customer account data to AISPs. If third-party AISPs gain significant traction, banks may lose their ownership of the customer interface, and, therefore, of the primary customer relationship. This threat may be further exacerbated if some TPPs choose to act as both AISPs and PISPs, allowing customers to initiate payments from their accounts via a third-party interface.

However, such providers will have to navigate complex issues around data protection and liability. The EU's General Data Protection Regulation (GDPR)<sup>8</sup> requires customers to be made fully aware, in a clear, concise and transparent fashion, of how their personal data will be used and by whom. Customers will need to provide explicit consent for the usage of their transaction data.

GDPR imposes certain legal duties on organisations to protect this data, and to ensure its accuracy and completeness. Customers also enjoy many additional rights, such as the ability to revoke consent at any time, to know what data an organisation uses, and to have their information erased.

As open banking enables personal information to be shared between organisations, banks will need to ensure that this data is protected when being shared with other parties and that customer consent is clear and kept up to date. Greater third-party access increases the avenues through which fraud could occur, over many of which banks do not necessarily have the same level of control.

AISPs and PISPs will not be able to use data captured during payment transaction processes to enhance their business models. This is because the legislation forbids them to use this data for purposes other than the provision of their respective payment services.<sup>9</sup>

Nevertheless, these steps towards opening up bank-held data mark a significant shift in how retail banks operate. Regulators in the UK are also eager to level the playing field for new banking entrants and to further exploit the potential customer benefits of banks opening up their data. They have capitalised on the requirements of PSD2 and put additional UK-focused initiatives in place.

### Open Banking Standard – one step beyond

In 2015, HM Treasury requested the formation of an Open Banking Working Group (OBWG) to explore how opening up bank data in the UK could benefit consumers and how these benefits could best be achieved.<sup>10</sup>

The group's report, released in February 2016, recommended the creation of an Open Banking Standard using an open application programming interface (API; see page 12 for an explanation). The OBWG recommended that this common API standard should allow:

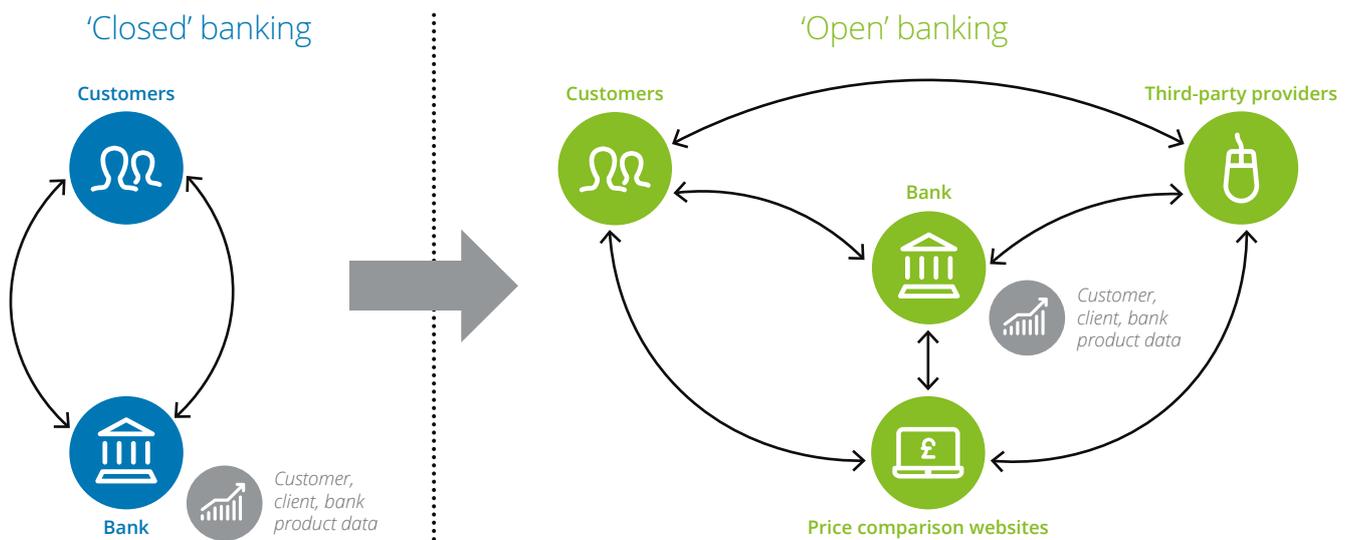
- **open access to open data** – i.e. allowing anyone, from TPPs to individual customers, to access publicly-available data such as pricing and product information
- **controlled access to shared data** – i.e. granting regulated TPPs access to customer-account transaction data, provided the TPP has customer consent.<sup>11</sup>

The UK's Competition and Markets Authority (CMA), which had "concerns that retail banking may not be working well for customers",<sup>12</sup> released the final report of its investigation into the retail banking market in August 2016. The CMA decided to incorporate the Open Banking Standard into its remedies, making it mandatory for the UK's largest banks<sup>13</sup> to open up their retail customer and SME account data.

Nine banks came under the scope of the CMA's order. They were required to make open data available through open APIs by 31 March 2017. They need to make shared data available through open APIs by the PSD2 implementation date of January 2018.<sup>14</sup> These banks are charged with setting the Open Banking Standard in collaboration with representatives of third parties and members representing the interests of consumers and SMEs.<sup>15</sup>

In addition to the tighter timeframe being enforced in the UK, there are two further main differences between PSD2 and the Open Banking Standard as introduced by the CMA.

**Figure 4. The 'opening up' of customer transaction data**



Source: Deloitte analysis

Firstly, PSD2 does not mandate the creation of common API standards. This means that individual banks may make their data available through different technical standards. This appears set to add an additional layer of complexity for account aggregation tools – complexity that the Open Banking Standard will mitigate in the UK.<sup>16</sup>

Secondly, PSD2 only opens up access to customer transactional data for specific institutions (see Figure 3), which must also be regulated PSPs. The CMA, on the other hand, may grant access to a broader range of third parties through its 'whitelisting' process (see Figure 4). Most notably, the CMA has recognised that price-comparison websites (PCWs) do not fall within the scope of PSD2. It will therefore set up separate whitelisting arrangements under which PCWs can become authorised to access customer data.<sup>17</sup>

PSD2's greatest impact will arguably be the opening up of bank-held customer account data to AISPs. If third-party AISPs gain significant traction, banks may lose their ownership of the customer interface.

### The impacts of the Open Banking Standard

The inherent threat to incumbent banks is the risk of commoditisation.

As it becomes easier for customers to switch between current account providers and shop around for other products based on price, incumbents are at risk of losing market share and seeing reduced profit margins.

Moreover, third parties may be able to create new propositions that meet unmet needs, using data to give the customer tangible benefit. As a result, incumbents could lose the primary banking relationship if customers increasingly choose to manage their finances via a third-party interface.

Of particular concern for banks would be third-party interfaces that allow customers both to manage their finances and to switch providers via one app. In this scenario, incumbents risk losing both market share and the primary customer relationship. As a result, they could be relegated to the status of commoditised product providers.

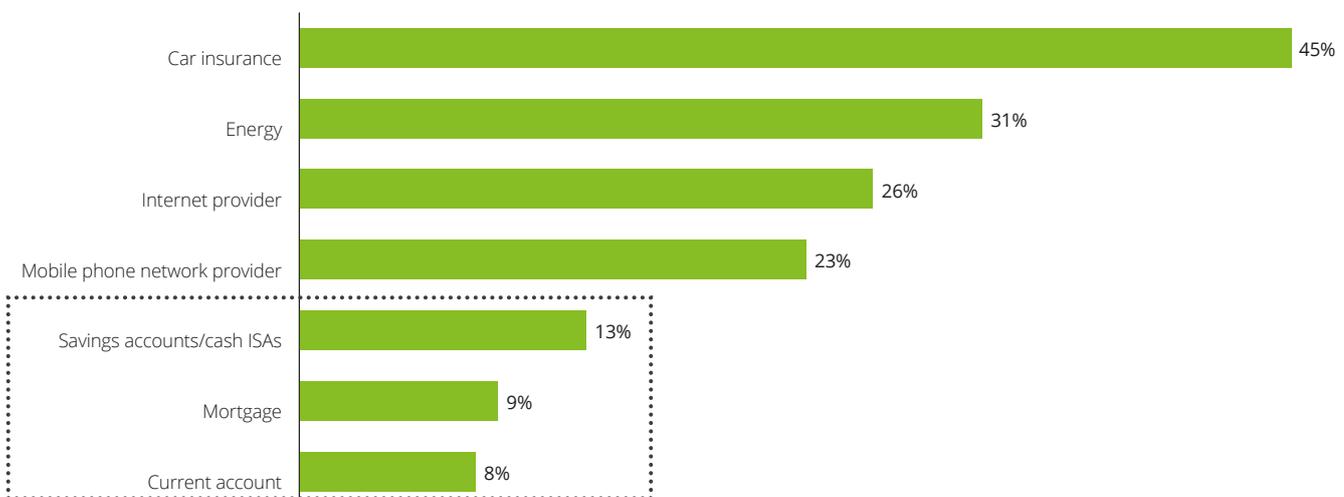
Anne Boden of Starling Bank believes that when “access to data is given to customers and they can choose the partners they want to work with in managing that data, it will have several impacts: it will create a market by making it easier to move between banks and try new products. This will generate more disruption in the market and allow new entrants to thrive”.

The CMA has two main aims in adopting the Open Banking Standard into regulation, namely:

- to make it easier for customers to switch current account providers, thus increasing competition
- “to change [the] nature of the customer journey itself by facilitating the emergence [of] a large scale of new service providers with different business models offering innovative solutions.”<sup>18</sup>

UK regulators have long been attempting to increase competition within the retail banking sector, particularly in relation to consumer and SME current accounts. For example, the Current Account Switch Service (CASS), launched in 2013, aimed to make it easier to switch current accounts. Despite this, the incidence of current-account switching remains low compared to equivalent moves in other industries and other financial products (see Figure 5).

**Figure 5. Proportion of customers who have switched supplier in different sectors in the last three years (as of February-March 2015)**



Source: Personal Current Account Investigation, GfK NOP, April 2015, p.44.  
 See also: [https://assets.publishing.service.gov.uk/media/555cabd0ed915d7ae2000007/PCA\\_Banking\\_Report.pdf](https://assets.publishing.service.gov.uk/media/555cabd0ed915d7ae2000007/PCA_Banking_Report.pdf)  
 Question: "In which, if any, of the following have you changed supplier within the last three years? If you do not have one of these services please say so."

By allowing third parties such as PCWs access to customer transaction data, the CMA hopes to drive competition by enabling customers to make personalised comparisons between accounts at different providers. This will help them choose which account would be best for them.

The opening up of data may also drive competition in other products. This is because it would mitigate one of the prime advantages enjoyed by incumbent banks: access to historical transaction data, which commonly allows incumbents to provide better offers on credit products, particularly for SMEs. Opening up this data to third parties would clearly level the playing field. Furthermore, the ensuing likely competition could also reduce banks' ability to cross-subsidise between customers, thereby reducing their profit margins.

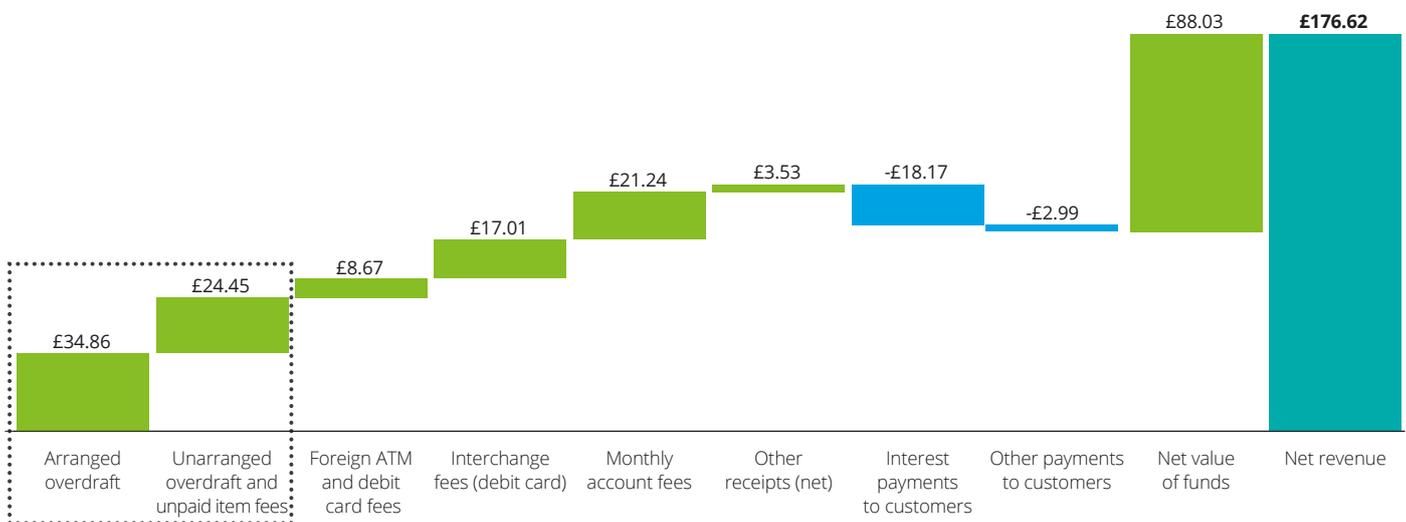
Moreover, armed with customer banking data, both banks and third parties could ultimately offer new propositions such as money-management and budgeting tools. There are also further opportunities for banks and third parties to offer personalised rewards and offers at merchants based on customer transaction history.

The CMA is particularly hopeful that its regulation results in services that help consumers avoid falling into and being hit by overdrafts. For example, access to customer transaction data could enable third parties to provide consumers with a line of credit, or even transfer funds automatically between their accounts, before they enter into overdraft.<sup>19</sup>

This could have a significant impact on banks' current account revenues: in 2014, overdraft fees accounted for 34 per cent of revenue per current account (see Figure 6). This impact may be further exacerbated by a reduced deposit base as wealthier customers shop around for better current account interest rates, so increasing the cost of funds for retail banks.

Open banking regulation, therefore, could lead to customers performing all their banking activities at different banks, using a third-party application that provides data-enabled tools to help them manage and optimise their finances.

**Figure 6. Analysis of personal current account (PCA) revenue, £ per main PCA, 2014**



Source: Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.104. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>

### Why will this be effective now?

Advances in technology and the evolution of the digital landscape, fuelled by the always-on interconnected web, are now enabling regulatory interventions that have the potential to drive truly revolutionary change.

In particular, the Open Banking Standard has been inspired by the rise of APIs in other industries. APIs define standardised methods for interaction with software systems. An apt metaphor is that of a plug socket that allows electrical devices to connect with the mains. In the same way, APIs allow mobile apps to 'plug into' third-party systems.

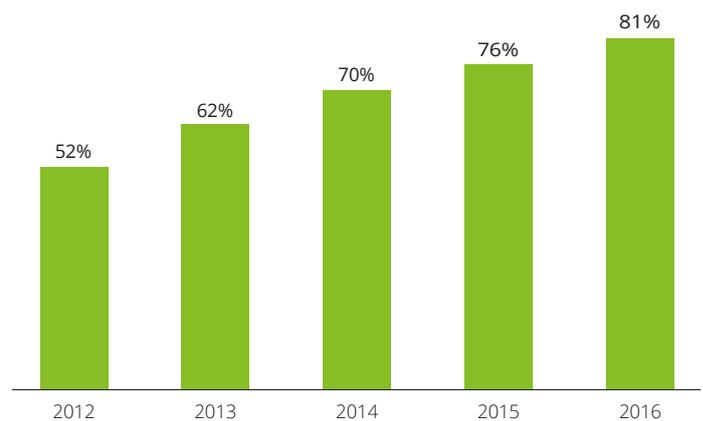
The rise in popularity among app developers of using APIs to incorporate third-party data highlights their potential for opening up customer banking data. As an example, Transport for London (TfL) provides live transport data feeds for third-party software developers.<sup>20</sup> A number of mobile apps plug into these data feeds to provide real-time transport information to customers via a proprietary interface. Account aggregators will be able to display customer banking data in exactly the same way under PSD2.

More broadly, the ever-increasing affordability (and therefore availability) of technology for consumers and businesses alike is enabling the open-banking developments prescribed in the PSD2 and Open Banking Standard regulations.

From a consumer standpoint, smartphone penetration has increased dramatically in recent years (see Figure 7), facilitating mobile access to applications and services for the majority of the UK population.

On the supply side, technologies such as 'Infrastructure-as-a-Service' (IaaS), 'Platform-as-a-Service' (PaaS) and 'Software-as-a-Service' (SaaS)<sup>21</sup> have allowed new tech-enabled entrants to enter the retail banking sector with lower IT overheads. They have also allowed them to respond more flexibly to changing market needs.

Figure 7. UK smartphone penetration, 2012-2016 (%)



Source: Deloitte Global Mobile Consumer Survey 2016 – UK Cut, There's no place like phone, Deloitte, 2016, p.26. See also: <https://www.deloitte.co.uk/mobileuk/assets/pdf/Deloitte-Mobile-Consumer-2016-There-is-no-place-like-phone.pdf>

These enterprise technology advances have therefore not only facilitated the rise of a number of banking challengers and FinTechs – they have also given them the nimble and interconnected IT architectures necessary to embrace fully the advantages that the opening up of banking could potentially give them. These advances are also available to incumbent banks; however, they face the challenge of grafting them onto their legacy systems.

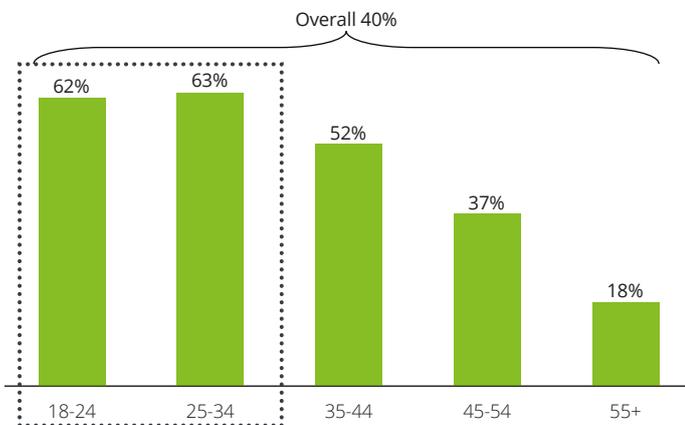
Advances in technology and the evolution of the digital landscape, fuelled by the always-on interconnected web, are now enabling regulatory interventions that have the potential to drive truly revolutionary change.

# Chapter 3 – Consumers – ready for change

None of the developments that regulators are hoping will result from open banking regulations will be achievable without a strong buy-in from consumers. Deloitte consumer research, conducted by YouGov,<sup>22</sup> reveals a strong latent demand among a technologically-savvy population for new and improved banking services. This could turn the potential outcomes detailed in the previous chapter into reality.

GB customers' acceptance and adoption of digital solutions in banking are relatively high. They are particularly strong among millennials, nearly two-thirds of whom have a mobile banking app (see Figure 8) compared with 40 per cent of all respondents surveyed.

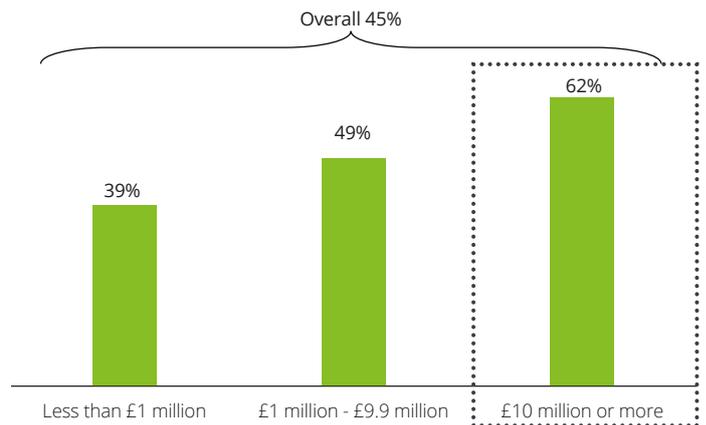
**Figure 8. Mobile app penetration by age group (%), GB consumers**



Source: YouGov plc 2016 © All rights reserved, Deloitte analysis  
 Base: All GB adults (nationally representative), 2,050  
 See appendix for survey questions

Uptake of mobile banking apps is marginally higher among SMEs, 45 per cent of which have a mobile banking app. Mobile app penetration is particularly high (62 per cent) for those GB SMEs with a turnover of £10 million or above (see Figure 9).

**Figure 9. Mobile app penetration by annual turnover (%), GB SMEs**

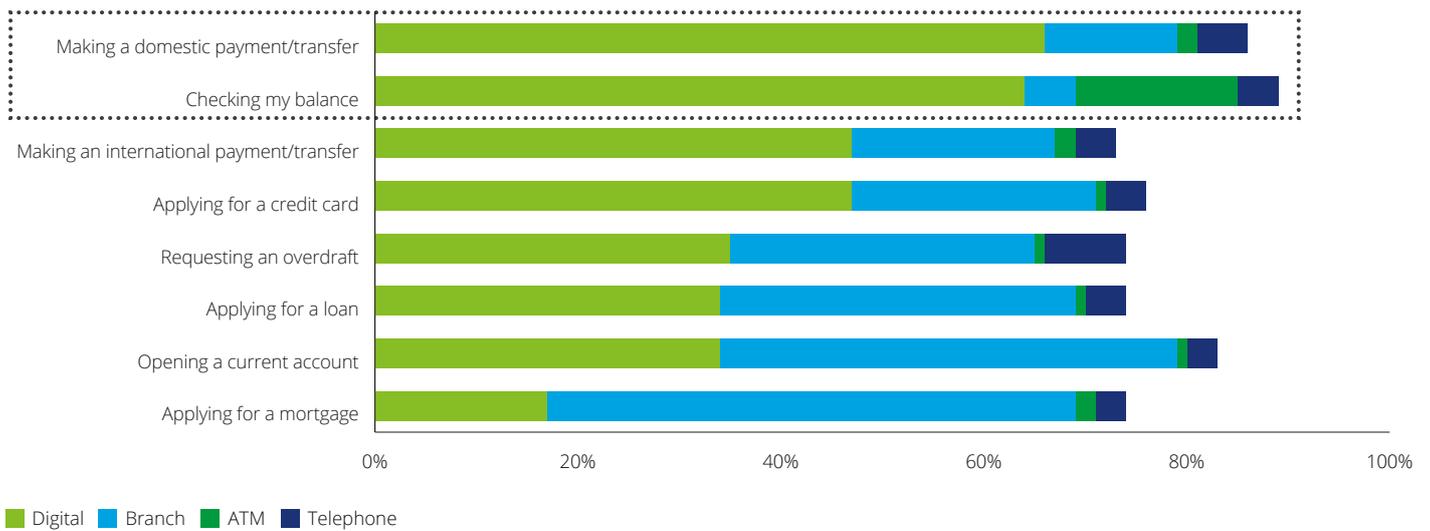


Source: YouGov plc 2016 © All rights reserved, Deloitte analysis  
 Base: All GB SME senior decision makers (nationally representative), 1,003  
 See appendix for survey questions

Furthermore, digital channels (such as laptop, tablet and smartphone) are now the first port of call for customers' day-to-day banking needs. They are preferred by 66 per cent of consumers for 'making a domestic payment/transfer' and 64 per cent for 'checking their balance' (see Figure 10 overleaf).

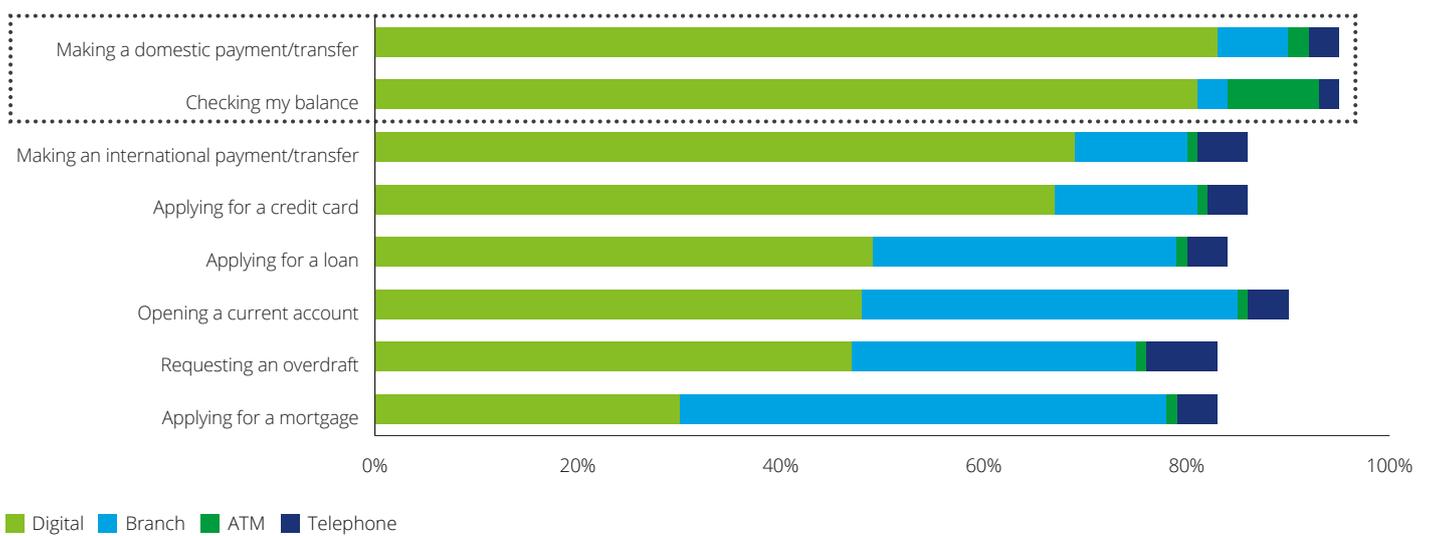
This trend is even more prominent among SMEs. Digital channels are preferred by 83 per cent of SME senior decision makers for 'making a domestic payment/transfer', and by 81 per cent for 'checking their balance' (see Figure 11 overleaf).

**Figure 10. Preferred channels for banking services (%), GB consumers**



Source: YouGov plc 2016 © All rights reserved, Deloitte analysis  
 Base: All GB adults (nationally representative), 2,050  
 See appendix for survey questions

**Figure 11. Preferred channels for banking services (%), GB SMEs**



Source: YouGov plc 2016 © All rights reserved, Deloitte analysis  
 Base: All GB SME senior decision makers (nationally representative), 1,003  
 See appendix for survey questions

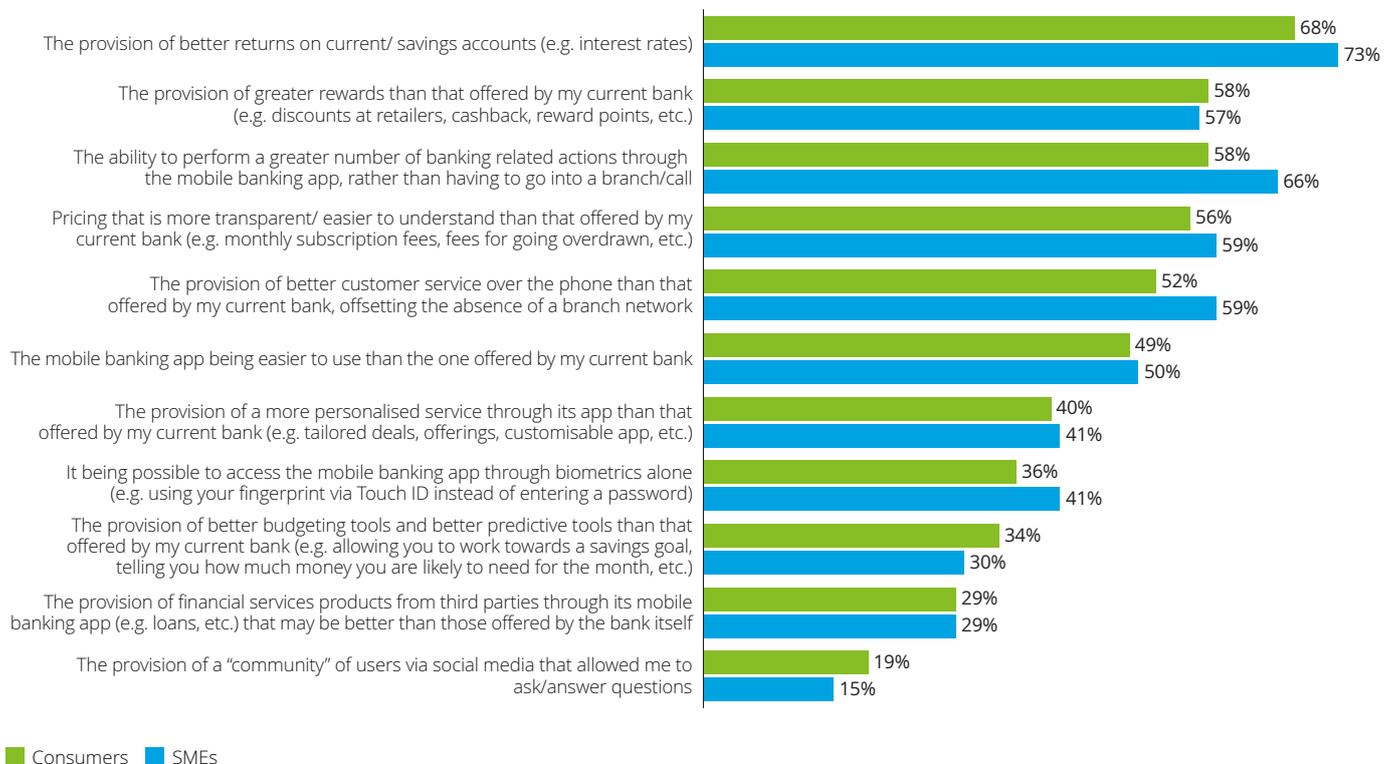
**A new way of looking at banking**

Our consumer research with YouGov shows that customers and small businesses are starting to look at banking in a different way. Based on our research, we believe that new entrants, or incumbents who embrace digital transformation, can differentiate themselves by offering an improved customer proposition that provides greater pricing transparency and a better user experience.

When we asked GB consumers and SMEs with a mobile app about the factors that may persuade them to switch to a mobile bank (see Figure 12):

- 56 per cent rated 'pricing that is more transparent and easier to understand than that offered by current bank'
- 58 per cent rated the 'ability to perform a greater number of banking-related actions through the mobile banking app'
- 49 per cent rated 'the mobile banking app being easier to use than the one offered by my current bank'.

**Figure 12. Factors that would persuade people to switch to a mobile-only bank (%), GB consumers and SMEs with a mobile banking app**



Source: YouGov plc 2016 ©All rights reserved, Deloitte analysis  
 Base: All GB adults with a mobile banking application ('app') from their main bank on their smartphone (nationally representative), 805; All GB SME senior decision makers with a mobile banking application ('app') from their main bank on their smartphone (nationally representative), 448  
 See appendix for survey questions

In addition, 34 per cent of these consumers also rated the availability of such tools as an important factor that may persuade them to switch to a mobile-only bank (see Figure 12). Moreover, 46 per cent of current users of banking apps told us they would welcome some of the potential new value-added services available via their banking app enabled by open data (see Figure 13). We believe that these numbers are high in the context of the relative infancy of such innovation and generally low customer engagement.

More specifically:

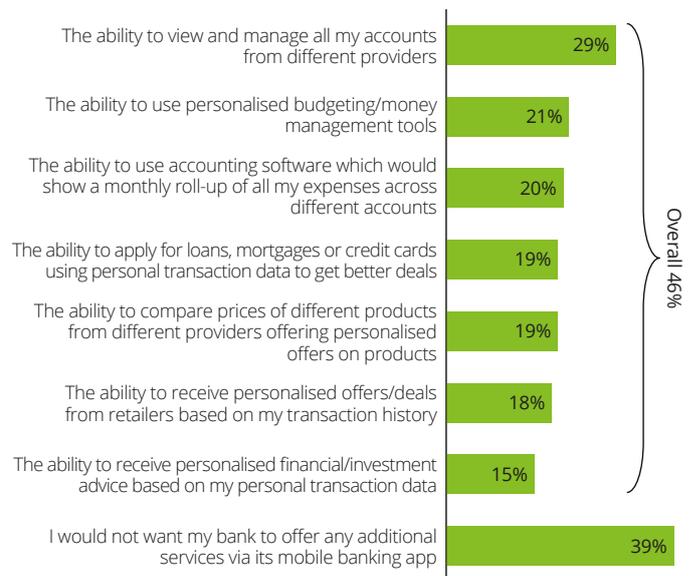
- 29 per cent would value the ‘ability to view and manage accounts from different providers’
- 21 per cent would value the ‘ability to use personalised budgeting/money management tools’
- 20 per cent would value the ‘ability to use accounting software which would show a monthly roll-up of all my expenses across different accounts’.

Given the context of generally low engagement and limited real-life examples, consumers are also relatively open to using an interface provided by a non-traditional provider to access their banking services. This suggests that the potential developments enabled by open-banking regulation may be welcomed by customers and could see significant uptake (see Figure 14).

Customers are currently more accepting of non-traditional players who already have a presence in banking, such as major retailers and digital payment providers. However, we also note a reasonable appetite for services from institutions such as major tech companies and telcos that to date have had little or no presence.

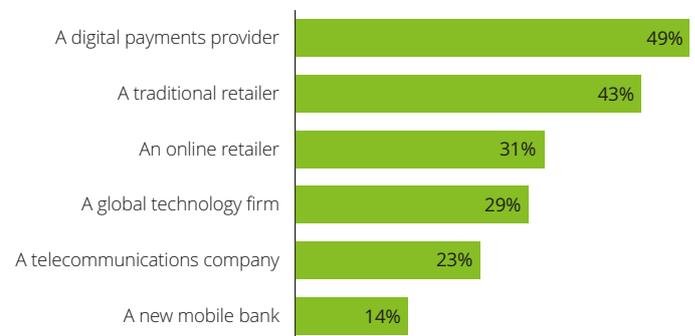
Consumers are relatively open to using an interface provided by a non-traditional provider to access their banking services. This suggests that the potential developments enabled by open-banking regulation may be welcomed by customers.

**Figure 13: Appetite for value-added mobile banking services (%), GB consumers with a mobile banking app**



Source: YouGov plc 2016 ©All rights reserved, Deloitte analysis  
 Base: All GB adults with a mobile banking application ('app') from their main bank on their smartphone (nationally representative), 805  
 See appendix for survey questions

**Figure 14: Trust in organisations to provide a mobile banking interface (%), GB consumers with a mobile banking app**



Source: YouGov plc 2016 ©All rights reserved, Deloitte analysis  
 Base: All GB adults with a mobile banking application ('app') from their main bank on their smartphone (nationally representative), 805  
 See appendix for survey questions

# Chapter 4 – How will the retail banking market evolve?

As we explore earlier in this report, opening up customer transaction data is likely to lead to increased competition in UK retail banking and facilitate new customer propositions. We believe this will just be the beginning of the impact, however. In the longer term, we expect open banking to facilitate a much more radical transformation of the sector, one that completely changes the dynamic of the UK retail banking landscape and the retail banking business model itself.

As we have already suggested, opening up customer banking data via APIs could allow customers to shop around for the best deals, using a single interface to switch seamlessly between different banking product providers, from incumbents to FinTechs.

As part of this progression, we believe the long-term future of UK retail banking is one where banking products, services and functions are opened up to third parties. As customers access products and services from different providers via their chosen banking interface, banking products and services may be unbundled from distribution.

We believe the banking model of the future, therefore, will be **marketplace banking**.

Current banking operating models are largely closed, whereby banks own the customer interface, through which they offer their own products. These interfaces are highly integrated with the services offered, which range from current accounts to savings accounts, borrowing and protection products.

## Marketplace banking

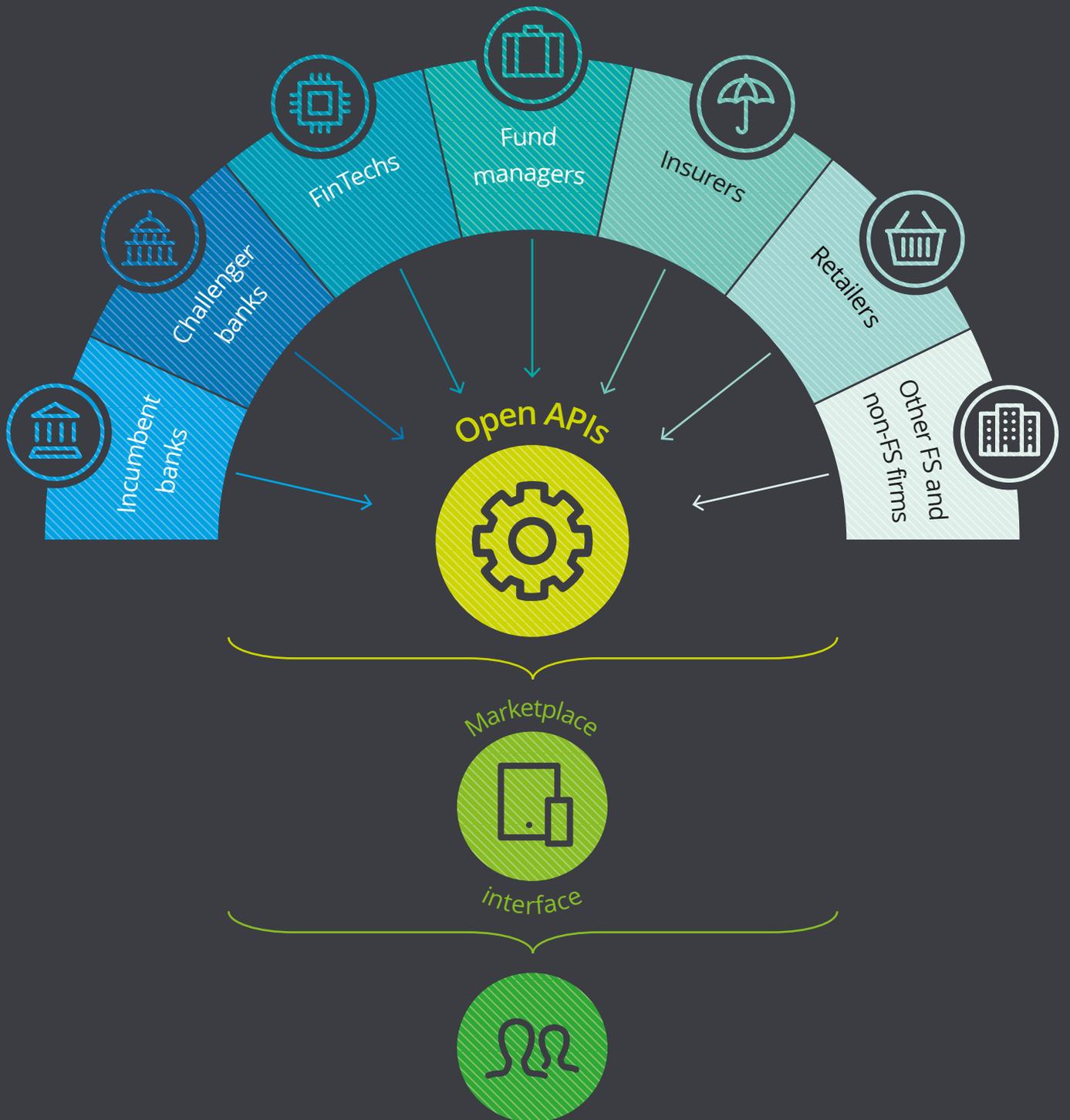
Current banking operating models are largely closed, whereby banks own the customer interface, through which they offer their own products. These interfaces are highly integrated with the services offered, which range from current accounts to savings accounts, borrowing and protection products.

FinTechs and challengers have already begun to unpick this model at the edges, with new players entering niches (such as TransferWise in the payments space).

A potential shift to the marketplace model is more far-reaching, however, and puts customer needs at the heart of banking.

In marketplace banking, the traditional banking business model is transformed into a data-intensive, platform-based marketplace, where several financial services providers continually compete to offer customers tailored, good-value products. As a result, traditional bank services are augmented by a variety of offerings through an ecosystem of providers (see Figure 15).

Figure 15. Marketplace banking



Beyond simply moving service provision from one available channel to another, marketplace participants will need to understand what customers want from their finances and their banking relationships.

We expect the marketplace interface to give consumers access to highly personalised 'concierge banking' services that exploit the vast swathes of customer data to which such an interface would have access. This would go beyond money management, budgeting tools and savings goals; it would also give customers insight into how best to optimise their finances, whether by reducing their cost of credit or by enabling them to get better returns on their savings. That said, this would require compliance with many different pieces of regulation, which could prove complex.

Banks also have an opportunity to become the platform for other, adjacent, services that involve multiple stages and providers, including banks, which can create friction for customers. By establishing an ecosystem of providers, banks may be well placed to centralise these stages via one interface to provide a seamless, holistic customer experience.

There are a number of potential examples. Buying a home, for example, involves a number of different players, including banks, with which homebuyers have to engage separately. Banks could bring together estate agents, solicitors, mortgage brokers and more via one interface to deliver a single home-buying service. Other areas we believe that banks could move into include car purchasing and foreign travel.

Banking customers tend to hold an array of financial products from multiple providers, ranging from insurance to investments to pensions. However, they do not think of their financial products as being independent of one another, but rather as tools that work together to enable their lifestyle. The marketplace interface would probably also give them an important (and otherwise lacking) holistic view of their financial products.

This holistic view of a customer's financial affairs would position marketplace interfaces ideally to offer automated financial advice, which we believe has great potential. In our recent research, *The next frontier: the future of automated financial advice in the UK*, we found that up to 15 million GB adults would pay for automated advice in at least one of six<sup>i</sup> major financial markets.<sup>23</sup>

However, we believe that there is no single financial services provider with an advantage across all these markets. Marketplace interfaces, on the other hand, are ideally placed to offer consumers a single point of purchase for these advice markets and to give providers access to their customers.

There are also myriad possibilities for such interfaces to integrate with firms from outside the financial services sectors, such as retailers who could offer personalised reward schemes based on customers' spending histories.

The interface provider could use banking and non-banking data to derive meaningful insights into customer behaviour. This would enable them to offer additional value, going beyond explicit requirements and tapping into latent requirements which may even extend beyond traditional financial services. The marketplace interface would also enable the anticipation of customer needs in given circumstances, even before customers explicitly prompt their bank about a specific need.

Deloitte Digital's prototype, #ConnectedBank, shows how we see the customer banking experience evolving as these developments take shape. Watch the video at <https://vimeo.com/155841332>.

Beyond simply moving service provision from one available channel to another, marketplace participants will need to understand what customers want from their finances and their banking relationships.

<sup>i</sup> The advice markets we examined are simple financial planning, investing, investing regular pension saving contributions, at-retirement, mortgages and protection

### Strategic options for incumbents

The pace of evolution towards marketplace banking may be uncertain, but the endgame is becoming clearer. This raises strategic questions for incumbents. The key risk they face is that new players usurp their ownership of the customer interface. Banks will therefore need to choose between defending their ownership of the interface and playing a different role in the banking ecosystem. This may entail a shift from the current net interest margin model to one based on fees or profit share.

As cross-subsidisation becomes more difficult, owing to the tailored product pricing and greater ease of switching enabled by open banking, banks may need to make decisions about what services to offer and which customers to target. They may need to accept some short-term risk of loss of income, with a long-term aim of operational and financial gains that could mitigate the threat from competitors.

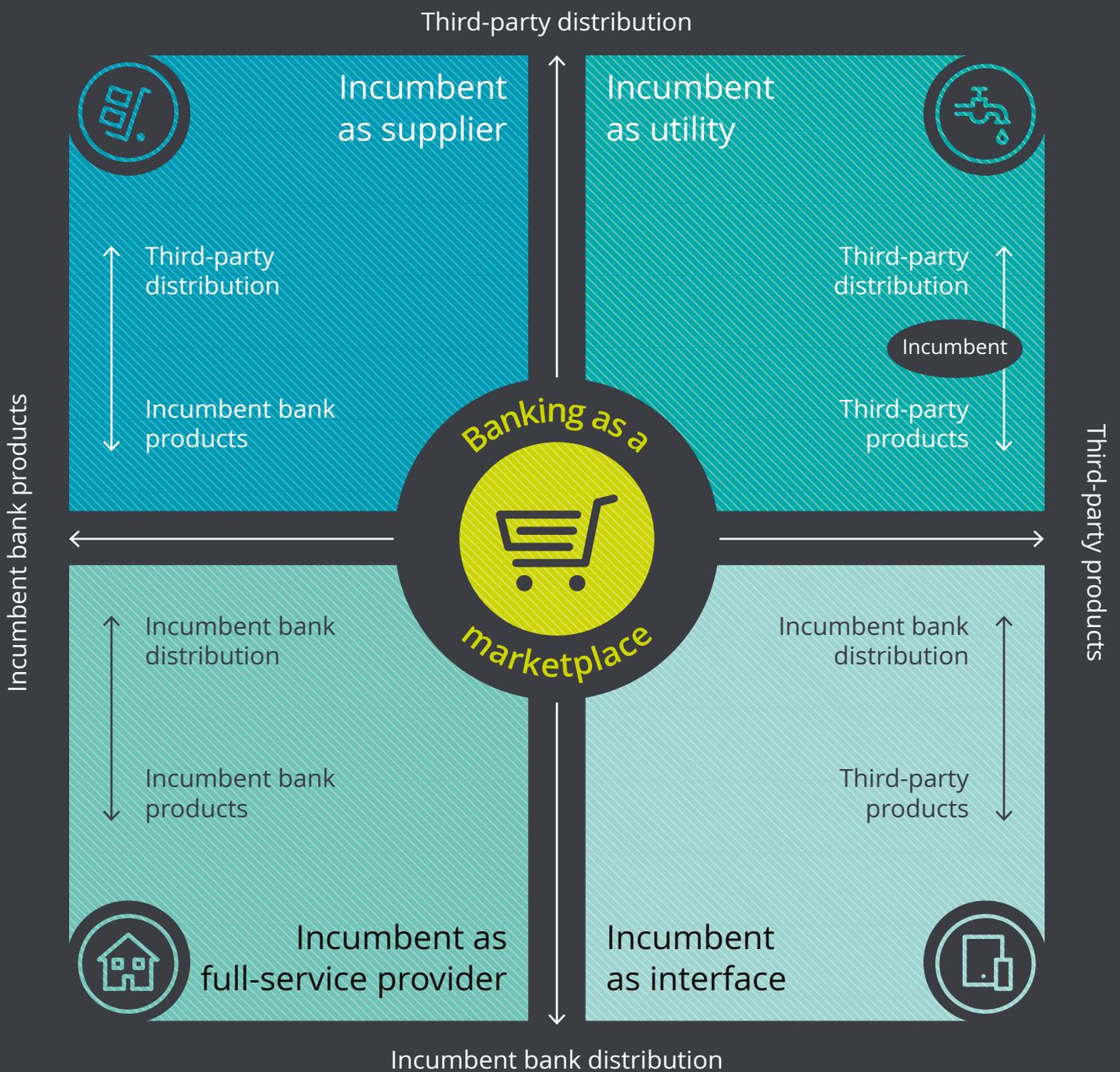
Embracing change will also bring new opportunities for incumbents. Acquiring and harnessing data more effectively could yield significant benefits, including improved existing propositions, the development of new products, including in adjacent areas, and greater product customisation. All of these could drive increased customer engagement.

Banks could also bundle their own products with select offerings from innovative third parties. This could allow them to broaden their customer offer more quickly – and potentially more cheaply. The increased speed of innovation and wider choice of products on a bank's platform could drive higher loyalty among existing customers and accelerate new customer acquisition. It is also likely that banks will develop new fee-based revenue streams as third-party players pay to access their infrastructure.

We believe banks have four broad strategic options, two of which involve losing control of the customer interface as products and distribution become unbundled (see Figure 16).

**Banks will therefore need to choose between defending their ownership of the interface and playing a different role in the banking ecosystem. This may entail a shift from the current net interest margin model to one based on fees or profit share.**

Figure 16: Strategic choices for UK incumbent retail banks in a marketplace banking landscape



### Option 1: Incumbent as full-service provider

This model represents the status quo, whereby banks continue to offer a full range of services with no or limited API integration with TPPs. This could be an option for select dominant players with strong brands. This option is most likely to succeed where the incumbent bank focuses its energies on a specific niche segment or product in which it can differentiate its products from those available via the marketplace interface.

To remain competitive, players wishing to pursue this option will need to use customer data much more effectively and to adapt their pricing, propositions and user experience.

### Option 2: Incumbent as utility

In this model, the incumbent bank would no longer provide either the user interface or banking products. It would instead earn revenue from providing utility services to banking interfaces and banking suppliers. For example, it might offer use of its payment gateways to other players or provide them with background functions such as Know Your Customer (KYC) and Anti-Money Laundering (AML) checks. This is analogous to the revenue earned by telcos for enabling the streaming and provision of media content through their infrastructure.

While this is unlikely to be a preferred choice for incumbents, it may be an option for banks without a strong brand that struggle to provide a strong user interface or price-competitive products.

### Option 3: Incumbent as supplier

In this model, the bank surrenders control of the customer interface and competes by using the strengths of its products to gain access to customers through third-party and competitor platforms. Banks will need to choose the service areas in which they are best placed to compete.

These products will be exposed to much more competition than in a closed market environment. In addition, these players will also need to factor in any potential fees that are payable to access third-party platforms.

### Option 4: Incumbent as interface

In this model, banks will retain the customer interface and remain the main point of interaction for customers and their finances; however, they will no longer provide proprietary banking products and services to customers. Instead, they will offer products and services via their interface from a number of different providers, including incumbent banks, challengers and FinTechs, to allow customers to choose their preferred third-party products. Customers would benefit from higher product and price transparency, as well as greater choice. This is arguably already happening in the investment management industry with the rise of retail investment platforms.

This option would require banks to adopt a new business model. As they may no longer take deposits or lend out proceeds, they are unlikely to make a net interest margin. Instead, they would generate fee-based revenue streams from third parties wishing to use the interface. It is also likely that they would seek to monetise customer data, subject to regulatory approval, for example by sharing with retailers wishing to offer rewards or discounts.

Incumbents considering this route would benefit from strong brands. This is the most challenging and demanding option, however, in terms both of the technology required for real-time integration with an ecosystem of third-party providers and the data-analytics capabilities they would require.

### Finding a happy medium

These four options are not mutually exclusive. We anticipate that incumbents looking to own the user interface would also continue to provide proprietary products and services, via proprietary as well as third-party interfaces. They will need to sharpen their own proposition to remain competitive, however, and may decide to withdraw from certain products and services where they are unable to do so.

Given their access to deposits, strong brands and expertise, incumbent banks that embrace the opportunities of the marketplace banking model to provide personalised, innovative products and to enhance their offering by collaborating with other players in the ecosystem will enjoy a significant first-mover advantage. As a result, incumbent banks have a real opportunity to win the battle for the customer interface and, therefore, the customer relationship.

One example of a bank looking at operating in a non-traditional way is mobile-only bank Monzo.

# Monzo case study

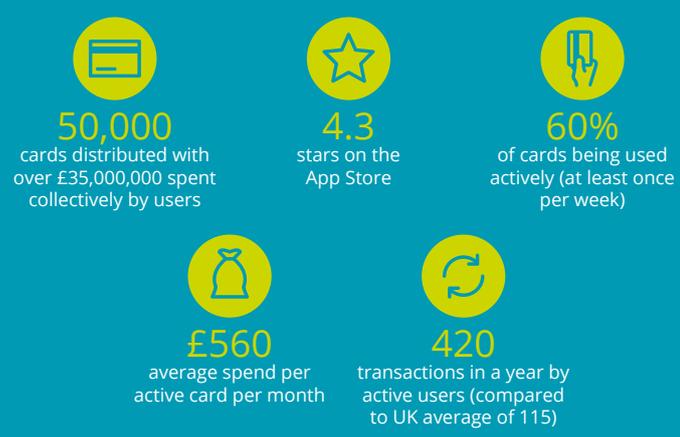
## The story so far

Monzo (formerly Mondo) was founded in 2015 with a view to building a banking experience centred around the smartphone.

At the end of 2016, Monzo's offering consisted of a prepaid card and a mobile app through which this could be topped up. The app also uses transaction data to provide other services, such as categorising spending and budgeting tools. Customers can set monthly budget targets for different categories of spending, and the app sends users notifications if they are spending over budget.<sup>24</sup>

Monzo cardholders have been using their cards actively (see Figure 17) when compared to the UK debit card averages of fewer than ten transactions per month and an average monthly spend of £386 (September 2016).<sup>25</sup> Having become a fully licensed bank in April 2017, Monzo now plans to roll out current accounts with debit cards.<sup>26</sup>

Figure 17: Monzo metrics, October 2016



Source: Monzo

## Building a bank

Monzo made the decision to build its technology platform in-house from scratch, using open-source technologies rather than buying off-the-shelf products from vendors. It also uses plug-and-play technology such as cloud-based IaaS for hosting servers and SaaS for data warehousing. Monzo believes that this approach will enable it to scale rapidly and efficiently, and allow it to process data and transactions in real time rather than in batches.

## A one-stop shop?

Rather than launching a full suite of proprietary banking products, Monzo plans to focus on its core offering – namely current accounts and debit cards. In the longer term, it plans to offer additional products and services by using open APIs to transform its platform into a marketplace, where customers can use and purchase third-party solutions through the mobile app (see Figure 18).

Figure 18: Monzo as a marketplace



Source: Monzo

Monzo believes it can provide additional value to consumers and convince them to switch at scale through allowing individuals, financial services providers and others to plug in via APIs. The bank pictures a future where:

- surplus money can be invested in a marketplace lending platform with one click
- individuals can choose from a number of mortgage providers that offer personalised deals based on transactional data held by Monzo
- international money transfers can be made in two clicks and customers can select from a range of providers
- companies can verify an individual's identity rapidly by connecting to Monzo through an API rather than requiring paper documentation.<sup>27</sup>

As Tom Blomfield, Monzo's co-founder and CEO, told Deloitte, "If we can use data to become the primary interface to your money and solve your problems, we can provide the best products at ultra-low costs".

# Chapter 5 – What will incumbents need to do to thrive in an open banking future?

In addition to choosing their strategic options, banks are learning to adapt to a changed marketplace by developing new skills. Perhaps most importantly, they are increasingly learning to operate in a shared ecosystem, moving away from the currently closed environment to one where they need to work more closely with third parties.

The ability to exploit and use customer data in innovative and more individually tailored propositions will be paramount. Banks will also need to engender a shift in culture towards a 'fail fast and learn quickly' mentality and an agile way of working that encourages experimentation.

## Data is the fuel

Incumbent banks have traditionally been unable to make full use of the data they have at their disposal. It is undeniable that they are strong in areas like risk and credit scoring. However, their ability to achieve a holistic view of the customer is hindered by two factors:

- data resting in product 'silos'
- legacy IT applications that do not communicate well enough and often struggle to process big data, particularly unstructured data (such as video, speech and images).

Banks that invest in capabilities to enable data collection, analysis and decision-making based on data insights will add value to consumers by building personalisation into products, services and customer interactions.

Such banks can use cognitive analytics in the form of both insight and engagement. First, cognitive insight can be used to detect key patterns and relationships in real time from multiple data sources, such as financial history and social media, to drive deep actionable insights. This will also help banks to better understand the way customers process information and make decisions.

Cognitive engagement then uses these insights with individual customers to offer personalised services. This approach could eventually drive actions in real time; for example, by using deep understanding of spending patterns, banks could flex overdraft limits for individual customers. This may help banks improve customer satisfaction and profitability.

Banks could also use third-party data to harness the power of data analytics more fully. Options could include geolocation services through APIs and big data analytics tools that can analyse vast swathes of structured data (i.e. data that is highly organised and easy to store and analyse by using simple algorithms and search operations) and unstructured data.

Taking this approach could allow banks to meet needs that customers may not have realised they had. For example, a bank could offer a pre-approved loan (subject to regulation around data protection, loan affordability and customer vulnerability) at the point of sale. This would involve using:

- customer's geo-location (retail outlet)
- historical transaction data (purchase history)
- credit standing (credit score).

A more advanced use of data could also enable banks to implement artificial intelligence (AI) solutions.

Cognitive automation through AI combines machine vision, speech recognition and machine learning with breakthroughs in computing power. As a result, it can automate processes through interpreting facts, taking decisions and adapting to change through self-learning.

For example, virtual assistants powered by AI are beginning to be adopted in the financial services industry. They are most commonly used to answer the basic queries of customers looking for a product or solution, but are evolving to answer more complex financial queries. Kensho Technologies' Warren AI software, for example, can provide responses to complex investment queries such as: "What happens to the share prices of energy companies when oil trades above \$100 a barrel and political unrest has recently occurred in the Middle East?"<sup>28</sup>

Such technologies may be implemented in the form of text-based ‘chat bots’, which can quickly and efficiently address customer needs while enabling the bank to reduce costs. They can learn by analysing data from previous interactions to better recognise the needs of the customer.

Banks may also use conversational interfaces to provide virtual assistants that can ‘talk’ naturally to deliver more of a personal touch.<sup>29</sup> Such interfaces use natural language-generation technologies that produce language as an output on the basis of data input.<sup>30</sup>

Another example in which data can help banks to leverage AI solutions is in reducing fraud and fighting crime. By analysing a multitude of behavioural data to learn about how customers normally interact with their bank, AI can immediately identify and verify customers. For example, AI can identify irregularities in how a customer taps and swipes on their smartphone by comparing to historical data, thus enabling superior customer identification.<sup>31</sup> Using location intelligence to augment AI can allow banks to identify transactional anomalies, verify customers’ place of business and flag sensitive cross-border conditions and proximity risk.

The ability to exploit and use customer data in innovative and more individually tailored propositions will be paramount. Banks will also need to engender a shift in culture towards a ‘fail fast and learn quickly’ mentality and an agile way of working that encourages experimentation.

### Leadership and culture

Adapting to a digital marketplace will require more from incumbents than simply upgrading their IT architectures and embracing new technology. To succeed, they will need to reshape their organisational structures and cultures from the top down. Innovation will need to be placed at the very heart of the business, and be encouraged at all levels of the organisation.

Being ‘digital’ is very different from the traditional way of doing things in financial services. Deloitte research suggests financial services firms’ legacy cultural attributes include a protracted response to change, ‘silo-ed’ working styles and a hierarchical organisational structure.<sup>32</sup>

The Deloitte Center for Financial Services report *Digital transformation in financial services – The need to rewire organizational DNA* highlights four main digital characteristics that incumbent banking leaders will need to implement in their organisations in order to thrive in an open, digital marketplace. These are based on Deloitte’s *Digital DNA* framework, which outlines the traits and characteristics of ‘being’ digital, and what it takes for businesses to thrive in a digital world:<sup>33</sup>

- introducing an agile, ‘fail fast and learn quickly’ culture wherein employees are encouraged to be innovative and even disruptive
- fostering internal collaboration by eroding department and product ‘silos’ and ensuring information is shared throughout the business – Deloitte believes implementing a ‘network of teams’ approach may help incumbents to achieve this<sup>34</sup>
- moving to a less hierarchical organisational structure, enabled by becoming more collaborative, where responsibility for business decisions is more widely distributed
- taking a balanced approach to risks and opportunities, by encouraging controlled risks in the right circumstances, while remaining cautious when engaging in high-risk activities.

### Working within an ecosystem

In addition to addressing these issues, incumbent banks will also face the cultural challenge of working within an ecosystem with FinTechs and other tech-enabled firms. This will be a learning process for both sides.

When collaborating with new entrants the key challenge for incumbent banks will be in adapting to the agile way of working that is commonplace within FinTech and technology firms in general. However, FinTechs in turn often underappreciate the complexity of legacy systems, as well as regulatory requirements, which can constrain the deployment of new solutions and technologies at scale.

#### Deloitte and 500 Startups

Initiatives such as Deloitte's partnership with 500 Startups are helping to bridge the gap between incumbents and FinTechs by enabling collaboration. This programme matches incumbents with FinTech start-ups to co-develop proofs of concept, helping incumbents develop the capability to effectively run an innovation portfolio, as well as scale and integrate successful ventures back into the core business.

Incumbent banks will need to be strategic when identifying with whom to collaborate within the ecosystem; they will need to choose partners that can add value, either by augmenting existing propositions or adding new ones. Thorough due diligence will also be required to minimise any potential risk to incumbent banks' security and brands.

The ideal FinTech partner for incumbents would be one whose solution can yield quick dividends, but with the scope to add longer-term value to the bank. To fully realise the potential of the relationship, incumbents must also ensure they buy into the longer-term vision of their FinTech partners.

Incumbents have a range of options in terms of their longer-term relationships with individual FinTechs. These can range from simply sharing information to partnering closely together to drive a solution forward. Incumbents will also need to think about how to structure their relationships with their FinTech partners for optimal results – options include joint ventures, strategic stakes and outright acquisitions. Management structures and responsibilities will need to be clearly defined to maximise benefits to both parties.

Incumbents should aim to engage with local FinTechs in order to build up these relationships. UK retail banks are uniquely positioned both to benefit from and foster the strength and talent of London's booming FinTech industry.<sup>35</sup> They can ensure they capitalise on these strengths by attending meet-ups, participating in hackathons, and by working with bodies such as Innovate Finance.<sup>36</sup>

Banks would also benefit from looking for FinTech partners in other jurisdictions, as FinTechs from different 'hubs' have distinct strengths and weaknesses.<sup>37</sup> For example, *Deloitte's Connecting Global FinTech Interim Hub Review 2017* suggests that UK incumbent banks could benefit from the innovations fostered by the pro-FinTech regulatory environment in Singapore,<sup>38</sup> the technological talent pool in Tel Aviv<sup>39</sup> and the established expertise in Silicon Valley.<sup>40</sup>

When collaborating with new entrants the key challenge for incumbent banks will be in adapting to the agile way of working that is commonplace within FinTech and technology firms in general. However, FinTechs in turn often underappreciate the complexity of legacy systems, as well as regulatory requirements, which can constrain the deployment of new solutions and technologies at scale.

# Conclusion

Customer expectations in financial services are increasingly being conditioned by their experiences in other industries that are further along the digital curve. In retailing, for example, customers have overcome their early inhibitions about buying fashion online driven by styling and fit concerns (and indeed industry scepticism). This has been aided in no small part by flexible return policies, pioneered by new market entrants rather than incumbents, which have gradually become the industry norm.

We believe the emergence of marketplace banking and the ensuing fight to capture the customer interface between incumbents and new entrants alike will drive similar pressures for change.

Even in the context of banking's currently low switching rates and the need for greater customer reassurance in money matters, we believe that banks will need to use customer data to:

- improve the user experience
- tailor services and offers to customers
- anticipate their future needs.

This will necessitate a shift in focus away from individual product profitability. Instead, it will move to identifying gaps in the bank's offering based on customer needs and determining whether these can be filled internally or via partnerships with TPPs.

Potential new entrants, ranging from relatively traditional players like PCWs to non-traditional players such as FinTechs and technology giants, are likely to adopt this customer-centric approach, forcing a shift in industry mindset and practices. This is likely to lead to a blurring of industry boundaries, with non-traditional players moving into banking and banks potentially moving into non-traditional services.

Incumbent banks have much to consider if they are to thrive in this future landscape. However, they cannot afford to stand still. By addressing their leadership and culture, improving their ability to optimise their use of data and embracing opportunities to automate, incumbent banks will be well positioned to maintain the customer relationship and, ultimately, to win in an 'open banking' world.

By addressing their leadership and culture, improving their ability to optimise their use of data and embracing opportunities to automate, incumbent banks will be well positioned to maintain the customer relationship and, ultimately, to win in an 'open banking' world.

# Appendix

**Figure 8:** Do you have a mobile banking application ('app') from your main bank on your smartphone? By main bank, we mean the bank that provides your primary current account (e.g. the account into which your salary/income is paid).

**Figure 9:** Do you have a mobile banking application ('app') from your main bank on your smartphone? By main bank, we mean the bank that provides your primary current account (e.g. the account into which your salary/income is paid). Note: Chart does not show the following categories: "First year of trading", "Don't know", "Prefer not to answer", which accounted for 20, 37 and 79 respondents respectively.

**Figure 10:** Which, if any, of the following is/would be your most preferred choice for each of the following banking services? Note: Percentages shown in the "digital" category are the aggregate of consumers choosing either "Banking via PC/laptop", "Banking via tablet" or "Banking via smartphone" as their preferred choice for each banking service. Percentages for each banking service do not total 100% as chart does not show the following options: "None of these", "Don't know".

**Figure 11:** Which, if any, of the following is/would be your most preferred choice for each of the following banking services? Note: Percentages shown in the "digital" category are the aggregate of SMEs choosing either "Banking via PC/laptop", "Banking via tablet" or "Banking via smartphone" as their preferred choice for each banking service. Percentages for each banking service do not total 100% as chart does not show the following options: "None of these", "Don't know".

**Figure 12:** Please imagine that you were considering whether or not to switch your primary current account, from your main bank to a mobile-only bank that offered a full suite of banking products. If you have already done this, please think about what made you switch. On a scale of 1 to 5, where 1 is "Not at all important" and 5 is "Very important", how important would each of the following factors be for you in persuading you to switch? By main bank, we mean the bank that provides your primary current account (e.g. the account into which your salary/income is paid). Note: Chart shows proportion of respondents selecting 4 or 5 for each category.

**Figure 13:** Which, if any, of the following additional (value-added) services would you want your main bank to offer via its mobile banking app? (Please select all that apply). By main bank, we mean the bank that provides your primary current account (e.g. the account into which your salary/income is paid). Note: Chart excludes the following options: "Other", "Don't know". "Overall" indicates the proportion of respondents selecting at least one of the value-added mobile banking services listed.

**Figure 14:** Please imagine that each of the below types of organisation provided a mobile app that allowed you to manage your financial accounts and services, including your primary current account... On a scale of 1 to 5, where 1 is "Would not trust at all" and 5 is "Would trust entirely", how much would you trust each of the following types of organisation to provide a mobile app that allowed you to access and manage your financial accounts and services (e.g. bank accounts, credit cards, loans etc.)? Note: Chart shows proportion of respondents selecting 4 or 5 for each category.

# Endnotes

1. Project Innovate and Innovation Hub, Financial Conduct Authority, 11 May 2015. See also: <https://www.fca.org.uk/firms/project-innovate-innovation-hub>
2. The Future of Financial Services, World Economic Forum and Deloitte, June 2015, p.13. See also: [http://www3.weforum.org/docs/WEF\\_The\\_future\\_of\\_financial\\_services.pdf](http://www3.weforum.org/docs/WEF_The_future_of_financial_services.pdf)
3. FinTech and society – FinTech for the greater good?, Deloitte, April 2017. See all: <https://www2.deloitte.com/uk/en/pages/financial-services/articles/fintech-and-society.html>
4. Marketplace lending – A temporary phenomenon?, Deloitte, May 2016, p.23. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-fs-marketplace-lending.pdf>
5. Directive (EU) 2015/2366 of the European Parliament and of the Council, 25 November 2015. See also: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2366>
6. Payment Services Directive: frequently asked questions, European Commission, 8 October 2015. See also: [http://europa.eu/rapid/press-release\\_MEMO-15-5793\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-15-5793_en.htm?locale=en)
7. Payments disrupted – The emerging challenge for European retail banks, Deloitte, September 2015, p.9. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-payments-disrupted-2015.pdf>
8. The General Data Protection Regulation – Long awaited EU wide data protection law finalised, Deloitte, May 2016. See also: <https://www2.deloitte.com/nl/nl/pages/risk/articles/the-general-data-protection-regulation.html>
9. PSD2 opens the door to new market entrants – Agility will be key to keeping market position, Deloitte, March 2016, p.4. See also: <https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/Banking/lu-psd2-new-market-entrants-03032016.pdf>
10. Open Banking Working Group, Payments UK. See also: <https://www.paymentsuk.org.uk/policy/european-and-uk-developments/payments-uk-help-ensure-best-outcomes-uk-customers-multi>
11. The Open Banking Standard (full report), the Open Banking Working Group, February 2016, p.5. See also: <http://theodi.org/open-banking-standard>
12. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.ii. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
13. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.441. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
14. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.442. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
15. Open Banking Advisory Group Heads Named, Open Banking, December 15 2016. See also: <https://www.openbanking.org.uk/2016/12/15/open-banking-advisory-group-heads-named/>
16. PSD2 – EBA dials up flexibility to achieve a more balanced approach, Deloitte, 28 February 2017. See also: <http://blogs.deloitte.co.uk/financialservices/2017/02/psd2-eba-dials-up-flexibility-to-achieve-a-more-balanced-approach.html>
17. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.458. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
18. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, p.443. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
19. Retail banking market investigation final report, Competition and Markets Authority, 9 August 2016, pp.443-444. See also: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>
20. Open Data Users, Transport for London. See also: <https://tfl.gov.uk/info-for/open-data-users/>
21. When to use SaaS, PaaS, and IaaS, ComputeNext, 27 August 2013. See also: <https://www.computenext.com/blog/when-to-use-saas-paas-and-iaas/>
22. As part of this research, Deloitte constructed two questionnaires around the current usage and potential future usage of digital banking solutions – one for consumers and one for SMEs, using YouGov as the source research agency. The questions were asked to nationally representative samples of 2,050 GB consumers and 1,003 senior GB SME decision-makers.
23. The next frontier: The future of automated financial advice in the UK, Deloitte, April 2017, p.3. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-updated- robo-advice-new-horizons-layout-mww8.pdf>
24. Launching Targets: Our New Budgeting Feature, Monzo, 3 October 2016. See also: <https://monzo.com/blog/2016/10/03/targets/>
25. Debit Card Report September 2016, The UK Cards Association, September 2016, p.7. See also: [http://www.theukcardsassociation.org.uk/wm\\_documents/8.%20Debit%20Card%20Report%20-%20September%202016.pdf](http://www.theukcardsassociation.org.uk/wm_documents/8.%20Debit%20Card%20Report%20-%20September%202016.pdf)

26. Welcome to Monzo Bank!, Monzo, 5 April 2017. See also: <https://monzo.com/blog/2017/04/05/banking-licence/>
27. The bank of the future will be a marketplace, Monzo, 4 February 2016. See also: <https://monzo.com/blog/2016/02/04/marketplace-banking/>
28. With 'Warren', Kensho is building a Siri for the Financial Industry, Wall Street Journal, 23 January 2014. See also: <http://blogs.wsj.com/venturecapital/2014/01/23/with-warren-kensho-is-building-a-siri-for-the-financial-industry/>
29. Bots That Can Talk Will Help Us Get More Value from Analytics, Harvard Business Review, 24 November 2016. See also: [https://hbr.org/2016/11/bots-that-can-talk-will-help-us-get-more-value-from-analytics?utm\\_campaign=HBR&utm\\_source=linkedin&utm\\_medium=social](https://hbr.org/2016/11/bots-that-can-talk-will-help-us-get-more-value-from-analytics?utm_campaign=HBR&utm_source=linkedin&utm_medium=social)
30. What is Natural Language Generation?, Narrative Science. See also: <http://resources.narrativescience.com/h/i/124944227-what-is-natural-language-generation>
31. Tap or swipe? Banks identify quirks for added security, Financial Times, 17 November 2016. See also: <https://www.ft.com/content/cb74f5a4-a204-11e6-82c3-4351ce86813f>
32. Digital transformation in financial services – The need to rewire organizational DNA, Deloitte University Press, 2016, p.5. See also: [https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993\\_Digital-transformation-in-financial-services/DUP\\_Digital-transformation-in-financial-services.pdf](https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993_Digital-transformation-in-financial-services/DUP_Digital-transformation-in-financial-services.pdf)
33. Digital transformation in financial services – The need to rewire organizational DNA, Deloitte University Press, 2016, p.5. See also: [https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993\\_Digital-transformation-in-financial-services/DUP\\_Digital-transformation-in-financial-services.pdf](https://dupress.deloitte.com/content/dam/dup-us-en/articles/2993_Digital-transformation-in-financial-services/DUP_Digital-transformation-in-financial-services.pdf)
34. Global Human Capital Trends 2016 – The new organization: Different by design, Deloitte University Press, 2016, pp.17-18. See also: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/HumanCapital/gx-dup-global-human-capital-trends-2016.pdf>
35. A tale of 44 cities – Connecting Global FinTech: Interim Hub Review 2017, Deloitte, April 2017, p.88. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-connecting-global-fintech-hub-federation-innotribe-innovate-finance.pdf>
36. See <http://innovatefinance.com/about>
37. Borderless FinTech – Connecting globally, acting locally, Deloitte, April 2017. See also: <https://www2.deloitte.com/uk/en/pages/financial-services/articles/borderless-fintech.html>
38. A tale of 44 cities – Connecting Global FinTech: Interim Hub Review 2017, Deloitte, April 2017, p.104. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-connecting-global-fintech-hub-federation-innotribe-innovate-finance.pdf>
39. A tale of 44 cities – Connecting Global FinTech: Interim Hub Review 2017, Deloitte, April 2017, p.108. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-connecting-global-fintech-hub-federation-innotribe-innovate-finance.pdf>
40. A tale of 44 cities – Connecting Global FinTech: Interim Hub Review 2017, Deloitte, April 2017, p.102. See also: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Innovation/deloitte-uk-connecting-global-fintech-hub-federation-innotribe-innovate-finance.pdf>

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