A close-up photograph of a woman with dark hair styled in a bun, wearing black-rimmed glasses and a black top. She is smiling and holding a round, golden-brown cookie to her mouth with her right hand. The background is a blurred white brick wall. A green rectangular overlay is positioned on the right side of the image, containing white text.

CONSUMER PRIORITIES FOR OPEN BANKING

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With

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A NOTE FROM THE AUTHORS

Last year several consumer organisations met to pen a Consumer Manifesto for Open Banking, to set out their expectations. The narrative and discourse of Open Banking is often most located in the technology and standards, as firms battle to 'own' the customer. But our aim is to see that firms develop products and services that truly 'serve' their customers. People and small businesses should be able to choose in an informed way products which genuinely meet their needs.

Our report calls for innovation in the way the market thinks about consumers. Firms should shape products around people, rather than expect consumers to shape themselves around products. Firms must challenge the old ways of working and behave more ethically than in the past. As people and small businesses we want products that fit economically into our busy lives and our stretched budgets. They should be both convenient and secure. They should help us live life better and improve our financial health.

Open Banking is the opportunity. Let's realise it.

The views set out in this report are those of the authors. In particular and unless otherwise specifically stated, they should not be taken as the views of either the the Open Banking Implementation Entity, the Financial Conduct Authority, the Financial Services Consumer Panel or the Current Account Switch Service at Pay.UK with each of which, at the time of writing, some of the authors may be associated.



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EXECUTIVE SUMMARY

As the Independent Consumer and SME Representatives for the Open Banking Implementation Entity (OBIE), we set out to understand the overall value of Open Banking for consumers and which consumers could stand to gain most from which Open Banking-enabled products. We wanted to understand what might hinder firms from offering those products or stop consumers from taking them up, so we could set out our ‘priorities’ before the Implementation Trustee, government, regulators and the industry responsible for building the Open Banking ecosystem. This report sets out our analysis and recommendations which we hope will spark discussion and debate.

Open Banking has been hailed a revolution in financial services. The UK is a trend setter globally, combining the legal framework of the EU Second Payment Services Directive (PSD2) with the regulatory mandate of the UK Competition and Markets Authority Order (CMA Order). It should change financial services for the better and create more tailored, personalised, suitable products for people and small businesses alike.

This report provides an overview of what consumers need from the market, what the market needs from Open Banking and what Open Banking needs next.

In **PART 1**, we explore different consumer needs; how their needs might be met through well designed Open Banking-enabled products; and calculate how much these products could save them.

In **PART 2**, we consider what more is needed from Open Banking, the technology and regulators to bring about good consumer outcomes.

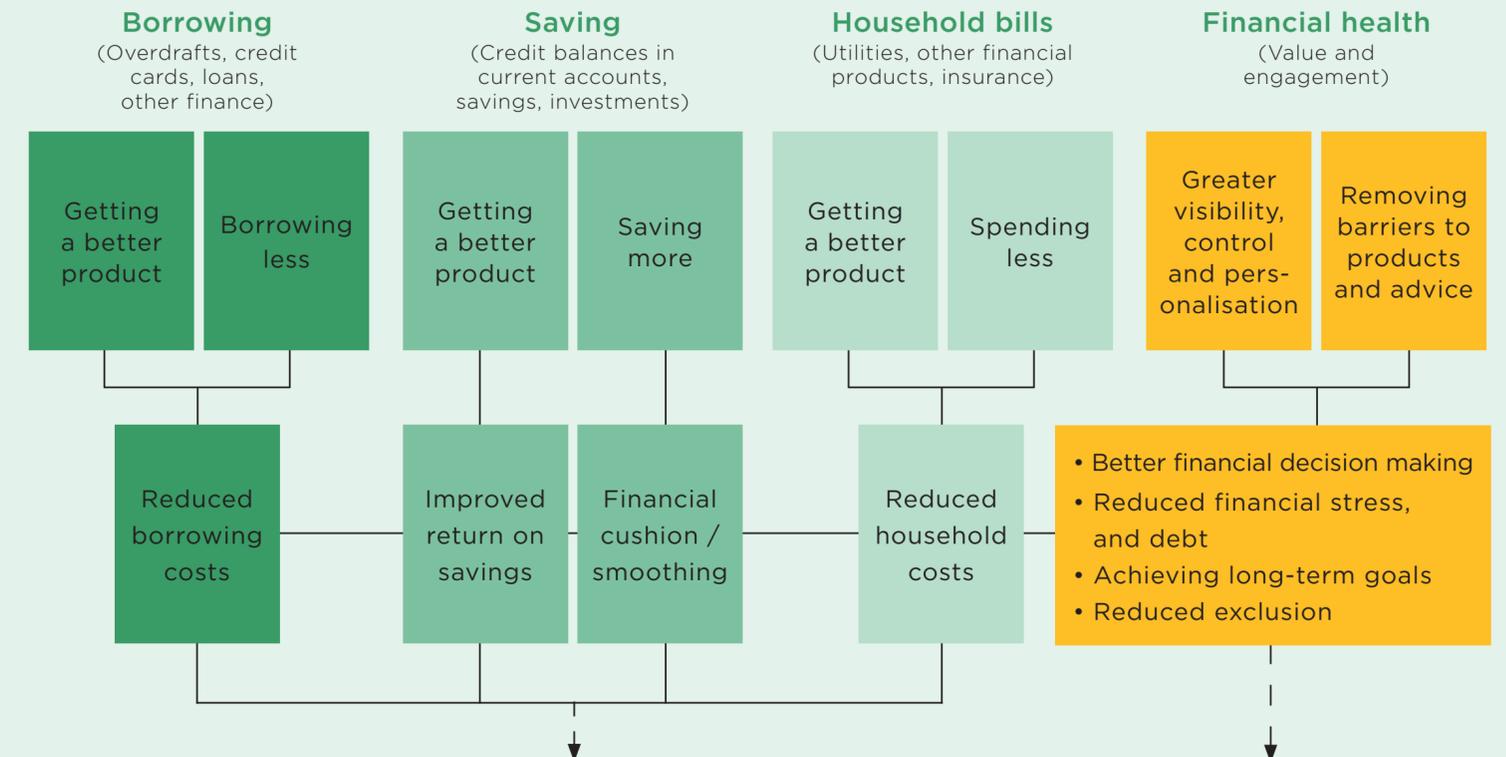
In **PART 3**, we conclude with some suggestions about where we might go next with Open Banking so that the full value of its potential can be realised for consumers.

Throughout this report, where we refer to “consumers” we mean people and small businesses. Small businesses are defined as businesses with turnover up to £6.5m.

METHODOLOGY

This report contains two new pieces of analysis: a consumer needs-based segmentation and a value model, quantifying the financial benefit consumers could realise from Open Banking-enabled propositions. The segmentation is built using the Financial Conduct Authority (FCA) Financial Lives survey. We have segmented consumers on the basis of resilience to small financial shocks and whether consumers have unsecured borrowing or not. We created 8 profiles of these consumers plus 2 small business profiles to bring to life the needs of UK consumers. Our value calculation is based on a bottom-up model, drawing together data from over 25 separate studies and peer reviewed by Dominic Lindley of New City Agenda, to quantify the potential consumer benefits of Open Banking.

HOW OPEN BANKING DELIVERS VALUE TO CONSUMERS



PART 1: WHAT CONSUMERS NEED FROM THE MARKET - PEOPLE

People could stand to gain £12bn from Open Banking-enabled services over the course of a year. Overall, the **overstretched** segment stand to gain most (£287, 2.5% of annual income). To realise all the value, consumers need products more closely tailored to their needs, which are designed to engage them more meaningfully and really enhance their lives. Access to transaction data allows firms to offer services at the exact point in time when a consumer needs them, reducing the background noise and offering something genuinely valuable.



Segment	% of UK adults	Description	Tailoring to needs	Key drivers of financial value	Potential financial value	
 ON THE MARGINS Not resilient & not borrowing	17%	These consumers tend to be younger and many are renting. Incomes are typically below £15,000 per year. A large minority have no qualifications. Long-term health problems and digital exclusion are also comparatively common. Many are on the margins of financial services.	<ul style="list-style-type: none"> Solving the identity challenge Controlling and sharing money Bridging the digital divide Making money go further 	<ol style="list-style-type: none"> Household bills Mortgage comparison 	£72 per person	0.8% of income
 OVER-STRETCHED Not resilient & borrowing	18%	Consumers in this segment are in their family years, with an average age of 25-54 and typically employed. These consumers have an average of £9,000 in unsecured borrowing, but little or no financial buffer. Making ends meet is a challenge.	<ul style="list-style-type: none"> Improving financial security Managing debt and credit smarter Making products accessible, relevant and timely 	<ol style="list-style-type: none"> Better deal on overdraft Balance transfer support Personal Finance Management (PFM) 	£287 per person	2.5% of income
 ASPIRING Resilient & borrowing	20%	Consumers in this segment typically have medium to high incomes. However, they owe an average of £10,000 in unsecured borrowing. Most have a mortgage. They tend to be 25 - 54, and live in couples. Of all the segments, they consider themselves savvy.	<ul style="list-style-type: none"> Managing and optimising credit Making life quicker, easier and happier Filling the advice gap 	<ol style="list-style-type: none"> Better deal on overdraft Mortgage comparison Better deal on savings 	£266 per person	1.4% of income
 ASSET-RICH Resilient & not borrowing	45%	The largest segment, these consumers are reasonably comfortable day-to-day. They are most likely to be in a couple with no children and 35% are retired. They have no obvious need to borrow as they have the highest level of savings - around £60,000. Just over half own their home outright.	<ul style="list-style-type: none"> Making the most of life Planning for later life (and health) 	<ol style="list-style-type: none"> Better deal on savings High balance sweeping Mortgage comparison 	£249 per person	1.5% of income

PART 1: WHAT CONSUMERS NEED FROM THE MARKET - SMALL BUSINESSES

The UK's 5.7m small businesses stand to gain significantly from Open Banking-enabled solutions. This benefit will drop through straight to profit so could be a significant amount for many small business owners. Additional, broader benefits for small businesses and UK plc could be even more significant, making UK small businesses more resilient and productive.

Tailoring to small business needs

UK small businesses have a quite different set of needs from people, with a far greater focus on productivity and growth. It is widely acknowledged that UK small businesses are less productive than their international counterparts, and one reason is the amount of time owners spend on distracting bureaucratic tasks. Many small businesses lack insight into their performance and are hungry for advice on how to improve their business. Credit doesn't work well for many small businesses, with many businesses unable to access the credit they need or finding it hard to shop around.

£6.0bn

TOTAL SMALL BUSINESS POTENTIAL VALUE

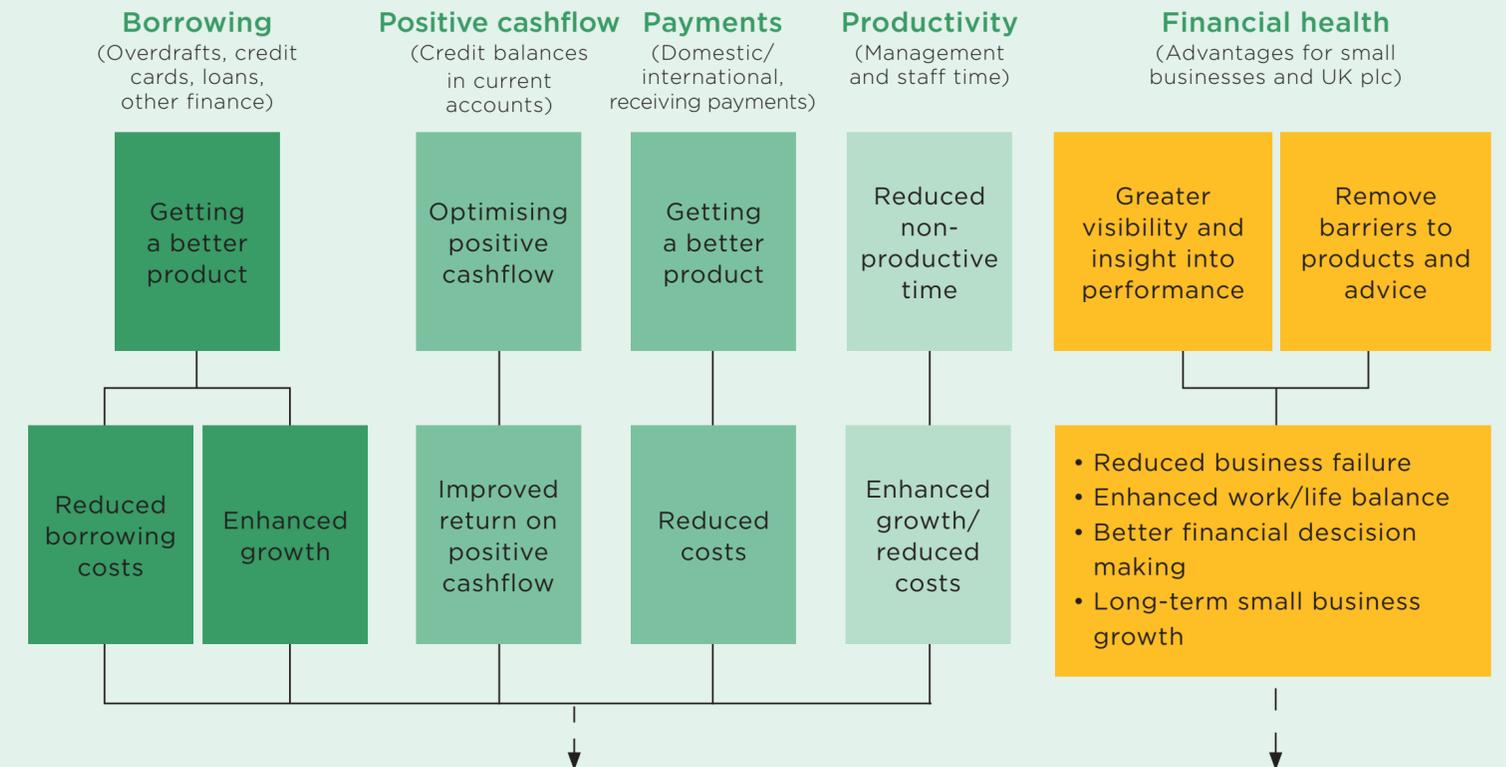
£1,083

POTENTIAL VALUE PER SMALL BUSINESS (0.4% OF TURNOVER)

Key drivers of value for small businesses

- New tools to enhance productivity and deliver enhanced insights into business performance
- Automated tools to optimise cashflow and help small businesses earn returns on credit balances
- Improved and more competitive access to relevant financial products
- Reduced costs to make payments and get paid - particularly on international payments

HOW OPEN BANKING DELIVERS VALUE TO SMALL BUSINESSES



PART 2: WHAT THE MARKET NEEDS FROM OPEN BANKING

Both people and small businesses need innovative products, underpinned by innovative business models and incentive structures which truly serve them and more closely align to their interests. At the time of writing there are 122 firms on the FCA Register. Growth

in Open Banking-enabled products is being led by Personal Financial Management (PFM) platforms and credit risk profiling services. However there is limited availability of other types of products that would drive most financial value for consumers.

AVAILABILITY OF OPEN BANKING-ENABLED PRODUCTS

	 Limited Availability	 Emerging Availability	 Good Availability
 INDIVIDUAL CONSUMERS	<ul style="list-style-type: none"> • Current account comparison • High balance sweeping • Third party overdrafts • Maximise interest on savings • Better deals on household bills • International payments • Mortgage comparison • Balance transfer manager • Micro savings • Highly controlled payments 	<ul style="list-style-type: none"> • E-Commerce • Debt advice 	<ul style="list-style-type: none"> • PFM platforms • Credit applications
 SMALL BUSINESSES	<ul style="list-style-type: none"> • Optimising cashflow • International payments • Domestic payments • Current account comparison • Insight and advice 	<ul style="list-style-type: none"> • Credit applications • E-Commerce 	<ul style="list-style-type: none"> • Open Banking-enabled cloud accounting • Small business PFM platforms

Note: Registered firm availability is qualitative assessment based on the declared business models of currently registered third party providers (TPPs). Adjustment has been made for TPPs who are registered but not live. Analysis based on publically available insight, and some significant initiatives not in the public domain may change the categorisation of some propositions.

The Open Banking-enabled propositions which are highly valuable for consumers but where we identified limited availability are:

- Tools which help consumers compare current account options
- Third party overdrafts: an unbundled alternative to traditional overdrafts
- High balance sweeping / optimising cashflow for personal and business current accounts
- Support for consumers managing balance transfers on credit cards
- Recommendations on better deals on household bills
- Saving money when making international payments

PART 2: WHAT THE MARKET NEEDS FROM OPEN BANKING

OBIE has developed a suite of tools to enable firms to join the Open Banking ecosystem, share data securely and swiftly via the APIs and implement the standards consistently; it has also provided for a dispute management system. Open Banking is a global leader in developing standards and has greatly influenced several other countries. However OBIE's work is not yet finished. People and small businesses need more from Open Banking, but third party providers (TPPs) can only provide more, where the technology and regulation enable them to do so. Our priorities focus on stimulating action to help the industry deliver more value-driving products in a way that simultaneously builds trust in the ecosystem.



DELIVERING VALUE

1. Extend the scope of the APIs to include other products and implement in an orderly way
2. Introduce digital identity
3. Deliver sufficient consumer protection to enable Variable Recurring Payments (VRPs) to be mandated safely
4. Make fees and rates transparent on international payments
5. Provide status of payment to the third party
6. Facilitate e-commerce with refund functionality
7. Ensure API availability, quality and reliability



BUILDING TRUST

1. Make it clear which firms are legitimate
2. Bring clarity and control to onward sharing
3. Make consents transparent and traceable
4. Make redress easy and consistent
5. Bring consistency and clarity to consent and access dashboards
6. Allow people to withdraw consent and re-authenticate conveniently
7. Make protection for payments consistent
8. Give people visibility of their balance before they make a payment
9. Establish a duty of care from firms to their customers



STIMULATING THE MARKET

1. Co-ordinate a sustained incubation, acceleration and innovation programme
2. Deliver a nationwide, co-ordinated and simple communications campaign to let consumers know they can safely share their data
3. Deliver a robust, policed Trustmark for firms who meet agreed standards

PART 3: WHAT OPEN BANKING NEEDS NEXT

We propose that to deliver on our priorities in full, a new regulatory regime is required.

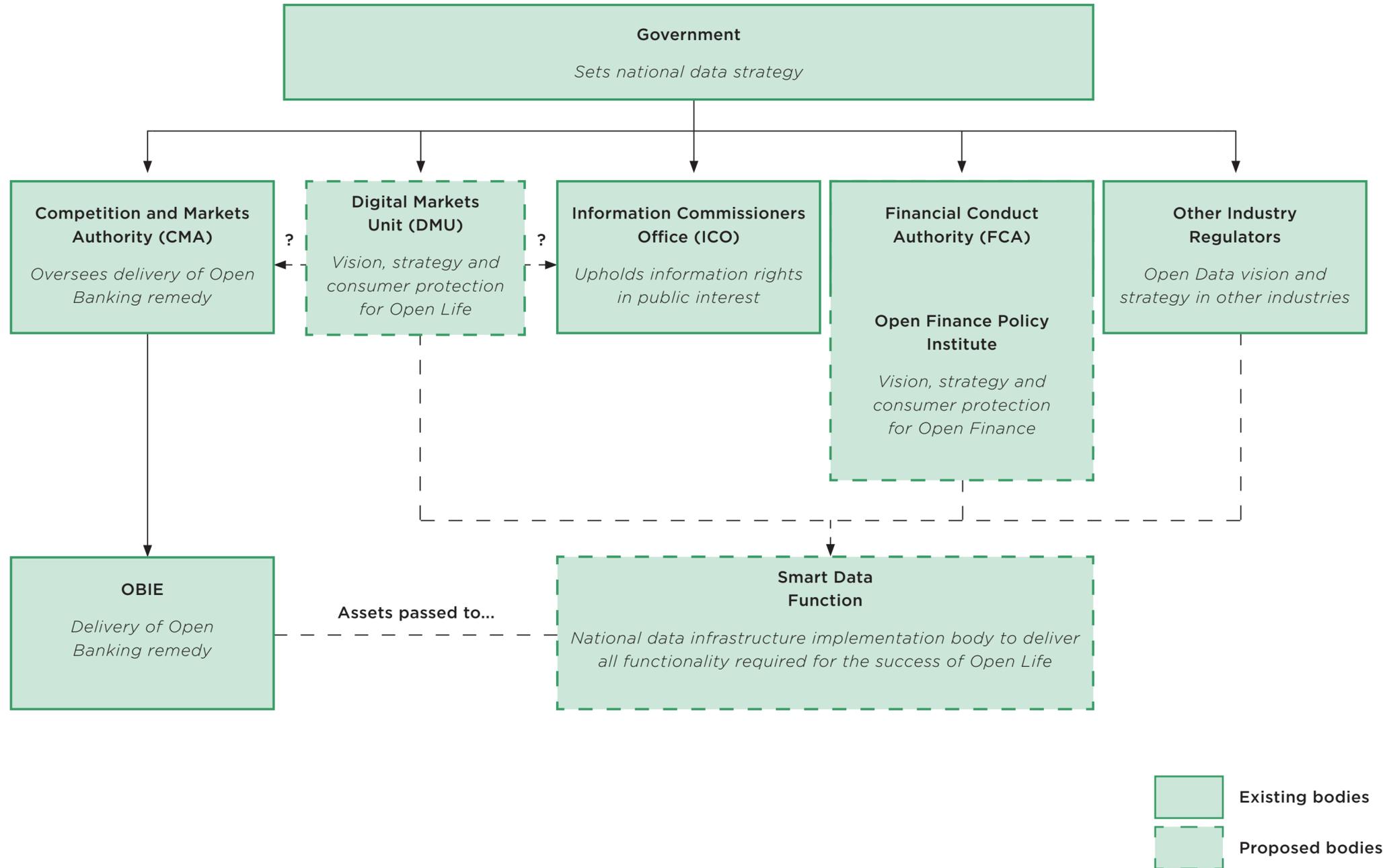
The Department for Business, Energy and Industrial Strategy (BEIS) has set out its vision in the Smart Data Consultation.¹ It says that consumers' data should work for them and not against them. Consumers should be able to make informed decisions about the best products and services and switch seamlessly.

We propose a similar vision is now needed for Open Finance alongside a well-articulated roadmap for its delivery. In its annual Business Plan,² the FCA has said it will lead the public debate on Open Finance. We suggest the primary and explicitly stated purpose of Open Finance should be to:

- Support increased productivity among small businesses
- Increase financial resilience for people across the whole of the UK

Its goals should reflect those set out in the Consumer Manifesto for Open Banking, ensuring Open Finance is a force for good which improves financial inclusion.

Certainty about the future of OBIE is required so that momentum is not lost. We suggest that the future of OBIE lies with the new Smart Data Function and the Digital Markets Unit. We put forward some ideas to spark discussion and debate, in response to the Smart Data Consultation.



PART 3: WHAT OPEN BANKING NEEDS NEXT

Our analysis shows that consumers could stand to gain £18bn from Open Banking. People and small businesses need more tailored services which reflect their interests and interfaces that engage them. But people also want to know that firms are acting with their best interests at heart in a way that is ethical and responsible.

Firms have an opportunity to make a fundamental difference to the financial health of the UK and change the way we think about and manage our money. But the industry needs help. Our priorities will help to deliver the value recognised, build a trustworthy ecosystem, and stimulate the market to action quicker.

Open Banking is at an early stage of development but early indications suggest for the full potential value of Open Banking to be realised for consumers, it must continue to develop, evolve and grow into Open Finance³ and become part of 'Open Life'.⁴ This requires a strategy bringing

consistency and security to data portability and appropriate governance arrangements to ensure Open Finance is delivered and in a way which puts consumers' interests first. Without a government or regulatory mandate of this kind, the value of Open Banking and Open Finance is unlikely to materialise. Instead, it could have unintended and harmful consequences, limit competition further or exacerbate financial exclusion.

The FCA's commitment to look at Open Finance, the promise of the Digital Markets Unit, the Treasury's review of the payments landscape and BEIS' Smart Data Review provide vehicles through which Open Finance could be set on the right path to securing better financial health for all consumers in the UK. For Open Banking to be a success, co-ordinated action must be taken, and soon.

THE VISION FOR OPEN BANKING



Niche adoption
Propositions do not materialise or are only adopted by low numbers of consumers



Market consolidation
Large incumbents dominate Open Banking distribution, nullify its impact on competition and increase barriers to switching



Risks crystallise
Fraud and misconduct proliferates. Firms act in ways which are 'legal but not right'



More informed decision making and engagement with financial products and services



Safer ways to share data and make payments



Access to better value products and offerings for everyone



Exclusion worsens
Open Banking is adopted by a majority, leaving the remainder excluded or paying more

INTRODUCTION
& METHODOLOGY



INTRODUCTION

Open Banking has been hailed a revolution in financial services. The UK is a trend setter globally, combining the legal framework of the EU Second Payment Services Directive (PSD2) with the regulatory mandate of the UK Competition and Markets Authority (CMA) Order. It should change financial services for the better and create more tailored, personalised, suitable products for people and small businesses alike.

However, there are challenges, which mean that consumers are not yet feeling the positive effects of the revolution. We still live in a market where:

- More than a million consumers every year need debt advice⁵
- The average consumer spends £900 more a year than they earn⁶
- Less than half of consumers are confident making financial decisions⁷

Small businesses in the UK employ over 16 million people, with a combined turnover of £2trn,⁸ but for a variety of reasons they are less productive than their G7 counterparts. 35% of small businesses say they spend approximately 4 hours a week chasing late payments⁹ and trying to get access to credit is a long, protracted and often fruitless process.

At the same time, the Government's industrial strategy seeks to put the UK at the forefront of the data revolution. Its Smart Data Review¹⁰ is identifying steps to:

- Accelerate the development of innovative services to improve consumers' experience in regulated markets
- Ensure a wide range of consumers can benefit (not just the digitally savvy)
- Establish a regulatory and policy framework which builds consumer trust in data portability and innovative intermediaries, while addressing any undue barriers to creating an effective market

This report provides an overview of what is needed to make Open Banking a success for consumers.

In **PART 1**, we explore different consumer needs; how their needs might be met through well designed Open Banking-enabled products; and calculate how much these products could save them.

In **PART 2**, we consider what more is needed from Open Banking, the technology and regulators to bring about good consumer outcomes.

In **PART 3** we conclude with some suggestions about where we might go next with Open Banking so that the full value of its potential can be realised for consumers.

Throughout this report, where we refer to “consumers” we mean people and small businesses.

We are particularly grateful to Daniel Jenkinson who coordinated the analysis underpinning the report and provided significant support to us; Tim Burrell at the FCA for his help with the data; Andrea Finney who did our consumer segmentation and accompanying analysis; Dominic Lindley who provided independent oversight of our value analysis; Galina Carroll for her input; John Heaton-Armstrong for his advice on digital identity; friends and colleagues across the ecosystem who contributed; and Manifesto Growth Architects who kindly sponsored the design of the final report and got it ready for publication.

METHODOLOGY

1. Understanding consumer segments

In this report, we wanted to bring consumers to life and reflect the significant differences in needs, situation and opportunities for different types of people.

Financial Lives from the FCA provided the raw underlying data

The Financial Lives study undertaken by the FCA is one of the broadest and most detailed surveys undertaken into consumers' financial lives, based on 13,000 respondents and covering all aspects of personal finances. We are grateful to the FCA and to the CDRC for facilitating our access to this data.

Defining the segments: financial resilience and use of credit

From a range of options, we found that two factors created the most meaningful and useful segments: whether consumers were defined as resilient or not; and whether consumers had any unsecured borrowing or not. This combination provided the most balanced segment sizes and distinct segments.

Profiling the segments and identifying drivers

We examined potential drivers of Open Banking value, such as likelihood to shop around. We also used regression analysis to identify which characteristics were the strongest predictors of the membership of each segment. Having defined the segments, we analysed how membership of the segments differed according to a range of personal, household and financial characteristics.

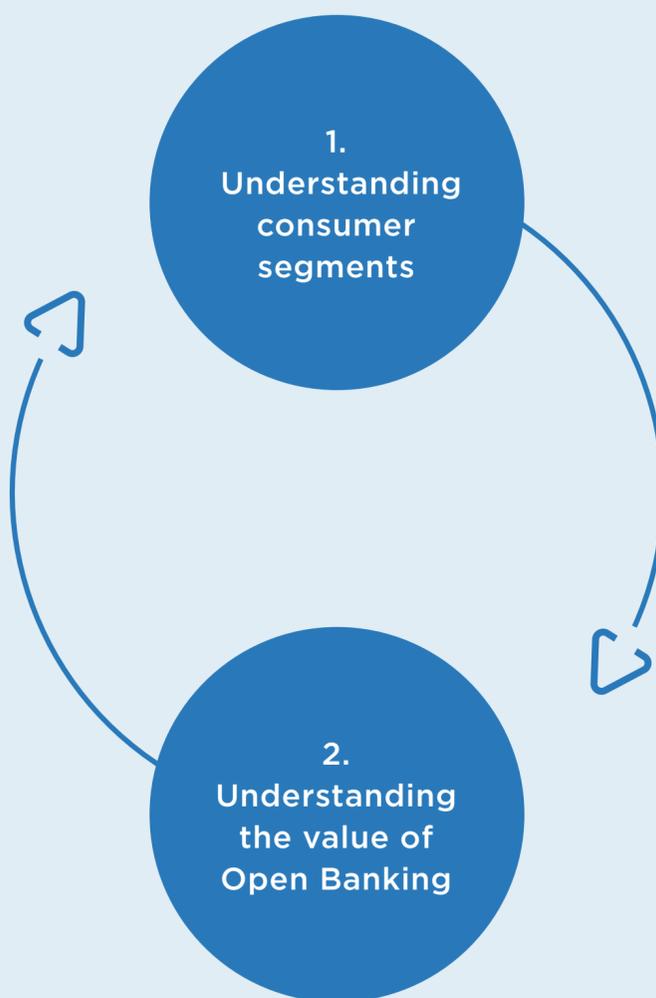
Creating sub-segments and pen profiles

Given that each segment was still very large, and to get a good breadth of consumer voices in our work, we developed two sub-groups within each group. Here, we took an entirely data-driven approach, using two-step cluster analysis. From the 8 sub-groups, we identified statistically significant cross-tabulations for each. We brought these to life by painting 'pen portraits' of each, a description of a fictitious person who represented the dominant characteristics of their sub-segment.

Full details of the methodology are in Appendix 2.

The data for this research have been provided by the Consumer Data Research Centre, an ESRC Data Investment, under project ID CDRC 289, ES/L011840/1; ES/L011891/1

UNDERSTANDING THE OPEN BANKING CONSUMER OPPORTUNITY



2. Understanding the value of Open Banking

To understand the value that Open Banking can deliver for consumers, we built a new bottom-up model which calculates the potential financial returns from the key Open Banking-enabled propositions. This value calculation draws on over 25 separate sources. The value calculation has been peer reviewed by a colleague and economist from New City Agenda, Dominic Lindley.

The calculation represents total potential value

The value figures contained in this report represents the value for consumers, if all consumers adopt the full range of Open Banking-enabled services. It therefore represents the total potential value, or value at stake.

We have not modelled provider response to consumer change

Importantly, the modelling makes no allowance for providers responding to changes in consumer behaviour. This could see providers change their pricing models to prevent consumers switching away (a positive impact); or providers seeking to recoup lost revenues through other fees or charges or penalising loyal customers (a negative impact). Both these impacts need to be monitored and considered as Open Banking matures.

There are broader benefits which we have not sought to quantify

Finally, in any such exercise, there are consumer benefits which cannot be realistically quantified, but are nonetheless very real and valuable. For example, it would be hard to quantify the benefit of improved mental health or reduced relationship breakdown. Open Banking-enabled services could plausibly impact both of these things, but we have not sought to quantify these type of broader consumer and societal benefits.

Early thoughts on the impact of the FCA Overdraft Policy Statement are included

The policy statement in June 2019 will potentially have significant impact on overdraft costs for some consumers, however the FCA estimates that the overall effects of their policy will be neutral in the short term. We have assumed a minor shift from unarranged to arranged borrowing.

Full details of methodology and sources are in Appendix 3.

PART ONE:

WHAT CONSUMERS
NEED FROM
THE MARKET



WHAT CONSUMERS NEED FROM THE MARKET

To understand what consumers need from Open Banking-enabled products, it is helpful to take a closer look at consumers' financial lives. Open Banking was conceived as a market intervention which should have benefits for all types of people and small businesses, not simply the more sophisticated or tech savvy.

In 2017 the Financial Conduct Authority (FCA) published its report, Understanding the Financial Lives of UK Adults. It made the data set available as open data in the spirit of collaboration to improve understanding of the issues that people face. Our analysis is built using the FCA Financial Lives survey. We have segmented consumers on the basis of resilience to small financial shocks and whether consumers have unsecured borrowing or not. The segments

represent four distinguishable groups of people in the UK.

We have also developed eight pen profiles to illustrate the experiences of these groups. Across the segments there is a roughly equal number of men and women, (although overall women are slightly less resilient than men). As such our pen profiles are gender neutral. They are also ethnicity neutral.

Additionally, we have used a number of sources to profile the small business market. There is a lack of robust data on which to define needs-based segments within the small business community. Consequently we have chosen to draw out the differences between those small businesses which are sole traders and those which employ staff.

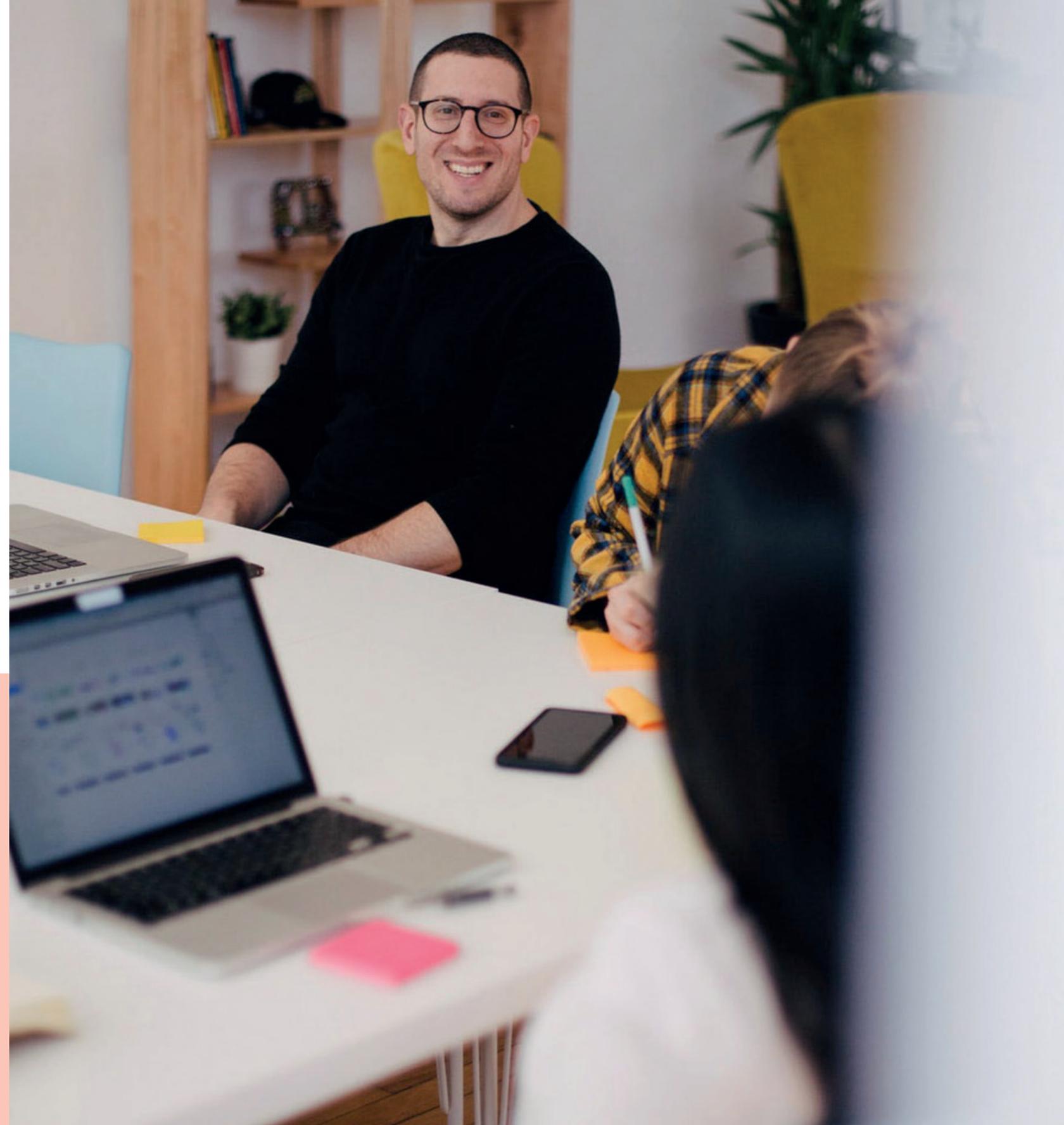
NO AVERAGE CONSUMERS

While it is helpful to segment people broadly into different groups, there is variation within groups and people's life experiences will vary significantly – there are no 'average' consumers.

Women do have different financial needs and experiences from men. The Fawcett Society identify 'a gender financial security gap' across pensions, insurance and investment products particularly. Women earn less over their lifetime and are often the primary care-givers, being four times more likely than men to give up their job as a result of looking after both children and adults.¹¹ Approximately 42% of marriages end in divorce and women have been found to have a 10% long-term dip in income, while divorced men's available income increases.¹²

Likewise, people's access to financial services can be impacted by their ethnicity.¹³ The UK poverty rate is twice as high for Black and Minority Ethnic (BME) groups as for white groups.¹⁴ They are more likely to be unemployed or on a low wage than white people. And 'while rates of academic attainment are higher amongst most BME groups than for White British groups, 40% of Africans and 39% of Bangladeshi graduates are overqualified for their roles'.

The FCA estimates that approximately 50% of the population may be vulnerable at any one point.¹⁵ Changing circumstances, life events and health problems can all shake resilience, meaning that people's lives should be viewed as dynamic. Our 'asset rich' segment may seem to be more resilient, but a proportion are also older, less likely to have capacity to earn money and more likely to have long-term health problems. In our 'on the margins' group, 20% are aged below 24 years, and they may yet become resilient as their employment prospects improve.



UNDERSTANDING CONSUMERS' FINANCIAL LIVES

For a long time, consumers and their advocates have recommended financial products which could more effectively meet consumers' needs and lifestyles.¹⁶ However, the costs of providing more tailored products have in the past been prohibitive. Even today, many products are designed around an 'ideal' consumer that doesn't exist, rather than 'real' people and businesses, who genuinely need help. But advances in technology now mean it is possible to align firms' commercial objectives more closely to the needs of consumers.

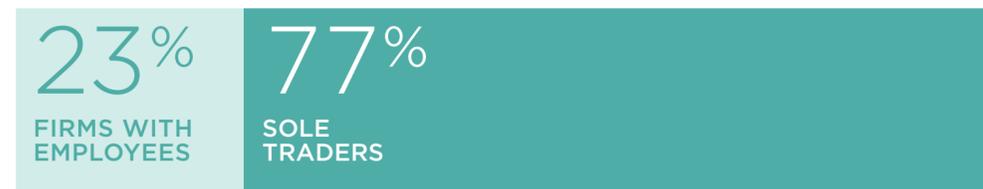
In the following section we show how our consumer segments might benefit from more tailored, personalised Open Banking-enabled products and how much they could stand to gain financially from Open Banking if the value can be realised.

We conclude part 1 of the report by considering some of the issues that cause consumers to disengage with products and how firms can design for engagement and build trust in the Open Banking ecosystem and the Open Banking-enabled products and services on offer.

FOUR MAIN TYPES OF PEOPLE



SMALL BUSINESSES



ON THE MARGINS

Not resilient & not borrowing

These consumers tend to be younger and many are renting. Incomes are typically below £15,000 a year. A large minority have no qualifications. Long-term health problems and digital exclusion are also comparatively common. They have no unsecured borrowing but also have little or no financial buffer. Few have savings and many are on the margins of financial services. In this segment, we have identified two clear sub-groups, represented by Jak and Jimmi.



OVERSTRETCHED

Not resilient & borrowing

Consumers in this segment are in their family years, with an average age of 25-54 and typically employed. Over a third have mortgages but most rent. Consumers in this segment have an average of £9,000 in unsecured borrowing, but have little or no financial buffer. They are regularly or always overdrawn and many are juggling credit card debt as well. Making ends meet is challenging and most are dissatisfied with their circumstances. In this segment, we found two clear sub-groups, represented by Ash and Noa.



ASPIRING

Resilient & borrowing

Consumers in this segment typically have medium to high incomes. However, they owe an average of £10,000 in unsecured borrowing. Most have a mortgage. They tend to be aged 25 - 54, and live in couples, with or without children. Of all the segments they tend to rate their own financial knowledge moderate or high and consider themselves savvy. In this segment, we found two identifiable sub-groups, one much larger than the other. Al, represents about 4 in 5 of people in this segment. A smaller group is represented by Mo.



ASSET-RICH

Resilient & not borrowing

The largest segment, these consumers are reasonably comfortable day-to-day. They are most likely to be in a couple with no children and to be retired. They have no obvious need to borrow as they have the highest level of savings - around £60,000. Just over half own their home outright. Half have incomes between £15,000 - £50,000 but 1 in 5 have an income of £70,000+. In this segment, we found two identifiable sub-groups, one older, retired with lower incomes (Mae) and the other younger, employed on a higher income (Max).



SMALL BUSINESSES

Up to £6.5million turnover

There are 5.7m small businesses in the UK. 77% are sole traders, and the other 23% have employees.¹⁷ The number of small businesses grows 3.5% a year, although this disguises a very high number of business births and deaths. 36% of small businesses borrow, but many firms also carry quite significant positive cashflow.¹⁸ Common business issues include productivity, accessing competitive credit, understanding how the business is really performing and chasing late payments.



ON THE MARGINS

Not resilient / not borrowing

SEGMENT PROFILE

Around 17% of UK adults fall into this segment. By definition, people who are on the margins have no unsecured borrowing, but also have little or no financial buffer.

Membership of this segment is driven by:

- Very low incomes
- Low net assets
- Having no transaction account (1.5m people)
- Having no insurance
- But having a savings account
- Renting or living rent-free

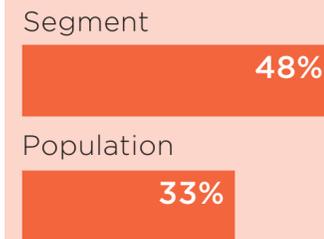
These adults are also more likely to be:

- Young and single
- Unemployed or studying
- In poor health
- Non-frequent internet users
- Lacking in financial capability

KEY STATISTICS

17%
of UK adults

Household income under **£15k**

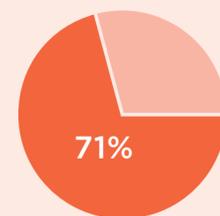


Only **1 in 5** have a mortgage

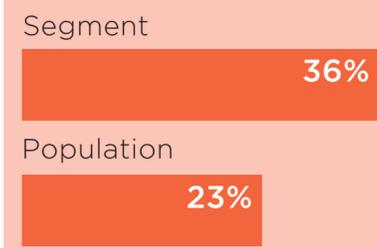
45% have no insurance

4x more likely than average to have no transaction bank account

Renting or living rent free



Non frequent internet user



INTRODUCING JAK AND JIMMI

For people on the margins of financial services with limited incomes like Jak and Jimmi, it can be difficult to imagine how Open Banking could help them. However, from a closer look at their situation, it is possible to infer a set of solutions that would facilitate greater trust and inclusion.



JAK has just turned 21 and lives with friends in the house they rent together. Like two of his house-mates, Jak is unemployed; the others are still studying for their vocational qualifications. Jak normally scrapes his rent together, but missing the occasional payment has compounded the challenges he faces living on a limited income. He admits that satisfaction with his financial situation is non-existent. He also reports low financial knowledge, but is moderately savvy as a consumer feeling that he has to be just to get by. With no savings account or pension, no insurance he is aware of, and relying on his housemate's current account for his benefits, his engagement with financial services is minimal. His local job centre has referred him to a credit union to help get him banked. Jak has never considered borrowing and doesn't have the ID he would need to apply.



JIMMI is now 54 and living on his own in the housing association flat he's been in for years. Always a tradesman, he has been self-employed since being laid off in the last recession. He loves it when his teenage kids visit and always keeps up with his child maintenance, but does struggle to make ends meet day-to-day. He has £1,000 tucked away in a savings account but won't touch it because it's there for emergencies. Jimmi has borrowed in the past but got into difficulty so avoids it now. Jimmi is not sure if he has a pension, and chronic anxiety stops him from thinking about it too much. Jimmi occasionally checks his bank balance online, but prefers to work in cash when he can. He also has basic home contents insurance, which he switched using a comparison website at the last renewal.

HOW OPEN BANKING CAN HELP



✓ Biometrically-authenticated ID

✓ Budgeting & control

✓ Accessible products

✓ Extra support

✓ Household bills

✓ Financial cushion

The statistics from the Financial Inclusion Commission¹⁹ about people at the very edge of banking are striking:

- There are 1.5m people who are unbanked
- 60-67% of those people who are unbanked have had an account in the past
- Only half of the unbanked want a bank account
- 50% of the newly banked have incurred penalty charges, with those affected paying 5.6 charges on average per year
- 26% of newly banked people are 'net losers', having paid more in charges than they have saved by having the account
- Around half of people with basic bank accounts still choose to manage their money in cash

Solving the identity challenge

Jak doesn't have the traditional identity documents that make opening an account easy. Open Banking could be a catalyst for biometrically-authenticated digital identity which could foster more inclusion. Pre-paid cards and simple products open-up options for Jak to make the most of getting online and accessing cheaper products.

Controlling and sharing money

Once Jak's transactions are digital, like Jimmi, he needs services which provide him with strong levels of control and more closely emulate working in cash: a constant, real-time balance, pots for his rent, bills, food and travel and alerts for when things get tight. Bill-sharing would help Jak and his friends manage the rent more easily together and keep a track of who has subsidised whom. Some options to set and meet manageable goals would keep financial management products relevant and engaging.

Bridging the digital divide

Jak and Jimmi would benefit from more face to face guidance, access to affordable credit and the chance to build up some savings. Open Banking-enabled services could help bridge the digital divide by working with alternative finance providers in a variety of ways: e.g. improve the efficiency of their own lending services; provide add-ons, such as budget management tools, to existing accounts; or make referrals into locally-based services. Likewise, community finance providers can work with people face to face to show them their financial situation and provide guidance based on the data, without the customer having to be on the internet themselves.

Making money go further

Jimmi could save on household bills. Open Banking could make recommendations or offer the possibility of joining a collective with other people to access even cheaper energy. Building flexible payment options, like Request to Pay,²⁰ would allow him to pay when he can afford to and manage the ebbs and flows of being self-employed. Rewards, vouchers or cashback programmes could enhance Jimmi's life and expand his resources when his children visit. As they grow up and he no longer has to pay child maintenance, he will have more disposable income and an Open Banking-enabled service could help him build a financial cushion and work out how best to maximise his state pension.

Potential consumer value

Open Banking could help improve financial inclusion and drive value for those currently excluded or on the margins of financial services.

£0.6bn

Potential annual value

£72

Per person

0.8%

Of income



OVERSTRETCHED

Not resilient / borrowing

SEGMENT PROFILE

There is increasing awareness of the differences in financial need across generations. Younger consumers will mature in different ways from today's older consumers and therefore will have different needs.

Membership of this segment is driven by:

- Zero or negative net assets
- Living in rented or mortgaged homes
- Dissatisfaction with financial situation
- Being banked

These adults are also more likely to be:

- In family years (ages 25 - 54)
- With children living at home
- On low-to-middle incomes
- Likely to be using or relying on an overdraft
- Lacking confidence in financial knowledge
- Declined financial products

KEY STATISTICS

18%
of UK adults

Housing tenure
of the segment

Renting

55%

Mortgage

35%

Own outright

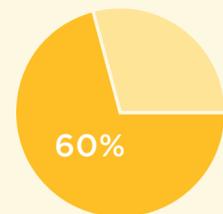
5%

£9,000
average
unsecured
borrowing

60%
overdrawn
in last 12
months

Borrowing typically
3x higher than savings

With low
financial
knowledge



Dissatisfied
with financial
situation

Segment

78%

Population

42%

INTRODUCING ASH AND NOA

Noa and Ash are both 'financially included' but their needs are not being met. Open Banking could tip them into more resilient living and have a big impact on their lives.



ASH is in her mid-20s, has a young son and lives with her parents in a rented house. She started doing care work after she lost her job in an office. They have little in the way of a financial buffer. She relies on her overdraft more often than not, borrows constantly on a credit card and has a small outstanding payday loan. By any measure, Ash is over-indebted. Ash has been worried about her situation and sought advice when she realised she owed nearly £6,000, but keeping to the repayment schedule isn't always easy, especially when she can't guarantee her hours. She knows she needs to take some action. She juggles her finances and makes frequent use of mobile banking, sometimes several times a day. She doesn't even have a savings account; or any insurance. She feels pretty low about her financial situation.



NOA is nearly 40 and lives with her husband and two children in their mortgaged home. She works in a shop, while her partner works in a school. They're looking forward to the school holidays. Noa relies heavily on her overdraft just to make ends meet every month and owes around £7,000 in personal loans alone, around £12,000 altogether. She does have some savings put away and basic insurance. She occasionally sends money to family 'back home'. As a consumer, Noa considers herself fairly savvy and, perhaps surprisingly, is reasonably happy with her lot, although she is not in any position to weather a financial storm of any size. It is possible that it is the borrowing which props up Noa's finances that gives her this false sense of security.

HOW OPEN BANKING CAN HELP



- ✓ Income maximisation
- ✓ Household bills
- ✓ Budgeting & control
- ✓ Managing credit commitments
- ✓ Financial cushion
- ✓ Accessing debt advice

Maximising and smoothing income

Ash would benefit from help maximising her income. £10.1bn in benefits go unclaimed every year.²² People who most need help are missing out because the welfare system remains complex and inaccessible. For people like Ash, it can be a struggle to manage universal credit alongside uncertain hours and the need to pay for childcare to ensure availability to work. Open Banking could help Ash make sure she's getting the benefits she's entitled to and provide regular updates to the Department for Work and Pensions about her earnings so that she is not getting into debt on over-payments.

Access to cheaper tariffs on household bills would help both Noa and Ash maximise their incomes further. Something to help smooth Ash's income would give her certainty so she doesn't have to worry about losing her childcare place, when her hours fluctuate.

Managing debt and credit smarter

Open Banking-enabled credit monitoring could have helped Ash transition between jobs, so that the affordability of her loans were re-assessed and repayments rescheduled based on her change in circumstances. Repayment plans could be flexed according to Ash's income. Thresholds for alerts to friends and family could allow Ash to let others know when she needs support.

Making products relevant and timely

The budgeting and control tools for Jak and Jimmi would also help both Noa and Ash. For Noa, being able to see all her credit commitments in one place may give her pause for thought. An overdraft that's separate from her bank account could offer her better value credit as could switching to a better value account (perhaps one that offers her jam-jarring facilities and alerts). A micro-sweep tool to build a small pot of savings for her holidays could be combined with a facility that helps Noa focus on paying down some of her debt. Cheaper forms of remitting money and making payments abroad when on holiday could save her money. Her new current account or overdraft provider could refer Noa to a debt advice agency, if it detects that her circumstances are worsening.

Intergenerational differences:

There is increasing awareness of the differences in financial need across generations.²¹ Younger consumers will mature in different ways from today's older consumers, and therefore have different needs.

This is predicted to have significant implications for the way that financial services products are designed and marketed. They will increasingly need to cater for Generation X and Millennial's flexible working practices, increased life expectancy, higher hurdles to home ownership, reduced levels of savings and tendency to overlook essential protection. These long-term shifts are likely to continue and increase. Fintechs and banks need to understand these socio-economic and attitudinal shifts and innovate in product design.

Potential consumer value

Open Banking could help overstretched consumers take better control of their finances, get better deals and manage their debts more effectively.

£2.7bn

Potential annual value

£287

Per person

2.5%

Of income



ASPIRING

Resilient / borrowing

SEGMENT PROFILE

Around 20% of UK adults fall into this segment. These consumers are relatively sophisticated, with high levels of borrowing but have sufficient savings to cushion them from shocks.

Membership of this segment is driven by:

- Low or moderate net assets
- High unsecured borrowing
- Living in a mortgaged property
- Medium or high income
- Holding a wide range of financial products

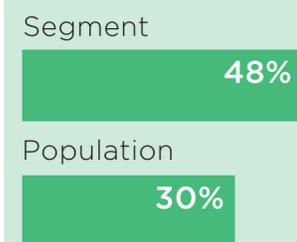
These adults are also more likely to:

- Live in couples
- Be confident in their financial knowledge
- Be frequent internet users, including banking online

KEY STATISTICS

20%
of UK adults

Household
income over
£50k

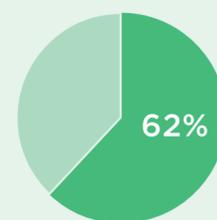


£10,200
average
unsecured
borrowing

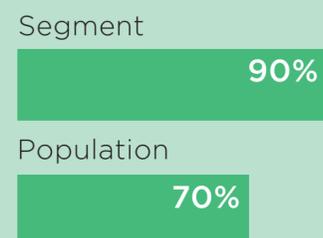
38%
overdrawn
in last 12
months

Half owe more in borrowing
than they have in savings

Rating
themselves
as savvy



Frequent
internet user



INTRODUCING AL AND MO

Al and Mo represent the segment most easy to engage in Open Banking-enabled products with a disposable income which makes them more profitable.



AL is in his mid-40s and lives with his wife and teenage daughter in their mortgaged home. His wife isn't working but Al is the local branch manager for a DIY store, earning just over £40,000 a year. He owes quite a lot in consumer credit – nearly £13,000 mainly from personal loans and car finance – which in his case offsets his £8,000 savings. He enjoys a flutter on the horses, but it does mean an occasional dip into his overdraft (and a few arguments with his wife). Al banks routinely online. He shopped around for his most recent loan when he bought a car for his daughter and got a black box to keep the car insurance as low as possible. He doesn't have any investments but does have an occupational pension. He is moderately happy with his financial situation, but he and his wife are wondering if they can afford to move house.



At 66, **MO** is a bit older and lives with his wife in the home they own outright. He retired a couple of years early as a master craftsman due to niggles with his health and a general sense of the need to 'live for today'. Mo has embraced retirement, but he didn't adjust quickly enough to his drop in household income (now £18,000) and found himself £7,000 in debt on credit cards and personal loans. He is confident he can get on top of it, though, and he's happy enough with his financial situation and feels reasonably knowledgeable about money. He's very excited to have just got Hive to manage his heating remotely. Mo has never trusted pensions, but has quite a lot set aside in savings and investments. In the past, he's taken advice about his investments from an Independent Financial Adviser (IFA) and enjoys keeping up to date with the markets.

HOW OPEN BANKING CAN HELP



- ✓ Income maximisation
- ✓ Household bills
- ✓ Budgeting & control
- ✓ Managing credit commitments
- ✓ Accessing financial advice

Managing and optimising credit

By sharing his data with a credit broker Al could access cheaper credit. With Open Banking he could get a mortgage offer within minutes to confirm whether his aspirations to buy a new house can be met (and perhaps consolidate his personal loans at the same time). When his balance transfer on his credit card runs out, a 'concierge' service could remind him to switch and offer him new options.

Making life quicker, easier and happier

Digital ID with a connected document store for things like 'no-claims' bonus certificates would make it easier to act on Al's shopping around more quickly. A savings sweep could move his savings into his account to avoid going overdrawn and facilitate micro-savings to support his treats. Controls that allow him to limit the number of bets he places over a month, and caps on the amount, could keep his hobby under control and improve his relationship with his wife. Combining Mo's utility usage and current account data could get him better deals on his household bills and automate the annual shop around.

Filling the advice gap

Mo could have managed his transition to retirement more easily with a personal financial management app. One that allows him to share his overall financial position with an IFA would also allow him to refresh his later life planning and think through how best to manage his money. Like Al, sharing his data may help him access cheaper credit. Getting tips on how much he should repay per month (based on his regular income and expenditure) to pay it off quickest would help him reduce the impact on his retirement.

Advice gap

Whilst the UK is acknowledged to have a professional and high-quality advice sector, it doesn't cater well to those with lower levels of investments. A survey found that 69% of advisers had turned clients away in the last 12 months, with the majority of cases being because of affordability.²³ The costs of supplying

face-to-face advice are significant and the market needs more automated, streamlined solutions to help a wider range of consumers. There are also consumer issues with trust, low levels of engagement and complexity, particularly where consumers have built up multiple pension pots. Many consumers who need advice do not

Potential consumer value

Open Banking could help overstretched consumers take better control of their finances, get better deals and manage their debts more effectively.

£2.8bn

Potential annual value

£266

Per person

1.4%

Of income

seek it because of these issues. Approaches are being used to increase take-up and reduce costs, including workplace advice. However, the ability to share data more easily and safely could herald a significant change in the advice sector and open up new ways for consumers to access it.



ASSET RICH

Resilient / not borrowing

SEGMENT PROFILE

Roughly 45% of UK adults fall into this segment. These people are generally satisfied with their financial situation, with good levels of savings and no borrowing.

Membership of this segment is driven by:

- Significant levels of savings
- Higher incomes than typical for lifestage
- Owning their home outright
- High financial satisfaction

These adults are also more likely to:

- Be older than other segments
- Be without dependent children
- Rate themselves as savvy consumers
- Prefer to be safe than sorry
- Have investments

KEY STATISTICS

45%
of UK adults

Retired

£57,000
average
savings

Segment

35%

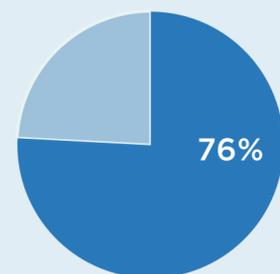
Population

23%

41%
have
investments

One third don't bank
online, the second highest
of all segments

Moderate or high
satisfaction with
financial situation



Own home
outright

Segment

51%

Population

30%

INTRODUCING MAE AND MAX

Mae and Max's is the single largest segment. While over 35% are retired, the larger proportion are still in work. The resulting sub-segments have very different financial needs but they are also profitable and currently underserved by Open Banking-enabled products and services.



MAE is a spritely 77, still fit and active and married to her childhood sweetheart. They own their home outright and a modest £18,000 in income each year is more than enough for their day-to-day needs, a few treats for their grandchildren and a few for themselves too. Mae's husband was diagnosed with a life-limiting illness two years ago. She has £76,000 in a mix of savings and investments an IFA recommended when her husband retired. But she has 'forgotten' the £8,000 in her current account at 0% AER. Mae dabbles on the internet with the iPad her granddaughter got her but wouldn't buy anything online as she's not terribly confident. When it comes to finances, she prefers to chat to the branch manager she's known for years. She's upset the branch is ear-marked to close next year.



MAX, 43, was recently promoted to head of languages at a large school where she teaches. She lives with her partner of 12 years. They enjoy travelling together but aspire mostly to buying and renovating a property abroad and offering eco art holidays. They have started to rein in their spending and to wonder if they have been doing enough to plan for their retirement. They don't have children and their current combined income of £85,000 pays their mortgage with plenty spare for savings. Max alone has around £39,000 built up plus her teacher's pension. They are internet savvy and use it frequently for banking and shopping for the best savings rates and insurance. They are comfortable but don't feel very confident in their financial knowledge, explaining why Max has not yet taken the step into investing.

HOW OPEN BANKING CAN HELP



- ✓ Maximise interest on savings
- ✓ Get more from high credit balances
- ✓ Planning for later and end of life
- ✓ Accessing regulated advice
- ✓ Scams protection

Making the most of life

An Open Banking-enabled app could provide Max with access to a range of more personalised services. An investment platform that provides for environmentally focused investments could match Max's values with simple investment options so she can compare the relative merits easily. Open Banking-enabled robo-advice, along with goal-setting could be linked to a service that shares the latest property news, location developments and job opportunities. Data from Max's property and location preferences would give the goals more context. A savings tool could ensure she was getting maximum value on her savings and sweep any surplus to her goals. Value preferences could nudge her to spend more in keeping with her beliefs.

Planning for later life

Mae may seem resilient now, but it's likely she'll become more vulnerable as she gets older. An IFA could use Open Banking to review her investment needs and use a tool to monitor her account for patterns of change related to her cognitive health. Nominating a friend or family member as an 'account assistant' who can access her account online, could help Mae navigate online banking when the branch closes. Pre-paid wearables connected to her account, running on real-time, would allow her family to check how carers are spending money. She would benefit from facial recognition and voice activated apps that avoid her having to use passwords; app-based video calls with her bank could give her reassurance when she needs it. Security focused services that monitor the account for unusual requests and add friction into journeys for authorising larger payments could provide additional protection from scams.

Digital exclusion

The UK Digital Index, produced by Lloyds Bank in 2018²⁴ highlights that 8% of the population (4.3m) have no basic digital skills at all. Of these 76% are aged 65 or over and 61% are women (compared with 39% who are men, suggesting a real gender divide). 81% of this group have no internet access, although 24% have a laptop or PC. For 39%, the reason given for not being online was that the internet was simply not of interest. 8 in 10 have

online security concerns, with 40% saying they are 'very concerned'. The top concern is worrying about identity being taken (65%); 47% do not like the idea of being monitored online; and 41% are worried that if their personal information was taken it could have an impact on other people. 65% would feel better if they knew their bank was protecting them and their money (the highest percentage).

Potential consumer value

Open Banking could help these consumers make their money work harder for them and ensure they're getting access to the best deals.

£5.8bn

Potential annual value

£249

Per person

1.5%

Of income

Highly digitally capable consumers are more than 3 times as likely to check their bank balance; save nearly twice as often; and save more than twice as much (regardless of income level). 62% report that they worry less because they can track their finances.

SEGMENT PROFILE

There are 5.7m small businesses in the UK, turning over an average of £240,000 per year. They employ a total of 12.9m people.²⁵

The segment can be divided into Sole traders and Firms with employees.

Sole traders typically:

- Turnover an average of £60,000 per year
- Use a Business Current Account (BCA), although 18% still use their Personal Account²⁶

Firms with employees typically:

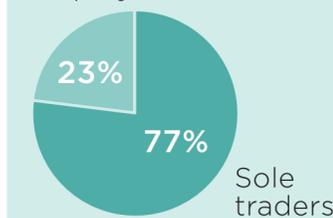
- Turnover £800,000 per year
- Have 6 staff per company
- Have more complex financial needs, including cash management, a wider range of credit, overseas transactions, complex payables and receivables and payroll management

KEY STATISTICS

5.7M
Small businesses

Company segments

With employees

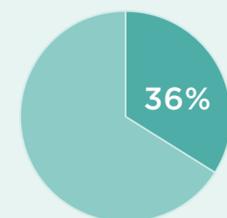


£25,500
average balance held in BCA²⁷

18% of sole traders use personal accounts

Firms with employees have an average of **6.1** members of staff

Firms borrowing



Firms forced to inject personal funds

Sole traders
13%

Firms with employees
11%

INTRODUCING DAV AND SAL

There are obvious differences between sole traders and more complex businesses with employees, which our profiles reflect. Dav is a sole trader and represents 77% of small businesses. Sal, representing more complex businesses with employees, reflects the other 23% of small businesses.



DAV set up his small car repair garage 15 years ago after being laid off from the dealership he had worked at for 20 years. He specialises in his passion, classic cars. He works on his own from small premises. He used to use his personal current account for everything, but 5 years ago decided to open a business current account at his existing bank. They also gave him a business credit card, which he sometimes finds useful to buy parts when cashflow is tight. He is happy with his business and has no real plans to grow it. He finds it hard to work out how his business is really performing and January is always a stressful time when he has to get his tax done. His wife helps him and they sit down together with all his paper statements and invoices to try and make sense of it all.



SAL, 38, owns a kitchen design and fitting business. She set up the business 8 years ago, starting out just doing designs, before expanding to also offer fitting. At this stage she also incorporated the business as a private limited company. Sal felt that the protection of limited liability would offset the somewhat higher costs involved. She now has 5 employees. The business has a bank loan, leases 3 vehicles and uses trade finance extensively on supplies. She uses a cloud accounting solution to keep on top of incomings and outgoings. Sometimes she has lots of cash in her account, but she rarely remembers to move any money into savings. She operates a website and accepts card payments, but finds the cost astronomical so prefers bank transfers for larger payments. She has done some work for developers, but found the hassle of chasing late payments too stressful and the delays were putting her business in difficulty.

HOW OPEN BANKING CAN HELP



- ✓ Enhancing productivity
- ✓ Business performance insights
- ✓ Optimising cashflow
- ✓ Access to credit
- ✓ International payments

Boosting productivity and insight

Many small businesses are now using cloud accounting solutions. Open Banking can transform the ease, accuracy and power of these accounting solutions by providing real time bank feeds. The productivity gains could be substantial. Firms can get much more accurate and convenient insight into how their business is performing, and identify issues earlier. Sole traders may not need a fully-fledged cloud accounting solution. Open Banking can enable the equivalent of a Personal Finance Manager, helping sole traders raise and track invoices, move money and pay bills.

Reducing the burden of late payments

Small businesses in the UK suffer particularly from the challenge of late payments. Open Banking-enabled services can help to take the friction out of getting paid, giving early warning of invoices which need attention and making it easier to access short term credit as needed.

Making money work harder

15% of small businesses have over £100,000 in their current account and in total there is £130bn kept in these accounts generating little interest for their owners.²⁹ Open Banking can enable automated solutions to shift cash between accounts and optimise returns.

Alternative forms of credit

36% of small businesses borrow,³⁰ with many using an overdraft or business credit card. Open Banking-enabled solutions will make it easier to shop around – particularly for the 40% who plan to grow and may need finance to support their plans and the 93% of small businesses who still go to their main bank for their lending needs.³¹

Better ways to pay and be paid – particularly international payments

Open Banking-enabled payment solutions can reduce costs associated with transactions and bring convenience and flexibility to small businesses. International payments in particular is an area where many small businesses pay over the odds by using their main bank.

Access to advice

Small businesses face an advice vacuum. Banks provide limited support and since the demise of Business Link there are very few sources of much-needed business advice. Open Banking could enable small businesses to share data to get dynamic and tailored advice.

Potential small business value

Open Banking can help small businesses get better deals, make their money work harder and improve efficiency.

£6bn

Potential annual value

£1,083

Per business

0.4%

Of turnover

SME productivity

It is widely recognised that the UK has a productivity gap compared to the majority of its G7 competitors. Research shows that SMEs are a key untapped resource for closing this gap. BEIS recently concluded: “... Productivity growth is essential for promoting long-term economic growth and higher living standards. It is therefore vital that SMEs are given the best chance of succeeding and can contribute towards the UK’s productivity.”²⁸

The reasons for this low productivity are complex, but Open Banking-enabled services touch a number of critical areas: reducing time spent on non-productive bureaucratic tasks; enhancing insight into business performance; improving access to competitive credit; and opening up channels of advice with access to real-time data.

REALISING THE VALUE

Our pen profiles show Open Banking could drive benefits for everyone. This value is both financial and non-financial.

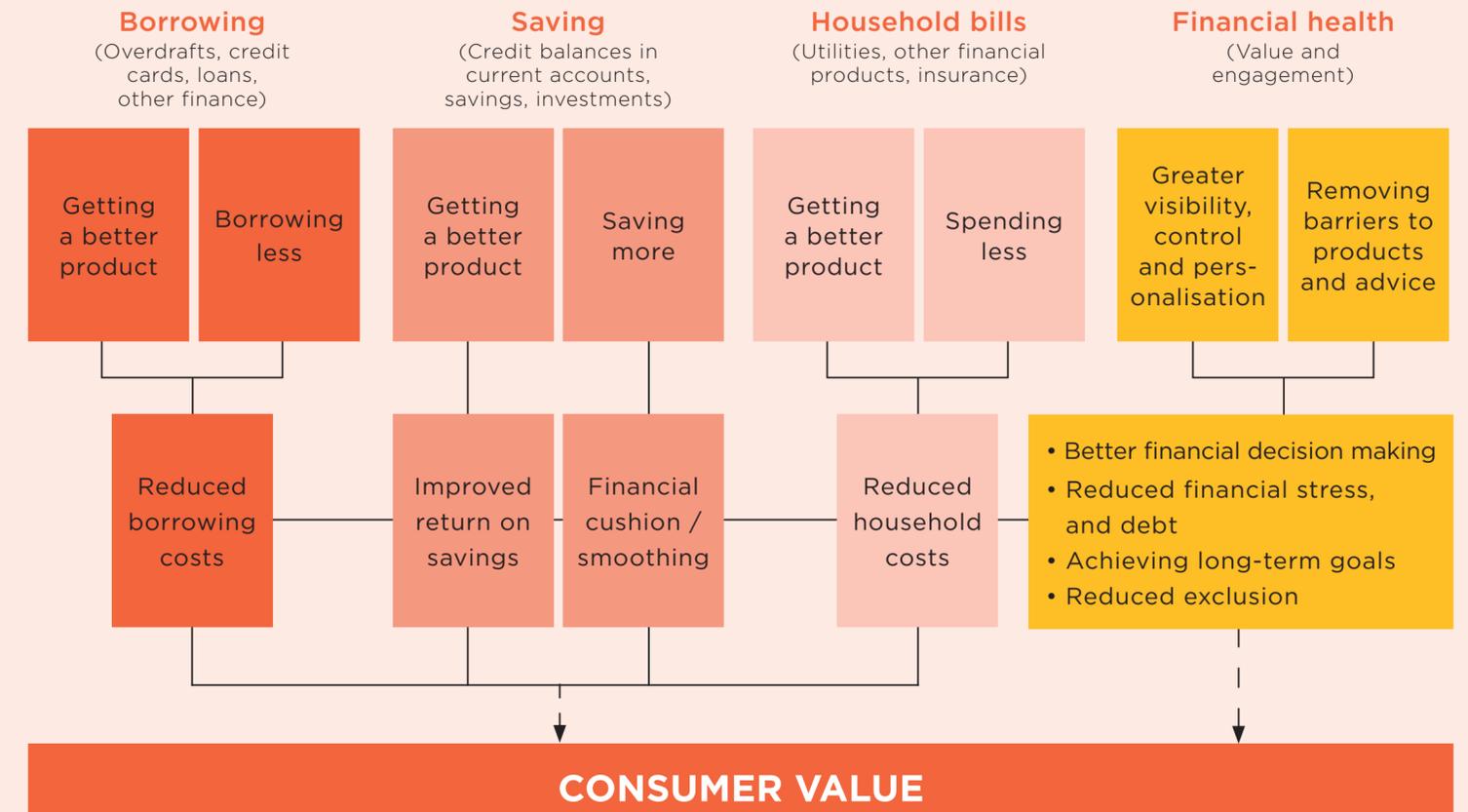
Based on our conservative estimates, people could accrue a potential £12bn financial value over the course of the year. For small businesses, it would be £6bn. On a case by case basis, for some individuals and small businesses paying over the odds across a range of products, the value could be significantly more than these average figures suggest. Open Banking is in its infancy and the true value is likely to evolve as more evidence emerges, new propositions are identified and markets adjust.

Alongside identifiable savings like avoiding overdraft fees or facilitating balance transfers, there are additional savings people may make based on more informed spending patterns. For instance, a PFM platform could raise your awareness of your spending on coffee and as a result you make a decision to invest in a coffee maker which reduces your spending, and allows you to save for a new iPad. Consumers might reduce spending or target savings for other purchases or different brands, which may not have occurred otherwise (and which are not quantified in our assessment of value), suggesting that the financial value could be higher.

In addition, there could be benefits for consumers' financial health: the value of better long-term decision making, reduced incidence of stress and mental health crises caused by money worries, improved access to financial services and advice.

We have looked at several value drivers which Open Banking services could influence and the inter-connections between them.

HOW OPEN BANKING DELIVERS VALUE TO CONSUMERS



REALISING THE VALUE

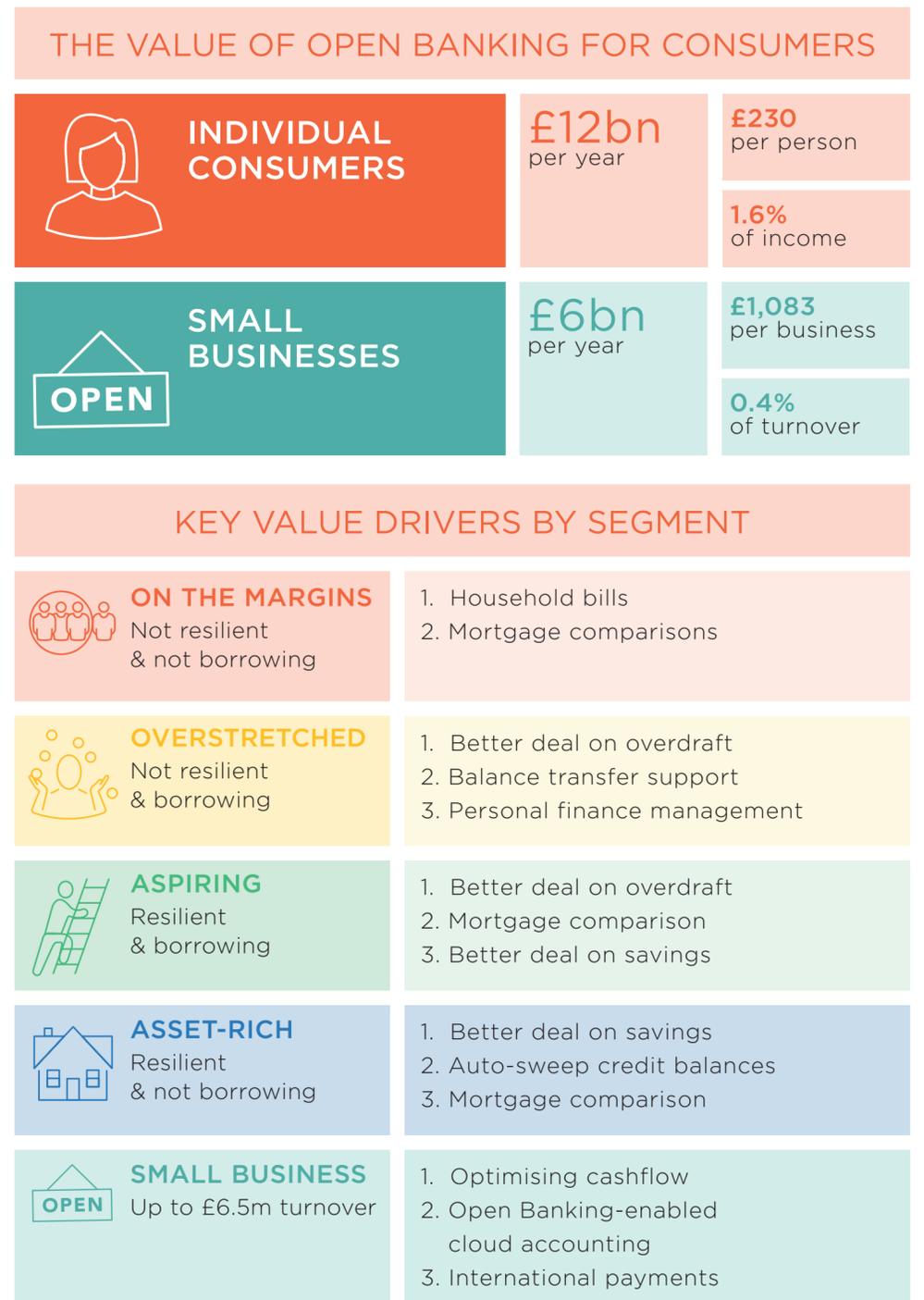
The segment represented by Noa and Ash (**Overstretched**) would stand to gain most from Open Banking (£287 per year) according to the savings they could gain as a percentage of their annual income (2.5%). The main driver of value for Noa and Ash would be moving to a cheaper form of credit than their current overdraft (by switching or getting an alternative overdraft) and moving credit card. Alerts and nudges to avoid interest payments and penalties provided via a PFM platform could be very powerful.

Our **Asset-rich** segment could save £5.8bn over the course of a year (£249 each). The largest financial benefits come from helping Mae and Max get more from their credit balances. Open Banking could facilitate a savings sweep facility which would automatically move their high balances to an interest-bearing account; and by helping to move existing savings to better paying accounts. Using Open Banking-enabled intermediaries to get a better deal on their mortgage is also a key value driver.

Al and Mo in our **Aspiring** segment would stand to gain an average of £266 each, and would get most value from switching current account or finding a cheaper source of overdraft credit; support and advice on getting a better deal on their mortgage and a savings sweep facility to help find a better home for their savings. The value this segment could earn from Open Banking-enabled products was the most evenly spread across the use cases in comparison to other segments.

Unsurprisingly, Jak and Jimmi, **On the margins** of financial services, would gain least from Open Banking-enabled products based on our value drivers (just an average of £72 each). The most significant value for them would be to save on household bills and insurance. In this respect, Open Banking could help reduce the poverty premium. For those with a mortgage their gain would be higher than those without. It is likely that for the majority the total value could improve with more financial inclusion and stronger control tools for spending. It is important to respond to this group's needs because the impact of exclusion from Open Banking could exacerbate their situation further and increase inequality of opportunity.

Both Dav and Sal, as **Small business** owners, can benefit considerably from Open Banking services, and the average benefit of £1,083 will flow through to profit for both their businesses. The key drivers of value are the productivity and performance insights which come from a real-time cloud accounting package, reducing costs of international payments and optimising cashflow. A significant number of small businesses can benefit by moving the cash held in BCAs into interest-bearing accounts, and back in as needed.



DESIGNING FOR ENGAGEMENT

For the value of Open Banking to be realised for consumers, it requires them to engage, add or switch to new products.

This is the premise of the CMA Order and PSD2: that consumers should enforce their market power, driving out bad actors and rewarding the good ones, forcing down prices and improving the quality of products. However, the adverse effects on competition identified by the CMA in the banking sector included a lack of consumer engagement in a market dominated by large incumbent firms. The purpose of the CMA Order then is to open up competition in the market, but also to engage consumers and help them add or switch to new providers who can offer better value.

As Jonquil Lowe of the Open University notes in a perfectly competitive market, consumers are rational, know their own needs, can access the full range of products, are equipped and have the time to shop around and switch and have the same knowledge and resources to facilitate their quest as firms do. In a perfectly competitive market, firms' profits normalise.

In reality, most firms seek to profit maximise and they do this through a variety of pricing and product strategies which leave consumers overwhelmed with choice and confused by opaque product information.

Consumers do not have equal resources to firms, cannot negotiate terms and conditions, and cannot evaluate a product fully in advance before having to make a decision. Consumers have to trust that providers will deliver what they broadly expect them to.

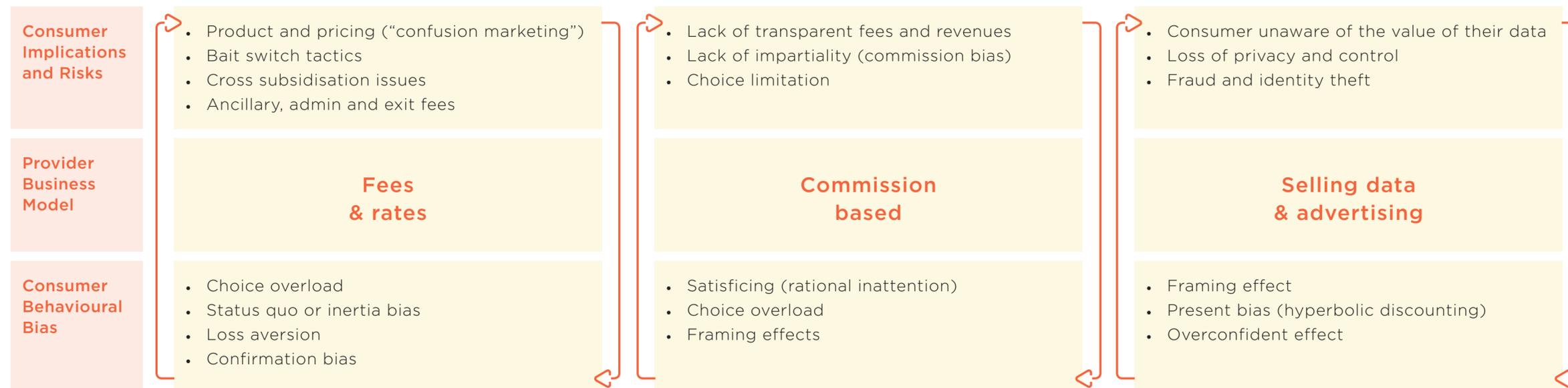
Added to this, human behavioural traits may reinforce firms' complex strategies. We all tend to exhibit behavioural biases which impede engagement or distort it. We tend to prefer the status quo, struggle with choice overload and may seek to confirm existing decisions we've made (confirmation bias).

We take mental short-cuts when faced with difficult decisions, and our bandwidth to appreciate costs and risks reduces when we face other worries (e.g. making ends meet). We don't consider or are optimistic about our ability to avoid fees or incur ancillary charges (optimism bias). We may also be affected by the availability of information, the way it is framed and the time we receive it.³²

Firms' pricing strategy and consumer behaviour: the 'loyalty penalty'

The degree of disengagement across regulated markets, including financial services, led Citizens Advice to make a supercomplaint to the CMA about the 'loyalty penalty'. The loyalty penalty is based around a simple pricing strategy of raising prices after a customer has had the product for more than a set period. It may be combined with 'bait and switch': a consumer is tempted to switch to access a 'teaser rate', a special or even 'free' offer but after a set period, the price increases. Companies rely on consumers inaction to subsequently maximise profits.

Citizens Advice found that 8 in 10 bill payers are currently charged significantly higher prices for remaining with their existing supplier in at least one essential market. Customers don't realise they are being penalised for their loyalty and face obstacles when trying to shop around. Older, lower income and less educated customers are more likely to face the loyalty penalty.³³

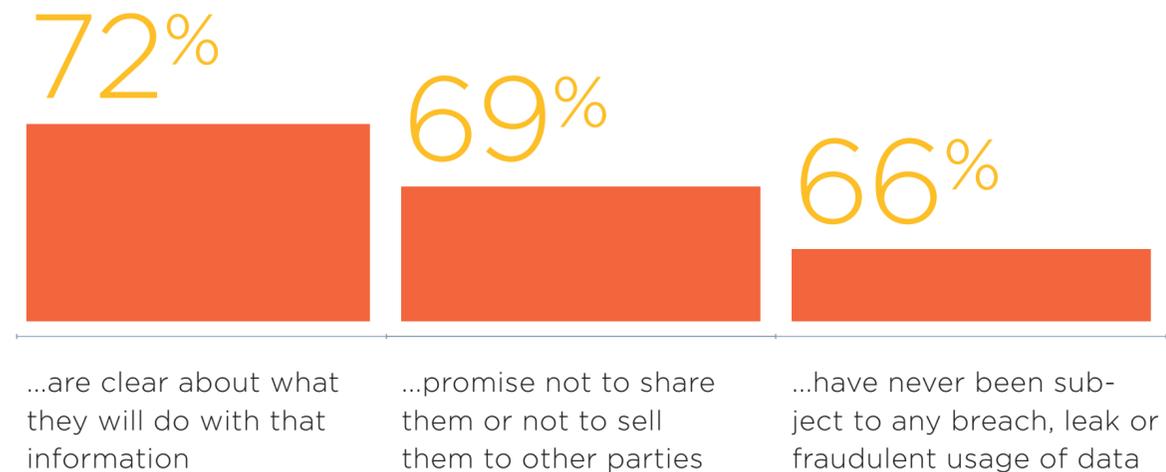


DESIGNING FOR ENGAGEMENT

For consumers to benefit from Open Banking they must be willing to share access to their bank account. Access to transaction data allows firms to offer services at the exact point in time when a consumer needs them, reducing the background noise and offering something genuinely valuable. Research shows that people are still not familiar with Open Banking as a concept³⁴ and they are cautious about sharing their data,³⁵ with 77% saying they would be concerned about sharing their data with companies other than their main bank.³⁶ Open Banking adds another layer of decision-making into an already complex process of choosing a product.

For Open Banking to be successful, firms must create innovative products that respond to consumers' needs. But they must also design innovative interfaces that reflect the capacity of the people and small businesses they want to engage, and earn their trust by working in their best interests. This is confirmed by regulatory guidelines, like those produced by the European Banking Authority on Product Oversight and Governance Arrangements for Retail Banking Products.³⁷ They say that firms should aim, when products are being designed and brought to market, 'to ensure the interests, objectives and characteristics of consumers are taken into account'. They also say firms should avoid potential consumer detriment and minimise conflicts of interest.

Consumers who would be more comfortable sharing personal information with companies who...



Research repeatedly shows that consumers want to know that their money and their data is secure. Features that aid transparency build trust and those that aid control keep consumers coming back. Convenience and speed create an experience that's worth repeating. Clarity and feedback loops provide reassurance. The same is needed both for the product and the touchpoints (such as consent) that consumers go through to access and exit the product.

Further developing the interface of current Open Banking products could widen their appeal to a broader set of people and small businesses like our pen profiles mentioned earlier. Partnering with community finance providers, advice agencies and the Post Office could bridge the digital divide for people like Jak. Account assistants, voice-activation and in-app video facilities would provide convenience and reassurance to people like Mae. Providing real-time visibility of balance and stronger spending controls would empower people like Ash and give people like Jimmi greater reassurance. Values-led products which integrate with life goals would appeal more strongly to people like Max.

Source: Source: Ipsos, Global Citizens and Data Privacy, 2018³⁸

DROPPED KERB DESIGN

'Dropped kerb' design is a term used to describe services which are designed primarily to make them accessible for more vulnerable people, but which when implemented make everyone's life easier. For instance, when the kerb is dropped for people in wheelchairs to improve accessibility, it's also found to be of benefit to a wide range of others: parents with prams, commuters with trolleys and tradesmen shifting heavy loads.

In 2011, the Financial Inclusion Taskforce recommended the promotion of 'jam-jar accounts' to give people more control over their money and to make banking more attractive to financially excluded and marginally banked people. These accounts would split consumers' balance into spending, saving and bill-payment pots. They would improve consumers' budgeting and bill payment behaviour through automatic low balance alerts and transfers of funds between 'jam-jars'.

Today, the young, tech-savvy, early adopters of challenger accounts value the very same 'innovative' features that were recommended for people on the margins of banking, some eight years ago.

DESIGNING FOR ENGAGEMENT

In addition to the design of the interface, consumers are also looking for firms to act in their best interests, with customer perceptions of the trustworthiness of firms increasingly being influenced by ethics and governance.³⁹ The research firm Ipsos MORI describe this as the difference between 'basic' trust, where consumers can rely on others to do what they say they will, versus 'active' trust, where consumers believe that a firm will treat them well and have their wellbeing in mind in the way they conduct their affairs. 'Inter-active' trust is a step further, where consumers may ask firms for something that is not strictly part of the rules and regulations, but where they hope a firm will comply based on a shared level of humanity (this level of 'interactive trust' seems particularly pertinent to helping consumers who are vulnerable).⁴⁰

"The lack of trust in the financial services sector partly reflects a failure of providers to articulate the value they are offering, leading to suspicions that their overwhelming priority is to make short term profits...providers must find new ways to explain the services they are providing, encourage consumers to voice their goals, priorities, expectations and respond to these."⁴¹

Research by Ipsos MORI for OBIE shows consumers are more willing to share their data where they believe a firm is acting in their best interests.⁴² But likewise are wary where they believe a firm may not act in their best interest,

increase the price or exclude them. The Financial Services Consumer Panel has called on the FCA to introduce a 'duty of care'⁴³ for firms to help them keep more in tune with consumers' needs and avoid such detriment. PWC notes that the answer to the dilemma of trust 'is not to push more and more product disclosure, but to guide customers through their choices in a way that is relevant and meaningful to them. Customer engagement and empathy over product disclosure is the point here'.⁴⁴

"After a week I'm hooked. This is what I was looking for. Control, but delivered simply"

"At any point in the night you can just touch an app on your phone and see exactly how much you have left in your current account...With a normal bank account...checking your balance/spending takes so much effort that you would never normally bother doing it."

"Because you get notifications instantly whenever a payment on your card is made, you can flag up dodgy payments immediately... Contrast with a traditional bank and it can be a headache having to make that call, go through security checks over the phone, explain the situation. The ease of use really pays off"

[Consumer reviews of fintech products]⁴⁵



Security
Transparency
Control
Convenience
Speed
Trustworthiness
Reassurance



DESIGNING FOR ENGAGEMENT

Understanding and addressing the trade-offs between consumer and firm interests necessarily requires a consideration of ethics: what a firm will and won't do and how it will communicate it. The advent of Artificial Intelligence (AI) and new technologies could exacerbate risks and further reduce consumers' ability to make informed decisions.

"The risks are heightened due to a combination of: even more opaque business models / conflicts of interest; a more complex, fragmented financial ecosystem; greater information asymmetries; more sophisticated confusion marketing; firms / intermediaries utilising data analytics to manipulate consumer behaviour, exploit consumers' behavioural biases, and manufacture fears. Far from levelling the playing field for consumers, compared to 'analogue' financial services, fintech could make it harder for consumers to make effective decisions and choices."⁴⁶

Greater than Experience recommends focusing on the outcomes people most value: both functional (the job to be done) and emotional (what consumers want to feel at the end). Their 'Data Trust by Design' framework builds on this foundation to help firms design products and services, business models and incentives structures that are directly aligned to their customers. Product information and terms and conditions become part of the core value proposition and experience (rather than simply a legal or regulatory requirement).⁴⁷

Firms can go further by considering the impact of their product on consumers and how it is meeting their needs and having an impact on others, incorporating this into the feedback loop, and making adjustments to ensure they are delivering socially preferable outcomes which build trust.

"[I was] feeling so anxious that I was going to be in trouble I spoke to an amazing girl called Jordan she reassured me that she could help and she did."

"I've enquired about duplicate and missing transactions, new features, replacement cards and the occasional bug and the response time has always been great, with super clear information and genuine human interactions."

"Instant bank balances each morning and very effective automated responses to questions on the app."

[Consumer reviews of fintech products]

PART ONE CONCLUSION

To be successful, Open Banking-enabled products must be tailored to the needs of a more diverse set of consumers and stretch beyond the 'early adopters'. People who are **Over-stretched** or **Asset rich** particularly stand to gain financially from Open Banking while our **Aspiring** segment are most likely to need an 'all-in-one' app that caters for their wider spread of needs. The impact of being left behind is likely to exacerbate problems for 17% of our population who are **On the margins** of financial services. The industry must increase its efforts to work with others to bridge the divide for this group – in doing so, dropped kerb design means their efforts will likely be attractive and benefit others too (especially older, retired, asset-rich customers).

For small businesses Open Banking-enabled products hold the promise of allowing the people who run them to spend less time on routine chores and more on the things that led them to start up in business in the first place. This in turn could lead to a significant improvement in small business productivity to the benefit of the whole UK economy.

Firms can improve accessibility to their products by integrating more features, such as digital ID and voice activation. They can improve engagement by considering the outcomes they are seeking to help consumers achieve and aligning their business models to these. Data and the growth in AI give further weight to considering the responsibilities that firms have towards consumers and what it is realistic to expect of them.

Communication should be used as a tool to engage and empower consumers (rather than as a means for firms to absolve themselves of their responsibilities). Ethics and governance are central to the design and communication of the product. Incorporating feedback loops and evaluating the impact of products on consumers downstream will enable firms to avoid creating new forms of detriment and allow them to adapt and stay relevant.



PART TWO:

WHAT THE
MARKET NEEDS
FROM OPEN
BANKING



RESPONDING TO THE REVOLUTION

Consumers may face challenges engaging with Open Banking-enabled products, but firms also face challenges in developing the underpinning technology and delivering the products that drive the value for consumers.

In this section we consider how firms are responding to the Open Banking revolution and key priorities which will:

-  Deliver value
-  Build trust
-  Stimulate the market

The FCA began taking applications for third parties to become authorised in October 2017. The number of parties registering grows daily, but at the time of writing 122 firms had registered with the FCA. The implementation of Open Banking is at an early stage with many firms being young start-ups. It's therefore unsurprising that not all the propositions outlined in Part 1 of the report are being delivered yet. It is early days to make any assessment of the market. Nevertheless, it is helpful to understand where third parties appear to be focusing their efforts so we can assess the gaps and what is needed to drive out further value from Open Banking as firms move from implementing standards to building products.

Of the companies registered to offer Account Information Services (AIS) and Payment Initiation Services (PIS), the key services offered are Personal Financial Management (PFM) platforms, credit risk profiling and payments for e-commerce.

Personal Financial Management platforms are central to realising value across a number of other use cases. They provide a foundation from which to understand a consumer's patterns of income and expenditure, respond according to their particular need and integrate other services suited to their lifestyle or business stage. These services are beginning to materialise (though not yet comprehensively used). They are still developing the features and interface that may make them attractive at a mass scale and underpin the business case to make them successful in the long term.

The second area where there is healthy development is in credit risk profiling. There is a clear alignment of consumer demand and firm supply in the lending market. Consumers are also familiar with providing detailed information about themselves for 'credit checks'. The match in supply and demand means this market is developing more quickly.

Research commissioned by OBIE¹ suggests that as many as 760,000 consumers could benefit from sharing their data to supplement their 'thin credit files' and access credit. The use of transaction data is also helping 'rent recognition', enabling people to access first-time mortgages.² The sharing of data means some consumers will not be able to access credit because their affordability is easier to assess. They may avoid debt as a result. However, this focus on credit risk profiling has not yet been matched by innovation in credit products that drive a lower cost of credit for consumers, e.g. third party overdrafts, or moving people at the end of balance transfer rates.

Improved risk profiling is highly valuable to lenders. It enables them to price more accurately, reduce defaults and potentially negotiate more successfully when setting up repayment plans. Data brokers can combine transaction data with other types of consumer data to develop very detailed profiles of people for targeted marketing, pricing, competitor due diligence, and other products like insurance. This level of detail is likely to tip the asymmetry of power between firms and consumers further towards firms.

There are a number of providers registered for e-commerce payments, although few are live. These may particularly benefit small businesses who frequently pay 3% or more to accept card payments. However, the number of providers registered has yet to be felt in the market with few offering services directly to people. The unique non-financial value of payment initiation in an e-commerce setting for people is the ability for them to see their balance before they agree to the payment and the improved control from real-time movement of money. Combined with digital identity, payment initiation could significantly reduce friction and fraud in payments. Nevertheless, in the meantime, cards still offer greater protection. It may be argued that the reduction in costs associated with cards for merchants could reduce retail prices for consumers, but this effect may take time.

RESPONDING TO THE REVOLUTION

Our analysis shows that 80% of the value for people and 60% for small businesses lies in propositions for which there are less than three or more firms registered per proposition. There may be other firms we have not captured that make use of Account Information or Payment Initiation providers. For instance, a number of fintechs are providing services to money advisers, who are not registered for Account Information Services. However, the assessment serves as a useful indicator.

The range and number of firms developing and offering solutions is growing, but the market is still at an early stage. For Open Banking to be truly transformational for people and small businesses, we need growth in the products identified by the CMA Order and which we have similarly identified as capable of driving most financial value for consumers. Building products which are both convenient and trustworthy compounds the overall financial and non-financial value to consumers. Open Banking has significant potential, but it can only be realised where:

- Products are available and accessible to all
- Products can be sufficiently compared
- The products and those providing them engender sufficient trust among consumers to adopt them

PRIORITY PRODUCT AREAS

Where potential financial value is highest, but availability limited:

- Tools which help consumers compare current account options
- Third party overdrafts: an unbundled alternative to traditional overdrafts
- High balance sweeping / optimising cashflow for personal and business current accounts
- Support for consumers managing balance transfers on credit cards
- Recommendations on better deals on household bills
- Saving money when making international payments

AVAILABILITY OF OPEN BANKING-ENABLED PRODUCTS

	 Limited Availability	 Emerging Availability	 Good Availability
 INDIVIDUAL CONSUMERS	<ul style="list-style-type: none"> • Current account comparison • High balance sweeping • Third party overdrafts • Maximise interest on savings • Better deals on household bills • International payments • Mortgage comparison • Balance transfer manager • Micro savings • Highly controlled payments 	<ul style="list-style-type: none"> • E-commerce • Debt advice 	<ul style="list-style-type: none"> • PFM platforms • Credit applications
 SMALL BUSINESSES	<ul style="list-style-type: none"> • Optimising cashflow • International payments • Domestic payments • Current account comparison 	<ul style="list-style-type: none"> • Credit applications • E-commerce 	<ul style="list-style-type: none"> • Open Banking-enabled cloud accounting • Small business PFM platforms

Note: Registered firm availability is qualitative assessment based on the declared business models of currently registered third party providers (TPPs). Adjustment has been made for TPPs who are registered but not live. Analysis based on publically available insight, and some significant initiatives not in the public domain may change the categorisation of some propositions.

SERVING THE NEED

OBIE has developed a suite of tools to enable firms to join the Open Banking ecosystem, share data securely and swiftly via the APIs and implement the standards consistently; it has also provided for a dispute management system. OBIE is a global leader in developing standards and has greatly influenced several other countries, including Australia, Canada and the US. However, its work is not yet finished. People and small businesses need more from Open Banking-enabled products, but third party providers can only respond where the technology and regulation enable them to do so.

Here we set out the key priority areas where we believe OBIE, government, regulators and the financial services industry could help deliver more value, build trust and stimulate the market.



DELIVERING VALUE

1. Extend the scope of the APIs to include other products and implement in an orderly way
2. Introduce digital identity
3. Deliver sufficient consumer protection to enable Variable Recurring Payments (VRPs) to be mandated safely
4. Make fees and rates transparent on international payments
5. Provide status of payment to the third party
6. Facilitate e-commerce with refund functionality
7. Ensure API availability, quality and reliability



BUILDING TRUST

1. Make it clear which firms are legitimate
2. Bring clarity and control to onward sharing
3. Make consents transparent and traceable
4. Make redress easy and consistent
5. Bring consistency and clarity to consent and access dashboards
6. Allow people to withdraw consent and re-authenticate conveniently
7. Make protection for payments consistent
8. Give people visibility of their balance before they make a payment
9. Establish a duty of care from firms to their customers



STIMULATING THE MARKET

1. Co-ordinate a sustained incubation, acceleration and innovation programme
2. Deliver a nationwide, co-ordinated and simple communications campaign to let consumers know they can safely share their data
3. Deliver a robust, policed Trustmark for firms who meet agreed standards

DELIVERING VALUE

1. Extend the scope of the APIs to include other products and implement in an orderly way

The scope of the APIs should be extended to other non-PSD2 products.

These should:

- Include all savings accounts, loans and other forms of credit, mortgages, pensions and investments
- Make personal and product data available. Make all pertinent data available online and shared over the API
- Ensure open data exposed via the API is comprehensive, real-time and accurate to facilitate more tailored product comparisons

The 'cliff-edge' risk to consumers of full PSD2 implementation should be assessed and mitigation put in place urgently.

2. Introduce digital identity

- Industry must drive through solutions to make digital identity an inclusive reality for people and businesses.

Firms are hindered from accessing the personal and product data needed to provide the full suite of propositions consumers need. In our analysis, around 40% of the consumer value from Open Banking is currently outside the PSD2 perimeter. Firms providing an overview of a consumer's products are forced to use alternatives to APIs such as screen-scraping. Screen-scraping is considered less secure; less convenient for firms and consumers; and offers firms less ability to minimise the data they take. Multi-Factor Secure Customer Authentication (SCA) is only required on products within the PSD2 perimeter. An inconsistent use of authentication methods reduces the familiarity of data sharing for consumers. Added to this, third parties are struggling because there is a very limited transition period to the full PSD2 regime which means consumers may lose key services.

Digital identity is a key enabler to improve convenience, reduce fraud and bring harmonisation to data sharing and payments. For people on the margins, biometrically-authenticated digital identity gives them a new way to prove who they are without needing to rely on documents they may not have. For small businesses, a lack of shareable KYC documentation creates a barrier for them to switch services as identity has to be re-established. Digital identity is a requirement of the Pensions Dashboard envisaged by the Department for Work and Pensions (DWP). Combined with digital identity, payment initiation could allow people to access products, identify themselves, confirm their address details and pay in one go, before getting a real-time balance update. This significantly reduces the friction involved in e-commerce as well as people's ability to switch between financial products.

Recommendations for:

- HM Government
- Financial Conduct Authority
- Competition and Markets Authority
- Open Banking Implementation Entity

DELIVERING VALUE

3. Deliver sufficient consumer protection to enable Variable Recurring Payments (VRPs) to be mandated safely

- VRPs should provide protection for fraudulent and scam payments, as well as issues with the merchant or product being paid for
- The use of VRPs should be limited in the case of debt repayments as Continuous Payment Authorities (CPAs) are (to avoid emptying accounts when consumers may have financial difficulties)
- A list of VRPs should be available on the consumer's online and mobile banking platforms / dashboards. They should be able to amend or cancel a VRP with their merchant, third party or bank
- VRPs (with the necessary consumer protection) should be a requirement on firms to implement in order to deliver the CMA Order

VRPs enable third parties to use their customer's data to monitor the account and initiate a payment when certain conditions are met (for instance, a threshold for surplus funds in an account is identified, so money is automatically moved to a savings account). This type of payment arrangement is fundamental to the success of approximately 38% of the consumer value from Open Banking, based on our analysis. VRPs offer more control for consumers than CPAs, however, their value could be undermined if there is not sufficient consumer protection built into their design to bring them in line with the protections on card payments and the regulatory limits on their use for debt repayment.

Recommendations for:

- HM Government
- Financial Conduct Authority
- Competition and Markets Authority
- Open Banking Implementation Entity

4. Make fees and rates transparent on international payments

- Providers should be obliged to share applicable fees and exchange rates prior to initiation

For competition to work more effectively in international payments, consumers must be able to see the total cost before they proceed to initiate a payment. Small businesses are the greatest users of international payments. One estimate places this figure at almost £163bn a year and suggests that small businesses collectively pay £4bn more than they need to in foreign exchange (FX) and transaction fees.³

PSD2 allows banks to share fees and any applicable FX rates with third parties after the transaction has been initiated, thus reducing consumers' ability to see the full cost before confirming payment. This will significantly hamper the emergence of a competitive market for international payments.

DELIVERING VALUE

5. Provide status of payment to the third party

- Banks should provide accurate, 'real-time' status up until the point that the payment enters the scheme for processing (which covers the majority, but not all, of payment failures)

4% of all Faster Payments fail during the set-up phase⁴ and consumers who set up payments via a third party should get 'live' updates on the status of them. Lack of meaningful status from the account servicing payment service provider (ASPSP "bank") to the third party has been identified by the API Evaluation Working Group and others as a key limitation in delivering payment initiation services. OBIE's own analysis demonstrates that most banks are "only providing the 'pending' status in order to meet the regulatory requirement for an 'immediate' response".

6. Facilitate e-commerce with refund functionality

- Firms should provide a secure refund solution which is easy for merchants to use
- The refund solution should work seamlessly, even where the consumer selects the payment account in their bank domain

Refunds are essential in e-commerce, with as many as 30% of purchases being returned in categories like clothing.⁵ If refunds are not possible under all payment initiation journeys, Open Banking is unlikely to become a mainstream payment option for e-commerce. This will prevent a competitive market emerging and preserve the card-centric status quo, which places a significant cost burden on small businesses that accept cards. Consumers will also be denied a choice in the way they choose to pay online.

7. Ensure API availability, quality and reliability

- Develop a fines regime to penalise account servicing payment service providers (ASPSPs) who do not meet industry targets for API availability, reliability and performance

APIs are only an effective means of driving out valuable propositions for consumers where their performance is sufficient for third parties to build products. The lack of availability or reliability can undermine third party propositions and frustrate consumers. For consumers to value Open Banking-enabled products, they must function properly.

Recommendations for:

- HM Government
- Financial Conduct Authority
- Competition and Markets Authority
- Open Banking Implementation Entity

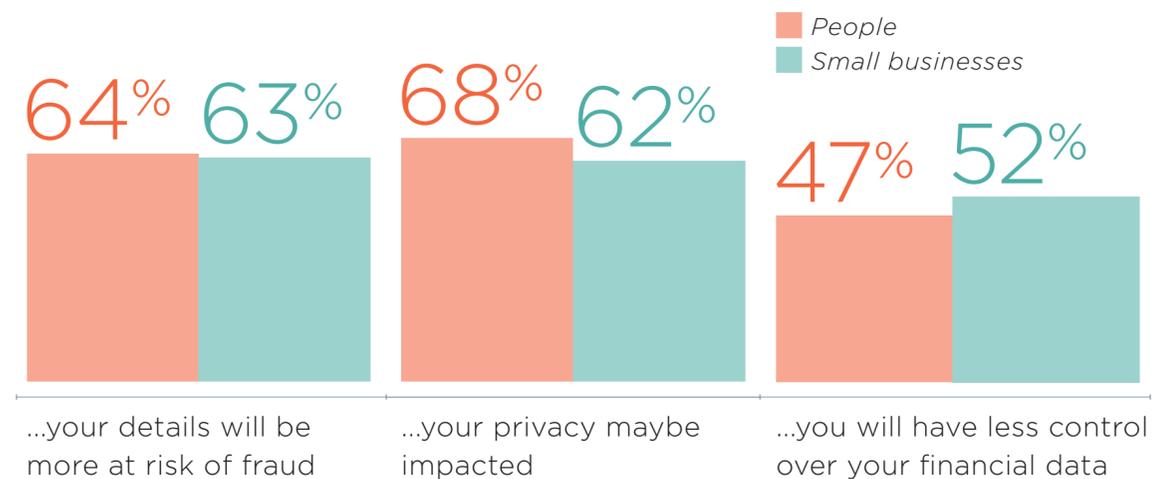
BUILDING TRUST IN THE ECOSYSTEM

A recent consumer survey highlights that both people and small businesses believe there is more to risk than to gain from Open Banking, with security, privacy and control all key concerns.⁶ As noted in Part 1, the success of Open Banking will depend on whether it can engage consumers and earn their trust. Realising the value of Open Banking implicitly means mitigating risks associated with it and ensuring that consumers' trust rewards only the good firms.

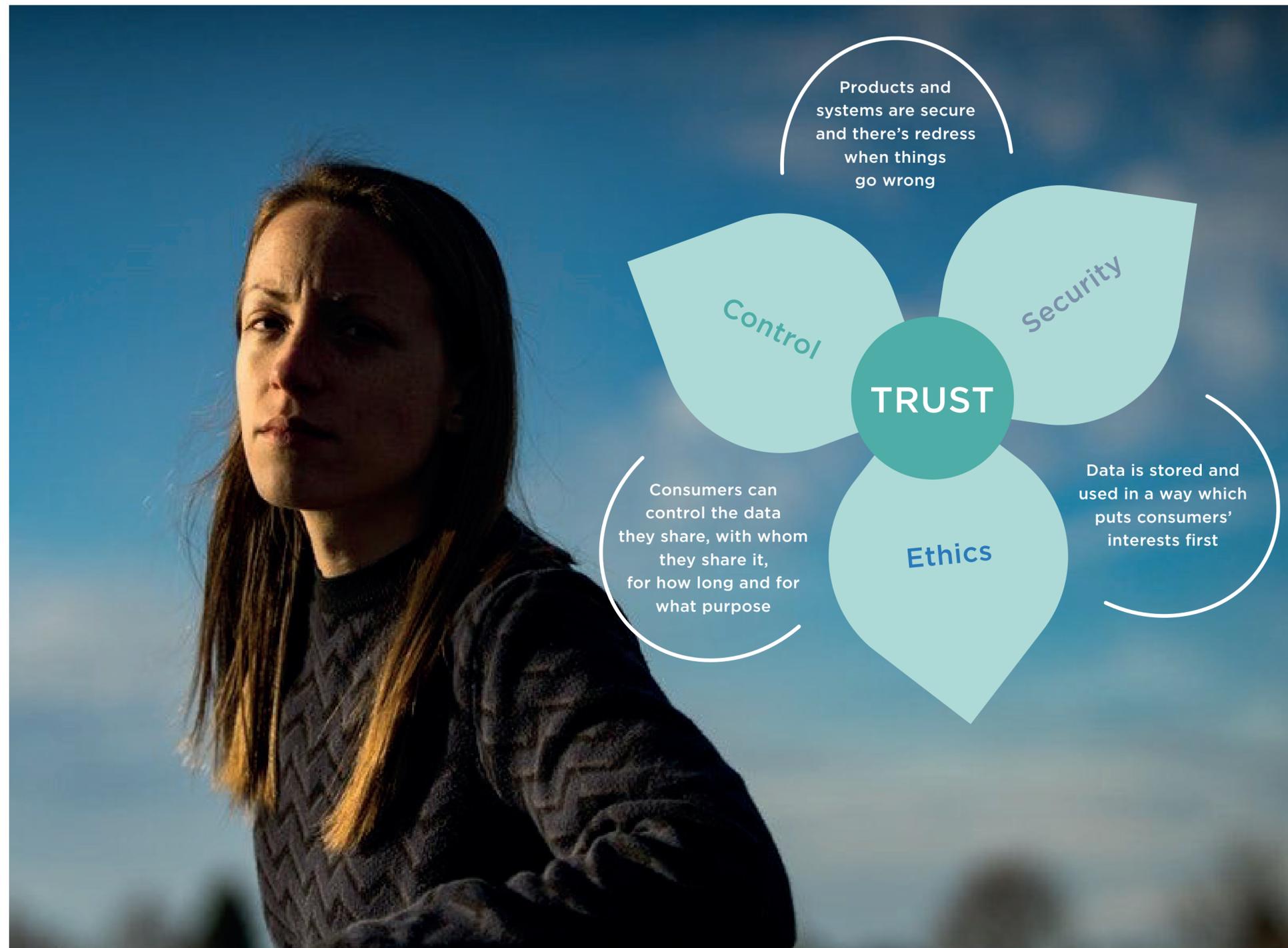
Our priorities are grouped into three areas: security, control and ethics. Together they provide a foundation for realising the value discussed and mitigating some of the risks associated with:

- Fraud and scams
- Asymmetry of power between consumers and firms
- Behavioural manipulation and mis-conduct

Consumers who agree that Open Banking means...



Source: PWC, *The Future of Banking is Open*, 2018



BUILDING TRUST IN THE ECOSYSTEM

Lloyds Consumer Digital Index⁷ suggests 8 out of 10 people have concerns about online security. In a survey of 2,000 people, 85% claimed the increased risk of fraud as the biggest barrier to them sharing bank account information with third parties.⁸ Key to realising the value of Open Banking is making sure that consumers can be rightly confident that the system is secure and if something goes wrong, they are protected.

BEIS makes a series of helpful proposals as part of its Smart Data Consultation,⁹ which signal the need for a regime to keep consumers' data safe across boundaries. We agree that a new regulatory regime should be established. It should be practical and realise our priorities as set out here.

The BEIS Smart Data proposals:

- TPPs ('third parties') should only be able to access consumer data once the consumer's explicit consent has been gained and identity verified through a secure authentication process
- Consumer data will only be shared through secure APIs
- TPP access to consumer data will be time limited and it should be as simple for consumers to revoke access as it is for them to grant access
- Only accredited TPPs will be able to access high risk data, for example banking or pensions data, via a Smart Data initiative
- Accredited TPPs will only be able to pass consumer data obtained via Smart Data initiatives to other third parties for approved purposes and only once the consumer has provided their consent
- In the case of data loss or misuse, there will be a clear way to ensure swift consumer redress. Clear liability rules will ensure a transparent system for settling disputes between data holders and TPPs

As scams become more sophisticated, consumers cannot easily check the legitimacy of firms. Consumers may give up credentials or other important information, like mobile phone numbers, to fraudsters phishing for information. Consumers are advised to check the FCA register but this adds too much friction to a journey which is not in keeping with the sentiment of Open Banking.

1. Make it clear which firms are legitimate

If a consumer's data is breached it may be difficult for a consumer to assess where the breach occurred or who caused it, making it difficult to pursue a complaint. In the first instance, consumers can complain to the Financial Ombudsman Service (FOS) but if data is breached by a body outside the perimeter, consumers can only seek individual redress through the ICO (Information Commissioner's Office).

4. Make redress easy and consistent

Consumers must securely authenticate (SCA) to share their financial data with a third party which is authorised and regulated by the FCA. However, once obtained, the third party can onward share the data to other parties. Consumers may not be aware that they have agreed to onward sharing and the sharing can happen without authentication. It increases the potential for fraud and identity theft and reduces people's control over their data and their ability to protect themselves.

2. Bring clarity and control to onward sharing

Language about the purpose and use of consent varies, meaning consumers may be unclear what data is being used for. Codifying types of purpose would standardise the uses and expectations related to data processing for firms and provide transparency to consumers. This purpose could then be viewed on the consent dashboard further aiding clarity and control. Connecting the purpose to the underlying metadata would provide an audit trail if the data is onward shared.

3. Make consents transparent and traceable

BUILDING TRUST IN THE ECOSYSTEM

In addition to the proposals laid out by BEIS, we also recommend that they should:

5. Bring consistency and clarity to consent and access dashboards

- Make the design of access and consent dashboards consistent for data holders and data receivers
- Ensure dashboards offer a searchable history of all consents and accesses granted (for data and payments); those still in force; date of expiry; the data being shared; and the intended purpose of data sharing
- Make sure consumers can identify the brand of the service on their dashboard as the company they did business with and include any third party acting as an intermediary
- Ensure onward sharing of data is captured by the 'data holder' and made visible to the consumer on the dashboard

The 'Open Banking dashboard' is at the centre of helping people manage their permissions. There are no regulatory requirements about how third parties should display the permissions granted, and no requirement on them to show to whom they have onward shared data or offer 'togglng off'. Consumers struggle to understand their data exposure. Helping consumers to make sense of the level of data they have exposed (for example by using a traffic-light system) could help people make more informed decisions. Dashboards should be required for all Smart Data initiatives.

6. Allow people to withdraw consent and re-authenticate conveniently

- Require consent to be manageable and revocable at both the data holder and the data receiver to ensure consistency across the market
- Require real-time two-way notification of revocation of consent
- Allow multiple connections to be re-authenticated in one domain; or allow all connections for one product to be re-authenticated in one sitting
- Create a three month cycle for re-authentication so consumers are not unduly inconvenienced by multiple re-auths across a 90 day period

A lot has been made of firm competition to 'own' the consumer journey. This obfuscates the fact that both ASPSPs (who 'hold' data) may become TPPs (who 'receive data'); and likewise TPPs may onward share and thus become 'data holders' as well as 'data receivers'. Consumers should be able to control the use of their data, including withdrawing their permission, both at the 'data holder' and the 'data receiver'. 90-day re-authentication provides some reassurance to the consumer that after 90 days, data-sharing will cease where they no longer want the product. However, re-authentication may become burdensome for multiple products with multiple connections. Some products work in the background and may be less used (e.g. bill monitoring). Consumers may find the inconvenience of re-authenticating a higher cost than the immediacy of the products' benefits.

Recommendations for:

- HM Government
- Financial Conduct Authority
- Competition and Markets Authority
- Open Banking Implementation Entity

BUILDING TRUST IN THE ECOSYSTEM

For payments, the same principles for redress and control should apply:

7. Make protection for payments consistent

- All payments made via Payment Initiation Services should have the same protection as recommended for Variable Recurring Payments (VRPs) on page 39

PSD2 provides protection for unauthorised payments. The UK has published its Contingent Reimbursement Model Code for Authorised Push Payment Scams and will deliver Confirmation of Payee. It is unclear how many PIS services will (be able to) sign up to the Code or provide alternative protection. International payments are not covered.

Recommendations for:

- HM Government
- Financial Conduct Authority
- Competition and Markets Authority
- Open Banking Implementation Entity

8. Give people visibility of their balance before they make a payment

- Require firms to display a consumer's balance immediately preceding and after a payment has been made

The Payments Strategy Forum recommended that consumers have "...real-time balance information to help them manage cash flow better".¹⁰ The Access to Cash review¹¹ noted that giving people real-time balance information would help people move off cash. Allowing people to see their balance immediately before and after they have made a payment offers much-needed control.

BUILDING TRUST IN THE ECOSYSTEM

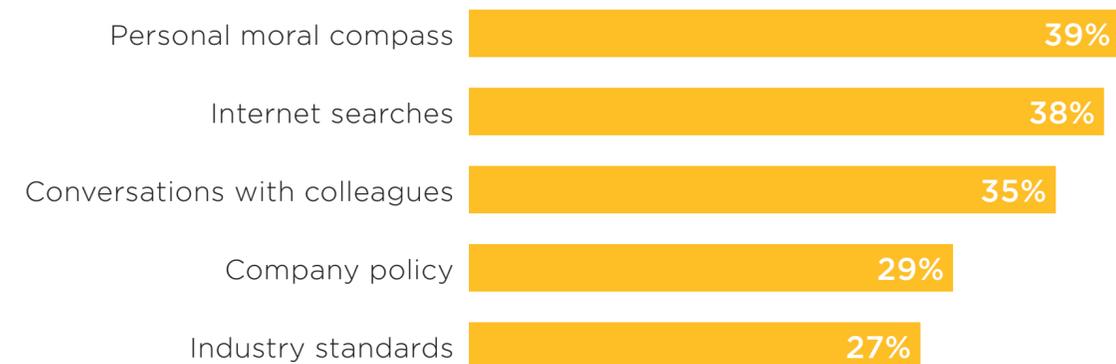
The increase in people's and businesses' data gives firms more power, and thus more responsibility to look after consumers. Risks associated with big data and artificial intelligence are keenly understood by industry, regulators and consumer groups.

A recent survey by Doteveryone¹² found that 59% of interviewees working in AI confessed they'd experienced decisions that could lead to negative consequences for people and society. 63% want more opportunity to consider the wider impact of their work. 78% want help by way of practical resources and workshops that help them build technology in a way which considers the impact it has.

In a survey of 27,000 consumers and business decision makers,¹³ 97% expected companies to act in their best interests and protect them by using technology ethically, with 94% saying, if not, then governments should step in.

An initiative led by the Lending Standards Board (LSB) is looking at the potential for a Code of Conduct for Open Banking. Their research with fintech leaders implementing Open Banking found they believed it should be a 'force for good'. However, there was no consistency about the way leaders understood 'ethics' or how they should integrate it into their governance.

Where tech workers have turned to when looking to assess the potential consequences on people and society



Source: Doteveryone, *People, Power and Technology*, 2019



BUILDING TRUST IN THE ECOSYSTEM

The FCA has committed to undertaking discovery work on data ethics and as part of this will publish its views on whether its approach to Treating Customers Fairly (TCF) is sufficient to cover data ethics. The Financial Services Consumer Panel (FSCP) has called on the FCA to introduce a 'duty of care' to address existing weaknesses with the TCF regime and to rebalance 'the information and bargaining position asymmetries between firms and consumers and ... [to] prevent poor conduct'.¹⁴ They suggest that it is only fair to expect consumers to take responsibility for their decisions where they can reasonably be expected to do so and where firms have exercised a duty of care.

The Treasury Select Committee has confirmed its support for such a measure.¹⁵ BEIS could consider such a requirement for data-led initiatives in keeping with its focus on delivering Smart Data infrastructure for the benefit of consumers, particularly vulnerable people.

A duty of care could offer a clear signal to the industry of the need to put consumers' interests first, especially where consumers cannot be expected to understand complex supply chains, the underlying technology or the level of security a firm has invested in.

Technology is moving quickly, industry representatives understand there are risks, but there is limited guidance on best practice. Firms need help to implement more ethical practices aligned to their purpose and the socially preferable outcomes identified by the OECD. But even where there is expert guidance, research shows that some industry decision makers believe firms will push the limits of AI development without regard for guidance.¹⁶ Firmer regulation may be needed, as recommended by Women Leading in AI.¹⁷

The UK Government adopted the OECD principles on Artificial Intelligence on 22nd May 2019:

1. AI should benefit people and the planet by driving inclusive growth, sustainable development and well-being
2. AI systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and they should include appropriate safeguards – for example, enabling human intervention where necessary – to ensure a fair and just society
3. There should be transparency and responsible disclosure around AI systems to ensure that people understand when they are engaging with them and can challenge outcomes
4. AI systems must function in a robust, secure and safe way throughout their lifetimes, and potential risks should be continually assessed and managed
5. Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the above principles

9. Establish a duty of care

- The FCA should establish a regulatory approach to govern and oversee the ethical use of artificial intelligence across Open Finance
- It should establish a duty of care from firms to their customers
- Firms should be required to report annually on the impact of their products on consumers and communities
- The Lending Standards Board should continue to work with industry and consumer organisations to deliver a Code of Conduct for firms which describes what good looks like (including provision for whistle-blowers).
- Industry bodies should develop more advanced ethics training and capacity building for their membership

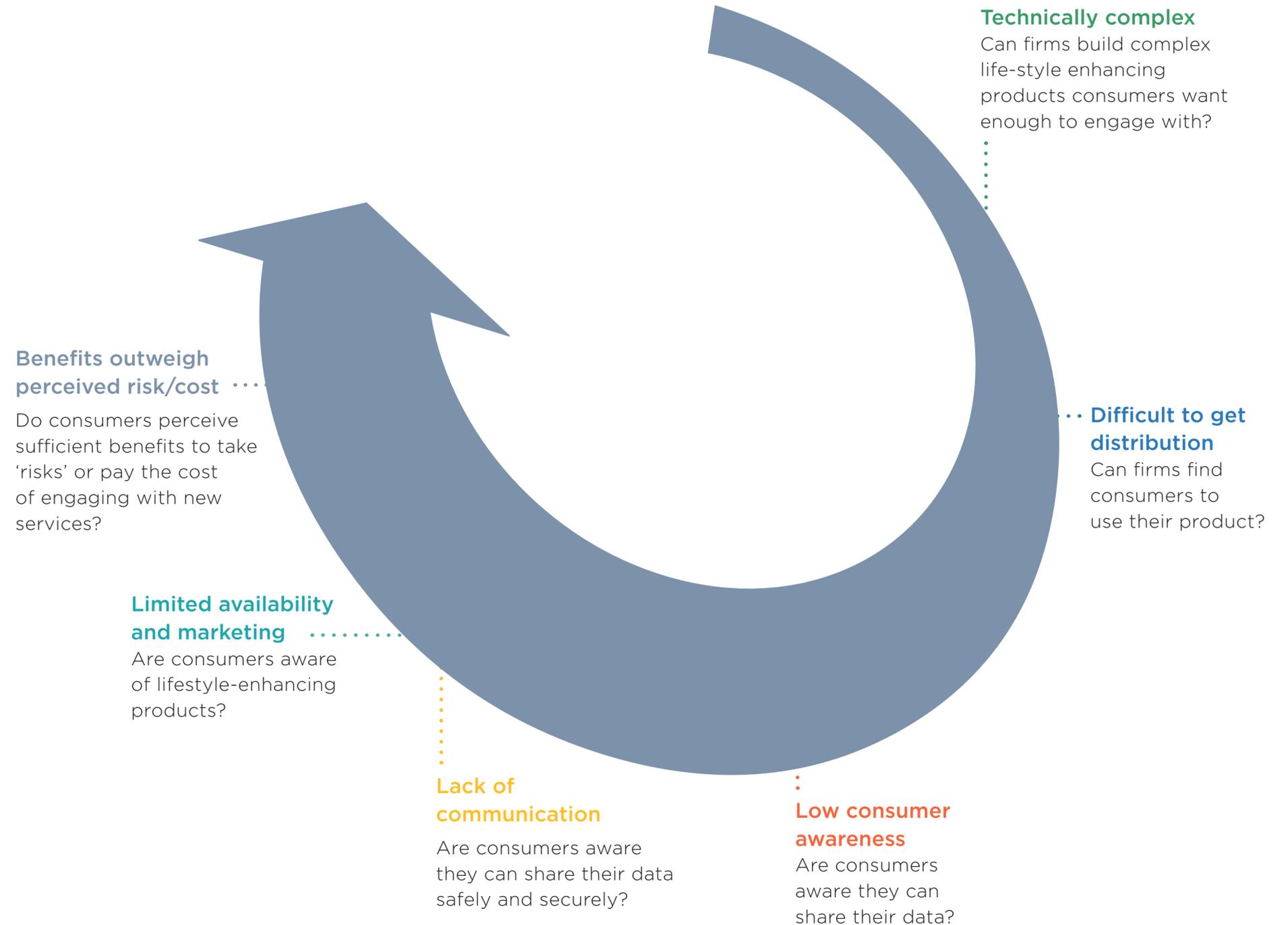
STIMULATING THE MARKET

Solving technology problems and mitigating potential risks may still not be enough to drive through the products that consumers need. Some key propositions, such as current account price comparison, have yet to materialise. Key challenges involve overcoming:

- The technical challenges of building the products people want
- Getting customers signed up to use the product

New services are challenged in particular by:

- Consumers' limited awareness of their right to port their financial data in a way which is safe and secure
- The limited consumer awareness of products and services sharing data can enable
- The difficulty of reaching consumers en masse; tempting them away from incumbents and overcoming consumers' status quo bias; or sufficiently selling the benefits of a product to outweigh the purchase costs or perceived risks



STIMULATING THE MARKET

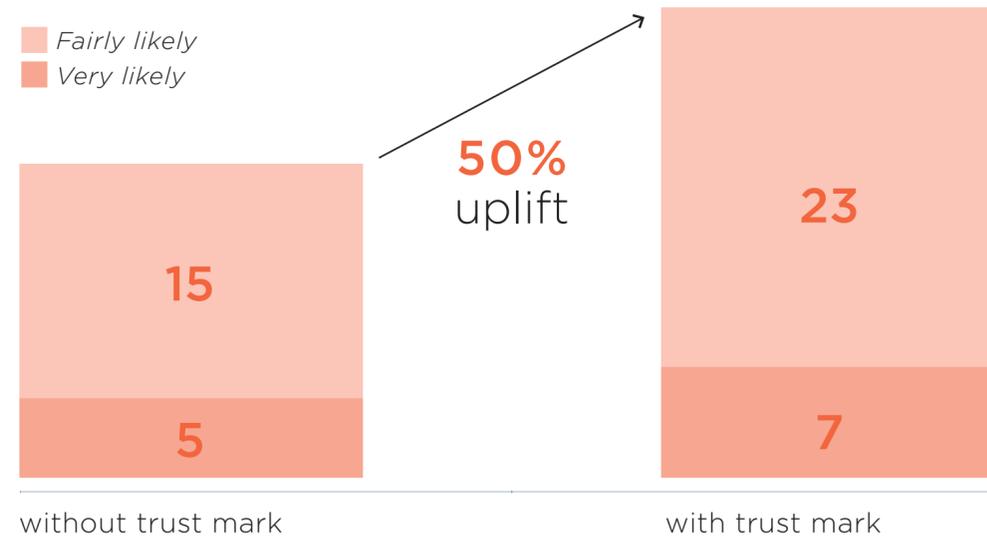
The market recognises the challenges and a mix of action is being taken. Fintech hackathons and challenges take place regularly. OBIE will be launching its second Open Up Challenge with NESTA focusing on people, following the success of the first small business Challenge. The Open Banking for Good initiative promises launches of new products this year which should particularly help people who are **on the margins** or **overstretched**. Showcasing winners in public media should help build awareness of some of the products people can try.

FDATA launched the Global Open Finance Centre of Excellence with Edinburgh University in December 2018, part of which seeks to build a data trust to enable fintechs, regulators and others to develop a better understanding of data, algorithms and ethics.

Sustained support for innovation over several years is likely to be needed for new firms to really exploit the technology for consumers' benefit.

OBIE is currently consulting the industry on the development of a Trustmark. However, this work is challenged by the nature of the PSD2 perimeter; onward sharing; firms' need to mix APIs and screen-scraping technologies to develop the products consumers need and want; and the unclear future of OBIE, among other things. Nevertheless, recent research by Ipsos MORI for OBIE shows that a Trustmark could have a positive effect on consumers, soften people's attitudes towards new providers and encourage take up.

Consumer likelihood to adopt Open Banking-enabled services



Source: Ipsos MORI for OBIE, Trustmark Research, 2019¹⁸

Consumers have a low awareness of their right to port their data generally and often under-rate the value of their own data. While limited awareness of the term 'Open Banking' may or may not be important, it is important that consumers understand their rights regarding their financial data, how they can share it safely, what it might do for them and that there is help at hand.

KEY PRIORITIES:

1. Co-ordinate a sustained incubation, acceleration and innovation programme to incentivise and support firms as they develop services, alongside facilities for training data
2. Deliver a nationwide, co-ordinated and simple communications campaign to let consumers know they can safely share their data to get life-enhancing products
3. Set the bar for what good looks like and deliver a robust, policed Trustmark for firms who meet agreed standards

PART TWO CONCLUSION

Consumers are looking for products which are more tailored to their needs and lifestyle, delivered with an interface that's equally suited to their capacity and interests. Many of the required products are not yet comprehensively available in the market or designed in a way which optimises consumer engagement and utility. Digital identity is a key enabler to improve consumer experience, control and security but has been slow to materialise. Additional functionality could facilitate the necessary product innovation but it's likely that more help is needed to address some of the business model challenges identified.

Consumers have a low awareness of their right to port their banking (or other) data. Research consistently shows consumers want safe and secure services, which give them speedy and convenient control and help when something goes wrong. Consumer protection for both payments and data-sharing needs harmonisation and simplification. Consumers need help to exercise control and take responsibility.



Niche adoption
Propositions do not materialise or are only adopted by low numbers of consumers

At the moment, they cannot identify legitimate/illegitimate providers; easily control how their data is shared or for what purpose; and if their complaint falls outside the perimeter (for example a data breach), their only route to redress would be through the ICO.

The aim of Open Banking is to improve value for people and small businesses by increasing competition and innovation in the market. However, with the end of OBIE in sight, we are at a cross-roads and need to take action to move the market towards the positive goals set for it. Without clear action to stimulate the market and mitigate the risks to consumers, a golden opportunity could be lost.



Market consolidation
Large incumbents dominate Open Banking distribution, nullify its impact on competition and increase barriers to switching



Risks crystallise
Fraud and misconduct proliferates. Firms act in ways which are 'legal but not right'



More informed decision making and engagement with financial products and services



Safer ways to share data and make payments



Access to better value products and offerings for everyone



Exclusion worsens
Open Banking is adopted by a majority, leaving the remainder excluded or paying more

THE VISION FOR OPEN BANKING

PART THREE:

WHAT OPEN
BANKING
NEEDS NEXT



WHAT OPEN BANKING NEEDS NEXT – GOING FORWARD

BEIS has set out its vision that consumers' data should work for them and not against them. Consumers should be able to use their data to make informed decisions about the best products and services and switch seamlessly.

We propose that a similar vision is now needed for Open Finance alongside a well-articulated roadmap for its delivery. The FCA¹⁹ has said in its Business Plan for 2019 that it will monitor Open Banking while leading the public debate on Open Finance. The public call for input allows the FCA to shape a vision for Open Finance with all stakeholders.

We suggest the primary and explicitly stated purpose of Open Finance should be to:

- Support increased productivity among small businesses
- Increase financial resilience for people across the whole of the UK

Its goals should reflect those set out in the Consumer Manifesto for Open Banking (see Note from the authors on page 2) ensuring Open Finance is a force for good which improves financial inclusion. A strategy should lay out clearly, sector by sector, how Open Finance will be delivered and its implementation principles. These should reflect those of the Smart Data Function proposed: to support the development and delivery of Smart Data infrastructure for the benefit of consumers, particularly vulnerable consumers.

Certainty about the future of Open Banking is needed. Government has set out its intentions for a National Data Strategy and its focus on becoming a world leader in data driven innovation. It has published the Smart Data Consultation

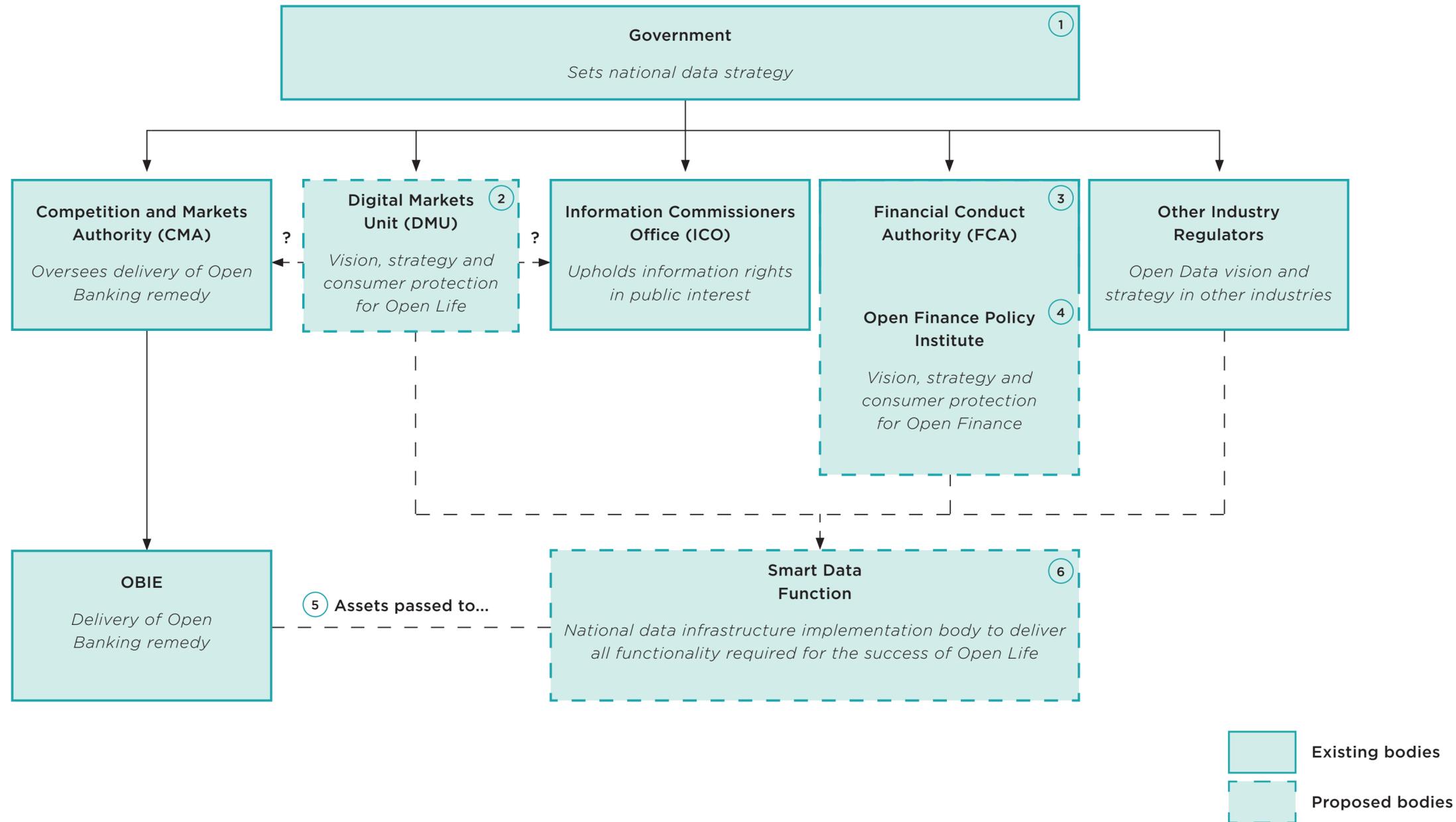
and announced its intention to review the payments landscape. But some urgency is now required to set out how the potential of Open Banking will be realised without losing momentum as OBIE comes to an end. And similarly, how the assets created by OBIE might be deployed for public benefit elsewhere. (It is after all consumers who pay for infrastructure by buying and holding financial products.)

Other similar initiatives in energy and pensions are already underway, but these are happening in regulatory silos, in part, because of legal limitations on the remit and funding of OBIE. The proposed role of the Smart Data Function and the steps to build trust in the market are needed urgently to avoid fragmentation of consumer protection, inconsistent approaches to authentication (leading to an inconvenient and frustrating experience for consumers) and a lack of interoperability. Such fragmentation increases costs for firms and reduces opportunities.

We suggest that the future of OBIE lies with the proposed Smart Data Function and the Digital Markets Unit. Below, we put forward some ideas to spark discussion and debate, in response to the Smart Data Consultation. The proposed Digital Markets Unit could play a role in providing the vision and strategy for Open Life or what we might now call 'Smart Life'. It would be responsible for considering the wider strategic priorities for the UK and the needs of consumers in a more data-based economy. The Digital Markets Unit would provide consistency for key cross-cutting policy areas relating both to consumer protection (e.g. vulnerability, redress, etc) and technology (e.g. consistent authentication, interoperability, etc), doing so in a way which maximises the use of data and social sciences, with Regtech.

Given the pioneering nature of Open Finance, the interest from across the world in the UK's approach to implementation, the connections to artificial intelligence and ethical considerations, we believe that the FCA could host or where appropriate, set up an arms-length body, to focus on the delivery of Open Finance: the Open Finance Policy Institute. It could work with other regulatory bodies, like the Digital Markets Unit, to keep the industry at the forefront of developments in technology. Working with academics and other organisations, like the burgeoning Global Open Finance Centre of Excellence at Edinburgh University, it could bring scale and velocity to the process of testing and mitigating data risks which could otherwise undermine the value of Open Finance.

A PICTURE OF FUTURE GOVERNANCE AND A HOME FOR OBIE



- 1 Government to agree the role of the Digital Markets Unit and give it levy-raising powers to provide a funding conduit
- 2 The proposed Digital Markets Unit (DMU) to drive the UK's strategic data and innovation priorities ensuring appropriate consumer protection. The DMU should become a strong cross-cutting regulator for data. This Unit could become an entity in its own right, or could form part of one of the pre-existing, cross-cutting regulators (ICO or CMA). The Smart Data Function would be its delivery arm
- 3 FCA to develop the strategy for Open Finance and raise levies on industry where necessary to fund the delivery of technology by the Smart Data Function
- 4 FCA to set up the Open Finance Policy Institute (internally to begin with but then to operate at arms-length) to develop the Open Finance strategy, oversee extension of the APIs to other financial products, the regulation of parties accessing financial data sets and use of financial data (working with others like the Centre for Data Ethics and Innovation)
- 5 The CMA to conclude the OBIE and allow assets to pass to the Smart Data Function to be deployed in other industries for public benefit
- 6 Smart Data Function to oversee the delivery of Smart Data initiatives, develop and share expertise, and ensure initiatives work in the interest of consumers, especially those in vulnerable circumstances

WHAT OPEN BANKING NEEDS NEXT - GOING FORWARD

Under this proposed structure, it is important that the new DMU liaises with the FCA's Open Finance Policy Institute to ensure that more specific finance-related policy issues are addressed. Similarly, it would work to support other sector regulators. We envisage the Smart Data Function as the delivery arm for the DMU which could be requested to deliver the requirements of the various regulators' Smart Data initiatives. Within the Smart Data Function, different implementation directors could host their initiatives but with common tech teams supporting them to facilitate agile and ever-improving infrastructure.

In the first instance, the Smart Data Function would become the home for the OBIE assets and the continuation of its work under direction from the CMA and the FCA's Open Finance Policy Institute. In due course, the organisation would reflect its role as the national provider of data infrastructure with a clear remit to ensure that technology is designed in such a way as to deliver optimum consumer outcomes.

As part of the new Smart Data Function, the OBIE assets would be freed up to be deployed elsewhere for public benefit. There would be a refreshed remit and clear roadmap of activity for Open Banking. Working with the CMA and the FCA's Open Finance Policy Institute, this should include evaluating remaining complex challenging questions, such as the onward sharing of data. The Smart Data Function should consult on what is mandatory and what is optional for firms, and identify enabling technologies which will improve the effectiveness and success of Open Banking.

Monetisation of infrastructure is challenging, so making a variety of funding models available – both private and public – is essential to give the Smart Data Function the best chance of success. Most API initiatives will be led by regulators. However, it is important to provide industry with a vehicle through which they can choose to pay for 'premium' or 'optional' APIs to be built. Without such a vehicle, this may stymie industry-initiated activity or give rise to a competing body for industry to commission.

The Smart Data Function could be funded in multiple ways but would not have any direct levy-raising capability - it would rely on its regulators to raise levies on its behalf, or require firms to fund directly, as they have OBIE.

Alongside levies, it could work with tech vendors on alternative funding models and provide other advisory services to the international market. For Open Banking, optional or premium APIs could be funded on a subscription basis, via a levy on the 'CMA9' where the CMA requires it as part of its Order, or via a legislative levy required by the FCA or Digital Markets Unit for the public benefit.

Both the new Digital Markets Unit and Smart Data Function should be governed by independently chaired boards. Both boards should include an equal balance of industry, consumer and civil society representatives. There should also be people within the organisations whose only purpose is to consider the technology through the consumer lens, advocate for the consumer and facilitate the engagement of consumer organisations within governance across the organisation as a whole.

PART THREE CONCLUSION

We set out to understand what the consumer value from Open Banking was and which consumers could stand to gain most from which Open Banking-enabled products. We also looked at what might be holding back those products from coming to the market or stopping consumers from adopting them.

Our analysis shows that together, people and small businesses could stand to gain £18bn a year from Open Banking, particularly benefitting people who are overstretched. People and small businesses need more tailored services which reflect their interests and interfaces that engage them. But consumers also want to know that firms are acting with their best interests at heart in a way that is ethical and responsible.

Firms have an opportunity to make a fundamental difference to the financial health of the UK and change the way we think about and manage our money. But the industry needs help. Our priorities will help to deliver the consumer value we have identified, build a trustworthy ecosystem, and stimulate the market to action quicker.

Open Banking is at an early stage of development, but the indications suggest for the full potential value of Open Banking to be realised for consumers, it must continue to develop, evolve and grow into Open Finance and become part of 'Open Life'. This requires a strategy bringing consistency and security to data portability and appropriate governance arrangements to ensure Open Finance is delivered, and in a way, which puts consumers' interests first. Without a government or regulatory mandate of this kind, the value of Open Banking and Open Finance is unlikely to materialise. Instead, it could have unintended and harmful consequences, limit competition further or exacerbate financial exclusion.

The FCA's commitment to look at Open Finance, the promise of the Digital Markets Unit, the Treasury's review of the payment landscape and the BEIS Smart Data Review provide vehicles through which Open Finance could be set on the right path to securing better financial health for all consumers in the UK. For Open Banking to be a success, co-ordinated action must be taken, and soon.



APPENDICES

1. Endnotes and references
2. Segmentation methodology
3. Consumer value methodology
4. Biographies



APPENDIX 1: ENDNOTES AND REFERENCES

Executive Summary and part one

- 1 BEIS, Smart data: putting consumers in control of their data and enabling innovation, 2019
- 2 FCA Business Plan 2018 / 2019
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APPENDIX 2: SEGMENTATION METHODOLOGY

Our analysis used data from the Financial Conduct Authority's (FCA's) 2017 Financial Lives Survey. We are grateful to the FCA and CDRC for facilitating our access to the data and to Kantar for their work in conducting the survey and compiling the data set. Analysis was undertaken in IBM SPSS and the data were weighted to be representative of all adults in the United Kingdom for all analyses as appropriate. The data for this research have been provided by the Consumer Data Research Centre (CDRC), an ESRC Data Investment, under project ID CDRC 289, ES/L011840/1; ES/L011891/1

Defining the four segments

Our starting point for segmenting adults based on the extent and nature of their potential gains from the Open Banking-enabled propositions was the FCA's 'financial resilience' segmentation. This draws on six measures of adults' ability to make ends meet and live comfortably, keep up with their financial commitments and put aside a modest buffer in savings. At its broadest, the segmentation identifies those who are resilient from those who are not. To this measure, added one or more dimensions which reflected someone's level of engagement with financial services, while limiting our typology to a small number of segments. In effect, we wanted the segmentation to be simple, but also meaningful and representative enough to be able to distinguish adults across a number of characteristics.

In order to achieve this, we explored several options, including segmentations which used borrowing, savings levels and net assets against the financial resilience segments. By looking at the profiles of the segments we produced from these options, based

on key demographic and other characteristics, an option which combined someone's financial resilience (resilient/non-resilient) with a measure of their non-mortgage consumer borrowing (borrower/non-borrower) offered the most balanced segment sizes and distinct characteristics. This simple segmentation returned the four segments which we refer to throughout our report.

Profiling the segments

We wanted to understand how membership of the segments differed according to a range of personal, household and financial characteristics. As such, much of our understanding of the segments comes from simple two-way crosstabulations of the segmentation against each characteristic in turn. We also examined additional measures of the potential drivers of open banking value in this analysis, although the complex questionnaire filtering and random assignment of question sets for these questions meant these characteristics were only available for small subsets of respondents.

There is good validity in using cross-tabular analysis to explore the profiles of the segments: it provides a clear breakdown of the composition of each segment by each characteristic; and it allows for statistical significance testing, which checks that any apparent variations in the composition of each group are likely to be representative of the wider population. These findings largely informed our description of each segment. However, when fleshing these out further into our segment profiles, and with so many characteristics at play, we also wanted to be guided in our understanding by the most important characteristics for describing membership of a segment. To do this, we used regression analysis.

Being a multivariate analysis tool, regression allowed us to consider the relationship of a wide range

of the characteristics to segment membership all together. It identifies the independent relationship of each characteristic in turn by effectively holding the influence of all of the others constant. We used the analysis to identify which characteristics were strong predictors of the membership of each segment and, among the strong predictors, which were the strongest. We started by predicting membership of the first segment (versus the rest) and repeated the analysis for the remaining segments. The particular type of regression analysis we used was a forward stepwise binary logistic regression analysis and a wide range of personal, household and financial characteristics were included in the analysis.

The results of the regression analysis helped in identifying the strongest factors driving the composition of each segment. These factors lead our descriptions of the profiles for each segment which still also draw on the results from the simple cross-tabular analysis, using other relevant characteristics which could not be included in the regressions to flesh out the segment profiles more fully.

Identifying sub-groups

We took a rather different approach to identify the sub-groups compared to the main segmentation. Here, we took an entirely data-driven approach; that is, we wanted the number of sub-groups per segment which could adequately account for heterogeneity within the segment to be defined by the dominant patterns in the data, rather than by us. And we wanted those patterns to be defined by the dominant characteristics of each segment.

As in the regression analysis described earlier, we were able to use multivariate methods of data analysis to consider the influence of multiple variables at once. We used a two-step cluster analysis approach, which is a proprietary algorithm developed by IBM SPSS. Its

particular strength as a cluster analysis tool is that it can handle large data sets and categorical data like ours.

The cluster analysis was run on the four segments in turn. For each segment, a two-cluster solution was indicated which could not reasonably be improved with the additional of more clusters. In other words, two sub-groups represented each segment reasonably well: they were well-defined by their characteristics within each sub-segment; and sufficiently different in key characteristics across the sub-segments to be distinguishable. As such, we took forward two sub-groups for each of the initial segments.

Producing the pen portraits

The final stage of our analysis was to run more cross-tabulations of the characteristics against the segments. This time, we had eight sub-segments, comprised of four pairs. As such, we tested for the statistical significance of the variation in the composition of the sub-segments across all eight sub-groups; all were statistically significant. We also tested for the statistical significance of the difference in their composition for each pair and found that the differences were significant in all but a minority of instances.

These crosstabulations informed how we could describe the sub-groups. In this case, we brought them to life by painting 'pen portraits' of each one, a description of a fictitious person who represented the dominant characteristics of their sub-segment. Their portraits were driven by the characteristics which were fed into the cluster analysis and proved particularly discriminating in defining the sub-groups. We then embellished these by drawing on other aspects of their (typical) personal and financial circumstances, as indicated in the data, and we have given them a name. These pen portraits should be

APPENDIX 3: SEGMENTATION METHODOLOGY

recognisable as characterising people who may have particular financial needs in common or be set to benefit potentially from open banking in particular ways. However, if any readers feel they recognise an individual in these pen portraits, then that is purely coincidental!

A note of caution on the statistics

In our report, we give the percentage of people who fall into each of the four segments. These estimates should be treated with caution, as we understand that the data may underestimate the penetration of active credit use among UK adults, due largely to the self-report nature of the questions.

In addition, the averages for monetary values reported here are based on responses to pre-defined discrete ranges given in the Financial Lives Survey, rather than precise numbers given by respondents. This approach was adopted by the FCA in order to reduce non-response. It also has the advantage of eliminating the potential for outliers (extreme answers). However, it does mean calculating averages based on the mid-points of the pre-defined ranges, which assumes that all answers in the specific range are grouped evenly around that midpoint. This may not always be representative of the true values underlying these ranges and may mean that the averages reported here are over or under estimates of population averages.

APPENDIX 3: VALUE MODELLING METHODOLOGY

High level approach to modelling

The modelling contained in this report is a bottom up evaluation of currently identified propositions which can be enabled or enhanced by Open Banking data. For each proposition, we identified exactly how the proposition could make consumers better off financially, identified pre-existing research which allowed us to quantify the impact, made assumptions where there were none and then modelled the impact assuming that all consumers adopted that proposition.

Therefore this modelling makes a number of important assumptions:

It quantifies the potential value if all consumers adopt. This is an established methodology for sizing the potential financial benefits to consumers, for example used in the recent Citizens Advice Loyalty Premium research or the Money Advice Service's quantification of the benefit of improving financial capability. The original CMA Order analysis was done in the same way. This quantification therefore gives the 'size of the prize' for policy makers to target, however being aware that it will be only achieved with mass adoption.

It doesn't model the response from providers. Making the model dynamic in this way would be extremely complex and the results hard to interpret, and the studies above make the same assumption. It is realistic to assume that if consumers starting behaving in the way that the model predicts, providers would be forced to react. Some may be forced to offer more advantageous pricing or features to encourage consumers not to switch away. Others may be forced to increase other prices to offset lost revenues. Both of these effects are very important, particularly given that one should be a net positive for consumers; and the other is potentially negative and will be vital in assessing the long-term outcomes of the Open Banking project, but are not the focus of this model.

We have used early stage assumptions to estimate potential impacts. Open Banking-enabled services in many case are in their infancy or do not yet exist and robust data on their impact is not yet available. We have therefore made estimates or assumptions on the efficacy of these solutions and used proxy data where available, from comparable initiatives, or assumptions where there were no proxy examples available. Once long-term data is available from live solutions, these assumptions can be updated. Some may prove to have been too conservative; others too ambitious. Gathering this kind of long-term data on the efficacy of Open Banking-enabled solutions is vital.

The potential value calculation for individuals

There are 8 components to this value calculation and a number of areas which we recognise but have not been able to include in this value calculation.

1. Getting better deal on current account

This was the core proposition identified and quantified in the CMA's Retail Banking Market Investigation. We identified that this opportunity covers a number of quite different consumer propositions. If a consumer is not on the ideal current account for their situation (and the majority are not), there are three ways that they can get a better deal: they can switch their account; they can use a third party overdraft but keep the rest of the account with the existing provider; or they can start sweeping their credit balances to a third party savings account but keep the rest of their account with their existing provider. We do not try to differentiate between these three propositions as in value terms they all have the same result: the consumer gets a better deal on their current account.

We therefore used the CMA's own quantification of the benefit (£4.6bn), however reviewed this in light of the more recent FCA analysis on overdraft revenues. We judged that this was useful given the very significant

changes in the overdraft market since 2014. This had the effect of reducing the benefit from £4.6bn to £3.6bn, mainly through a reduction in unauthorised overdraft charges. We also factored in an estimate of £0.2bn impact from the June 2019 FCA policy statement on overdrafts.

To allocate these benefits to segments, we used relevant data from the FCA Financial Lives study on overdraft usage and made assumptions around credit balances, overseas debit card usage and propensity to pay a monthly fee.

2. Maximising interest on savings

This opportunity refers to the potential benefit for consumers from Open Banking-enabled services which shift funds out of poor paying savings accounts and into higher paying accounts. We used a study commissioned by Open Banking Limited, and completed by Ernst & Young, however we adjusted some of the assumptions on total savings held by consumers using latest data from Bank of England. This gave us a total figure of £861bn for savings held by consumers in instant access accounts. We used the Ernst & Young estimated calculation on the potential to improve interest rates through switching (0.3%). Benefits were allocated according to the amount of savings held by each segment.

3. Different currency savings

This opportunity includes the potential for Open Banking-enabled services to help consumers get a better deal when making an international money transfer or when using their debit card abroad. We took both values from the Ernst & Young study, having checked them against other market sources. Allocating the benefit to segment was based on a combination of FCA Financial Lives data (on international money transfers) and assumptions (on international debit card fees).

4. Shopping around on household bills

Open Banking-enabled services are expected to make it easier to shop around and for consumers to get better alerts and nudges when better deals are available. As such it is expected to increase levels of shopping around. This is an example of a proposition which is enhanced but not enabled by Open Banking, and so we only include a proportion of the benefit.

We used the Citizens Advice study on the Loyalty Premium for most of the numbers in our model. These included: mobile contracts, home insurance, broadband contracts and utilities. Additionally, we included data on motor insurance using data from the FCA on shopping around rates and savings achieved. We used an assumption that Open Banking could enhance rates of shopping around by 20%. This would need to be tested and refined as these services mature.

The value was allocated to segment in line with the proportion shopping around: those segments with lower levels of shopping around stood to gain more.

5. Personal finance manager (PFM)

PFM platforms are seen as a foundational proposition in our analysis: these are the platforms which consumers will sign up to and which will deliver many of the other services and recommendations. However, they also have a benefit in their own right. We assume that PFM platforms will help consumers reduce the amount they pay in overdrafts and credit card interest, through nudges, alerts and advice. This market is still in its infancy and we therefore used a proxy to estimate the potential impact. The proxy we used was from an FCA study which found that signing up for mobile banking reduced unarranged overdraft fees by 8% for consumers. We assumed that signing up to and using a PFM platform would have an analogous impact. This would need to be tested and refined over time (the actual impact could easily be much higher than the impact of a simple mobile app).

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We used total remaining interest paid on overdrafts (£0.8bn) and credit cards (£5.1bn). The benefits were allocated to segments in line with their borrowing levels from FCA Financial Lives data.

9. Non quantified benefits

There were two propositions which it was not possible to quantify in terms of consumer benefits due to lack of reliable data: micro savings and alternative credit score.

Micro-savings solutions: these should have a valuable role to play in helping UK consumers build up a financial cushion, particularly for those who lack financial resilience. However it is not a simple job to quantify the financial benefit of having a financial cushion. There are studies which quantify the cost of problem debt (for example, Step Change), and having a financial cushion should help to reduce the likelihood of falling into problem debt, however our judgement was that this not robust enough to include in the calculation. We would welcome more detailed work on the impact and benefits of micro-savings.

Credit solutions: this is another complex area, and one with significant levels of activity by providers. There are a range of ways in which Open Banking can support the effective operation of the lending market. Some of these solutions are likely to be neutral for consumers, for example providers using Open Banking as a means to perform affordability checks more quickly and effectively. It is in the space where Open Banking data enables lenders to lend in situations where otherwise they would not have been able to or at lower interest rates, that there is most potential value for consumers (eg, rent recognition schemes). However in our judgement, the data in this space was not robust enough to include it in the calculation. Again we would welcome objective, long-term studies in this area.

There are a range of other broader benefits for individuals and society which we have not sought to quantify. These include benefits relating to consumers

being more engaged with their finances, making better long-term decisions and reduced levels of stress. All of these are highly valuable but complex to model and have therefore been excluded.

The potential value calculation for small business

There are 5 components of this value calculation, plus a number of areas we haven't been able to quantify at this stage due to lack of robust data.

1. Open Banking-enabled cloud accounting

Whilst many small businesses already have data sharing between their cloud accounting platform and their bank data, Open Banking can make cloud accounting solutions more effective, more powerful and more insightful for small businesses and reduce barriers to cloud accounting providers moving into the market.

To calculate this benefit, we first estimated the value that Cloud Accounting brings to small businesses through enhanced productivity. A study by Plum / Sage, estimated non-productive admin to account for 116 days a year for a small business (or 1.6% in cost terms). Cloud accounting could reduce this by 21% the report concluded. This gave a cloud accounting benefit of £6.8bn.

As in other areas where Open Banking is an enabler of better solutions, we apply an assumption that the Open Banking component of the benefit is 20%. This results in a final figure of £1.4bn. This is an assumption and we would strongly welcome more robust, independent studies into the value of cloud accounting for small businesses more generally and the benefit that comes from these solutions being Open Banking-enabled. We think these figures are likely to be conservative.

2. Personalised BCA comparison

We used the CMA calculation, of £80 potential benefit per Business Current Account from switching.

3. Optimising cashflow

From the FCA's recent work on Retail Banking Business Models, we know that small businesses keep £130bn of deposits in their BCA, earning on average 0.07% in interest. This is a huge lost opportunity and a perfect solution for an automated solution to optimise returns. Using the average market leading small business savings accounts (3x instant access, 3x 90 day and 3x 1 year term), we estimated that a small business could earn 1.3% on these funds.

Netting off the insignificant amount of interest small businesses already earn (£0.001bn), leaves a benefit of £1.9bn.

4. Domestic payments

The CMA Report quantified the average annual transaction cost to small businesses of £112. From informal market enquiries, we established that a small business could potentially reduce this cost by 50% - a solution which could be facilitated by Open Banking-enabled solutions. Once PISP services are more mature, the cost saving estimates would need to be revisited.

5. International payments

Firm data on how much small businesses pay on international transfers is limited, as much of the cost is hidden in FX spreads. One study has estimated this cost and found that small businesses make £169bn of international transfers, paying a total of £3.96bn in FX spread and fees. The study found that the margin could be reduced by 34%, resulting in a saving for small businesses of £1.4bn. We would welcome additional studies to estimate this significant opportunity.

6. Card acquisition costs

Some small businesses accept card payments and many will typically pay very high fees. Payment Initiation could potentially offer these firms an alternative to traditional card payments. Small businesses represent 37% of all retail firms by turnover.

It is difficult to estimate how much small businesses could save on their card acquisition costs, particularly given that acquiring fees are typically not in the public domain and viable PISP models and pricing are not yet in existence. Therefore we have modelled conservatively and assumed that the saving for small businesses would be the cost of interchange (0.20% on debit, 0.30% on credit). This may understate the opportunity, but can be updated once PISP solutions are in the market and pricing can be analysed.

7. Non quantified benefits

There are a number of benefits which we have not yet been able to model accurately and which have therefore been excluded.

One of the most significant is the opportunity in the credit space. We know that small businesses do not typically shop around for credit and that a number of small businesses get turned down for credit. The small business funding gap is estimated at £5.1bn. Open Banking should result in easier access to credit for small businesses and easier access to account data for providers. However, we have not yet seen any reliable data on the benefit to small businesses from this enhanced access to credit and have therefore not included it in this model. We would welcome studies in this space, which estimate the opportunity for small businesses to get access to more competitive credit and more flexible options to drive growth.

In addition, we believe there are a range of benefits from Open Banking-enabled services which should make the UK's small businesses more resilient, more successful and their owners less stressed and less likely to experience financial distress. These are hugely valuable benefits for UK plc and the our broader society, but we have not been able to quantify these benefits so they have not been included. They are best considered as a halo of non-quantitative benefit.

APPENDIX 3: VALUE MODELLING SOURCES

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Bank of England, Household Deposits

Bank of England, Lending Statistics

BDRC, SME Finance Monitor, 2018

BEIS, Business Population Estimates, 2018

Citizens Advice, Excessive Prices for Disengaged Consumers, 2018

CMA, Actual and Perceived behaviour of Personal Current Account Customers, 2015

CMA, Retail Banking Market Investigation Market Report 2016

CMA, Energy Market Studies, 2016

Department for Work & Pensions, Family Resources Survey 2016/2017

ERC, State of Small Business Britain Report, 2018

Ernst & Young, Analysis of Open Banking Use Cases, 2018.

Europe Economics, The Economic Impact of Debt Advice, 2016

Europe Economics, The Economic Impact of Low Financial Capability, 2016

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PWC, The Future of Banking is Open, 2018

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UK Finance, The Way We Bank Now, 2018

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APPENDIX 4: BIOGRAPHIES

Faith Reynolds

Faith is an independent consultant. She acts as the Independent Consumer Representative on the OBIE Steering Group and authored the widely-read report: Open Banking: A Consumer Perspective. She is a member of the FCA's Financial Services Consumer Panel, where she is the lead for technology and innovation and a non-executive director for the Current Account Switch Service. Faith was named as one of the 2018 Standout 35 on Innovate Finance's Women In Fintech Powerlist.

Mark Chidley

Mark is an independent financial services consultant. He acts as the independent SME Customer Representative on the OBIE Steering Group. He is a member of the FCA Consumer Panel, in which role he has particular interest in small businesses as consumers of financial services. He is a former banking and financial services lawyer, having worked both in private practice and for one of the UK's largest financial services groups.

Daniel Jenkinson

Daniel is a Senior Manager at the OBIE, supporting its independent representatives and ensuring that Open Banking meets the needs of consumers and small businesses. Previously he worked in a range of strategy and product roles at Visa, including responsibility for the European Product Strategy and shaping Visa's response to PSD2. Before that he was a strategy consultant working for clients across financial services on projects including modelling, market futures and strategy development.

Andrea Finney

Andrea is an experienced social researcher, having worked for many years in central Government and academia. Backed by degrees in the social sciences, she applies quantitative and qualitative methods, often in complementary ways, while specialising particularly in the advanced analysis of complex survey data. Andrea is now a freelance researcher (www.socialresearchandstatistics.wordpress.com) and an Honorary Senior Research Fellow at the University of Bristol's Personal Finance Research Centre (www.pfrc.bristol.ac.uk).

Dominic Lindley

Dominic is Director of Policy at New City Agenda and a member of the FCA Consumer Panel. Prior to working for New City Agenda, Dominic was leader of the financial services policy team at consumer group Which? and an economist for the Treasury Select Committee. He has written two reports on Pensions Dashboards and conducted a number of projects examining financial regulation and cultural change in banks including a project for Consumers International which examined the role of sales incentive schemes in leading to banking misconduct.