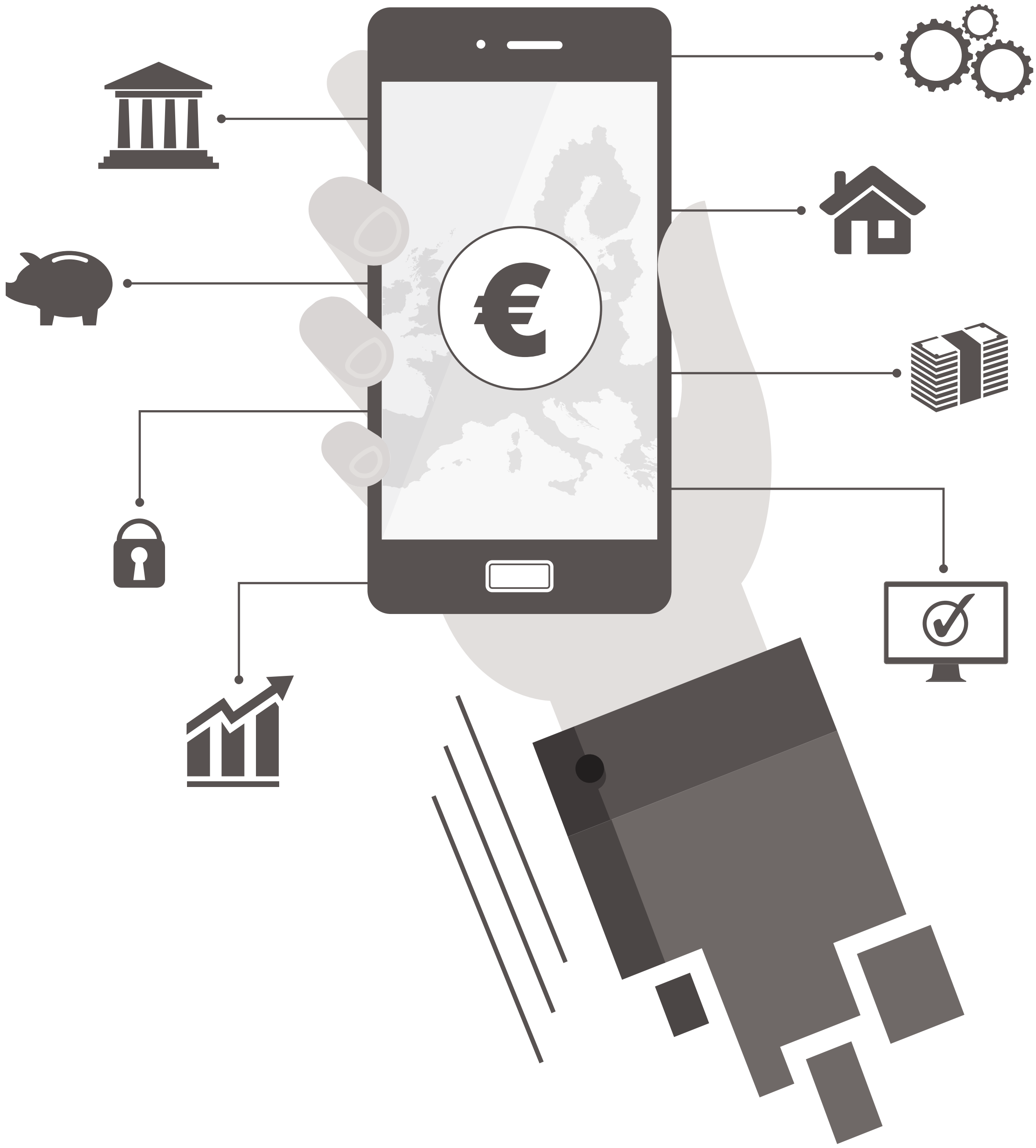
IRSG

INTERNATIONAL
REGULATORY
STRATEGY GROUP

RETAIL FINANCIAL SERVICES
BRINGING REAL BENEFITS TO EUROPE'S CUSTOMERS



The International Regulatory Strategy Group

The International Regulatory Strategy Group (IRSG) is a practitioner-led body comprising leading UK-based figures from the financial and related professional services industry. It is one of the leading cross-sectoral groups in Europe for the financial and related professional services industry to discuss and act upon regulatory developments.

Within an overall goal of sustainable economic growth, it seeks to identify opportunities for engagement with governments, regulators and European and international institutions to promote an international framework that will facilitate open and competitive capital markets globally. Its role includes identifying strategic level issues where a cross-sectoral position can add value to existing industry views.

TheCityUK and the City of London Corporation co-sponsor the IRSG.

FOREWORD

Globally, retail financial services continues to see significant change. Customers' needs and expectations are evolving, and they are increasingly turning to digital channels to interact with businesses. The rise of digital channels and other technologies is affecting the very nature of retail financial services and facilitating the growth of new market entrants. Throughout this shifting landscape, retail financial services remains an industry of which the main purpose is to help customers to plan for their financial future. The changing nature of retail financial services and the introduction of new technologies provides opportunities for the industry to even better serve those needs.

Against the backdrop of these developments, the global economy is becoming increasingly competitive. Emerging markets look set to increase in financial sophistication in the coming years, and Europe must keep up. For instance, Prime Minister Modi's 'Digital India' initiative seeks to empower citizens with access to digital services and use innovation as a catalyst for economic growth. Financial services has long remained an area of global strength for Europe and for this to continue there must be a focus on harnessing the opportunities provided by digital technologies for individuals and businesses alike.

Europe's 500 million people make up the world's largest internal market. Yet many barriers to the completion of this Single Market remain, including in retail financial services. Breaking down these barriers will help provide more choice for consumers and a more competitive environment as more businesses seek to trade cross-border which in turn will help Europe compete on the global stage. The competitiveness of Europe's financial services industry also depends on its ability to respond to changing customer needs and the growth of new technology. This will require a supportive regulatory environment that strikes the right balance between supporting innovation by incumbents and challengers with proportionate consumer protection.

The importance of the financial services industry in supporting economic growth and the wellbeing of individuals is well known. A stable, functioning and competitive financial system is key to the growth of enterprises and the European economy. By harnessing that dynamism the industry can best play its role in helping drive job creation, boosting economic growth and contributing to meeting many of the public policy challenges of the coming decades.

Miles Celic
Working Group Chair

1.0 INTRODUCTION

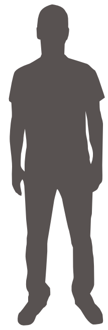
Retail financial services is an industry which has a profound impact on the lives of Europe's 500 million people, helping them to save, buy homes and plan for their retirement. Across the globe the retail financial services landscape is evolving rapidly. The European Commission has recognised the challenges and opportunities this will bring for EU legislation and made policy development in this area a priority for the 2014-2019 mandate.

Financial services regulation has undergone significant reform as a result of the global financial crisis. Many of the changes were driven by a desire to restore and strengthen financial stability and increase consumer protection. Now that the new regulatory regime has been put in place, policymakers wish to ensure transparency and facilitate consumer choice through digital technologies and making markets more competitive.

In part driven by mobile and other digital technologies, customers' expectations are rapidly evolving. At the same time disruptive technologies and innovative business models are being adopted by new entrants to financial services and established players alike.

This changing landscape provides significant opportunities for the customers of financial services and the industry must respond to these developments. To leverage the full potential of these opportunities, a balanced and cooperative approach will be required from all stakeholders. Doing so will provide real benefits for all of Europe's 28 Member States and 500 million people. This report illustrates how policymakers and regulators can help unlock the potential of the Single Market in Financial Services by approaching retail finance from the customer's perspective.

500 MILLION PEOPLE



RETAIL FINANCIAL SERVICES IS AN INDUSTRY WHICH HAS A PROFOUND IMPACT ON THE LIVES OF EUROPE'S 500 MILLION PEOPLE

THIS CHANGING LANDSCAPE PROVIDES SIGNIFICANT OPPORTUNITIES FOR THE CUSTOMERS OF FINANCIAL SERVICES AND THE INDUSTRY MUST RESPOND TO THESE DEVELOPMENTS

This report outlines the changing relationship between the financial services industry and its customers and explores the opportunities offered by new technologies and business models. Taking into account these changes, the report contains recommendations for European policymakers, EU Member States, regulators and the industry itself. These recommendations will help all these stakeholders create the right framework to promote consumer trust in financial services and enable Europe's citizens to spend, save and invest in more efficient and innovative ways. The value of these recommendations is quantified in an econometric model.

When considering the retail financial services customer in Europe, this report includes micro-businesses; those with fewer than ten employees. Businesses of this size often use retail financial services products and allowing them to access these products is critical to their growth.

Maintaining and enhancing Europe's position as a leader in retail financial services will require policymakers and the industry to embrace the opportunities provided by the changing landscape. This report not only discusses regulatory obstacles, but also the broader need for a cultural change to occur. The challenge for Europe is to implement and maintain a robust and appropriately regulated system which allows innovation to thrive whilst ensuring customers are appropriately protected. The prize for doing so is immense, will fund economic growth for a generation and has the potential to improve the life of every European citizen.

THE CHALLENGE FOR EUROPE IS TO IMPLEMENT AND MAINTAIN A ROBUST AND APPROPRIATELY REGULATED SYSTEM WHICH ALLOWS INNOVATION TO THRIVE WHILST ENSURING CUSTOMERS ARE APPROPRIATELY PROTECTED

2.0 EXECUTIVE SUMMARY

2.1 A core role of financial and related professional services is to help meet the aspirations of individuals and help them prepare financially for the future. If the market in financial services does not perform as well as it could then it will be less able to fulfil these important functions. The EU's political, economic and social model cannot exist without the support of a well-functioning financial services sector. This can only be achieved through competitive provision of financial services within a framework of smart and proportionate regulation.

2.2 Retail financial services is an industry which can help improve the lives of Europe's 500 million people. New digital technologies, market entrants and business models are changing the way in which businesses interact with their customers and enabling them to better meet their customers' needs. For the industry to leverage these opportunities requires a regulatory framework which is both supportive and adaptive to change. A broad culture change will be required across policymaking and the industry in order to adapt to the changing financial services ecosystem.

2.3 The completion of the Single Market in financial services has proved difficult, owing to differences in the configuration of national financial systems, regulatory frameworks and customer preferences. Nevertheless, the Commission's focus on the removal of barriers is welcome and should be part of the Commission's wider programme to broaden and deepen the Single Market in financial services.

2.4 In completing the Single Market in Retail Financial Services in particular, it will be important that the Commission ensures that the right infrastructure is in place before proposing any further harmonisation. Any proposals should be preceded by a gap analysis and cost-benefit analysis and be based on customer demand. Before attempting to harmonise further and designing more complex products, current initiatives should first be fully implemented and the lessons learnt from those processes should be applied to new proposals.

2.5 Across Europe, public finances are constrained and the private sector is increasingly called upon to provide services that might once have been Government-run. A shift in the European age profile has put new demands on pension schemes and policymakers are increasingly looking for innovative solutions, involving the private sector, to address this trend. New technologies can play a role in facilitating the provision of these services.

2.6 This report addresses the fragmentation of retail financial services markets in the EU and outlines the optimal regulatory and legislative environment to encourage consumer trust in financial markets and to ensure that markets work better for consumers. Its recommendations are aimed at European policymakers, Member States Governments, regulatory bodies and the industry itself. It is important that these bodies (public and private sector) collaborate to build lasting solutions for the benefit of the individual.

2.7 The recommendations in this report target four key areas of development for Europe. These are listed below:

Adapting to the changing nature of the financial services ecosystem

The retail financial services landscape continues to change at a rapid pace. Recommendations in this section focus on building a framework to help the industry leverage the opportunities of the new ecosystem for the benefit of customers.

Key Recommendations:

- **European and national policymakers and regulators:** *Adopt a new approach to financial services regulation that aims to prioritise and stimulate innovation whilst maintaining customer protection*
- **European Commission:** *Take a holistic view of the regulatory environment to implement common standards and definitions.*

Leveraging the opportunities of digitalisation

Customers are increasingly opting for digital channels to interact with businesses, and these businesses are digitalising their operations. The impact of this, and the greater levels of data produced, provides opportunities for businesses and policymakers to better understand and manage risk.

Key Recommendations:

- **European Commission:** *Consider financial services when developing regulation as part of the Digital Single Market strategy*
- **Financial services industry:** *Build a framework for a Digital ID system to help customers transfer their data between financial services providers*

The Single Market in Retail Financial Services

Completing Europe's Single Market in Retail Financial Services will provide customers with better value through enhanced choice and more personalised products. The recommendations in this section identify and aim to overcome barriers to completion of the Single Market.

Key Recommendations:

- **European Commission:** *Ensure the presence of underlying infrastructure for cross-border movement of financial services products*
- **European Commission, ESAs and NCAs:** *Extend the development of a common supervisory approach to the digitisation of financial services*

Better information and products for customers

This section focuses on providing customers with the necessary information for them to better understand financial products and equipping them with the necessary tools for planning their financial future. This part of the report has a specific focus on encouraging medium- and long-term saving.

Key Recommendations:

- **Member States' Governments and the European Commission:** *Facilitate the provision of and access to financial advice*
- **Financial services industry:** *Stimulate and quality-assure innovation through means, such as test centres, which encourage innovation for the benefit of customers*

2.8 This report lays out twenty policy recommendations suggested by the financial services industry that will bring real benefits to Europe's customers. Each of these recommendations, if implemented, will positively impact the ability to provide financial services. A scenario analysis model has been built to explore the effect that such an impact will have on customers. The model does this through the following process:

- The policy recommendations are sorted into four policy themes, based on how they will impact the financial services industry.
- Each policy theme, if implemented, would change how the industry provides financial services, through a number of factors. These factors are called the supply metrics.
- As financial services changes, so too does customers' desire and ability to use these services. Customers' requirements of financial services are measured by demand metrics.
- A change in the way that people use financial services affects how well off they are.
- Using historical analysis of data, the model explores the relationship between these different variables. By looking at the relationship between the supply metrics and demand metrics, and in turn the demand metrics and the wealth of customers, it is possible to project how implementing the policy themes would filter through to benefits for customers.

2.9 Through this method, the model is able to project the impact on customers from implementing these recommendations. To facilitate the model, the countries are grouped by GDP per capita into low, medium and high. A 'frontier' scenario analysis is then used, measuring the impact of moving each country's ability to provide financial services to the level of the top performer in the group.

2.10 Implementing these recommendations is estimated to improve net financial wealth by an average of 1.2% across Europe over a single year, equivalent to an average of €1,262 per household.

Summary of recommendations

Adapting to the changing nature of the financial services ecosystem

Recommendation 1

European and national policymakers and regulators: Adopt a new approach to financial services regulation that aims to prioritise and stimulate innovation whilst maintaining customer protection

Recommendation 2

Member States' Governments and the European Commission: Work with new and established businesses to support innovation and FinTech and share best practice across Member States

Recommendation 3

European and national legislators: Write legislation that is 'future-proof' – open to application to new developments

Recommendation 4

European Commission: Collate and coordinate behavioural economic research into the European customer

Recommendation 5

European Commission: Take a holistic view of the regulatory environment to implement common standards and definitions

Leveraging the opportunities of digitalisation

Recommendation 6

European Commission: Consider financial services when developing regulation as part of the Digital Single Market strategy

Recommendation 7

European Commission, ESAs and NCAs: Produce a framework for regulators to make better use of available data, without increasing the number of data requests

Recommendation 8

Financial services industry: Communicate to customers how their personal data is being used, and what the results of this use are

Recommendation 9

European Commission and supervisory bodies: Ensure the EU General Data Protection Regulation is implemented and applied in a proportionate way, to allow customers to benefit from the innovative use of their data

Recommendation 10

Financial services industry: Build a framework for a Digital ID system to help customers transfer their data between financial services providers

Summary of recommendations

The Single Market in Retail Financial Services

Recommendation 11

European Commission: Support existing work to build a solution for cross-border payments, and conduct a study into the feasibility of extending this to multiple currencies once implemented

Recommendation 12

European Commission: Ensure the presence of underlying infrastructure for cross-border movement of financial services products

Recommendation 13

European Commission, ESAs and NCAs: Extend the development of a common supervisory approach to the digitisation of financial services

Better information and products for customers

Recommendation 14

Member States' Governments and the European Commission: Work together to ensure best practice in financial education is shared and that it addresses the digital age

Recommendation 15

Member States' Governments and the financial services industry: Facilitate the provision of and access to financial advice

Recommendation 16

Financial services industry: Stimulate and quality-assure innovation through means such as test centres which encourage innovation for the benefit of customers

Recommendation 17

Member States' Governments, the European Commission and the financial services industry: Support customers with saving for the future

Recommendation 18

European Commission: Continue to explore the demand for a European pension product to help customers save for retirement

Recommendation 19

Financial services industry and Member States' Governments: Support tools to facilitate the comparison of offers

Recommendation 20

Member States' Governments: Connect microbusinesses to crowdfunding platforms

3.0 RETAIL FINANCIAL SERVICES TRENDS

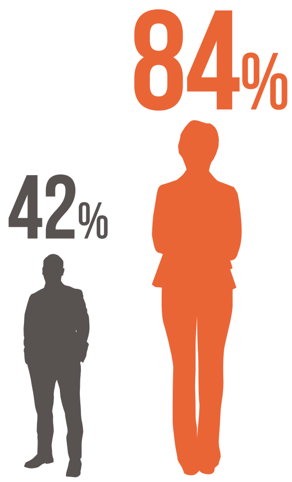
3.1 The modern retail financial services customer

Whilst there is no 'European' customer as such and there are marked differences in customer behaviour across different Member States, there are certain changes that affect the industry across all of Europe and, indeed, globally. These customer trends are driving changes in the way that financial services businesses operate and the way they interact with their customers. Some key areas are outlined in more detail below:

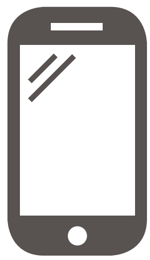
- Customers increasingly interact with financial services through new channels. The internet and associated rise of digital channels has affected a variety of businesses, and financial services are no exception. Just as the launch of the ATM and credit cards shifted the way customers carry out banking activities, the growth of digital channels has affected, and will continue to affect, the way customers interact with all their financial services providers. While the level of engagement with digital channels varies, even those who rely mostly on traditional methods are likely to use digital channels for certain activities. No longer are digital methods solely the domain of the young; internet use amongst those aged 65 to 75 is as high as 84% in some Member States, with an average of 42% across the EU[1]. These developments allow for a more flexible and personalised interaction that suits different lifestyles.

- Across Europe, people are changing their working habits. They are moving between jobs, and even careers, more and more frequently. The average 'millennial' is expected to have between 15 and 20 jobs in their lifetime[2]. Workers are also increasingly retiring later than at the traditional state pension age[3]. These shifting habits, combined with an increasingly elderly population, will impact the provision of pensions and Europe's saving culture more generally.

- Mobile technology has become a source of information for customers as well as a tool to connect with businesses and each other. Smartphones have become widely affordable and are being used by all age groups. Increasingly, customers are using mobile channels to interact with financial services businesses and to seek support or advice[4]. Yet smartphones are more than just a new channel; they have enabled virtual social connectivity on a big scale and impact the way customers interact. This rise in digital usage, centred on the smartphone, catalyses a very different relationship between businesses and customers.



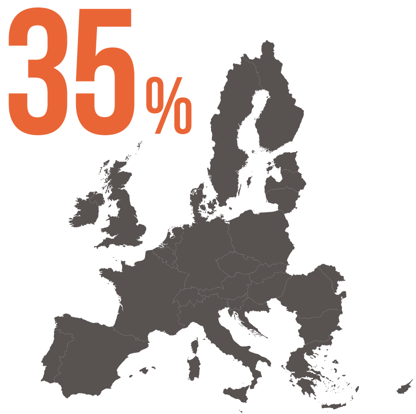
INTERNET USE AMONGST THOSE AGED 65 TO 75 IS AS HIGH AS 84% IN SOME MEMBER STATES, WITH AN AVERAGE OF 42% ACROSS THE EU



MOBILE TECHNOLOGY HAS BECOME A SOURCE OF INFORMATION FOR CUSTOMERS AS WELL AS A TOOL TO CONNECT WITH BUSINESSES AND EACH OTHER

[1] Europa; Eurostat Newsrelease, September, 2015
[2] Future Workplace; Multiple Generations @ Work, 2012
[3] CSFI; The Death of Retirement, 2015
[4] Accenture; Banking Customer 2020, 2015

- 35% of European citizens live in regions which border other Member States[5]. Many of these already do a part of their shopping in local cross-border areas, yet they are largely unable to carry out financial services activities across borders.
- The modern customer is increasingly active on various forms of social media. Whilst this remains largely an informal and social practice, customers are increasingly using social media to interact with businesses, to discuss products and to make recommendations to peers. Social media demonstrates one way that technology is empowering customers to access products and services through the same channels that they use to interact with peers. It also provides an opportunity for businesses to provide information and communicate through a new channel. By facilitating communication between large numbers of people, social media does carry the threat of reputational risk if not addressed correctly.
- Increasingly, customers' expectations towards financial services are being driven by best practice in other sectors. Uber has shown how a convenient, customer-focused approach can disrupt a market. Amazon seeks to meet, or even exceed, the demands of its customers and has recently started providing deliveries as quickly as one hour after purchase for some orders. These offerings have set the bar for customers' expectations and whilst they may be examples from outside of financial services, increasingly customers expect these levels of service from every firm with which they do business[6].



35% OF EUROPEAN CITIZENS LIVE IN REGIONS WHICH BORDER OTHER MEMBER STATES

3.2 Disruptive technologies, new entrants and innovative business models

Changes in financial services are not only being driven by changes in customer attitudes. Technological changes have influenced the very nature of financial services. These vary from the cutting edge of new technologies, such as cryptocurrencies and blockchain, to the application of existing technology to financial services.

Alongside this technology are a number of new entrants to financial services. These entrants use technology or different business models to address customers' demands. For example, in a low interest environment, customers are increasingly looking for alternative ways to invest their money. The success of companies like Nutmeg, an online investment management service, demonstrates the emergence of this trend. Equally, where customers felt that the traditional model of business-to-customer (B2C) has left gaps, they have often turned to peer-to-peer (P2P) alternatives. Such businesses may in some cases provide a challenge to established businesses. In many cases, however, they offer a collaboration with larger businesses to enhance the services that customers receive.

BY FACILITATING COMMUNICATION BETWEEN LARGE NUMBERS OF PEOPLE, SOCIAL MEDIA DOES CARRY THE THREAT OF REPUTATIONAL RISK IF NOT ADDRESSED CORRECTLY

[5] European Commission; Green Paper on Retail Financial Services, 2015
[6] Accenture; Living Services: The Next Wave In The Digitization Of Everything, 2015

These new technologies and business models represent a rapidly changing area that both established businesses and new entrants are increasingly involved in. In combination with the wider retail financial services landscape, they present opportunities for businesses to provide customers with improved services, and products, and interact with them in new ways. In particular, technological advances provide a chance for greater financial inclusion through new and cheaper ways to access those customers without a traditional financial services provider.

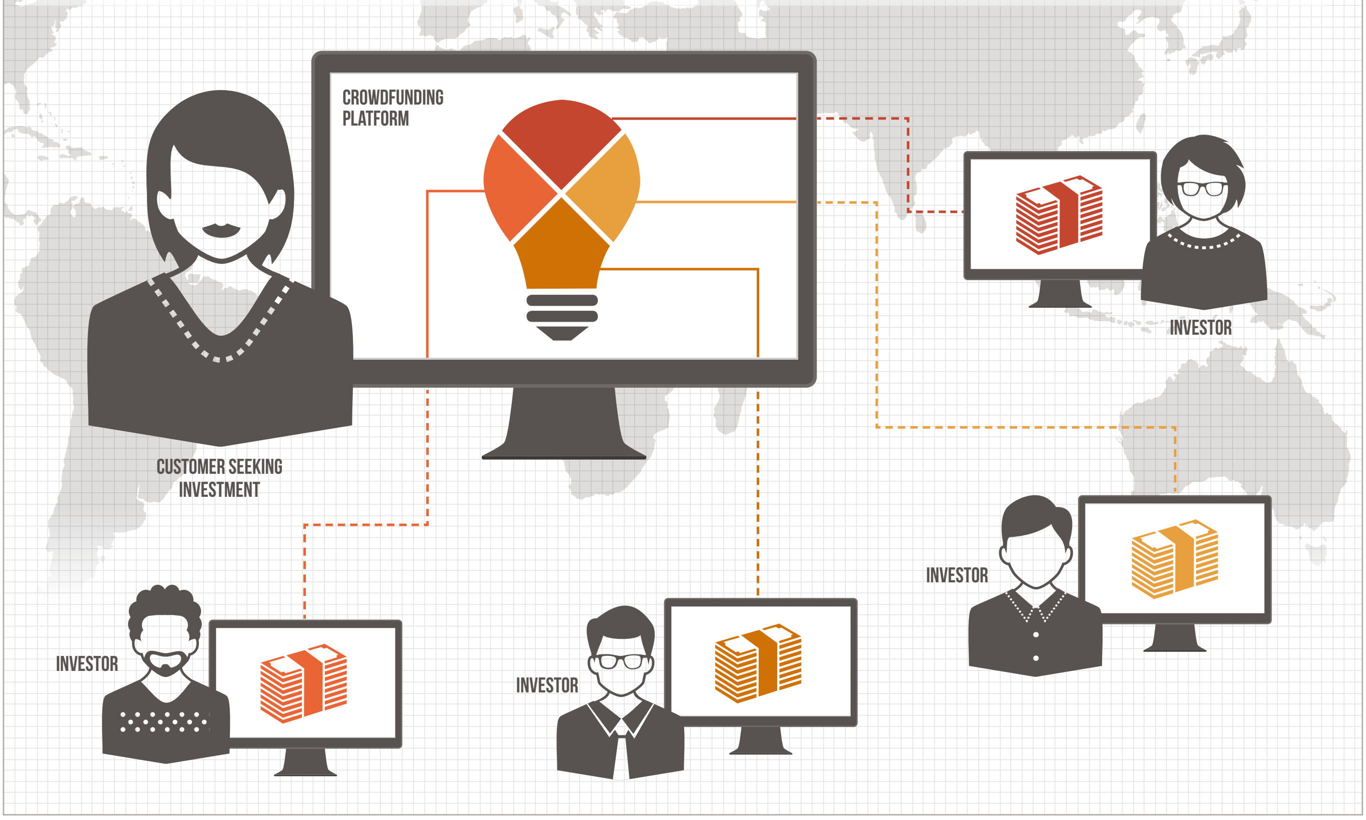
The case studies below illustrate some of the most important recent disruptions within financial services.

CASE STUDY: CROWDFUNDING

Platforms which provide an alternative to traditional borrowing and lending channels. Customers, both individuals and businesses, seeking to borrow money are able to gather investment from the public. The return on investment is set by the party seeking to borrow – often this takes the form of equity, debt, or rewards. These crowdfunding platforms are typically international, allowing borrowing and lending to take place across borders through digital channels. Crowdfunding is different from peer-to-peer lending as the borrower will set a target amount they wish to raise, which could be reached by any number of investors all contributing varying amounts.

Examples:

- *Seedrs* allows all types of investors to invest as little or as much as they like (from £/€ 10 up) in businesses they believe in and share in their success. It also allows ambitious businesses in all sectors to raise capital and build community through an efficient, online process. *Seedrs* has funded over 320 deals to date, and on average raises up to £7m per month. All investments made through *Seedrs* offer voting shares to investors and use professional-grade subscription agreements. This ensures that investors get the same level of protection that angel investors and venture capitalists enjoy. *Seedrs* is authorised and regulated by the UK Financial Conduct Authority. It was the first equity crowdfunding platform in the world to gain regulatory approval.

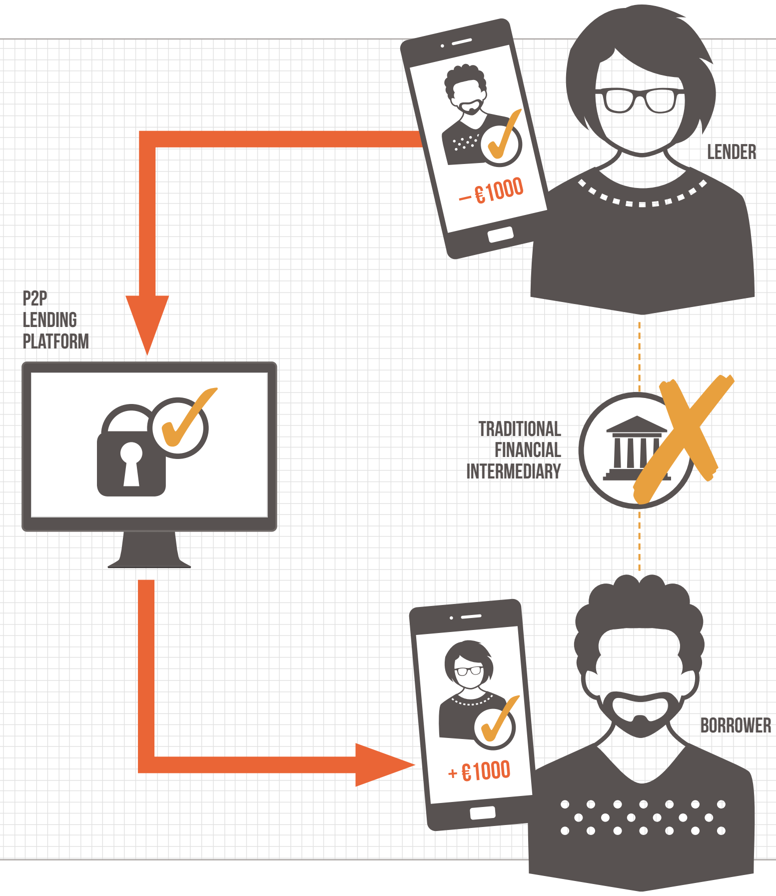


CASE STUDY: MARKETPLACE LENDING

Platforms for consumer borrowers to connect with willing lenders. These are often referred to as peer-to-peer (P2P) lenders, though institutions also provide capital on many of these marketplaces.

Examples:

- *Lending Club* facilitates direct peer to peer lending and was the first peer-to-peer lender to register its offerings as securities with the Securities and Exchange Commission (SEC) and to offer loan trading on a secondary market.
- *LendInvest* is a peer-to-peer lending platform for residential and commercial mortgages. *LendInvest* lets investors find and invest in new loans and facilitates an online market for completed loans. It was the first live P2P lending platform in the world to focus specifically on mortgage loans.

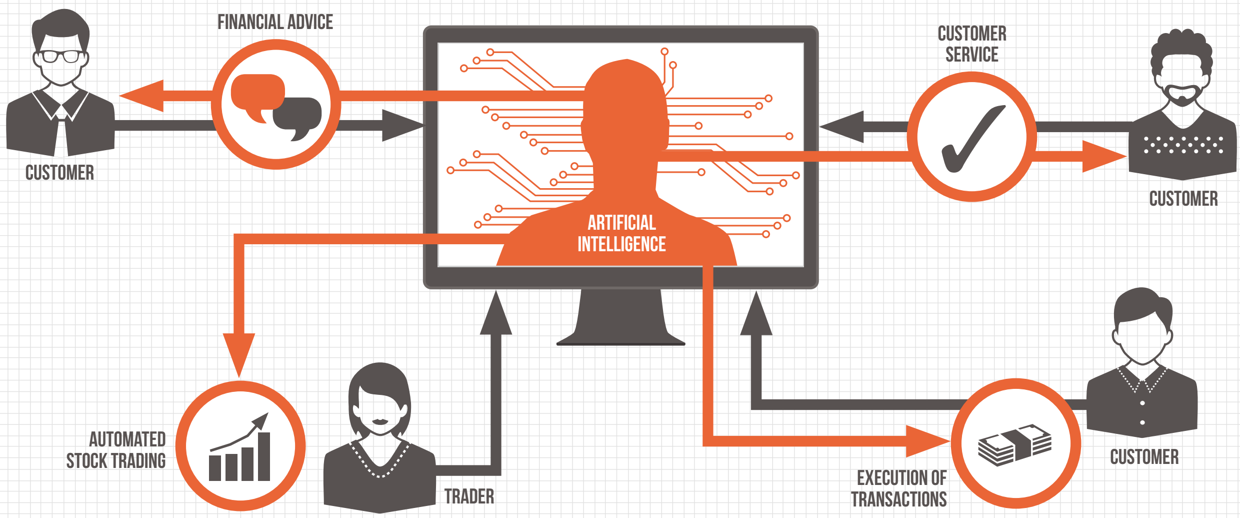


CASE STUDY: ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI), or cognitive computing applications, are machines or software that exhibit intelligent behaviour. They are used in many industries to minimise risk and human error, and to complete tasks at speeds surpassing those capable of being achieved by humans. There is a vast array of potential applications for AI within financial services, including customer service and financial advice.

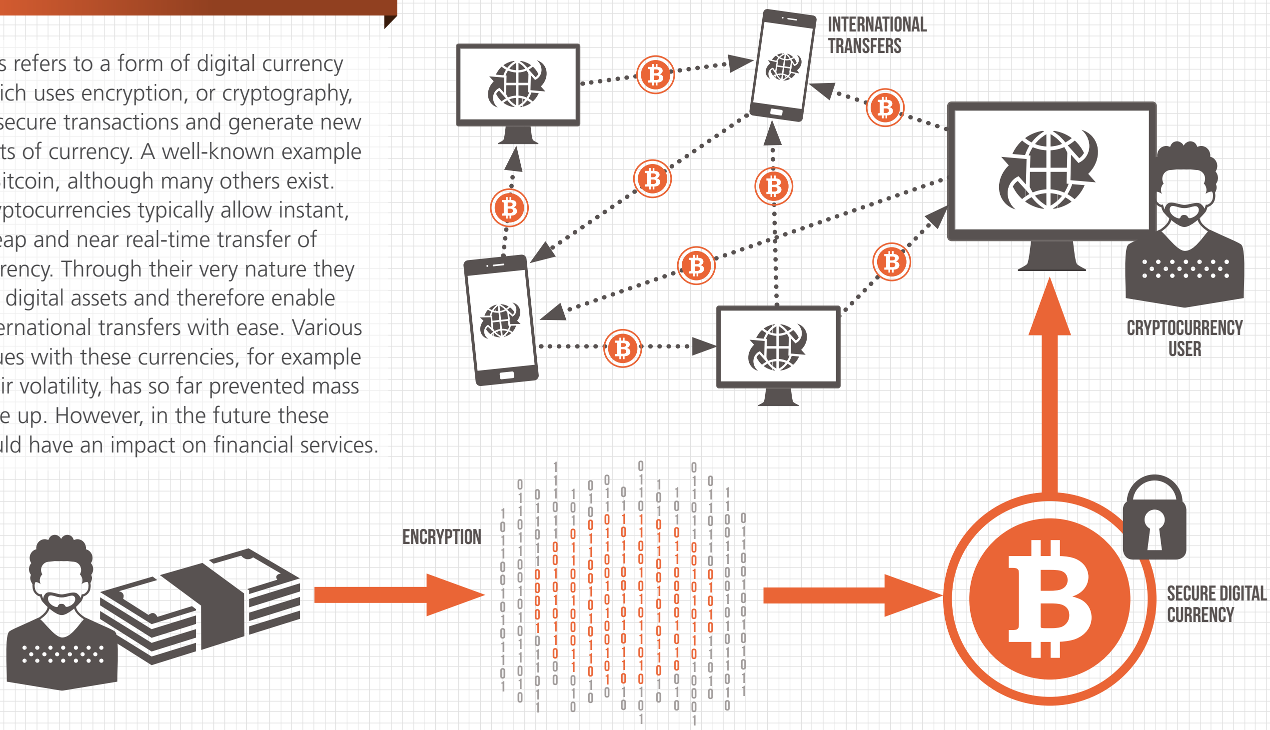
Examples:

- *IPSoft's Amelia* is a cognitive knowledge worker which can interface with customers and understand both what they ask and how they feel. *Amelia* learns as it works and can be used to automate customer service interactions.
- *Betterment* is an online-investment adviser registered by the U.S. Securities and Exchange Commission based in New York. Betterment provides investment advice and diversified, fully automated investment management to customers. All transactions occur online and it does not have brokerage sales representatives or advisers.



CASE STUDY: CRYPTOCURRENCIES

This refers to a form of digital currency which uses encryption, or cryptography, to secure transactions and generate new units of currency. A well-known example is Bitcoin, although many others exist. Cryptocurrencies typically allow instant, cheap and near real-time transfer of currency. Through their very nature they are digital assets and therefore enable international transfers with ease. Various issues with these currencies, for example their volatility, has so far prevented mass take up. However, in the future these could have an impact on financial services.



CASE STUDY: CUSTOMER CONVENIENCE

A number of new entrants to financial services are using technology, along with the agility that comes with their small size, to build an enhanced experience for the customer. Typically providing services that focus on a narrow area of the retail financial services experience, these businesses aim to reduce friction for the customer.

Examples:

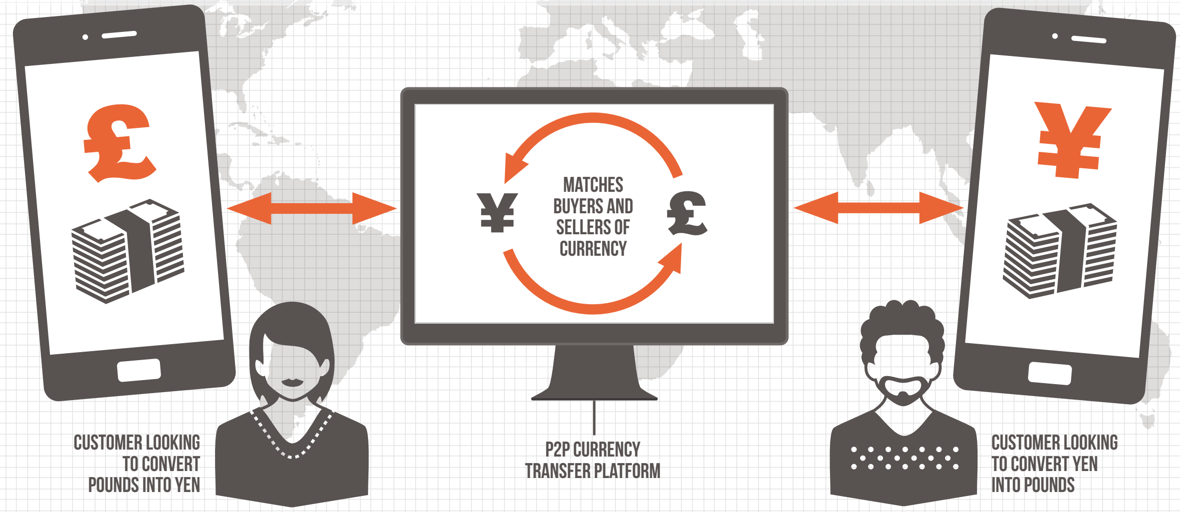
- *Number26* is a German startup that aims to provide a banking service that gives customers a stress-free experience, from signing up to reading statements that reflect payments in real time. Applying for an account takes place on the company's website. At the end of the process, *Number26* starts a video call to verify the customer's identity. The customer simply shows their passport to the webcam and answers a few questions. Once the account has been set up, the customer receives a card and an accompanying app.
- *Kabbage* is a company based in the US that lends money to small businesses and individual consumers. They have simplified the complex manual loan application process to one that is entirely online and automated. Businesses and consumers can use their own data to submit an application online and receive an immediate answer. *Kabbage* uses a number of data factors, including business volume, time in business, transaction volume, social media activity and the seller's credit score.

CASE STUDY: P2P CURRENCY TRANSFER

Currency conversion is an area which has typically been costly for customers, with intermediaries charging to cover the cost of the conversion. P2P platforms have begun to disrupt this process, connecting a customer looking to transfer between currencies with one looking to transfer the other way. This provides customers with a cheap, convenient way to transfer currencies.

Examples:

- *TransferWise* gives customers a similar experience to conventional money transfers; they choose a recipient and currency and the money is transferred. Where *TransferWise* differs is in the way it routes the payment. Instead of transferring the sender's money directly to the recipient, it is redirected to the recipient of an equivalent transfer going in the opposite direction. Likewise, the recipient of the transfer receives a payment not from the sender initiating the transfer, but from the sender of the equivalent transfer. This process avoids costly currency conversion for both parties.
- *Kantox* is a multinational FinTech company offering FX management solutions. The *Kantox* P2P exchange platform enables clients to perform international payments in over 40 currencies. Liquidity is constantly assured by liquidity providers which are in competition on the market place if the transaction cannot be "matched" 100% with other past transactions on the platform, generating significant savings, efficiency and productivity with full transparency.

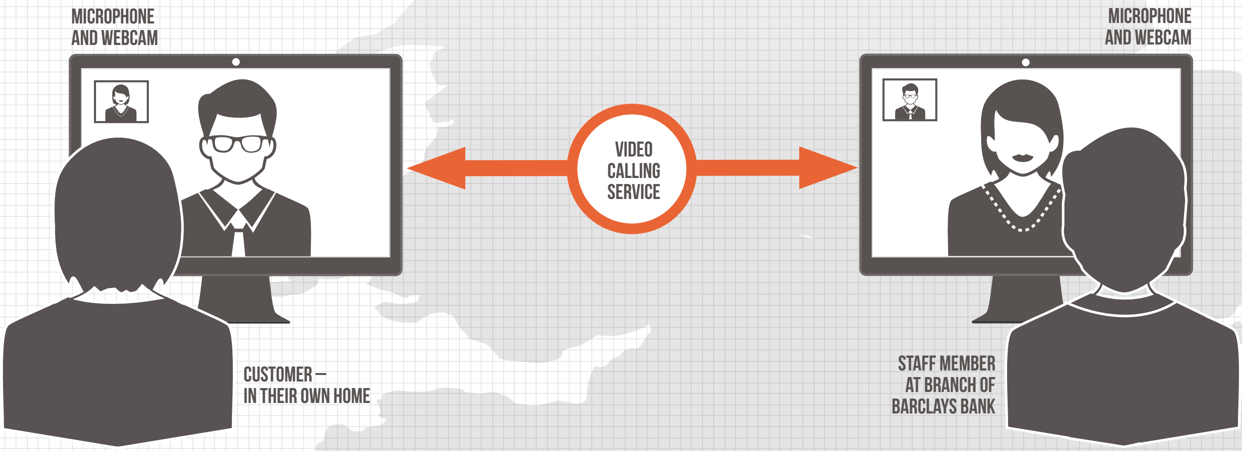


CASE STUDY: VIDEO SERVICES

Whilst video calling is not a new technology, it is increasingly being utilised to help serve customers from a distance, with the added personal touch of the employee and customer being able to see each other.

Examples:

- *mBank* Poland has launched a video banking service. *mBank's* call centres now contain video capabilities, for advisors to explain products, help set up accounts, loans and deal with other requests from the customer. The aim is to let a consumer connect with a subject matter expert whenever and wherever she wishes, saving the bank some of the operational costs of a full-fledged branch while offering a comparable experience

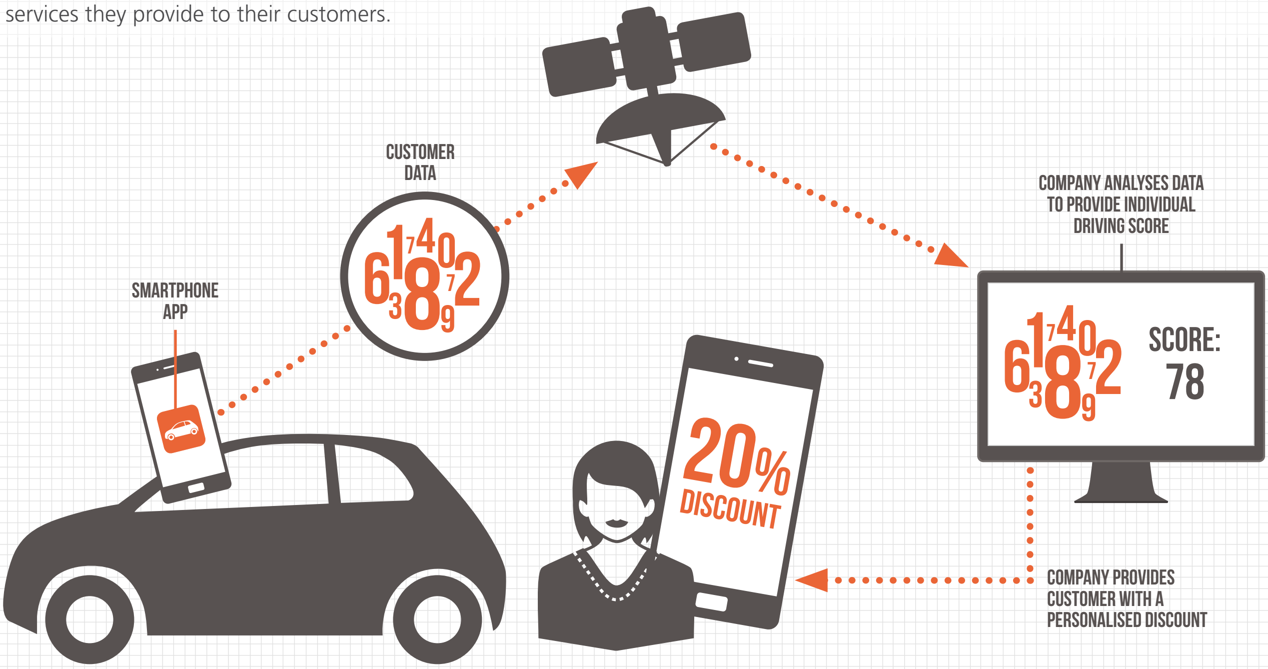


CASE STUDY: CUSTOMER DATA

As the use of technology increases, so does the level of data available to businesses. This comes from a variety of sources; whether publicly available or provided privately by the customer. Along with the increased availability of data, analytical tools and capabilities are improving, meaning increasingly powerful insights can be gained from data. Many businesses are using data to improve the services they provide to their customers.

Examples:

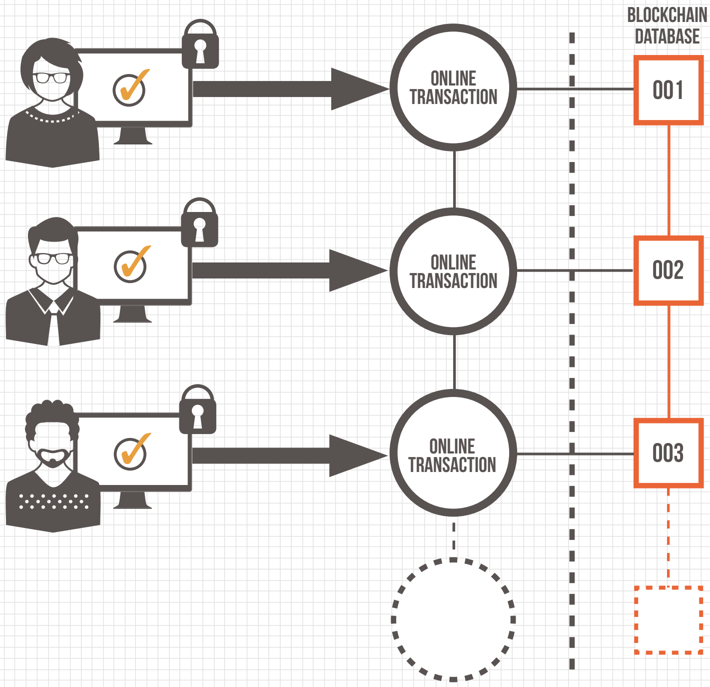
- *Wecash* is a credit assessment company based in China. It uses data analysis, along with machine learning technology, to provide credit assessments in less than fifteen minutes. To facilitate this, it combines and analyses the data provided by the applicant along with publically available data from the internet.
- *Aviva Drive* is an initiative which uses a smartphone app to measure a person's driving style. Through the GPS of the phone, it can measure accelerating, braking and cornering. After 200 miles of driving, it analyses these to provide an individual driving score. This score is then used to provide the motorist with a personalised discount – up to 20% off their premium.



CASE STUDY: BLOCKCHAIN

Initially established to facilitate Bitcoin, a blockchain is a continuously growing list of transactional records, which is verified by members of the chain and protected against tampering. The potential uses of blockchain could have a large impact on financial services, in particular banking. It has been described by the Bank of England as a "key technological innovation", and it has a team dedicated to it. Potential uses extend from facilitating P2P payments to more secure and cheaper interbank clearing.

A number of the world's largest banks have signed up to a blockchain group headed up by the technology firm R3. This group is collaborating to explore ways that blockchain technology can be used in financial markets.

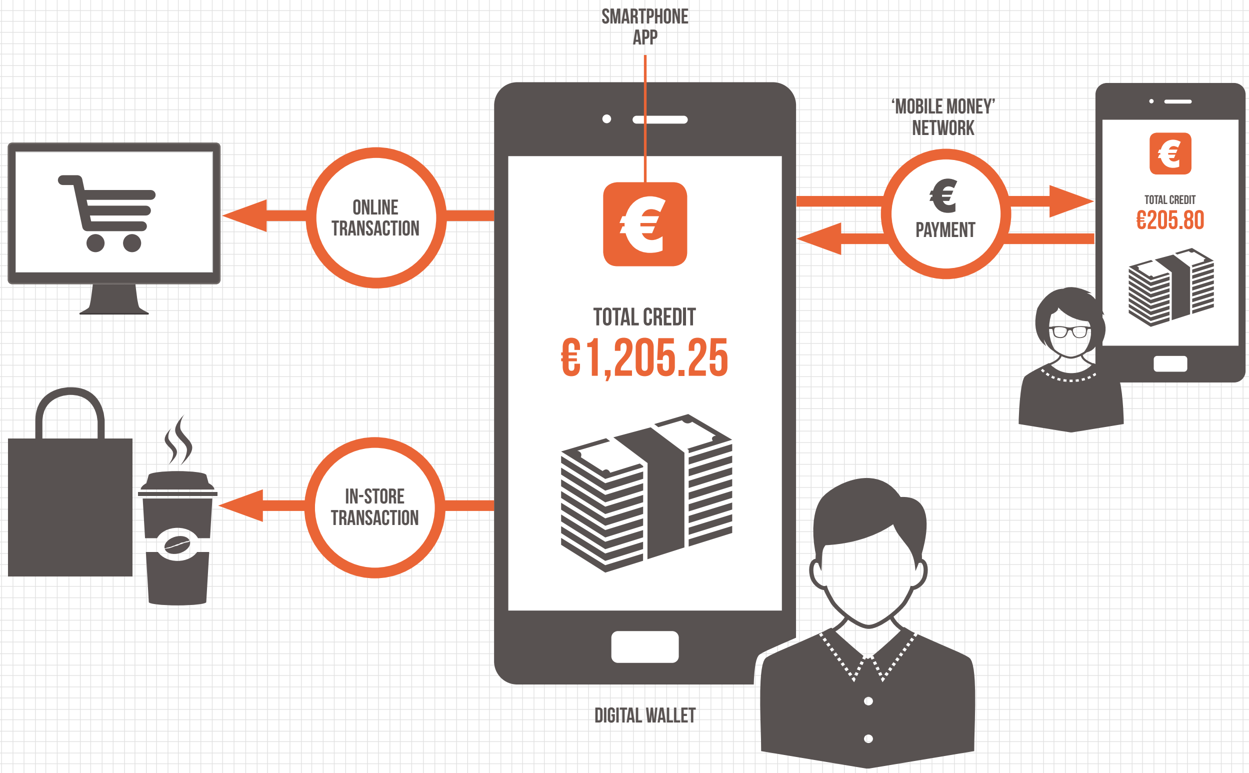


CASE STUDY: DIGITAL WALLETS AND MOBILE MONEY

A digital wallet refers to an electronic device that allows a customer to make electronic commerce transactions. This includes purchasing items online, and recently seen growth in the mobile phone market. Mobile money refers to a network that supports payment from one user to another via a mobile device.

Examples:

- *Apple Pay/Google Wallet* are contact payment technologies that pulls your credit cards, debit cards, and other sensitive-payment data from the Passbook app, enabling you to use a smartphone or smartwatch as a wallet at store checkouts.
- ***Square, Inc.*** provides a number of services in this area. ***Square Reader***, a credit card reader for iPhone, iPad, and Android devices, enables businesses to accept credit cards payments. ***Square Register*** is an application that works with ***Square Reader*** to turn a smartphone or iPad into a mobile point of sale, as well as providing payments, sales reports and other services. The company also provides ***Square Cash***, a solution for sending and receiving money via email, text or Bluetooth.
- *M-Pesa* is a mobile phone based money transfer and microfinancing service. *M-Pesa* allows users to deposit, withdraw, transfer money and pay for goods and services with their mobile device. It allows customers to deposit money into an account stored on their cell phones, from which they can send balances via SMS to other customers. *M-Pesa* provides a branchless banking service as customers can deposit and withdraw cash from a network of agents including retail outlets.



These technological changes and new business models have created new forms of interaction between customers and financial services. A flexible and dynamic regulatory framework is necessary to allow businesses to continue to adopt new models and safely implement innovative solutions. It is important that regulation enables financial services to leverage these opportunities to ensure the EU remains at the forefront of financial services.

3.3 Putting Europe's customers at the heart of the growth agenda

Customers are driving changes in retail financial services, and technology offers new ways of dealing with them. To maintain Europe's position as an internationally competitive centre for financial services, an effective and timely response to these changes is important. Europe's citizens will expect policymakers and the industry to collaborate in order to find these solutions. Retail financial services is by its very nature a customer-focused industry and no large scale response can be successful unless it keeps the customer at the very heart of the agenda. This report proposes ways in which policymakers and the industry can work together to achieve these goals.

As Europe began to recover from the financial and economic crisis, emphasis was rightly placed on stabilising the financial system and ensuring customer protection. Now, with the new regulatory mandate, the focus has shifted to transparency, consumer choice, digital technologies and making markets more competitive. Achieving these goals will ensure that Europe remains competitive in a global marketplace. Vital to these objectives is the retail financial services customer. The focus must go beyond ensuring customer protection and allow customers to spend, save and invest in more efficient and innovative ways. Supporting Europe's customers requires a regulatory landscape that is adaptive to the changing financial services ecosystem; customers must be presented with the opportunities this landscape provides, but also protected from the risks.

The EU's 500 million people make up the world's biggest Single Market. Completing this market will benefit consumers through greater choice and more personalised products. However, progress in completing the Single Market for services has been much slower than for manufactured goods. In retail financial services, the completion of the Single Market has proved particularly difficult and there is insufficiently developed provision of cross-border services in insurance, pensions, capital market products and banking. In part this is intrinsic to the products themselves. In insurance, for example, the local nature of retail insurance products means that cross-border sales will be the exception for the foreseeable future due to a lack of actuarial information across borders, poor infrastructure for cross-border claims management and fragmentation in the arrangements for taxation of insurance premiums.

Despite these initial difficulties, the Commission's focus on the removal of barriers is welcome and should be part of the wider programme to broaden and deepen the Single Market in Financial Services. For this to happen, it is important that the right infrastructure is in place. The Commission should base any proposals on customer demand and the results of gap analysis. The Commission has taken a number of steps in the right direction and the recent Cumulative Impact Assessment, along with regular considerations of the impact of regulation, will help the Commission to take a holistic view of the regulatory environment across Europe. For future impact assessments, there should be a renewed focus on the customer and their needs. The IRSG response to the cumulative impact assessment contains more detail in this area. The IRSG welcomes the positive steps outlined in the European Parliament's report *Stocktaking and challenges of the EU Financial Services Regulation* regarding the consumer, particularly around the appropriate level of consumer protection to ensure that customers have the necessary information to make informed choices, but businesses are not excessively inhibited by this burden.

4.0 MODELLING THE BENEFITS FOR EUROPE'S CUSTOMERS

The importance of the service sector in bolstering headline economic growth and individual well-being is clear and well-recognised – even in those developed economies where industry and manufacturing are still relatively strong. For example, IMF research on the EU services directive examined the spillover effects from productivity-boosting reforms in specific sectors, and found that "the effect on economy-wide GDP stemming from an increase in a specific sector is larger than the corresponding sector's share in output". Amplification effects were notable in some services sub-sectors, although the IMF research did not consider financial services specifically.[7]

The IRSG asked Accenture to create an econometric model to capture the potential impact on consumers if various policy recommendations relating to the digital single market and the broader financial-services ecosystem were implemented. The model shows a positive effect – particularly on net financial wealth per household – arising from the hypothesised implementation of 20 specific policy recommendations (see Appendix I for discussion of policy recommendations. The model is based on the structure and membership of the European Union as of March 2016.)

Like all models, ours is theoretical and provides a simplified framework within which relationships among key variables can be explored. The quantitative output from our model should be viewed with particular caution given that translating qualitative policy recommendations into quantitative output metrics presents formidable challenges. Our model achieves this difficult transformation through two intermediate stages. First, having grouped policy recommendations into thematic policy themes, these themes were represented by financial-services supply metrics. Second, regression analysis was performed to find correlations between the supply metrics. Finally, these demand metrics were correlated with changes in financial-services related household welfare, represented by:

- Household net financial wealth;
- Household consumption; and
- Personal disposable income.

For details of the supply and demand metrics, see Appendix II. These three welfare metrics were assessed as discrete dependent variables. Consumption and net financial wealth could, for example, both be considered functions of income, but this does not necessarily mean that these independent variables would affect the dependent variables in the same direction and with the same magnitude because the model did not analyse correlations among the dependent variables (the welfare metrics). For a full description of the model, see Appendix III.

The model included 17 European countries chosen on the basis of data availability. The countries were grouped by level of economic development as measured by

[7] IMF; The EU Services Directive: Gains from Further Liberalization, 2014

real GDP per capita; this facilitated analysis about the varying impact of policy implementation of countries at different stages of development[8]. The model is designed to predict the impact on countries over a single year only. Whilst there may well be further changes in time in the real world, it is beyond the scope of this model to project those further changes here.

Frontier analysis in country groups

To facilitate this model, the countries were grouped by GDP per capita into high, medium and low groupings. These groups were then used to provide a balanced and realistic scenario for the results of impacting the recommendations. This scenario focused on a country's distance to the 'frontier' of supply metrics – that is, the gap between each country's score and the highest historical score among the group. Two variants of this exercise were conducted – one in which the frontier was represented by the overall best-country-score (i.e. where the group was the full set of 17 countries) and one in which the frontier was income-group specific (so that each high-income country was assessed based on the distance to the high-income frontier and so on for each income group). The latter variant is more pragmatic since countries in each income group should be at a similar level of development; because they should be able to catch up to the group leader (the frontier), this analysis offers a more realistic picture for the lower-income countries.

The supply metrics were grouped into eight categories, called pillars, and the demand metrics into three. Each category of supply metric was analysed to reach each country on an index, and then review the difference between each country and the highest performer within their group.

The pillar that measures the power of innovation within the countries saw a large room for improvement within the middle-income group, due to a frontier set by the high levels of FinTech within the UK. If these policies were implemented, there is therefore a large benefit to be gained for middle-income countries by moving them to the level of the UK.

Digital infrastructure metrics saw small gaps between countries, with a higher GDP per capita typically meaning a higher level of digital infrastructure. One area that low-income countries performed well in was the depth of their digital data, which was measure by the level of credit information available. In the frontier analysis scenario, implementing the recommendations in the category of 'leveraging the opportunities of digitalisation' and moving each country in the low-income group to the level of Poland, the leader in the group, would see significant gains for the group.

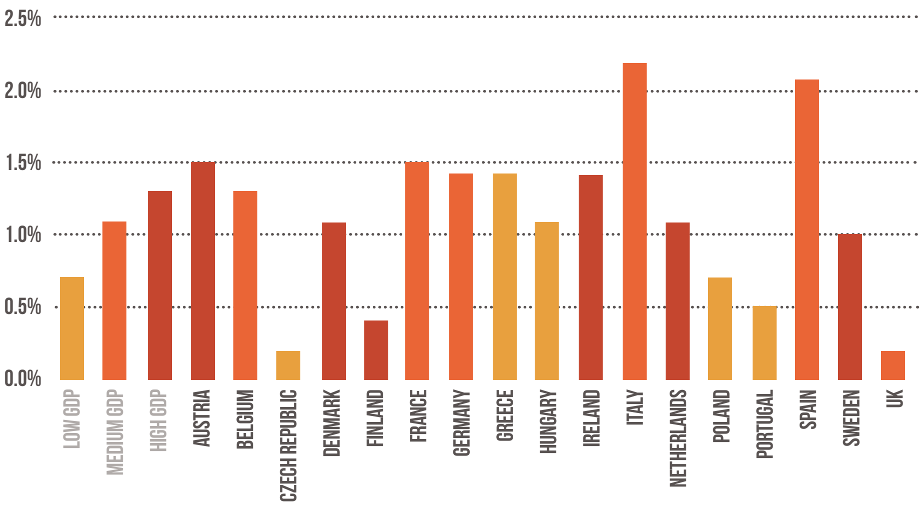
Across all policy themes, the customer welfare metric most significantly impacted was the net financial wealth metric. The results below show the impact that implementing all four themes together, in this frontier scenario would have on customers' net financial wealth. The model focuses on a single year after implementation.

[8] Low GDP countries were defined as those with average real GDP per capita in 2010-14 of below €20,000; Middle-income countries were those with average real GDP per capital of €20,000-34,000; and high-income countries had real GDP per capita of €34,000 or above.

- Middle-income countries stand to gain by an aggregate of €207bn across the six countries. This translates into a gain of €1,464 per household in the six countries, a percentage increase of 1.1%.
- The aggregate gain for high-income countries (€31bn) is much smaller, but the relatively small populations of these countries ensures that the per-household gain is still significant (€1,389). This is a percentage increase of 1.3%.
- The low-income countries make a modest gain in both aggregate terms (€9bn) and per-household terms (€273), although the percentage increase is more in line with the other groups, at 0.7%.

Figure 1 shows the percentage increase in net financial wealth relative to the 2014 level across all countries and groups in the model. Whilst those in the medium GDP group have on average the largest benefit, it can be seen that there is a positive impact across Europe.

FIGURE 1: NET FINANCIAL WEALTH INCREASE (PERCENTAGE)



Like all models, this model is theoretical and provides a simplified framework within which relationships among variables can be explored. In light of this, and taking account of the considerations outlined in Appendix III, the analysis presented here should be considered as illustrative rather than as definitive quantitative estimations. The quantitative estimates described above would change based on the group of countries considered and also based on the assumptions that underpin the different scenarios. Since outcomes differed among different groups of countries, a reasonable conclusion is that different emphases would be required when implementing these policies in countries at different levels of economic development. It is also important to note that these benefits are modelled over a single year only and that further changes may well occur in the real world over time. However, although the expected benefits vary among groups of countries, ultimately consumers in the majority of countries would benefit for each policy group. The benefit is most pronounced in terms of net financial wealth, where all the values associated with net financial wealth were positive, indicating an increase in this measure of consumer welfare across all 17 countries included in the model.

5.0 POLICY RECOMMENDATIONS

To produce a regulatory and legislative environment which is in line with the modern financial services landscape and ensures that markets work better for customers, it is important that the financial services industry, Member States' Governments and European policymakers work together. All stakeholders will need to be forward-looking and flexible in their approach, whilst protecting the customer through appropriate regulation.

The recommendations laid out here call upon policymakers and the industry to work collaboratively to build a modern regulatory system which supports the industry in serving Europe's customers, and ensures the EU remains a global centre of excellence for financial services.

5.1 Adapting to the changing nature of the financial services ecosystem

The trends outlined in this report contribute to a rapidly changing ecosystem in which there are new ways to meet the needs of financial services customers. These opportunities come with certain risks. Proportionate and appropriate regulation will be required to manage these. The impact that retail financial services has on the lives of individuals is significant and Europe's regulatory framework should be based on an understanding of customer behaviour and demand.

The opportunities provided by financial technology (FinTech) and innovation within this new landscape are significant. These areas have seen rapid growth across the industry in recent years, a trend that is set to continue. An environment which fosters FinTech and innovation will help Europe continue to be a leader in these fields, to the benefit of customers.

Recommendation 1

European and national policymakers and regulators: Adopt a new approach to financial services regulation that aims to prioritise and stimulate innovation whilst maintaining customer protection

For the retail financial services industry to adapt to the changing landscape and to respect the modern demands of its customers, the regulatory framework should be supportive and adaptive to change. A principles-based approach to regulation along the lines set out below would be the most appropriate:

- **Fostering innovation and flexibility** – Regulation should reduce barriers to innovation where possible. To identify such areas it is important that policymakers and regulators engage with businesses whether incumbent or challenger. Regulators across Europe are increasingly aware of the limitations of static, prescriptive regulation, and recognise the importance of adopting dynamic regulatory policies which focus on and measure outcomes. Data and insights from regulatory approaches which have not delivered expected results should be used in a constructive way, allowing them to inform future decision-making.
- **A level playing field** – A large number of new entrants are joining the financial services ecosystem. These widen the choice available to customers and make markets more competitive. There is a significant amount of potential value that these firms could provide for customers. However there is also a risk of damage, even if only to a small segment of customers, and associated reputational harm. These risks must be adequately managed, whilst allowing for the benefits of these firms to reach customers. At the same time, innovation also stems from established businesses with innovative approaches which should be equally supported by regulation. It is important that all firms operate on a level playing field, one which does not give advantage to one participant over another. Regulators should therefore ensure they are regulating the risk to the customer proportionately, not wholly focusing on the entity behind it.
- **A holistic approach** – Regulators should look at the market as a whole and attempt to update their regulatory approach to the digital age. This goes beyond individually updating single directives to bringing together common standards and definitions which can be applied across the ecosystem. In this context it is important that the Commission adopts a collaborative approach, both internally and with the industry.
- **Customer first** – Whilst seeking to reflect the digital age, regulation should accept that customers may have differing opinions on digital and some may wish to continue using traditional methods, especially in a domestic context. Regulation should support the shift to digital while not excluding those who wish to continue engaging with financial services through traditional channels. Policymakers and regulators are recognising the benefits of undertaking research to identify the needs of the modern customer so their work can build on trends seen by creating or adapting legislation to meet these needs.

Recommendation 2

Member States' Governments and the European Commission: Work with new and established businesses to support innovation and FinTech and share best practice across Member States

FinTech has grown vastly in recent years with global investment having tripled between 2013 and 2014 to $12.1 billion[9]. The value of FinTech for the customer has been proven on numerous occasions by established institutions, such as Barclays, providing convenient peer-to-peer payments with *Pingit* and new players, such as *Transferwise*, helping to reduce the cost of transferring money abroad. As FinTech continues to grow customers will expect a regulatory framework that supports large and small businesses in meeting their evolving needs in innovative ways.

FinTech developments often occur initially in individual hubs, where companies benefit from a cluster effect. Once these innovations have been tested businesses will seek to roll them out across Europe. To facilitate this process, the Commission should **create a forum with representation across Governments, regulators, trade associations, academia, businesses (incumbents and new entrants) and end users** to share best practice regarding FinTech and digital technologies.

To promote Europe as a global FinTech leader more generally, **innovation and support for emerging FinTech solutions should be included in each regulator's mandate**. This will encourage the development of a rich ecosystem and help to ensure that regulators work with established businesses and new financial services entrants alike, focussing on regulating the risk when considering new technologies.

Recommendation 3

European and national legislators: Write legislation that is 'future-proof' – open to application to new developments

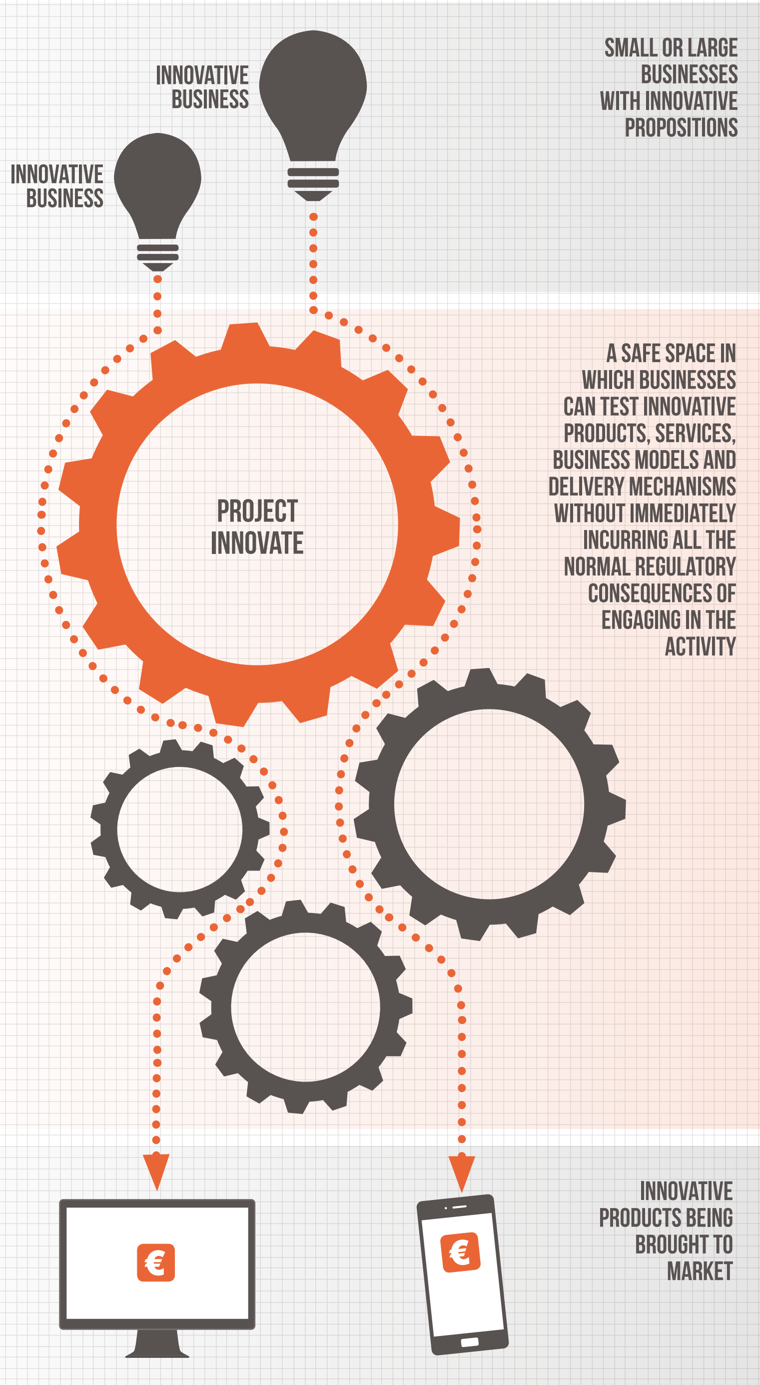
One of the consequences of a continuously evolving financial services ecosystem is that current financial services regulation is often not fit for the digital age. An example of this is the Packaged Retail and Insurance-based Investment Products regulation (PRIIPs) which is still based on the idea that most interactions involve physical meetings and the signing of paper documents. It uses paper measurements, such as number of sheets of A4, as standards. This fails to recognise that many interactions now take place on mobile devices and do not involve any physical paper.

[9] Accenture; The Future of FinTech and Banking, 2015

CASE STUDY: PROJECT INNOVATE

Launched in 2014, Project Innovate was developed by the FCA in the UK, to foster competition and growth in financial services. One of its key objectives is to ensure that the regulatory environment in the UK supports products that innovatively make improvements to the lives of customers. Project Innovate works with new FinTech firms that have a valuable customer proposition, but often lack detailed knowledge of regulation, and helps them to understand the regulatory requirements placed on them. It also works with larger businesses to help them appreciate the regulatory requirements around bringing new and innovative products to their customers. By covering both large and small businesses, Project Innovate helps the FCA itself to build a picture of the barriers to the adoption of new ideas within the industry.

One of the proposals being implemented by Project Innovate is the building of a regulatory sandbox. This is a 'safe space in which businesses can test innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences of engaging in the activity in question'. The purpose of this would be to increase the number of innovative products being brought to market, and reduce the time taken for them to be tested and introduced. It also helps to ensure that appropriate consumer protection is built into these products.



Policymakers should attempt, where possible, to make regulation 'future-proof'. The Commission could seek to incorporate this into its **Better Regulation Agenda**. Just as every proposal has to pass a subsidiarity test and a proportionality test, **new regulation should also be required to pass a 'future-proof' test**. Any changes made during that check would of course be scrutinised and go through the normal legislative process to ensure that they achieve the desired outcome. The Commission should continue to update existing legislation in this spirit to make it suitable for the digital age.

A good example of where this has happened already is the use of the term 'durable medium'. This will make it possible to apply legislation to mediums which are yet to be developed. Regulators should seek to follow this lead and incorporate future-proof terms in regulation where possible.

Recommendation 4

European Commission: Collate and coordinate behavioural economic research into the European customer

The insights from behavioural economics could potentially revolutionise the way in which legislation is being devised. Deciding which method to use to send information to a customer is a practical example in this context. Given that there are multiple ways in which the same information can be sent, displayed and communicated, insights from behavioural economics could inform which methods are most effective for customers. This might be an email, an infographic, a voice message or a combination of all three.

As legislators move to an approach that will allow them to harness these insights, **the European Commission could play a useful role in collating existing behavioural economics research and sharing the results with Member States**. For example, the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, AFM) has already undertaken substantial research into the behaviour and performance of self-directed investors. Insights such as these should be shared with policymakers and regulators across Europe and the European Commission seems to be best placed to coordinate this. To move forward on this, the Commission should also work to promote any research it has undertaken itself, and ensure that this is widely shared to be most impactful.

In future, the Commission may choose to fill some of the gaps that this analysis might have exposed itself or encourage other bodies and institutions, which might be better placed to conduct the research, to do so. **These insights should be considered by the Regulatory Scrutiny Board as part of the pre-legislative impact assessment.**

Recommendation 5

European Commission: Take a holistic view of the regulatory environment to implement common standards and definitions

There are currently a number of areas where different directives cover the same areas but have contrasting standards. A striking example of this is the Payments Account Directive (PAD) and the Payment Services Directive (PSD). They cover similar areas but are distinctly separate directives with differing requirements. An example where this causes difficulties is that PSD and PAD use the same definition of 'payment account' but it is clear from the recitals to PAD that the scope of accounts covered is different to the position under the PSD.

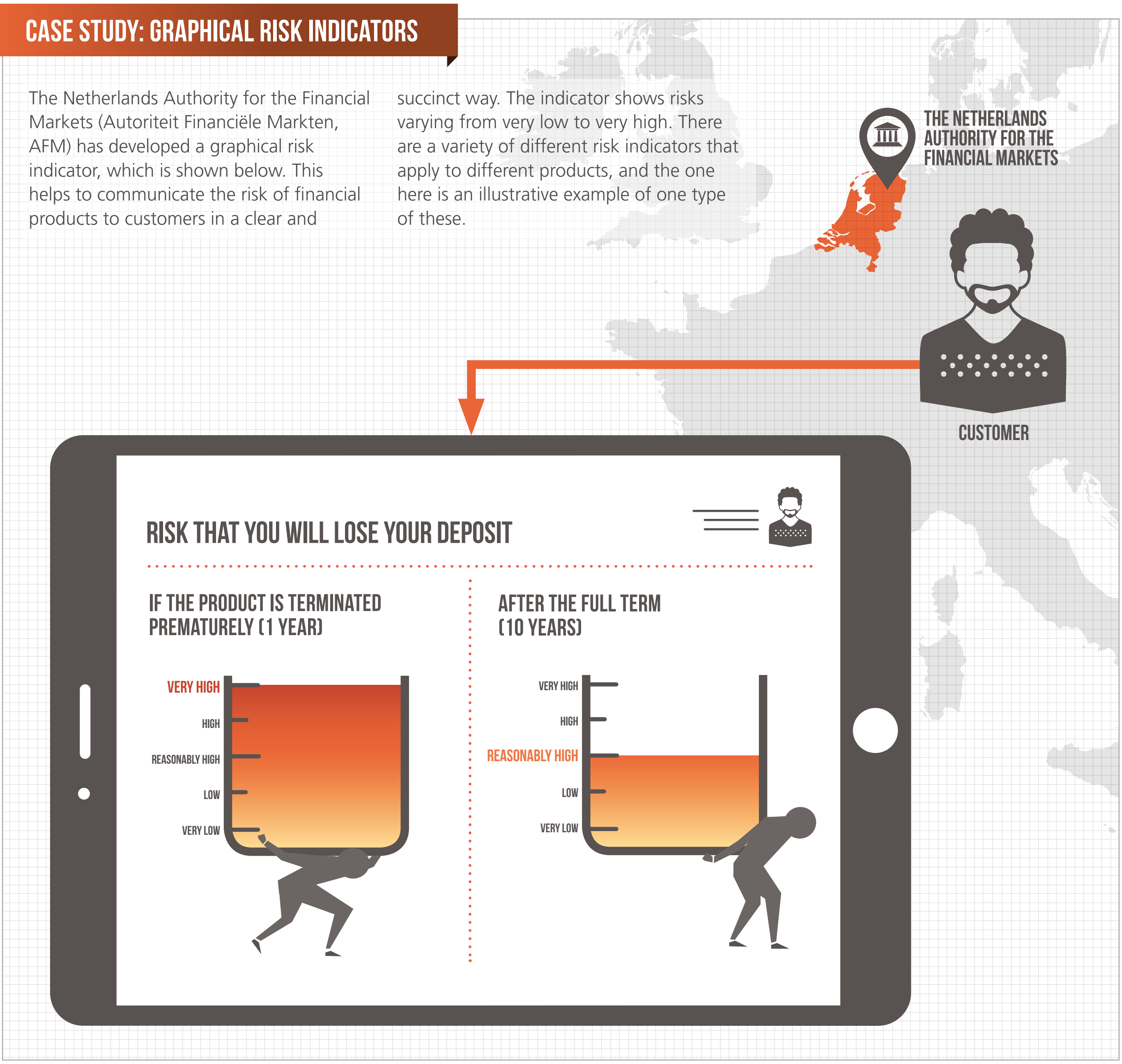
Producing joined-up and consistent regulation would make it clearer and easier for businesses to follow, and enable them to save on the costs of understanding and complying with regulation. These savings could be directed to the customer and could help support a more competitive marketplace.

The European Commission has already started work in this area and the call for evidence on the cumulative impact of financial services legislation is a valuable first step. It will be important that this initiative marks the beginning of a dialogue and that European and national policymakers continue to work with the industry on these issues. Once the results of the call for evidence have been collected and analysed, the Commission should attempt to consolidate them. One way to do this would be to **produce a horizontal piece of legislation which introduces common standards and definitions**. This would also ensure that all legislation is brought in line with the digital age; an age in which many customers access information and products through their mobile device.

One specific area of concern is marketing rules. There are, for instance, contradictions between the rules set out in Markets in Financial Instruments Directive (MiFID) and PRIIPs and social media marketing is yet to be addressed. **Any horizontal regulation produced should thus also set clear standards for social media to improve clarity with regard to cross-border marketing**.

CASE STUDY: GRAPHICAL RISK INDICATORS

The Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, AFM) has developed a graphical risk indicator, which is shown below. This helps to communicate the risk of financial products to customers in a clear and succinct way. The indicator shows risks varying from very low to very high. There are a variety of different risk indicators that apply to different products, and the one here is an illustrative example of one type of these.



5.2 Leveraging the opportunities of digitalisation

Digitalisation is a key driver behind the changes affecting retail financial services. Digital channels help businesses to interact with customers in real time across vast distances. As the European Commission responds to digital more generally, it will be important to consider the effect any responses will have on financial services.

As a result of the increased use of digital the levels of data produced by financial services businesses and their customers has risen dramatically in recent years. There are tangible benefits to be gained by the improved use of this data: regulators and legislators can gain a clearer picture of the real-time state of the industry, businesses can streamline operations and have a detailed understanding of their customers and those customers benefit from personalised and relevant offerings and individualised risk and pricing. Whilst recognising these potential benefits, a customer's data remains both important and private and regulation must be in place to ensure the safety and appropriate use of data.

Recommendation 6

European Commission: Consider financial services when developing regulation as part of the Digital Single Market strategy

The Digital Single Market (DSM) strategy aims to bring the EU's Single Market in line with the digital age, 'tearing down regulatory walls and moving from 28 national markets to a single one[10]'. Whilst e-commerce, telecoms and media are explicitly mentioned within the pillars of the strategy, financial services is not. Retail financial services is an industry that will be among those most impacted by digital which is why the alignment of the DSM with the retail financial services review is particularly important.

The current approach to digital within financial services often seems ad-hoc and is as a result less effective. **The DSM strategy should be used as a framework for consistent regulation across different sectors that considers the individual needs of different industries and its customers and thereby avoids unintended consequences**. For example, as the European Commission considers action on geo-blocking (limiting access to content based on a user's location), the impact of any potential new legislation on different sectors, including financial services, must be considered.

[10] Europa; Digital Single Market

Recommendation 7

European Commission, ESAs and NCAs: Produce a framework for regulators to make better use of available data, without increasing the number of data requests

Just as improved technology and better understanding of the use of data has helped fuel FinTech, these same trends have been harnessed to drive forward regulation technology (RegTech). This will have many applications for regulators and firms. Many regulators are exploring the adoption of RegTech, such as the FCA in the UK through its Call for Input, and we support this work.

There is a particular benefit for prudential supervision. The large amount of data generated within financial services could help micro- and macro-prudential regulators to better understand the financial climate. During the last financial crisis it was difficult for many regulators to fully understand the size and location of exposure risks. Since then, analytics tools have become increasingly sophisticated and the cost of data storage has significantly decreased. Regulators should leverage these developments to better understand the state of the market and the location of risks.

Regulators can now upgrade their analytics and visualisation capabilities to ensure they are making full use of available data. To support this, the Commission could provide a framework to ensure efficient data capture and use in the following areas:

- Micro-prudential: Regulators can make use of available data tools and technologies to drill down into the detail of risk reports and gain a clear view of the workings of financial services businesses. It is important that this does not mean extra requests for businesses to share data, rather that **currently available data should be analysed in a more rigorous manner to improve insights gained**. This could be supported by a clear prescriptive list of data requirements, so that the data regulators receive is in a similar and comparable format.
- Macro-prudential: National Competition Authorities (NCAs), European Supervisory Authorities (ESAs) and the Commission should seek to improve their analysis of the financial system at large through enhanced data collection and analytics tools. It is important that they **standardise the format of data requests so the data can be aggregated and used to give an EU-wide picture of the financial services industry**.

Recommendation 8

Financial services industry: Communicate to customers how their personal data is being used, and what the results of this use are

By using the benefits of enhanced analytics of customer data, businesses can improve both the services and the products they provide to their customers. Data is of great value to customers, and in the wake of recent large scale data breaches, customer trust about the safety of their data is low. 54% of customers do not feel confident about the safety of their online data[11]. In this context, it is important that the use of customer data is made transparent. Businesses should ensure they provide a clear

[11] Accenture; Digital Trust in the IoT Era, 2015

explanation of how data is to be used and the benefits that will result from this use, presented to the customer in a clear way when purchasing a new product or when rules/uses are changed. **To assist with this, each Member States should explain on the Government website what data they require businesses to hold on their customers. This will allow businesses to direct customers to that site and help explain why they are required to ask for certain data.**

Despite sophisticated attempts to keep data safe there remains a significant risk of data breaches. Large scale breaches have shown the potential damage to customers and their relationships with businesses. Businesses should take every step to prevent these but should also accept the possibility of breaches and have a clear plan to protect the customer if and when they occur. This plan should include a clear dialogue with the supervisor and the customer to make them aware if their data has been put at risk, including advice and guidance to allow them to make necessary changes to passwords and card details. Many businesses have already produced such plans, but it is vital they are regularly being reviewed and updated in close collaboration with supervisors.

Given that financial data is sometimes lost by businesses which hold customers' data to provide them with goods and services rather than financial institutions themselves **an enhanced pan-European approach to managing data loss and helping to facilitate engagement between third parties and financial services providers** would be welcome. This would prevent stolen data from being used to access financial products, decrease the value of stolen data and enhance consumer confidence.

Recommendation 9

European Commission and supervisory bodies: Ensure the EU General Data Protection Regulation is implemented and applied in a proportionate way, to allow customers to benefit from the innovative use of their data

The increased levels of data available and the improved ability to analyse it have enabled businesses across different industries to use data in previously unknown ways. For financial services, this means that businesses can offer customers increased value, through more personalised products based on their individual risk profile, ambitions and needs, and streamlined services based on a deeper understanding of their needs.

In order for businesses to be able to fully leverage available data, regulation should be fit for a modern digital economy and not be overly restrictive. Safeguarding customer data is of absolute importance, but the framework for this needs to be as balanced and non-restrictive as possible. **The current Data Protection Regulation is considered to be overly prescriptive and restricts the ability of individuals and companies to deploy innovative uses of data**. There is a need to rebalance the protection of individual data and the need for the free flow of commercial data, given that digital businesses do not operate in national and regional silos and that virtually all commerce entails data movement. Especially, as we move towards a more integrated financial services market and the mobile economy gains importance, more and more data will need to flow across borders. The regulation also assumes that there will always be a personal relationship between the customer and the data collector which will not always be the case and makes the innovative use of data more difficult.

Whilst changes to the Data Protection Regulation will not be possible due to its stage in the legislative process, a flexible approach should be taken in its implementation.

More detailed work on and analysis of the Data Protection Regulation, including its interaction with the Digital Single Market Strategy, has been done by the IRSG and is set out in other reports.

Recommendation 10

Financial services industry: Build a framework for a Digital ID system to help customers transfer their data between financial services providers

Currently there is a substantial amount of background information that must be provided by a customer to open a new account or purchase a financial product. Despite a move to digital methods from some providers this still means a lengthy procedure to open new accounts and a duplication of requirements when opening accounts from more than one provider. To overcome this we propose the creation of a **Digital ID; a way of a customer transferring their financial data between businesses**. The customer would have ownership of this data and would be able to grant businesses access and limit it as required.

The aim for such an ID system is to enable customers to use them to speed up the Know Your Customer (KYC) process when applying for new products from providers in either the home state or another Member State. The customer would grant a business access to their ID, providing them with the necessary data to process an application. These IDs could also contain credit history and other financial data, which either the customer or businesses could use for further services. **The Digital ID would be offered as voluntary tool for customers** and should complement rather than replace existing procedures. The data stored on the ID will need to meet stringent criteria for authenticity in order for it to be used by businesses.

The specific format for these IDs is yet to be determined. For example, the data could be held in an online platform, or locally on the customer's mobile device. Before an effective solution can be built, an assessment must be made of the requirements and any existing technologies. Some Member States have begun to develop, or completed, solutions for their market, such as verify.gov.uk in the UK or the Digital Passport system in Estonia, yet others are much further behind. A significant challenge will be agreeing universal standards that could apply across these different Member States. We support the work of the Tax Incentivised Savings Association (TISA) in the UK which is seeking to define universal standards for a Digital ID.

In the long term, such an ID system could allow customers **to keep up to date records of all their finances**, allowing them to be managed in one online location.

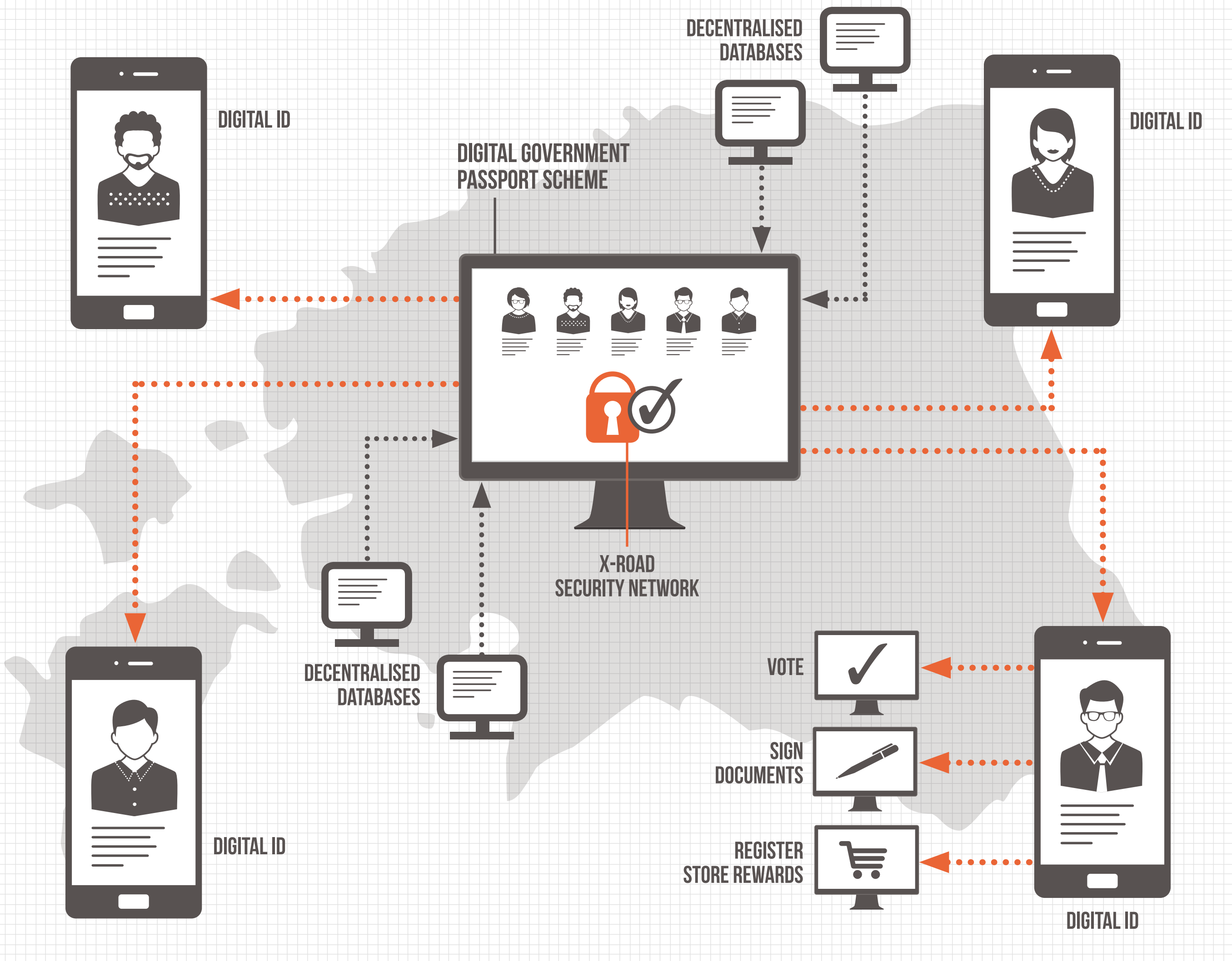
CASE STUDY: DIGITAL PASSPORTS IN ESTONIA

In Estonia, a digital Government passport scheme offers secure, authenticated identity checking for all citizens:

- All residents of Estonia have a digital ID, which can be used to help with an array of transactions
- Each person is legally allowed to see what data is held on them.
- Estonia aims to fill the gap in online ID verification by allowing non-residents to enter into this scheme. Applicants will pay a small fee, provide biometric data and verification documents and a physical or virtual ID card will be issued.

These electronic IDs have clear benefits. For businesses they reduce customer-facing and back office costs. For customers themselves, they offer greater convenience and privacy. There are strict standards for security; the system operates on two-factor authentication, meaning users have to provide two means of identification from separate categories of credentials. They also use a specific security network, called X-Road, which pulls together personal data from numerous decentralised databases upon an authenticated request. These requests can be monitored so users know what, when and why their data has been looked at. These standards of security are vital to ensure customer trust in the security of the system.

To enhance convenience, they operate a 'once only' principle, meaning users never have to input the same data more than once. The ID system can currently be used to sign documents digitally, use internet banking, incorporate a company, file annual tax returns, register store rewards, vote, and access over 300 public services. For an example of the system's efficiency, signing a document digitally takes on average 30 seconds, and filling in a tax return takes an average of 5 minutes.



It could also be extended to allow them to compare their products with other offerings to find the best deal. This is similar to the *midata* initiative being developed in the UK which provides a breakdown of account usage and allows online customers to compare to offers from other providers.

The first steps should be the establishment of a group of pan-European representatives from the financial services industry, along with policymakers, to build a framework for Digital ID, ensuring that they capture the necessary requirements for data standards and security. It would also be beneficial for timelines to be agreed upon.

5.3 The Single Market in Retail Financial Services

The completion of the Single Market in Financial Services has proved difficult owing to differences in the configuration of national financial systems and national regulatory frameworks. The retail financial services industry in the European Union is still fragmented along national lines. A true Single Market in Retail Financial Services will promote a more competitive environment and more choice, giving greater value to the European customer. Whilst significant barriers remain, the European Commission should continue work on the completion of the Single Market in Financial Services.

Recommendation 11

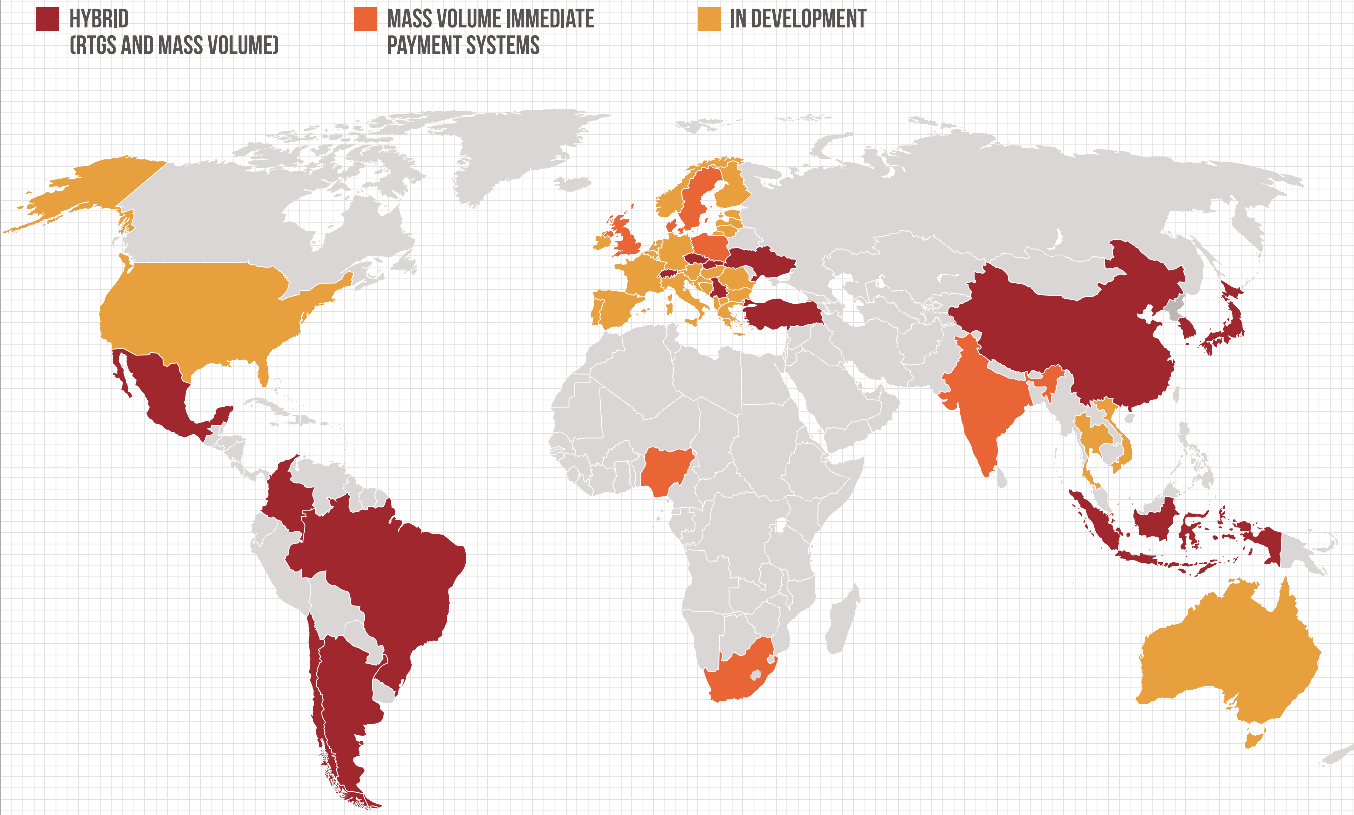
European Commission: Support existing work to build a solution for cross-border payments, and conduct a study into the feasibility of extending this to multiple currencies once implemented

There are clear benefits to customers of faster payments and the resulting speed at which these payments are reflected in bank balances and statements. This allows for enhanced financial planning and the avoidance of unplanned overdrafts due to mistimed transfers. In the UK, the Faster Payments Service has been implemented to reduce payments between bank accounts from a few days to typically seconds.

We recommend the Commission supports the work of the Euro Retail Payments Board (ERPB). This new entity, which has replaced the Single Euro Payments Area (SEPA) Council, is targeting the production of a Pan-European solution for Euro payments by November 2017. In particular, the Commission should work with the ERPB to overcome the potential legal issues they have identified, which include compatibility of this Euro solution with the SEPA Regulation and Payment Services Directive 2 (PSD2).

Once implementation for the euro has concluded, the Commission should then consider launching a study into the feasibility of extending this to other currencies, potentially by establishing interoperability with existing instant payment schemes, and the examination of potential barriers. Implementing and extending this scheme could provide an opportunity for businesses to better serve customers across all Member States. However the extension of this scheme, if feasible, would not be possible until after its implementation for the euro.

CASE STUDY: GLOBAL FASTER PAYMENTS SCHEMES



Source: Accenture Research, February 2016

Recommendation 12

European Commission: Ensure the presence of underlying infrastructure for cross-border movement of financial services products

Part of a genuine Single Market in Financial Services is a customer's ability to move between countries and transfer their financial products accordingly. However, before cross-border provision and the transfer of financial services products can be promoted it will be important to ensure the underlying information infrastructure is in place.

Without rigorous background checks and access to reliable customer data the likelihood of serious fraud within financial services provision will increase drastically. Focussing on standardising the quality of information held and developing data sharing arrangements (such as the Digital ID system set out in Recommendation 9) that firms can use to assist KYC is therefore recommended.

There are still significant barriers to the transfer of pension and insurance products due to differing legal and tax regimes.

The Commission should in the first instance focus on delivering infrastructure to support those products that can most easily be provided and moved cross-border, or those where cross-border requirements have already been put in place, such as with current accounts through PAD.

Recommendation 13

European Commission, ESAs and NCAs: Extend the development of a common supervisory approach to the digitisation of financial services

There are currently differences in the way that regulation is applied across Europe, leading to an incoherent regulatory landscape for businesses and this will act as a barrier to the cross border trade in retail financial services that digitisation will facilitate. The ESAs should play an important role in addressing this problem in the foreseeable future. Developing a common supervisory approach will help pursuit of the principle, outlined in Recommendation 1, of a holistic approach to regulation. Whilst it is important that ESAs recognise the different markets across Europe and do not attempt to adopt a 'one size fits all' approach, building a common approach to digitisation will help businesses operate across Europe and provide better services for their customers.

ESA's and NCA's could use RegTech solutions to collect and use data. **There is an urgent need for data requests to be streamlined and collected in a common format and on a common platform**. More coordination between ESAs and NCAs on data collection and analysis will contribute to establishing a common supervisory culture.

With the continued development and application of the common rulebook this will likely happen over time. However the process could be speeded up by **making better use of the joint committee**. This should be used to greater effect to ensure alignment and better sharing of best practice between the ESAs. The Commission should also seek to empower ESAs with a reliable budget so they can play their proper role in the European System of Financial Supervision (ESFS).

5.4 Better information and products for customers

At the heart of the evolving financial services ecosystem outlined in this paper is the modern European customer. Putting the customer at the heart of the ecosystem is essential to meeting the changing demands that customers have of financial services. Financial services products are often complex and difficult to compare with each other. Digital technologies will allow for information, guidance and advice on financial products to be communicated in new and more accessible ways. As responsibility for funding retirement moves from Government and employers toward individuals there is an in increasing need to equip individuals with the tools they need to make medium and long term savings decisions. There is a particular need to reduce existing reliance on cash savings. It is essential that industry and Governments work together to articulate the benefit of existing and proposed pan-European products. It is important that proposed new products are also based on customer demand from detailed market analysis. Crucially both Governments and the industry should work together to ensure that the consumers can easily understand and compare the objectives of these products without becoming lost in technical disclosure documents.

As the Single Market moves towards completion, a suite of pan-European retail products are being considered. Where there is demand, these products may offer an opportunity to benefit Europe's customers, but there will be overwhelming barriers for some businesses to provide them across borders. They should therefore be run alongside national products, and offering them should be optional for providers.

Recommendation 14

Member States' Governments and the European Commission: Work together to ensure best practice in financial education is shared and that it addresses the digital age

In the rapidly evolving financial services ecosystem it is now easier for a customer to understand their financial options and to know what to do and where to go in the event of a crisis. Digital technologies have made it easier to provide customers with the help and information needed to navigate financial services and regulation should support this trend. **Each Member State should aim to update their education initiatives to ensure that they reflect the reality of the digital age and provide accurate and relevant education.**

The Commission should aim to support Member States in updating their education initiatives by allowing best practice to be shared between them.

Recommendation 15

Member States' Governments and the financial services industry: Facilitate the provision of and access to financial advice

The financial landscape and its many different products often seem complicated and overwhelming to customers. Financial advice offers one way for customers to navigate this landscape and policymakers can help to facilitate access to advice.

To provide customers with clarity on where they can access financial advice a national register (private or public) should be available to them. Whilst these exist in some Member States – with the example of unbiased.co.uk in the UK, there is value in these being created across Europe. Where they do currently exist, they should be regularly updated to ensure accuracy.

To help facilitate this and to provide consistency in the advice offered across Europe, the Commission and the ESAs should produce common standards for the different types of financial advice needed by consumers. There are currently different definitions of advice across banking, securities, pensions and insurance, e.g. in the Mortgage Credit Directive and MiFID. Over time, the Commission should seek to produce common standards reflecting the level of advice and support required by different categories of consumer. This will provide customers with the safety of knowing that they can access advice which is of a verified standard across Europe.

Any registers, definitions and standards should be future-proofed by addressing the rise of automated advice. Automation can involve fully automated, algorithm-based, sources of advice for customers or simply tools which support human contact. Often automation is used to enhance the role a person plays, but does not fully replace the human interaction with customers. Whilst not currently widespread across financial services, the joint committee of the European supervisory authorities views automation as 'an innovation with growth potential that requires the attention of regulators to better understand and harness its potential benefits, but also to identify risks before they materialise in the forms of consumer detriment or a reduction in market confidence'[12]. As the market moves further towards automation it is important that this is reflected in regulation.
The notion of 'automation' is, in the context of financial services, not defined in any relevant legislation. The Commission should define the term for use across directives to ensure that automated advice is clearly understood by customers and supported by developing a common standard.

[12] Joint Committee of the European Supervisory Authorities; Discussion paper on automation in financial advice, 2015

Recommendation 16

Financial services industry: Stimulate and quality-assure innovation through means such as test centres which encourage innovation for the benefit of customers

As the nature of financial products and their provision changes and becomes more innovative, the way these are being tested should too. Regulators should encourage the sharing of good practice and the use of **'test centres', a safe place where new products can be tested before going to market. This is something that is already common practice in many other industries**. These should seek to go beyond already existing focus groups and will provide a safe environment where near-final products can be trialled. An example of this taking place is Aviva doing beta testing of products with their staff such as their new product AVO – motor insurance by the hour bought using a smartphone.

Recommendation 17

Member States' Governments, the European Commission and the financial services industry: Support customers with saving for the future

As life expectancy increases, Europe has to meet the demands of an increasingly elderly population. Many Member States face the issue that much of society has begun to take a short-term view of their financial wellbeing. 28% of Europeans say they have not made financial preparations for the future and a third do not have a savings product[13]. As set out previously, new technologies can make financial services more easily accessible and encourage citizens to save for the future. Additionally, new products and saving schemes which focus on wealth creation and not just on wealth preservation can support customers during this process.

- **Auto-enrolment:** In the UK most employers are legally required to enrol their employees into pension schemes which deduct contributions from salaries through the payroll. Employees can opt out from this scheme. This initiative has been very successful in the UK with 59.2% of UK employees now being enrolled in a workplace pension scheme[14]. **Where appropriate other Member States should adopt an auto-enrolment scheme**. This should be accompanied by a campaign to demonstrate the importance and the benefits of saving through a pension scheme and to explain auto-enrolment in an attempt to minimise opt-outs.
- **Pan-European medium-term savings product:** Some Member States lack a mature and competitive market for medium-term savings products. This means that some European customers lack a suitable vehicle for helping them save for the future. Rather than only attempt to stimulate the market in each Member

[13] Aviva; Consumer Attitude Survey, 2014
[14] The Pensions Regulator; Automatic Enrolment, 2015

State, the Commission should seek to support the creation of attractive pan-European medium- and long-term savings products. In this context it is important to remember how successful Undertakings for the Collective Investment in Transferable Securities (UCITS) have been. Encouraging investment in medium and long-term savings products instead of deposits and similar cash instruments could thus build on the success of UCITS, bearing in mind that to make them more attractive saving vehicles for retail investors:

– There is a need to develop a coherent vision for the role that UCITS and ELTIFs should play in Europe's medium- and long-term savings;

– It will be important to ensure that marketing and distribution rules across Member States are as streamlined as possible to keep the cost of marketing and regulatory disclosure documentation as low as possible to make direct ownership by private households more attractive. For example, while the European distribution passport has contributed to UCITS' success story, UCITS are still subject to various different requirements imposed by different NCAs, e.g. the need to appoint a local agent and cross-border notification fees; and

– The European Commission could encourage Member States to develop a more coherent tax framework to eliminate uncertainties in cross-border fund operation which lower the number of truly 'cross-border' UCITS and prevent consolidation which would lead to larger funds. There are significant barriers to this element of any pan-European product and this should be preceded by market analysis and an assessment of demand. Further to this, the offering of any new products should be voluntary.

Recommendation 18

European Commission: Continue to explore the demand for a European pension product to help customers save for retirement

As part of the Capital Markets Union the Commission has asked the European Insurance and Occupational Pensions Authority (EIOPA) for advice on a Pan-European Personal Pension product (PEPP). This venture could be important but there are some significant barriers which must be recognised.

The demographic outlook in many Member States suggests that state provision of retirement income will come under pressure over time. As a result of this, greater provision from the private sector will be required. Wherever possible this is best provided through employment-led schemes but across Europe a significant part of the workforce is self-employed. For them a personal pension product may prove helpful.

Similarly the European workforce is increasingly mobile, including increased movement across borders. The ability to keep a standardised pension could be of assistance to customers in those circumstances. Multi-national firms in particular are seeking standardised solutions for their employees.

In these circumstances the work the Commission and EIOPA are advancing may provide a viable solution for customers.

Nonetheless, merely designing a product will not provide a complete solution and there are barriers to the creation and supply of such a product. Taxation will provide a difficulty on two fronts. The PEPP, even if tax transparent, will be subject to local arrangements where the customer is resident. There will also need to be rules on the treatment of product owners when they cross borders and there may be differences of views between Member States about tax recovery once a pension is in payment.

Judging demand for a new product is difficult, but it should be avoided to design a product for political ends which might then be poorly received in the market. Given the differences in markets across Europe, this product should remain voluntary for businesses to offer, providing complementary savings options where required.

Recommendation 19

Financial services industry and Member States' Governments: Support tools to facilitate the comparison of offers

To facilitate improved decision-making, customers should have clear information on the variety of products available to them and be able to compare different offers. This will help support customers to make the best decision for them in light of the available options and their personal circumstances. The financial services industry and Member States should encourage this through **the provision of national comparison tools, such as a website, providing a way to both compare prices and see reviews of the value of a product. As customers increasingly rely on peer reviews for most goods and services they purchase, this feature will be of particular importance for most comparison sites**. These tools should compare key features including cover, exclusions and price, helping customers find the best value for money

Where these sites currently exist, policymakers should seek to ensure that the public are aware of them and that they are accurate and truly unbiased. Where such sites do not exist, Member States should be encouraged to ensure there is at least one tool for this purpose, although with no requirement for it to be Government-run or funded.

Recommendation 20

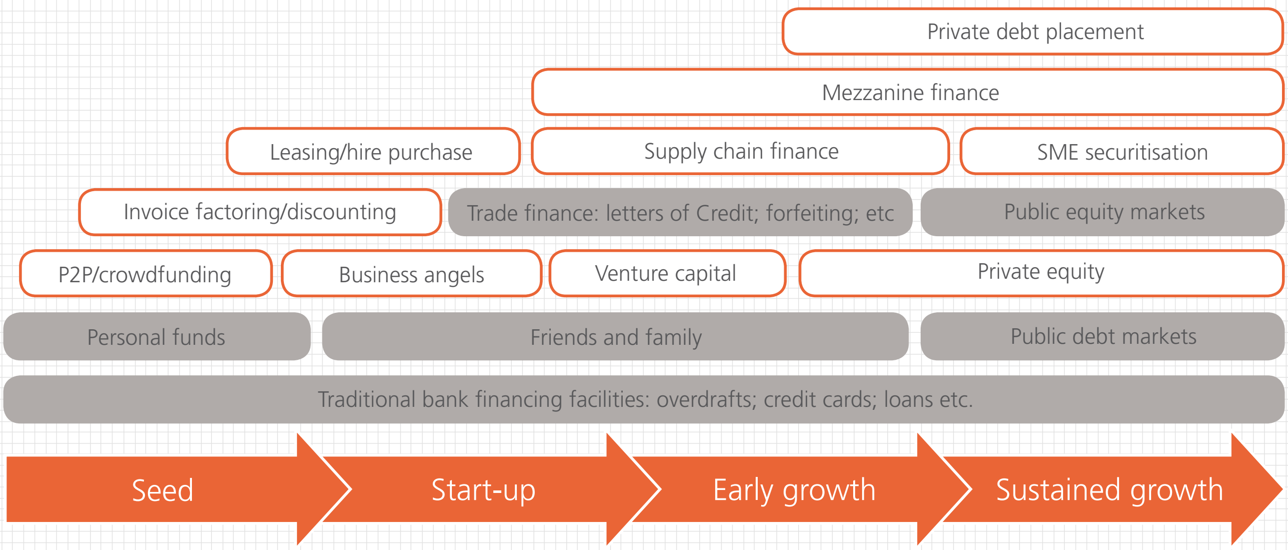
Member States' Governments: Connect microbusinesses to crowdfunding platforms

Crowdfunding is an interesting complementary source of finance for microbusinesses which often use new and niche business models and might struggle to attain funding through more traditional means. In the European Union, more than 90% of businesses are micro (employing fewer than 10 people)[15]. Crowdfunding platforms operate alongside traditional lending models to offer a complementary way for these businesses to acquire capital, especially during their early stages.

Microbusinesses which have had difficulties acquiring funding through traditional methods should be encouraged to appeal to crowdfunding and be assisted in doing so. Member States should work with crowdfunding businesses and microbusinesses to connect them and inform microbusinesses about the opportunities and risks of alternative methods of funding.

CASE STUDY: FUNDING FOR SMEs

SME funding escalator: 'traditional' and 'alternative'



Source: Bain & Company, 2013 and Llewellyn Consulting
Note: grey shading represents older, more traditional funding options; and white newer, alternative options.

[15] Eurostat; Business Economy – Size Class Analysis, 2015

APPENDIX I: POLICY INPUTS

The full list of policy recommendations and their grouping into policy themes that were used in the modelling exercise is detailed below:

Policy recommendations were grouped into Policy Enablers

Policy recommendations	Policy Enablers
1. Adopt a new approach to financial services regulation that aims to prioritise and stimulate innovation whilst maintaining customer protection 2. Work with new and established businesses to support the growth of FinTech, and share best practice across Member States 3. Write legislation that is 'future-proof' – open to application to new developments 4. Collate and coordinate behavioural economic research on the European customer 5. Take a holistic view of the regulatory environment to implement common standards and definitions	Adapting to the changing nature of the financial services ecosystem
6. Consider Financial Services when developing regulation as part of the Digital Single Market strategy 7. Produce a framework for regulators to make better use of data available, without increasing the number of data requests 8. Communicate to customers how their personal data is being used, and what the results of this use are 9. Ensure the EU General Data Protection Regulation is implemented and applied in a proportionate way, to allow customers to benefit from the innovative use of their data 10. Build a framework for a European Digital ID system to help customers transfer their data between financial services providers	Leveraging the opportunities of digitalisation
11. Support existing work to build a solution for cross-border payments, and conduct a study into the feasibility of extending this to multiple currencies once implemented 12. Ensure the presence of underlying infrastructure for cross-border movement of financial services products 13. Extend the development of a common supervisory approach to the digitisation of financial services	The Single Market in Retail Financial Services
14. Work together to ensure best practice in financial education is shared and that is addresses the digital age 15. Facilitate the provision of and access to financial advice 16. Stimulate and quality-assure innovation through means such as test centres which encourage innovation for the benefit of customers 17. Support customers with saving for the future 18. Continue to explore the demand for a European pension product to help customers save for retirement 19. Support tools to facilitate the comparison of offers 20. Connect microbusinesses to crowd-funding platforms	Better information and products for customers

APPENDIX II: METRICS USED IN THE MODEL

23 individual quantitative supply metrics were grouped into the following eight supply "pillars" to facilitate the modelling:

1. Power of innovation
2. Regulatory environment
3. Digital infrastructure
4. Depth of Digital Data
5. Facilitating financial-services
6. Enhancing a competitive FS market
7. Support in saving for the future
8. Financial education and guidance

8 individual quantitative demand metrics were grouped into the following three demand "pillars" to facilitate the modelling:

1. Maturity of digital channels
2. Wealth management
3. Financial-services usage

APPENDIX III: ECONOMETRIC MODELLING METHODOLOGY

As described in Chapter 4.0, qualitative policy recommendations were grouped by theme into policy enablers. These policy enablers were then translated into quantitative terms by way of specifically-chosen metrics. The metrics used (see Appendix II for details) were chosen taking into account consistency across the 17 countries included in the model, and were sourced from datasets maintained by institutions including the European Commission, Eurostat, the OECD and the World Bank.

The length of the time series varied considerably across the different metrics, and the homogenous data required for the purposes of this model was available only from 2010-14. A panel-data model, which combines cross-sectional and time-series analysis, was chosen in part because it helps address the shortcomings posed by the short time series. Available data were "trimmed" to the longest available period for the majority of metrics, which was 2010-14. Although a longer time series would have been preferable, limited data availability precluded this possibility. In addition to the shortness of the time series, another consideration is posed by the particular time period. Since 2010-14 constitutes the immediate aftermath of the 2008-09 economic and financial crisis, this period reflects specific, idiosyncratic economic and market conditions and is not representative of longer-term economic market conditions. On the other hand, including only the immediate post-crisis period in the model – means that distortions that might have occurred by including the post-crisis period as part of a longer time series have been avoided.

Regression analysis was used to assess the correlation between these metrics – which collectively represent financial services supply – with financial services demand. The regression specification used to estimate the impact of financial-services supply on financial-services demand was:

$$D_{n,t,i} = a_1 + \sum_{j=1}^{J} \beta_1 S_{n,t-1,j} + \sum_{j=1}^{J} \beta_2 S_{n,t-1,j} \cdot logGDP_{n,t}$$

$$n=1...17;\ \ t=1...5;\ \ i=1...3;\ \ j=1...7$$

Where:

- n is each of the 17 countries
- t is time 2010-2014
- i is the specific demand metric or specific welfare metric
- j is the specific supply metric
- a represents country fixed effects, included to take account of structural differences in countries
- D_{nti} / S_{ntj} are the financial accessibility *ith* and *jth* sub-index scores of country *n*

Error terms were included in the model but not illustrated above. The response of the demand metrics are computed using the country specific estimated coefficients $ß_2$ and $ß_5$

The demand-side metrics were then correlated with the following consumer welfare metrics:

- Personal disposable income
- Household consumption
- Household net financial wealth (defined as total household financial assets minus total household financial liabilities)

The regression specification used to estimate the impact of financial-services demand on household welfare was:

$$logW_{n,t,i} = a_2 + \beta_3 logW_{n,t-1,i} + \sum_{i=1}^{I} \beta_4 D_{n,t-1,i} + \sum_{i=1}^{I} \beta_5 D_{n,t-1,i} \cdot logGDP_{n,t}$$

$$n=1...17;\ \ t=1...5;\ \ i=1...3$$

Error terms were included in the model but not illustrated above. The response of the welfare metrics are computed using the country-specific estimated coefficients $ß_2$ and $ß_5$

The use of a partial-equilibrium model means that relations among the three welfare metrics were outside the scope of the analysis. Intuitively, the flow variables of income and consumption are related to each other as well as to the stock variable of net financial wealth. However, the model treats separately the relationship between each of the three welfare metrics and the demand metrics.

The model assess the impact, using a two-year lag, of an increase in all supply metrics on each household welfare metric. For more information on the model, please contact Schira Lillis (schira.lillis@accenture.com) or Francesca Caminiti (francesca.caminiti@accenture.com).

BIBLIOGRAPHY

Accenture; *Banking consumer 2020: Rising Expectations Point to the Everyday Bank*, 2015

Accenture; *Digital Payments Transformations*, 2016

Accenture; *Digital Trust in the IoT Era*, 2016

Accenture; *Finance 2020: Death by Digital*, 2015

Accenture; *Living Services: The Next Wave In The Digitization Of Everything*, 2015

Accenture; *Welcoming a new phase of Everyday Payments in Europe*, 2015

Accenture; *The Future of FinTech and Banking*, 2016

Apple.com [Online], Accessed February 2016

Aviva; *Consumer Attitude Survey*, 2014

BBA; *Beyond boundaries: how to drive regulatory coherence*, 2015

Betterment.com [Online], Accessed February 2016

Blackrock; *Investor Pulse Survey UK, Third Edition*, 2014

BoE; *The economics of digital currencies,* 2014

BoE; *One bank research agenda*, 2015

CapGemini; *World Retail Banking Retail Report,* 2015

Centre for the Study of Financial Innovation; *The death of retirement*, 2015

CryptoCoinNews; *Top Bitcoin Companies Propose the Windhover Principles - A New Digital Framework for Digital Identity, Trust and Open Data*, 2014

EBA; *Opinion of the European Banking Authority on lending-based crowdfunding*, 2015

Economist; *Peer to Peer Lending – From the people for the people*, 2015

Edengene; *Innovation in Financial Services? Be careful what you wish for!*, 2015

Europa; *Digital Single Market,* 2015

Europa; *Eurostat News Release,* 2015

Europa; *Eurostat; Business Economy – Size Class Analysis,* 2015

European Commission; *Emerging challenges in retail finance and consumer policy*, 2014

European Commission; *Green Paper on retail financial services: better products, more choice, and greater opportunities for consumers and businesses*, 2015

European Commission; *Summary of the impact assessment of the PSD*, 2013

Ernst & Young; *Landscaping UK Fintech,* 2014

Financial Conduct Authority; *Innovation: The regulatory opportunity,* 2014

Future Workplace: *Multiple Generations @ Work*, 2012

Government Office for Science; *FinTech Futures – The UK as a World Leader in Financial Technologies,* 2015

HM Treasury; *Banking for the 21st century: driving competition and choice*, 2015

Innotribe; *Innovation in Financial Services: The Elastic Innovation Index Report*, 2015

International Monetary Fund; *The EU Services Directive: Gains from Further Liberalization*, 2014

IRSG; *High Level Position Paper on Global Data*, 2014

IRSG; *Position Paper on Data Protection*, 2012

IRSG; *Commentary on Data Processing for Compliance with Legal and Regulatory Obligations*, 2013

Joint Committee of the European Supervisory Authorities; *Discussion Paper On Automation In Financial Advice,* 2015

Jonathan Hill; *Bringing Financial Services Back To The People They Serve*, 2015

Kantox.com [Online], Accessed February 2016

KPMG; *Evolving Banking Regulation EMA Edition*, 2015

LendingClub.com [Online], Accessed February 2016

Lendinvest.com, [Online], Accessed February 2016

Mbank.pl [Online], Accessed February 2016

Mpesa.in [Online], Accessed February 2016

Oliver Wyman; *Rethinking Financial Innovation*, 2012

PayPal; *Putting Innovation at the heart of payments regulations*, 2014

PWC; *Economic analysis of SEPA (Single Euro Payments Area)*, 2014

PWC; *Retail banking 2020: Evolution or Revolution?*, 2015

PWC; *Capital markets in 2025: The future of equity capital markets*, 2015

Seedrs.com [Online], Accessed February 2016

Step Change; *Becoming a nation of savers,* 2015

Steven Majoor; *Opening Speech, Joint ESAs Consumer Protection Day 2015*, 2015

Telegraph; *How to teach financial literacy,* 2014

Transferwise.com [Online], Accessed February 2016

Wallet.google.com [Online], Accessed February 2016

World Economic Forum; *Technology and Innovation in Financial Services: Scenarios to 2020*, 2010

YouGov; *Consumer Appetite for Crossborder Shopping in Financial Services,* 2010

The IRSG wishes to thank the members of the steering group which has overseen production of the report:

Miles Celic, Prudential plc (Chair of the IRSG Steering Group)

Alan Ainsworth, Barclays Bank plc
Anjalika Bardalai, TheCityUK
Andrew Power, Deloitte LLP
Bill Tonks, St. James's Place Wealth Management
Dean Jayson, Accenture Plc
Gordon Mead, Aviva Plc
Kerstin Mathias, TheCityUK
Martin Parkes, BlackRock
Nicky Edwards, TheCityUK
Nicolette Moser, Allianz Global Investors GmbH
Peter Cunnane, City of London Corporation
Philip Warland, Fidelity Worldwide Investment
Rob Hailey, Lloyds Banking Group
Roger Tym, Hogan Lovells International LLP
Samuel Hinton-Smith, Santander
Ted Hart, Legal & General

The IRSG would like to thank Dave Henry of Accenture plc and the Accenture Research Economic Value Modelling Team for their work on this project and all those who gave their time to discuss the content of this report during its preparation.

Made by Accenture Research

Accenture Research is a global team of industry and digital analysts who create data-driven insights to identify disruptors, opportunities and risks for Accenture and its clients. Using innovative business research techniques such as economic value modeling, analytics, crowdsourcing, expert networks, surveys, data visualization and research with academic and business partners they create hundreds of points of views published by Accenture every year.

For further information about this report, please contact:

Nicky Edwards, Director of Policy and Public Affairs, TheCityUK
nicky.edwards@thecityuk.com

Anjalika Bardalai, Chief Economist and Head of Research, TheCityUK
anjalika.bardalai@thecityuk.com

Kerstin Mathias, Head of Policy, TheCityUK
kerstin.mathias@thecityuk.com

IRSG
INTERNATIONAL REGULATORY STRATEGY GROUP

DOMINE DIRIGE NOS
CITY OF LONDON

TheCityUK