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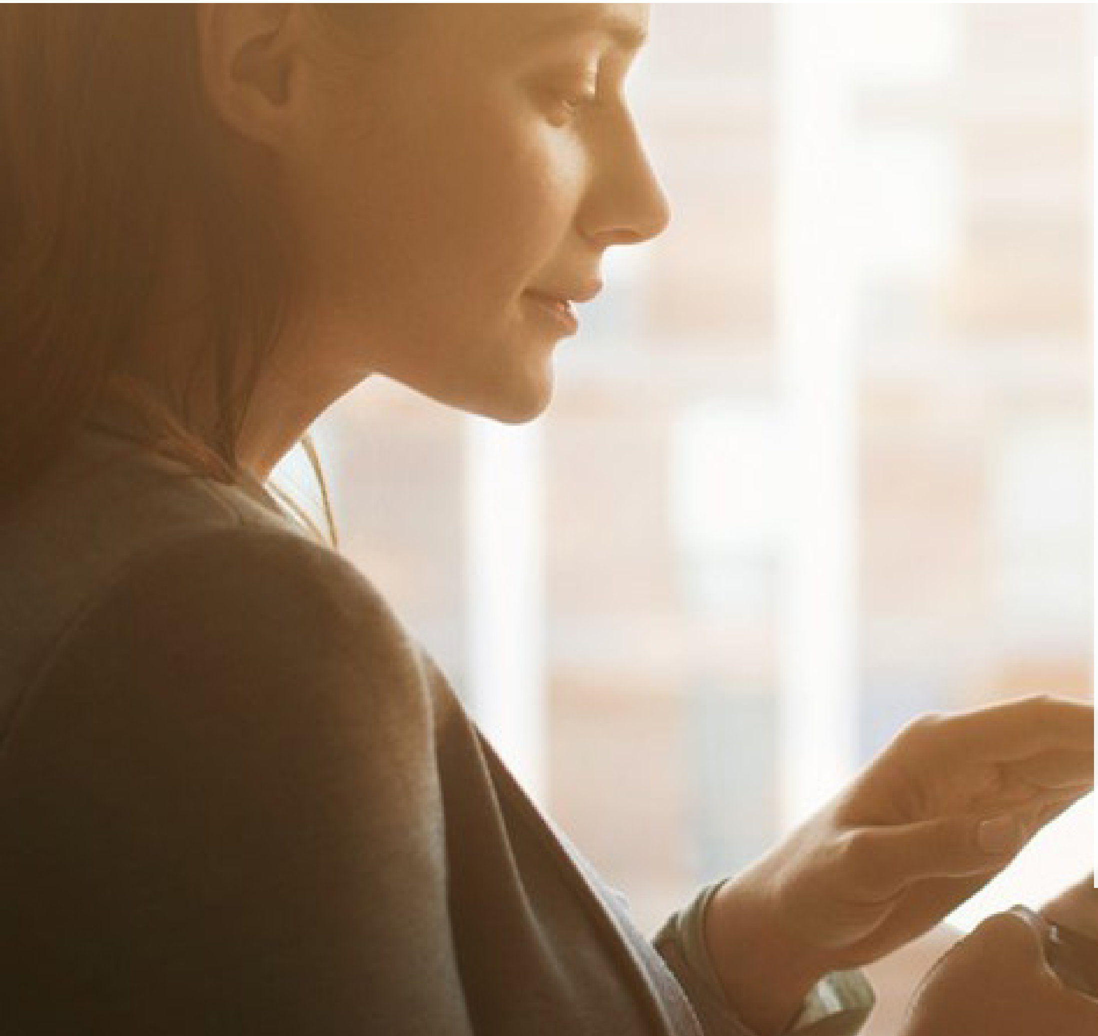
FUTURE READY PAYMENTS 2030

A dynamic, purposeful and united agenda for the UK

February 2021

Contents



Foreword

In the last few years payments, hitherto banking's expensive backwater, has seen unprecedented change with emerging and evolving technologies creating manifold opportunities to revolutionise product offerings, customer experience, infrastructure capabilities and cost-to-market. Since the launch of Faster Payments in 2008, the UK's vibrant market has become home to one of the most dynamic fintech sectors in the world, grounded on a bedrock of stability, resilience and security with regulators who support, rather than constrain, competition and innovation.

Recognising that the creativity and energy of the sector needs to be harnessed to maximise the economic and social benefits for the UK; UK Finance's Payments Products and Services Board, which I have the privilege to chair, delivered the mandate to establish Payments Futures. The task was to convene the industry to create a clear, industry-led, ten-year vision for the UK Payments ecosystem.

I shan't reveal any plot spoilers; however, our core insight was that new technology means old trade-offs between competition, innovation, resilience and ubiquity need no longer hold us back. This report set outs a consolidated view on how the industry might capitalise on further change to benefit customers and further innovation whilst supporting competition.

Finally, some thanks: I asked Marion King from NatWest to lead the Payments Futures work. As I expected she has done that with aplomb, bringing all her expertise, knowledge, commitment and, above all, style and elegance to the task. More than 100 practitioners from more than 40 firms contributed with energy and enthusiasm to the creation of this report – without their input we would not have been able to cover the breadth, nor depth, possible in this report. We are indebted also to the PwC team for supporting this work with their skills, knowledge, hard work and good humour, and all pro bono. Last but not least, none of this would have been possible without UK Finance and the exemplary support of the Payments team that continues to meet the industry's high expectations. My personal thanks to them.

No one should accuse us of false modesty. We make no bones about our intention: this report seeks to set the agenda for the UK payments industry for years to come.

Gerard Lemos CMG
Payments Products and Services Board Chairman
UK Finance

Introduction

This report is the culmination of the thoughts, ideas and requirements of payments professionals across the UK industry. I have had the privilege to chair Payments Futures for UK Finance and have been struck by the passion and energy of its members who, like me, have the ambition that the UK maintains a dynamic, real-time, secure, modern, payments infrastructure and service, which will in turn provide the best possible foundation for a truly competitive and interoperable market.

The UK is world-leading in the payments arena, but, with the drivers of change in technology and society, we have an obligation to share a ten-year vision and implement an action plan to stay at the forefront of the global payments industry.

Payments play a purposeful role as a gateway to improve customers' lives, enabling money to flow and people and commerce to thrive. Payments have become the epicentre of what we offer government agencies, consumers, large corporates and SMEs, and it is critical the solutions we offer via different channels give customers an informed choice as to what is relevant for each of their needs as well as providing a safe, secure and frictionless experience for everyone.

With the introduction of Open Banking, we are seeing an acceleration of digital innovation and we need to harness the power of these capabilities for the benefit of our society as a whole. As the industry continues on its transformational journey, **we must meet the challenge of balancing competing priorities, digital versus physical, real-time versus security and data versus privacy**. Working with the Fintech community will be one of the ways in which we can find solutions to address these challenges, as they offer a rich vein of innovation, agility and expertise, and we can work collaboratively to enrich the customer payment experience. **My 'payments utopia' would see customers being able to make payments with the method that suits them, whether it is instant, single or bulk, one-off or recurring, domestic or cross-border**. Where we can identify the payer and payee using digital ID and authentication technology to thwart fraudsters and where confirmation, reconciliation and data insights for decision making flow seamlessly with the payment taking advantage of global messaging standards and APIs.

ISO 20022 standards will support enhanced data, enabling new business models that are workable and promote effective competition. Open access will bring large and small entrants into the market, as well as promote regulatory convergence, harmonisation and standardisation and deliver the best outcomes for all customers. Consideration will be given to protection, to ensure it is delivered in a sustainable, fair and equitable way that benefits the future viability of the payments industry and gives better incentives to build innovation in a way that has consumer protection at its core.

As a network industry, we already have a culture of collaboration, working within comprehensive and co-ordinated regulation. **The Covid-19 pandemic has shown that industry and regulators can work rapidly and in a new way to deliver even better outcomes for customers and provide the best foundation for competition**.

I would like to thank all our participants, from across the industry, for the time and expertise they are giving to this initiative. I would particularly like to thank the Chairs of the Working Groups for their work in steering the thinking and the excellent support both from UK Finance and PwC.

This report which sets out our ten-year vision is a 'living strategy' with the intention of driving industry debate and working together to determine the art of the possible. To attain our vision of an enhanced, yet economically sustainable UK infrastructure, and to find ways to beat fraud and ensure inclusion in a digital age will not be without its challenges; hard decisions lie ahead but industry and Government have a huge opportunity to work in partnership to set out a bold and coordinated strategy for the UK payments industry to succeed.

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Marion King
Director of Payments, Natwest
Payments Futures Chair

Executive summary

Our ambition

The Payments Futures vision for 2030 is to deliver further customer benefit, innovation and to enhance competition.

On the world stage the UK payments industry has long been regarded as being at the forefront of innovation and best practice. Over the next decade, the potential in our sector is enormous, as advances in new technologies and changing customer expectations and needs continue to accelerate, hand-in-hand with ongoing growth and competition in the market.

The aim of our strategy is not to leave positive change to chance but to take a proactive approach to ensure that the UK payments industry is best placed to adapt to a changing world; delivering the best outcomes for all its customers whilst supporting payment providers who wish to compete and flourish within our highly competitive market.

To focus this work, the industry launched Payments Futures, a collaborative initiative, tasked to look ten years out, considering the conditions, context, constraints, and opportunities for the payments industry as a whole and developing a vision for payments in 2030. This report titled **Future Ready Payments 2030** provides detail of this important work and our collective recommendations.

Payments Futures Vision 2030

Vision	Delivering customer benefits			Delivering further innovation			Supporting competition		
Enablers	More Customer Choice	Enhancing Consumer Protections	Building Digital Financial Inclusion and Confidence	Developing Digital Identity Use Case	Tackling Economic Crime	Ensuring Liquidity Optimisation	Aligning Payments Standards	Ensuring accessible and competitive infrastructure	Effective Regulation
Recommendations	Access to Cash Supporting customers Innovative Market	Regulatory Leadership Review existing Protections Raise awareness Ongoing Modelling	Inclusion Working Group Digital Inclusion	Industry and Government Collaboration Industry SCA Development	Fraud Information Sharing Unblocking Frozen Funds	Global Liquidity Optimisation UK Infrastructure Optimisation	Improved Standards Governance ISO 20022 Adoption Open Banking alignment	SEPA Access Interoperability and Access Central Bank Digital Currency	Coordination Coherence Consistency

Digital payment definitions can vary. For the purposes of this report, digital payments refer to any payment made over the internet, mobile or by phone, including those involving a card. Contactless card payments are classified as digital payments. We clarify other terminology in the Appendix.

Our vision

Our vision for 2030 is for customers to benefit from the most **modern, resilient** and **safe** payments systems in the world, enabling competition, innovation, choice and opportunity. We will harness common **standards**, open **technology** and a payments industry with a culture of **collaboration**, a **resilient and sustainable** ecosystem that works well for everyone.

Deliver Customer Benefits:

Our vision for 2030 is supported by the desire to ensure all customers have access to digital payments and, if they choose to, are able to benefit from them. We know some personal customers will continue to need to use cash and we remain committed to making it available to them. Customers should have a frictionless experience between different payment types giving them maximum flexibility whilst minimising costs across the industry. We are seeking to create a digitally inclusive environment for customers which offers them safe, secure, convenient and immediate payments. An opportunity exists to deliver additional value for customers by leveraging the power of the digital transaction and its data to offer new add-on services and improve the customer experience.

Payments are used continuously to pay for goods and services and, although consumer protection in the UK is wide and deep it varies across payment types making it an obvious area to consider more closely. To achieve our vision we need an ecosystem which gives consumers clarity on protection, confidence and greater consistency, so that no matter which payment they chose, they can be informed of and understand the range of available protections.

Deliver Further Innovation:

Providing certainty on the identity of the payer and the payee is a key part of our vision for digital payments. The payments industry recognises that a collaborative approach with government, regulators and others **to facilitate development of a new digital identity and authentication capability** will deliver the optimum outcome for UK customers. A consistent approach might make solutions ubiquitous, removing friction and improving the customer experience across multiple services and channels far beyond payments. Improved digital identity and authentication would make digital payments safer for customers, help prevent economic crime and build trust.

Support Competition:

Payment market infrastructures lie at the heart of any change and they are the key enablers to realise our vision, particularly to support competition and innovation of digital payments. **The payment infrastructures in 2030 should support a vibrant and competitive ecosystem whilst being developed on a business model that is economically sustainable over the longer term. Reliability and resilience must be maintained but it should offer a smart, instant, cost-effective, scalable and frictionless payment experience for end users.**

Opportunities to evolve existing infrastructures should be taken to further support payment service providers with a variety of business models, offering lower barriers to entry and increased flexibility. They should be innovative and open to new entrants, offering them access to these payment networks in terms of policies, rules, technical standards, and with an appropriate supervisory regime. The networks they provide should also seek to offer system and platform interoperability and a unified approach to standards.

As an enabler of the UK's economy, it is essential that the UK's payment networks continue to provide the means and mechanisms for businesses and consumers to meet the UK's obligation to achieve net zero carbon emissions by 2050.[1] Consumers, businesses and payment providers should be aware of the impact that their payment choices have on their carbon footprint and the ability of the UK payments ecosystem to transition to green sources of energy. The industry should look to work with other supporters of this vision, such as the Bank of England and its commitment to support the transition to a carbon neutral economy,[2] to collectively achieve this objective.

Vital enablers to support interoperability and improve the user experience include **ensuring domestic and international payments standards are aligned** and that the governing supervisory regime facilitates safe access by participants.

1 https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law
2 https://www.bankofengland.co.uk/research/future-finance/transition-to-a-carbon-neutral-economy

Positive outcomes for every customer

Delivering positive outcomes for consumers and businesses lies at the heart of our vision. This section summaries what we want the future payments to look like for our customers.

By 2030, we want all payment providers to continue improving the experience of making a payment for all types of customers. Both payers and payees should have more choice and be better informed. Inevitably there will be more payment methods and we expect all payment providers to continue to meet the high standards of safety, trust and resilience demanded by customers. This will give customers increased confidence in all payment methods, particularly new digital options such as virtual cards or digital wallets.

More choice – The financial services industry is committed to ensure that its customers continue to enjoy a wide choice of payment options. Customers are increasingly opting to make digital payments, and this is set to continue. Customers will also see new payment providers offering new products and services. Some innovation will come from firms outside the traditional financial services world, for instance in areas such as ticketing, concierge and gaming.

Better informed – We want customers to enjoy improved reconciliation and budgeting opportunities with new and existing payment options thanks to the use of data. Enriched data allows for more detail to be provided, for example, on the payment mandate offering details such as Itemised breakdowns and other capabilities.

Digital payments available to everyone – Consumers are increasingly preferring to use digital channels and we expect this to continue. By 2030, we want as many consumers as possible to have the confidence, ability, and desire to use digital banking and payments reducing their reliance on physical cards, notes, cheques and coins.

Easier to verify identity – By 2030 the goal is to meet customer demand for more interoperable and resilient digital identity capabilities, removing a reliance on multiple passwords or authentication methods. This will help build trust in both payments and associated services.

Consumer confidence – Seeking opportunities to achieve greater consistency across consumer protections will aid consumer confidence to use a wider range of payment types for different purposes. To these ends, the industry will continue to monitor consumer protections in similar advanced economies and work with UK regulators to identify the appropriate payment protections for the UK.

Greater detection and prevention of economic crime and fraud – Building on the industry's strong track record of implementing effective measures to prevent, deter and detect fraud, in 2030 the infrastructure needs to provide effective and efficient services to aid in tackling economic crime.

**Supporting environmental sustainability – ** Customers will be better able to reduce their environmental footprint through greater awareness of the environmental impact of their payment choices, and how they can reduce the travel needed to make a payment or manage their money.

Why do we need a Payments Strategy now?

A strategy is needed to ensure that the UK payments industry can continue to lead the way and fulfil its duty to customers and businesses in what is increasingly a globally competitive industry.

Our industry is an essential part of the UK's national infrastructure, providing the foundations for the wider economy, and is used by UK consumers and businesses every day. In 2019, UK consumers and businesses made over 1000 payments per second using interbank transfers and the cards networks. This shows a sharp rise in the last decade – in 2009 just under 570 payments were made every second.

1,000+

2019 - Payments per second

The UK's payment ecosystem is increasingly diverse and complex, evolving at rapid speed. Evolution is being driven by changing technology and digitisation of the customer experience, consumers' changing payment choices and the growing number of banking providers and niche payment providers.

A strategy is needed to determine how key features within the payments ecosystem can be improved or their potential exploited, and where collaborative effort or third party support will be required. A structured approach should help ensure that change happens at the right time and in the right order to make efficient use of resources and ensure that unintended consequences are avoided.

Positive changes already underway

Through this, we remain cognisant of existing initiatives that will propel positive change. We are already in the middle of an Open Banking revolution, driven by the requirements of the second Payments Services Directive (PSD2). The continued development of the New Payments Architecture (NPA) by Pay.UK, and the renewal of the Bank of England's Real Time Gross Settlement (RTGS) service will deliver a step change in infrastructure through the implementation of ISO 20022, among other benefits. The Bank of England's work on potential options for a national Central Bank Digital Currency (CBDC) could also be a gamechanger. While the Bank of England is currently focusing predominantly on the impact of a CBDC on retail payments use cases, great potential exists in its use for wholesale applications and as a means to deliver monetary policy.

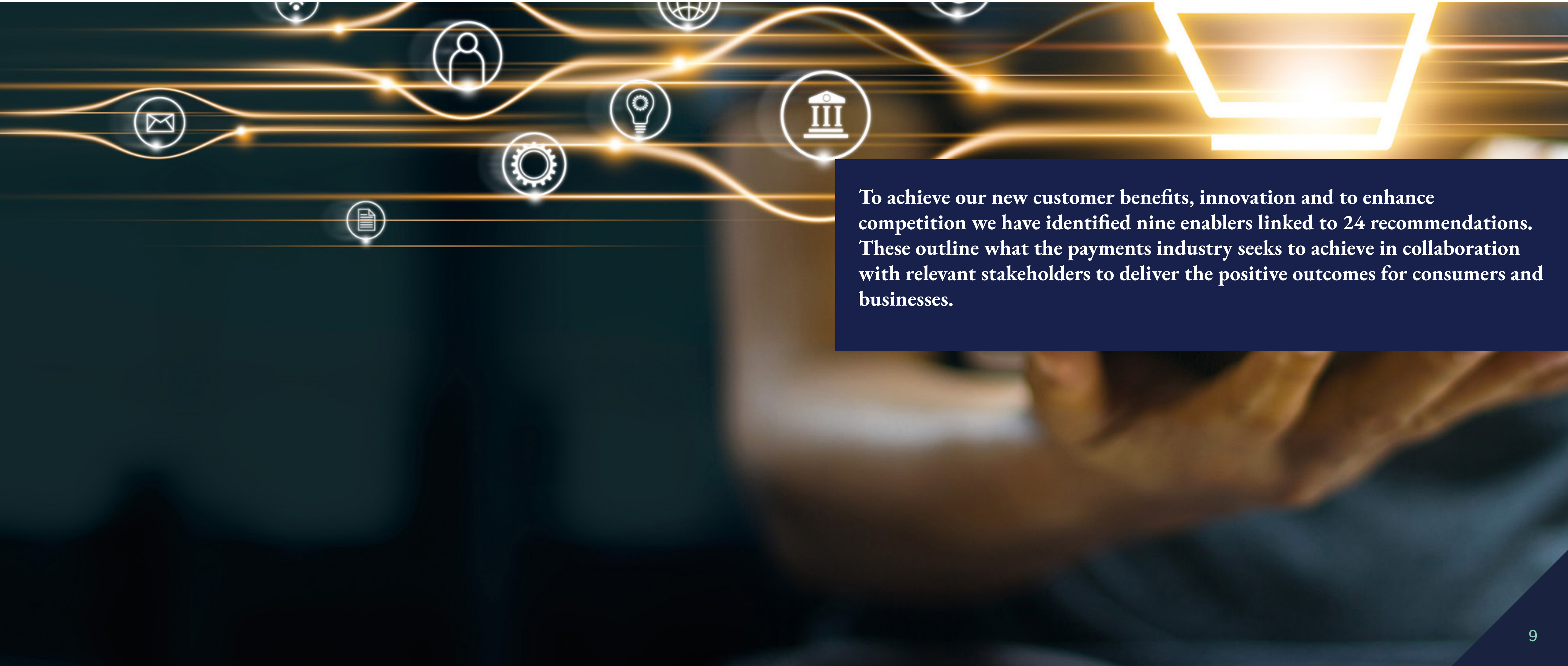
International innovation is also important: with the launch of services such as SWIFT's global payment innovation (gpi) initiative; the ongoing migration of international payment networks to ISO 20022 and the G20's support for the domestic and international Roadmap on enhancing cross-border payments.[1]

The start of this decade has been dominated by Covid-19. The pandemic acted as catalyst for change. It accelerated the use of digital technologies, and dramatically impacted the use of cash, which saw a sharp decline in withdrawals at the height of lockdown. Most pressingly, the pandemic has highlighted the importance of work to enhance digital payment inclusion.

Considering this growing change, regulators have recognised the important role that they have in ensuring that any change happens effectively and for the benefit of consumers. Notable initiatives in this area include the Future of Finance report commissioned by the Bank of England,[2] HM Treasury's (HMT) Payments Landscape Review,[3] Payment Systems Regulator (PSR) strategy,[4] the Financial Conduct Authority (FCA) guidance on safeguarding funds,[5] the Bank of England's Discussion Paper on a potential retail CBDC,[6] the Future Regulatory Framework (FRF) Review[7] and the FCA's consultation on extensions to firms' financial crime reporting obligations.[8] More widely, following the UK's exit from the EU, for the foreseeable future it will be essential that the UK retains access to the Single Euro Payments Area (SEPA) and TARGET2.

1 The Roadmap was developed by the Financial Stability Board and the Committee on Payment Market Infrastructure – currently chaired by Sir Jon Cunliffe, the Bank of England's Deputy Governor for Financial Stability – available at: https://www.fsb.org/wp-content/uploads/P131020-1.pdf
2 The Bank of England, "The future of finance report" (2019) available at: https://www.bankofengland.co.uk/report/2019/future-of-finance
3 GOV.UK, "Payments Landscape Review: Call for Evidence" available at: https://www.gov.uk/government/consultations/payments-landscape-review-call-for-evidence. Also see the Bank of England's response; https://www.bankofengland.co.uk/-/media/boe/files/report/2019/response-to-the-future-of-finance-report.pdf'
4 PSR, "PSR Strategy" available at: https://www.psr.org.uk/psr-focus/psr-strategy
5 FCA, "Coronavirus and safeguarding customers' funds: additional guidance for payment and e-money firms" available at: https://www.fca.org.uk/publications/finalised-guidance/coronavirus-safeguarding-customers-funds-additional-guidance-payment-e-money-firms
6 Bank of England, "Central Bank Digital Currency: opportunities, challenges and design" available at: https://www.bankofengland.co.uk/paper/2020/central-bank-digital-currency-opportunities-challenges-and-design-discussion-paper
7 GOV.UK, "Future Regulatory Framework (FRF) Review: Consultation" available at: https://www.gov.uk/government/consultations/future-regulatory-framework-frf-review-consultation
8 FCA, "CP20/17: Extension of Annual Financial Crime Reporting Obligation" available at: https://www.fca.org.uk/publications/consultation-papers/cp20-17-extension-annual-financial-crime-reporting-obligation

Summary of recommendations



To achieve our new customer benefits, innovation and to enhance competition we have identified nine enablers linked to 24 recommendations. These outline what the payments industry seeks to achieve in collaboration with relevant stakeholders to deliver the positive outcomes for consumers and businesses.

1. Delivering customer benefits

Enabler 1. More Customer Choice

The financial services industry is committed to ensuring a choice of payment options for its customers. Customers should be able to understand their options, their value and any impact on them. Cash must remain free and widely accessible for those personal customers that continue to need it. To encourage wider access to different payment options, particularly new and existing digital payments, the industry plans to continue to promote their benefits and values. The ambition is that by widening access to digital payments to as many people as possible, they may benefit from improved financial outcomes.

Recommendation 1: Access to cash
The industry will continue to work with regulators, government and key stakeholders to ensure that cash remains free and widely accessible for those personal customers that continue to need it.

Recommendation 2: Supporting customers
The industry will further explore potential customer journeys that might enable more consumers to benefit from digital payments and identify any opportunities to take collaborative action to address them.

Recommendation 3: Innovative market
The industry will continue to, within the context of an already highly-innovative and competitive market, to actively enable new digital services, methods of payment and other innovation that meet the evolving needs of all end-users in the UK.

Enabler 2. Enhancing Consumer Protections

By 2030, through regulatory collaboration, industry cooperation and increased scrutiny and research of the market, industry will be able to provide greater clarity, confidence and consistency in consumer protection. Consumer protections must keep in step with the evolving payments landscape.

Recommendation 4: Regulatory leadership
We would encourage the regulators to provide leadership and coordination to ensure policy initiatives deliver the right outcomes for consumers and businesses, and avoid unintended consequences, through a framework that will produce clear, effective, fair and commercially viable outcomes. Respective regulators' responsibilities should be clearly understood and aligned, to avoid duplication of effort and conflicting outcomes.

Recommendation 5: Review consumer protections
Undertake further work, including via Pay.UK's Consumer Protections Working Group, on potential enhanced protections for different business models and journeys and across different payment types. This work will include how protections are funded. We expect this activity to be in support of the work the PSR are planning in this area.

Recommendation 6: Raise customer awareness
The industry will further promote customer education and other possible actions to improve awareness of current payment protections. Industry players should understand and consider the societal differences in users of payment types, and consumer confidence to seek a refund, including identifying the barriers to educating customers on protections at the point of transaction.

Recommendation 7: Ongoing modelling
Pay.UK will continue its tracking of international markets, to identify any accelerators or barriers to the take up of real-time customer-to-business payments, as well as alternative approaches to consumer protection. This research can help inform its policy work to explore if, and how, Pay.UK can use its rules and standards to enhance consumer protections.

Enabler 3. Building Digital Financial Inclusion and Confidence

Everyone, who wants to, should be able to access and use digital payments and benefit from them. Increasing customer confidence is a priority. Digital payments maximise choice, reliability and security for customers, as well as enhancing efficiency and innovation for the industry.

Recommendation 8: Access to digital payments
A key ambition for the industry over the coming years will be to promote customer access to digital payments. The industry will work together where necessary to identify opportunities to enhance digital inclusion for its customers and address any issues.

Recommendation 9: Digital inclusion
In order to achieve our vision for digital payments, the industry will consider ways in which to support existing initiatives and research on digital inclusion to ensure a coordinated and transparent approach to identifying and understanding consumer needs.

Note: The industry is committed to keeping cash accessible to those personal customers who need it. The majority of ways that customers can withdraw cash are free to use, and maintaining that choice for personal customers that need to access cash (perhaps due to vulnerability) is a core aim of the industry's access to cash work.

2. Delivering further innovation

Enabler 4. Developing a Digital Identity Use Case

We foresee tangible benefits through the enablement of a Digital Identity ecosystem that provides appropriate identification and authentication for different use cases. A consistent approach could deliver better outcomes for customers reducing unnecessary transaction friction and improving security. It could also support interoperability at scale across the competitive market.

A collaborative approach would be beneficial, enabling stakeholders, customers and the industry to work closely with government and regulators to facilitate development. Making it easier and more certain for providers to verify payment users and for users to authenticate each other will allow greater access to financial services and build trust..

Recommendation 10: Industry and government collaboration
UK Finance will work with its members and Innovate Finance to establish a Taskforce to explore use cases and develop views on standard frameworks that could support interoperability. The industry will input into the Department for Culture Media and Sport's Digital Identity Trust Framework taking into account the wider regulatory and legislative agenda (including data privacy and cyber security considerations) to help ensure the Framework delivers for payments and financial services providers.

Recommendation 11: Industry SCA development
UK Finance will continue to work with industry stakeholders and regulators in 2021 to consider how to enhance and adjust Strong Customer Authentication (SCA) to further reduce digital fraud and enhance the payment experience outcomes while encouraging innovative approaches to deliver this.

Enabler 5. Tackling economic crime

The industry seeks to foster a thriving and competitive ecosystem which delivers increased prevention and detection of economic crime whilst building trust across financial services. Achieving this will require ongoing collaboration and specifically access to data shared by the entire sector and beyond. The industry's interaction with the public sector will need to ensure any data sharing is appropriate and that funds linked to criminal activity are not lost from the system and, ultimately, from an innocent customer. It is also essential to consider how other industry sectors can help support a reduction in economic crime, noting the interconnected nature of payments across all aspects of the UK economy.

Recommendation 12: Information sharing
UK Finance will work with members to consider mechanisms to improve data sharing within and beyond the financial services sector. This includes the sharing of data in real-time to help identify threats to customers and the industry. This can only be achieved through an appropriate legal and regulatory framework provided by government and regulators.

Recommendation 13: Unblocking frozen funds
UK Finance will continue to work with members and the government to examine if and how funds held in suspended accounts can be unlocked and put towards economic crime outcomes.

Enabler 6. Ensuring liquidity optimisation

Liquidity acts as a vital enabler within the payment ecosystem – making liquidity optimisation a key part of our vision. Current liquidity arrangements for cross border, domestic wholesale and retail payment market infrastructures could be optimised by enhanced systems, processes and regulation. We recommend that central banks, regulators, infrastructure providers and the industry undertake further work to consider how to improve liquidity optimisation in payment systems and liquidity risk management for the benefit of global and domestic economies.

Recommendation 14: Global liquidity optimisation
Regulators, central banks, and industry bodies to support global initiatives to enhance cross border liquidity management.

Recommendation 15: UK infrastructure optimisation
The Bank of England and industry, with the support of UK Finance, should continue existing work to improve liquidity efficiency in the renewed UK payment systems. They should also explore potential further innovations in the future including options for improving liquidity efficiency between and across multiple payment and securities settlement systems.

3. Supporting competition

Enabler 7. Aligning Payments Standards

Payments standards are an underlying enabler of interoperability, innovation and competition. If underpinned by strong governance to ensure they retain future effectiveness, they can promote best practice, increase scalability and facilitate end user choice. The industry's adoption of ISO 20022 and common API standards should lower barriers to entry and promote competition. It is essential to consider this adoption from a market wide perspective and the potential alignment with different payment methods and types. While domestic payments standards are important, the UK payments industry should aim to implement and use global standards wherever possible and only diverge where absolutely necessary. Should divergence be required, the industry needs to ensure that this is managed transparently and effectively, to avoid introducing unnecessary friction and cost to payments.

Recommendation 16: Improved Standards Governance
UK Finance has established a cross-industry group to consider opportunities for coordinating the development and governance of payments standards across inter-bank, cards and Open Banking; with appropriate consideration of the international standards landscape.

Recommendation 17: ISO 20022 Adoption
In order to support our vision, it is recommended that the industry further explores whether the UK cards market should move to the ISO 20022 standard. Such a change could enhance interoperability of payments across the ecosystem. However, there are a large number of stakeholders and widespread, international implications that must be considered.

Recommendation 18: Open Banking alignment
The industry will work with the Open Banking Implementation Entity, UK Finance, Pay.UK, the Bank of England and other stakeholders to ensure that the Open Banking API standards are developed in line with wider adoption of ISO 20022. The aim of this work is to support a wide range of payment types and ensure interoperability with underlying payment formats.

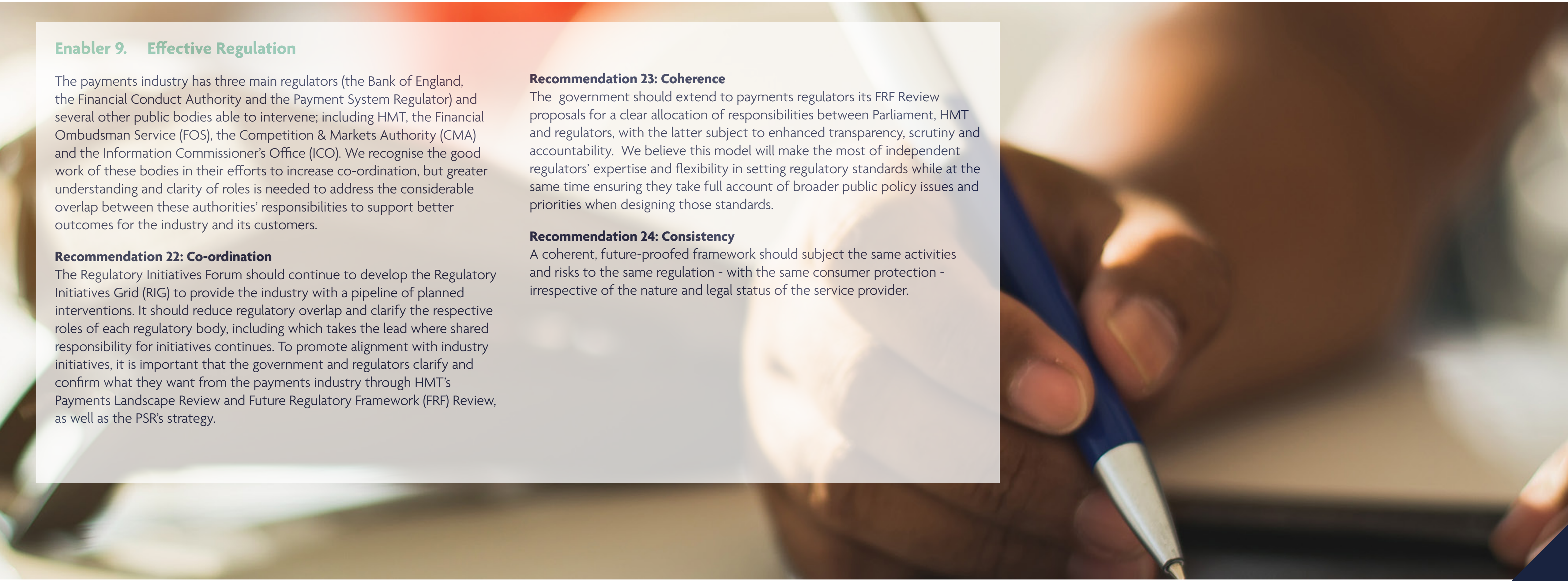
Enabler 8. Ensuring an Accessible and Competitive Infrastructure

The payments industry is fast-moving and driven by constant advances in technology. Payments innovation looks set to continue across the board with the prospect of new payment types and digital currencies. To support competition, innovation and customer choice the payment market infrastructure will need to continue to evolve, offering increased interoperability whilst being developed on a business model that provides economic sustainability over the longer term. The challenge is to successfully support a wide range of payment providers so they can offer great services to their customers whilst maintaining critical security, resilience and delivering efficiencies. Similarly, it is of utmost importance that both industry and the government ensure the continued alignment with the functional equivalence criteria of the European Payments Council (EPC) to support the UK's continued participation in SEPA, whilst this remains in the UK payments industry's interests.

Recommendation 19: SEPA access
UK Finance will work with government and regulatory stakeholders to ensure ongoing adherence to the SEPA geographical scope criteria to ensure the UK can maintain its participation in SEPA.

Recommendation 20: Interoperability and access
Payment market infrastructure providers to continue setting clear standards and utilising modern connectivity technology, such as the use of cloud services and APIs, in order to ensure that future developments align with interoperability principles, as well as meeting market requirements for resilience, safety and security.

Recommendation 21: Central Bank Digital Currency (CBDC)
Further collaboration with industry, government, the Bank of England and other stakeholders on the possible use cases for Central Bank Digital Currency in payments including exploring what functionality it would deliver as well as how the build and run costs would be met.



Enabler 9. Effective Regulation

The payments industry has three main regulators (the Bank of England, the Financial Conduct Authority and the Payment System Regulator) and several other public bodies able to intervene; including HMT, the Financial Ombudsman Service (FOS), the Competition & Markets Authority (CMA) and the Information Commissioner's Office (ICO). We recognise the good work of these bodies in their efforts to increase co-ordination, but greater understanding and clarity of roles is needed to address the considerable overlap between these authorities' responsibilities to support better outcomes for the industry and its customers.

Recommendation 22: Co-ordination
The Regulatory Initiatives Forum should continue to develop the Regulatory Initiatives Grid (RIG) to provide the industry with a pipeline of planned interventions. It should reduce regulatory overlap and clarify the respective roles of each regulatory body, including which takes the lead where shared responsibility for initiatives continues. To promote alignment with industry initiatives, it is important that the government and regulators clarify and confirm what they want from the payments industry through HMT's Payments Landscape Review and Future Regulatory Framework (FRF) Review, as well as the PSR's strategy.

Recommendation 23: Coherence
The government should extend to payments regulators its FRF Review proposals for a clear allocation of responsibilities between Parliament, HMT and regulators, with the latter subject to enhanced transparency, scrutiny and accountability. We believe this model will make the most of independent regulators' expertise and flexibility in setting regulatory standards while at the same time ensuring they take full account of broader public policy issues and priorities when designing those standards.

Recommendation 24: Consistency
A coherent, future-proofed framework should subject the same activities and risks to the same regulation - with the same consumer protection - irrespective of the nature and legal status of the service provider.

1. Delivering customer benefits

Thanks to innovation and competition UK customers have never had so many payment options to choose from.

Given that the majority of innovation will continue to occur in the development or enhancement of digital payments, the payments industry wants to make every effort to create a digitally inclusive environment which delivers safe, secure, reliable and immediate payments for its customers. **Everyone who wants to, should be able to pay using a digital method, and they should be aware and confident of the consumer protections that relate to each payment type and other measures in place to protect them**. Customers should be able to choose the level of friction that suits their use case and enjoy the maximum flexibility and engagement.

Despite a focus on digital benefits, **the financial services industry is also committed to maintaining a choice of payment options for its customers**. However, in order to exploit all the choices available to them, customers need to understand their payment options, their value and any impact on them.

To deliver further customer benefits and provide greater clarity, confidence and consistency in consumer protection it is clear that regulatory collaboration, industry cooperation and increased research of the market will be needed.

The industry will also continue to, within the context of an already highly-innovative and competitive market, actively seek to develop and deploy new digital methods of payment which meet the evolving needs of all end-users in the UK. A digital environment should enhance efficiency, innovation and minimise costs across the industry.

1.1 More Customer Choice

Customers are increasingly paying digitally. Faster Payments volumes rose by 19.4% in 2019 alone. Also in 2019, 81% of the UK adult population used at least one form of remote banking service, including online and mobile services. Cards are increasingly customers' most common way to pay: card payment volumes increased 11.4% in 2019 with contactless making up 21% of all card payments.

Looking ahead, it is clear that opportunities are increasingly emerging to leverage the power of transaction data to deliver customer value. In October 2020, the Open Banking Implementation Entity (OBIE) saw a record breaking 600 million successful API calls from its participants[1] and research suggests that 7% (3.6 million) of UK citizens are now using a Fintech service or Open Banking functionality;[2] we expect the impact of these services to increase with the additional data bandwidth offered by the modern payments infrastructure.

Spontaneous consumer payments in 2019

Retail
19,091
Million payments
64%

Travel
3,259
Million payments
11%

Entertainment
4,548
Million payments
15%

Person-to-person
869
Million payments
3%

Person-to-business
1,531
Million payments
5%

Financial
698
Million payments
2%

Note: For details on data sources, please see UK Payment Markets Report 2020 pg.24

1 Open Banking, "API performance – Open Banking" available at: https://www.openbanking.org.uk/providers/account-providers/api-performance/
2 UK Consumer Digital Index 2020, p. 35

Spontaneous consumer payments in 2019

Retail

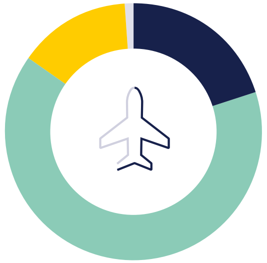
Cash	30%
Debit card	56%
Credit card	11%
Other	2%

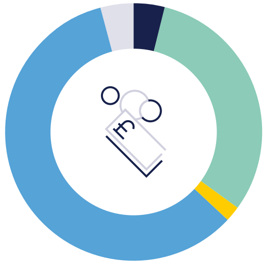
Person-to-person

Cash	39%
Debit card	27%
Credit card	4%
Faster Payments	25%
Cheque	3%
Other	3%

Travel

Cash	20%
Debit card	64%
Credit card	14%
Other	1%



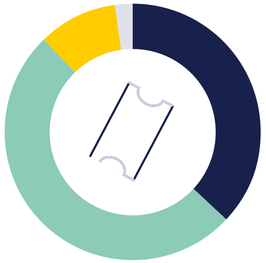


Financial

Cash	4%
Debit card	31%
Credit card	2%
Faster Payments	59%
Other	5%

Entertainment

Cash	37%
Debit card	51%
Credit card	10%
Other	2%



Person-to-business

Cash	31%
Debit card	49%
Credit card	8%
Faster Payments	8%
Other	4%

Note totals may not sum to 100 due to rounding

Although the shift to digital is driven by wider societal priorities, areas for improvement remain – not all consumers are ready or able to move to digital payments. For instance, the Access to Cash Review report[1] identified key reasons why cash is still preferred by some consumers in some situations. Its research, conducted in 2018, found that some consumers feel more in control of their money when they use cash, and that cash may be preferred for smaller purchases or when making payments to friends or family. This aligns with UK Finance's own research (cf. Figure on the left), which showed that consumers continue to use cash, particularly for spontaneous payments, person-to-person, entertainment and other person-to-business payments.

Of course, it is important to acknowledge that businesses are also shifting to digital payments, for instance with four out of ten business payments were made via Faster Payments or other remote banking payments in 2019.

1 Access to Cash Review: Final Report cf. p. 19 – 21

Potential barriers preventing customers from benefiting from digital payments – although digital payment options are increasingly the first choice for many customers, there are specific use cases for the industry to explore to enable even more consumers to benefit from digital payments. For some consumers issues of confidence, feeling safe and secure and having the ability and desire to access digital banking and payments need to be overcome.

Tackling digital exclusion – some parts of the UK do not yet have sufficient broadband or mobile signal coverage to enable customers to benefit from the digital payment options available. The financial services industry's aim is to actively remove barriers preventing customers from benefiting from digital payments but there are clear limitations on what the sector can achieve on its own. We look to government to help coordinate the delivery of better digital services and welcome initiatives such as the commitment in the March 2020 Budget of £5 billion to support the rollout of gigabit-capable broadband in the most difficult-to-reach 20% of the country.[1]

Enable budgeting and control – digital payments may need to evolve to appeal to those consumers who currently choose cash as a means of ensuring control over their payments. Competitive offerings such as digital wallets and innovative digital budgeting tools might address this need but they may also be too complex for some users. Other industry innovations such as the Request to Pay service defined by Pay.UK could allow individuals to feel more in control of their regular outgoing payments.

Fostering trust – consumers may not trust digital methods due to concerns regarding scams or fraud, or they may simply trust cash more due to historic reliance. However, in some instances, digital methods can offer an attractive alternative to cash as they provide greater protection from fraud than cash, and often offer inbuilt dispute and refund mechanisms. Helping customers understand the protections available to them when making digital payments is vital. This topic is explored in greater depth on page 20.

Facilitating low value digital payments – contactless payment use continues to grow particularly for low value payments under £10. In 2019 (prior to the rise of the contactless limit to £45) the average value of a contactless payment was £9.91.

Paym, operated by Pay.UK, is a digital alternative to cards or cash. It is a mobile payment system, enabling account-to-account transfers, where recipients are identified by their phone number. Other commercial offerings providing similar services also exist within the UK and including services that allow for other commonly used identifiers (such as email or a social media account) to be used to make a payment. Such services could work well for low value consumer-to-consumer payments, however, consumer awareness remains low and, in the case of Paym, not all banks currently offer it.

Supporting SMEs and local shopping – whilst larger chains and supermarkets almost universally offer customers digital payment options from a variety of providers, local stores and smaller businesses have been less able to benefit from this growing trend. There are three key enablers to address this:

- greater ubiquity of digital options at Point-of-Sale (POS), whether remote or face-to-face, across all payment types;
- the development of industry-agreed standards to support a broad array of payment types - particularly at instore POS terminals; and
- ongoing reviews by industry of the contactless transaction limit
  - the development of industry-agreed standards to support a broad array of payment types - particularly at instore POS terminals;
  - and ongoing reviews by industry of the contactless transaction limit.

Addressing issues highlighted above around building digital financial inclusion and confidence are explored in greater depth in section 1.3.

The development of new digital payment services to benefit businesses are another key area for the industry to consider as their use of digital payment methods is growing in step with their customers.

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1 UK Parliament, "Written questions and answers - Written questions, answers and statements" available at: https://questions-statements.parliament.uk/written-questions/detail/2020-03-09/HL2351

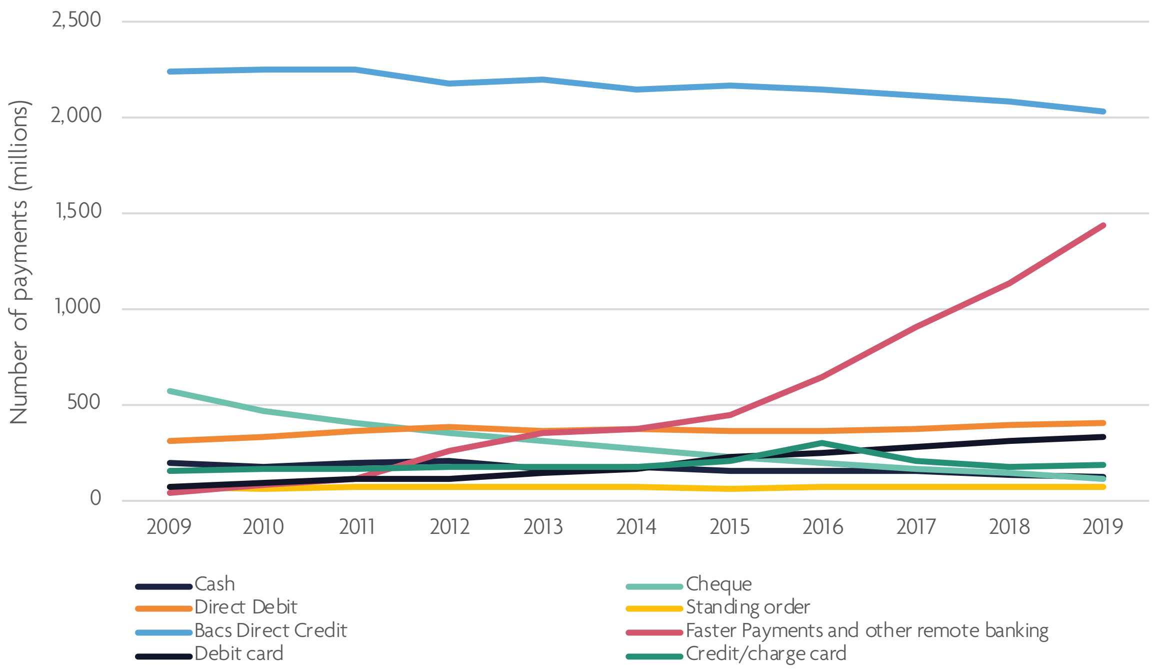
1.1.1 Access to cash

As the use of digital payments continues to grow; the use of cash for everyday spending is declining. In 2007, more than 60% of all customer payments were made in cash; in 2019, this dropped to 23%. At the peak of the Covid-19 lockdown, withdrawal volumes were down 65% year on year. Despite this trend, some groups of consumers still use and rely on cash. UK Finance estimate that in 2019 there were 2.1 million consumers who mainly used cash and it remains the second largest payment method in the UK by volume.

Although cash remains king for some customers in some situations, UK Finance research shows that of the 2.1 million customers who mainly use cash, the majority use other payment methods to pay their regular bills. In addition, 98% of the population hold a debit card.

Research conducted for the Access to Cash Review report highlighted a number of reasons why consumers carry cash on their person or keep some at home. Using results of a 2018 survey of 2,000 people, the report estimates around 97% of the UK population carry cash – 67% of the population said they like to pay for small things with cash, 55% said that it provides peace of mind (in case they can't pay for something with a debit or credit card). Similarly, 85% of the UK population keep cash at home, with 43% again saying that it provides peace of mind, 39% that sometimes they need cash (for example, to pay tradesmen, a window cleaner or gardener) and 21% noted that they felt that it was good to have some cash in case of IT issues. Overall, 34% of respondents noted they liked to have a choice when paying for things.[1]

Chart 1: Number of business payments made using different methods, 2009 - 2019



1 Access to Cash Review: Final Report p. 19

Whatever the reason, the supply of cash fulfils an important function as a payment mechanism of last resort for many in society. It is important that customers continue to have a choice – whether digital or non-digital – and that the payments industry remains committed to ensuring access to cash remains free and widely accessible for those personal customers that continue to need it.

This includes customers being aware of how each payment choice works and which one may be best for their specific, individual need. They should also be aware of how their choice of payment method impacts the environmental sustainability of the payment ecosystem and how the relative benefits of their choices may vary depending on different transaction scenarios.

To maintain customer choice, and to support customers in all communities continuing to access and use cash, as well as increasing overall digital inclusion and confidence in the UK, collaboration will be needed involving the wider industry, government, regulators and consumer groups and communities.

The ultimate goal is to ensure that everyone is aware and understands their digital payment options, can easily access them, and that digital payments clearly address their individual payment needs so that they have confidence to use them.

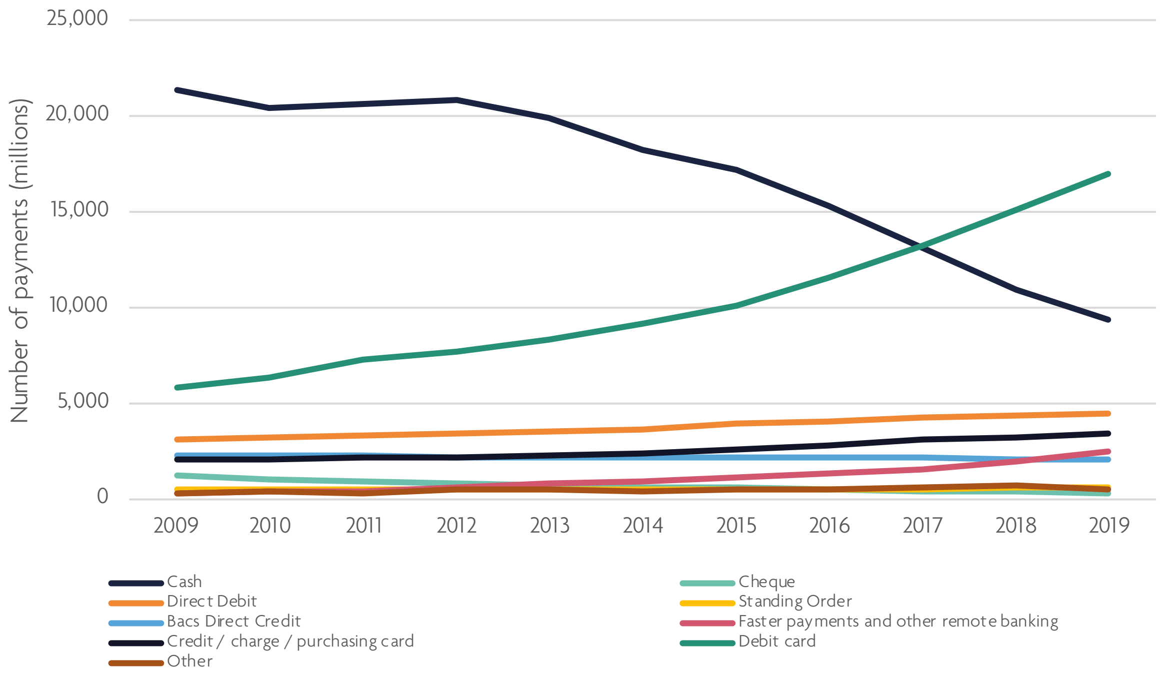
Enabler 1: More customer choice

Recommendation 1: Access to cash
The industry will continue to work with regulators, government and key stakeholders to ensure that cash remains free and widely accessible for those personal customers that continue to need it.

Recommendation 2: Supporting customers
The industry will further explore potential customer journeys that might enable more consumers to benefit from digital payments and identify any opportunities to take collaborative action to address them.

Recommendation 3: Innovative market
The industry will continue to, within the context of an already highly-innovative and competitive market, actively enable new digital services, methods of payment and other innovation that meets the evolving needs of all end-users in the UK.

Chart 2: Payment volumes (millions) 2009-2019



1.2 Enhancing Consumer Protection

UK consumers currently enjoy a level of protection which compares favourably with many other countries around the world, delivered through a mix of legislation, payment scheme rules, retailer protections and personal protections such as insurance. Cards and Direct Debits, which have been in mainstream use for 50 years, provide the greatest range of protections whilst protections, on more recent innovations tend to be at various stages of development.

As the UK payments landscape continues to evolve, with new players utilising the existing payment market infrastructure to deliver new ways to pay, it is vital that the industry remains focused on making sure payment systems and consumer protections associated with them remain fit for purpose. This is for the benefit of consumers, businesses and the UK economy as a whole.

By 2030, our vision is is for there to be greater clarity, confidence and consistency in Consumer Protections, to keep in step with the evolving payments landscape.

The UK landscape

A range of consumer protections currently exist in the UK to protect consumers when making a payment. Covering the key issues consumers may face including:

- **A dispute**, such as the goods or services turning out to be faulty, not as described, or not being received at all.
- **Fraud**, including unauthorised payments or authorised push payment scams.
- **Technical errors**, such as payment duplications or delays.
- **Insolvency**, either of the payee, or of the PSP or others in the payment chain.

The table below summarises the main consumer protections across different payment types – covering fraud, disputes, technical errors and insolvencies. Further information on dispute protections is provided in Section 1.2.2

Digital Payment Method	Dispute protections	Protection against fraud	Protection against technical errors	Protections against insolvency, including retailer insolvency or bank failure
Cards	Chargeback rights (Card Scheme rules) On credit cards Section 75 of Consumer Credit Act Consumer Rights Act Consumer Contracts Regulations (replaced Distance Selling Regulations)	Unauthorised payment protection (PSD2)	Chargeback rights (Card Scheme rules)	Section 75 of the Consumer Credit Act (retailer insolvency) Financial Services Compensation Scheme (FSCS) (bank failure) The UK Banking Act (bank failure)
Faster Payments	Consumer Rights Act Consumer Contracts Regulations (replaced Distance selling Regulations)	Unauthorised payment protection (PSD2) Authorised Push Payment scams – voluntary CRM Code Strong Customer Authentication (where implemented) Confirmation of Payee name checks help prevent fraud (where implemented)	Customer error – Credit Payment Recovery (CPR). (offers some protection to recover payments sent in error on a reasonable effort basis) Bank error recovery (offers protection to recover payments in case of bank error) Confirmation of Payee name checks help prevent errors (where implemented)	Financial Services Compensation Scheme (FSCS) (bank failure) The UK Banking Act (bank failure)
BACS Direct Debit (DD)	Consumer Rights Act Consumer Contracts regulations (replaced Distance selling Regulations)	Unauthorised payment protection (PSD2)	Direct Debit Guarantee – full refund (in case of originator error)	Financial Services Compensation Scheme (FSCS) (bank failure) The UK Banking Act (bank failure)

Note: The contents of this table represent an indicative guide to the types of protection potentially available to consumers for each payment journey. It is not meant to be an exhaustive, definitive nor legally reliable guide to what protections consumers may expect when making payments.

The table below summarises the main consumer protections existing across different payment types – covering the key areas of fraud, disputes, technical errors and insolvencies. Further information on dispute protections is provided in Section 1.2.2. (continued)

	Dispute protections	Protection against fraud	Protection against technical errors	Protections against insolvency, including retailer insolvency or bank failure
CHAPS	Consumer Rights Act Consumer Contracts Regulations (replaced Distance selling Regulations)	Confirmation of Payee name checks help prevent fraud (where implemented) Autorise Push Payments Scams – Contingent Reimbursement Model Voluntary Code Unauthorised payment protection (PSD2)	Customer error – Credit Payment Recovery (CPR). Confirmation of Payee name checks help prevent errors (where implemented)	Financial Services Compensation Scheme (FSCS) (bank failure) The UK Banking Act (bank failure)
Open Banking	Consumer Rights Act Consumer Contracts Regulations (replaced Distance selling Regulations)	Unauthorised payment protection (PSD2) Strong Customer Authentication (SCA) Confirmation of Payee name checks help prevent fraud (where implemented)	OBIE payment reversal proposals Confirmation of Payee name checks help prevent errors (where implemented)	Safeguarding under PSD2 provisions
SEPA	SEPA batch offered "R" processing that enables refund, reject, recall and return processes on the payment	Will depend on individual PSPs and their jurisdiction	SEPA Direct Debits refunds procedure similar to Direct Debit Guarantee but time limited	Will depend on individual PSPs and their jurisdiction

Note: The contents of this table represent an indicative guide to the types of protection potentially available to consumers for each payment journey. It is not meant to be an exhaustive, definitive nor legally reliable guide to what protections consumers may expect when making payments.

Focusing on interbank payment protections

One key area of consumer protection identified for further scrutiny is that of interbank payments, specifically Faster Payments. The rationale is that the use of Faster Payments is changing. Its use continues to grow, with consumers increasingly using it to make payments to businesses rather than just for person-to-person payments as was the case in the past. Over the next ten years this shift is expected to continue.

This growing popularity of the Faster Payments Service (FPS) as a payment method raises important questions regarding consumer protections. Firstly, criminals have unfortunately already exploited the near-immediate and final nature of FPS payments to steal from consumers via Authorised Push Payment (APP) scams. Such scams can have a devastating impact on their victims and the industry is determined to reduce their prevalence and impact. Tackling APP scams continues to be an immediate priority rather than being part of a vision for 2030.

Beyond this immediate priority, a second critical area of consumer protection, concerns that of disputes. The Consumer Protections Working Group sought to assess how the payments industry – participants; operators and regulators – can work together as the use of interbank payments evolves to develop solutions to ensure that consumers are appropriately protected in disputes.

To provide further context, when FPS was launched in May 2008, for the first time it gave consumers the option of making account-to-account payments, 24 hours a day, seven days a week, and to see their balance updated in real-time. Since launching, the number of remote banking payments processed using FPS (or cleared in-house by banks) has continued to rise. In 2019 there were nearly 2.5 billion payments made via FPS.

The advent of Open Banking has opened up the opportunity for FPS to be used for more than just personal payments. Payment Initiation Service Providers (PISPs) are now able to connect to their customer's bank accounts to initiate payments on their behalf, making it easier for consumers to use FPS to purchase goods and services. The innovations and improvements identified elsewhere in this Report may further accelerate the opportunity for consumer-to-business payments via FPS.

1.2.1 Other notable work on dispute consumer protections within the payments ecosystem

Although our Working Group represented a broad spectrum across the payments industry, there are a number of additional initiatives focusing on disputes on consumer protections. These include:

- **HM Treasury's Call for Evidence as a part of its Payment Landscape Review,** which refers to the use of FPS rules to assign and manage PSP liabilities around various consumer protection issues
- **The PSR's strategy review** to define its desired outcomes for the payments sector. It is undertaking work to understand the detriment and identify potential solutions in relation to consumer-to-business interbank payments
- **As requested by CMA, the PSR and OBIE have established a working group** to provide advice and recommendations on whether changes to consumer protections for payment initiation services would promote competition in payments by improving Open Banking propositions as a viable alternative form of payment

It is a complex landscape and it is important the industry's work aligns to achieve the right outcomes are achieved in an efficient and collaborative way.

1.2.2 Current Consumer Protections – focusing on dispute protections

As previously explained given the potential growth of consumer use of FPS for the purchase of goods and services, the Consumer Protections Working Group focussed on dispute protections to support this Report. Research[1] was commissioned to explore the payments landscape and consumer protections. Within the wider context of economic crime, which we consider further in section 2.2, it is also important to consider where dispute resolution issues may stray into considerations of fraud.

In the case of disputes, UK consumers have the option to seek compensation through a number of protections:

- **General legal protections** written into law, such as the Consumer Rights Act and Consumer Credit Act which covers credit card purchases.
- **Payment protections** where the payment service provider (PSP) essentially acts as an intermediary between the merchant and the consumer, with the application of these protections being dependent on how the payment was made.
- **Debtor-Creditor-Supplie**r credit product protections such as hire purchase and credit cards.
- **Retailer protections** made available as part of their competitive offering.
- **Personal protections**, such as insurance.

There are a number of agencies responsible for oversight of consumer purchase and payment dispute issues in the UK, including the Financial Conduct Authority, the Competition and Markets Authority, the Payment Systems Regulator, and the Financial Ombudsman Service.

Legal protections

In the UK, consumer rights cover interactions between consumers and merchants. Every purchase forms a contract between the two parties. Both the buyer and the seller agree to terms and conditions, and the seller agrees to provide the buyer with their statutory rights, no matter how the consumer pays.

For instance, the Consumer Rights Act (2015) covers almost all purchases. Products and services must be of satisfactory quality, fit for purpose and as described before the purchase. If the consumer believes the products do not comply, they can raise a claim against the retailer. By law, consumers have thirty days after taking ownership of non-perishable items to reject goods which are not of satisfactory quality, are unfit for purpose or not as described, and are then entitled to a full refund.

After thirty days, some protections are still available. Consumers have the right to request a repair or replacement of the goods or the right to a price reduction. Consumers also have the right to, amongst other things, challenge hidden fees and charges in contracts, disproportionate default charges, and excessive early termination charges.

If the consumer purchased the goods remotely, the Consumer Contracts Regulations, that replaced the Distance Selling Regulations, also confer protection. The consumer can cancel and return goods within 14 working days.

1 Consumer Protections in Payments: Summary Paper, Pay.UK

Consumer payment protections in the Faster Payments Service (FPS)

Additional payment protections within FPS have focussed on creating strong and secure customer authentication, implementing credit recovery in the case of payment errors and combating fraud. No additional consumer protection exists when consumers use FPS to pay for goods and services because the original intention of FPS was for personal bank-bank payments.

As the market continues to grow, using Open Banking services to route payments through FPS, payment providers may offer additional protections as part of their competitive offering. However, as the market is relatively nascent, these new protection propositions are at various stages of development.

Retailer protections

Some UK retailers offer guarantees, product care and insurance that build on the protections offered in law.

Retailers may offer added care at an extra cost to consumers, for example to cover for ongoing repairs and replacements, or to provide technological support services. These additional consumer protections may be a key part of a retailer's competitive offering and brand building.

1.2.3 Current consumer perceptions – focusing on interbank payment disputes

Primary research[1] into consumer perceptions of consumer protections was commissioned to understand current payment method behaviours, and the role protection plays in these, as well as to understand consumers usage and attitudes towards FPS.

Convenience and ease are key drivers when choosing a payment

The research found that payment behaviours are entrenched, with consumers having go-to methods for offline, online and bill payments. Consumers also reported a range of motivations for using different payment methods, with convenience and ease coming out on top. With regard to the less financially confident, control and security are key drivers of payment type choice, while the more financially confident are more likely to be driven by rewards.

Research identified that payment protection is typically not front of mind when choosing which payment to use, and awareness around protections is mixed.

Consumer perceptions of Faster Payments

Whilst FPS use is widespread, consumers are not always aware they are using it, partly due to the lack of familiarity with the terminology. Lines are further blurred with consumer-to-business payments, where consumers are unaware they are using FPS payments or whether they are paying into a business account.

Consumer research showed that brand is a key element establishing consumer trust in new technologies.

Convenience, speed and seller preference were found to be key drivers for using FPS for consumer-to-business transactions, however, limited availability and lack of clear benefit over and above existing methods were highlighted as key barriers to wider adoption.

Consumer research revealed that specific payment protection was not felt to be relevant for the majority of consumer-to-business purchases via FPS. However, additional payment protections were considered as a safety net for some higher-value purchases, particularly where the seller is not known or trusted or should advance payment be required. There was also a lower expectation that payment protection should cover complex disputes or customers errors.

With regards to potential gaps in consumer protections, no evidence was found that additional payment protections were required for FPS use for consumer-to-business transactions at its current rate of use. However, a range of factors were identified that may increase the need for additional protections in the future. These were:

- Increasing use for 'high risk' purchases.
- Promotion by financial providers, retailers or tech companies.
- Increasingly fragmented payment provider markets (particularly online).

These high-level findings demonstrate that whilst there may not be an immediate high usage of FPS for the purchase of goods and services, any future offerings for FPS could encourage a higher take-up. The research offers important insight into the consumer view regarding if and when protections may be needed and highlights that consumer awareness and understanding of protections could be improved.

1 Exploring Perceptions of Consumer Protections in Payments, Pay.UK

Critical considerations when assessing consumer protections

Identifying any customer detriment More work needs to be done to understand the nature of the potential detriment to consumers, given the early stages of usage of consumer-to-business FPS payments, and to identify what harm additional protections may need to address. This will require consideration of different use cases and scenarios, in order to identify plausible solutions and the dependencies to deliver these.

Avoiding unintended consequences An analysis of protections will need to take into account the impact on different business models (and products for end users) and the unintended consequences, for example whether a protection within the payment system rules would constitute an unreasonable barrier to entry.

Development of sustainable business models Cards currently offer a high level of additional payment and statutory protection (e.g. Section 75 of the Consumer Credit Act provides additional protections on many credit card purchases). However, card protections are underpinned by economic and commercial models which do not currently exist in interbank payment systems such as FPS. Global card scheme rules also give consumers rights to chargeback a card transaction from their issuing bank if a merchant breaches a contract - for instance if they fail to deliver what was contractually promised. No equivalent rights exist for FPS users. Should further protections be established as necessary, significant work would be needed to understand how such protections could be sustainably delivered, including careful consideration of the economic and commercial models underpinning such protections, and where the money for refunds would come from.

Evaluating the merits of a collaborative vs competitive approach Competition may naturally allow for protections to evolve in the market, or regulators or other bodies could introduce prescribed protections. As work continues to identify the appropriate consumer protections for different payment types, it will be important to keep in mind the various options to deliver protections in different use cases. There does not have to be a blanket approach adopted across all payment types, and whether competition or central coordination should facilitate the emergence of protections may differ in each instance.

Keeping customers informed on change Consideration should be given to how we ensure customers can understand the different protections that may emerge and how these apply across all payment types.

Enabler 2: Enhancing Consumer Protections

To realise the industry's 2030 vision to provide greater clarity, confidence and consistency in Consumer Protections a number of recommendations have been identified:

Recommendation 4: Regulatory leadership
We would encourage the regulators to provide leadership and coordination to ensure policy initiatives deliver the right outcomes for consumers and businesses, and avoid unintended consequences, through a framework that will produce clear, effective, fair and commercially viable outcomes. Respective regulators' responsibilities should be clearly understood and aligned, to avoid duplication of effort and conflicting outcomes.

Recommendation 5: Review consumer protections
Undertake further work, including via Pay.UK's Consumer Protections Working Group, on potential enhanced protections for different business models and journeys and across different payment types. This work will include how protections are funded. We expect this activity to be in support of the work the PSR are planning in this area.

Recommendation 6: Raise consumer awareness
The industry will further promote customer education and other possible actions to improve awareness of current payment protections. Industry players should understand and consider the societal differences in users of payment types, and consumer confidence to seek a refund, including identifying the barriers to educating customers on protections at the point of transaction.

Recommendation 7: Ongoing modelling
Pay.UK will continue its tracking of international markets, to identify any accelerators or barriers to the take up of real-time customer-to-business payments, as well as alternative approaches to consumer protection. This research can help inform its policy work to explore if, and how, Pay.UK can use its rules and standards to enhance consumer protections.

1.3 Building digital financial inclusion and confidence

By 2030, we want as many consumers as possible to have the confidence, ability, and desire to use digital banking and payments.

In 2019, there were 2.1 million adults in the UK who mainly used cash for their day-to-day spending, representing 3.8% of adults. Our challenge is to ensure that nothing holds back any consumer from shifting to digital payments.

Up-skilling consumers lies at the heart of realising the vision. **Although remote banking use continues to grow, around 12 million UK consumers (or 22% of the population) still lack digital skills in 2020[1]. Nine million people feel unable to use the internet or their devices without help**.[2]

Covid-19 has highlighted the importance of digital skills. Lockdowns and social distancing have encouraged everyone to work, shop, bank, and stay connected with friends and family digitally. Achieving our vision will build skills which benefit society as a whole.

Whilst the proportion of businesses who consider themselves 'digitally advanced' has continued to grow, this can vary greatly even within sectors. Of the UK's 166,000[3] charities, 13% (26,000) undertook almost no digital activity in 2019[4], whilst 24,000[5] charities are almost digital by default.

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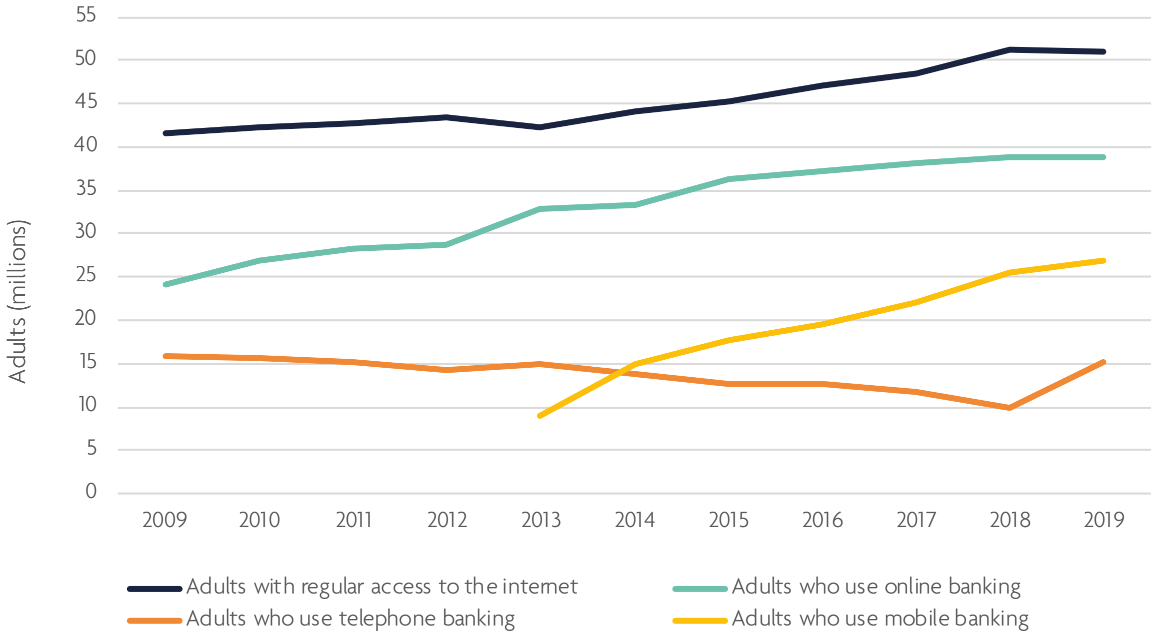
Chart 3: Regular internet users and adults using internet, mobile and telephone banking

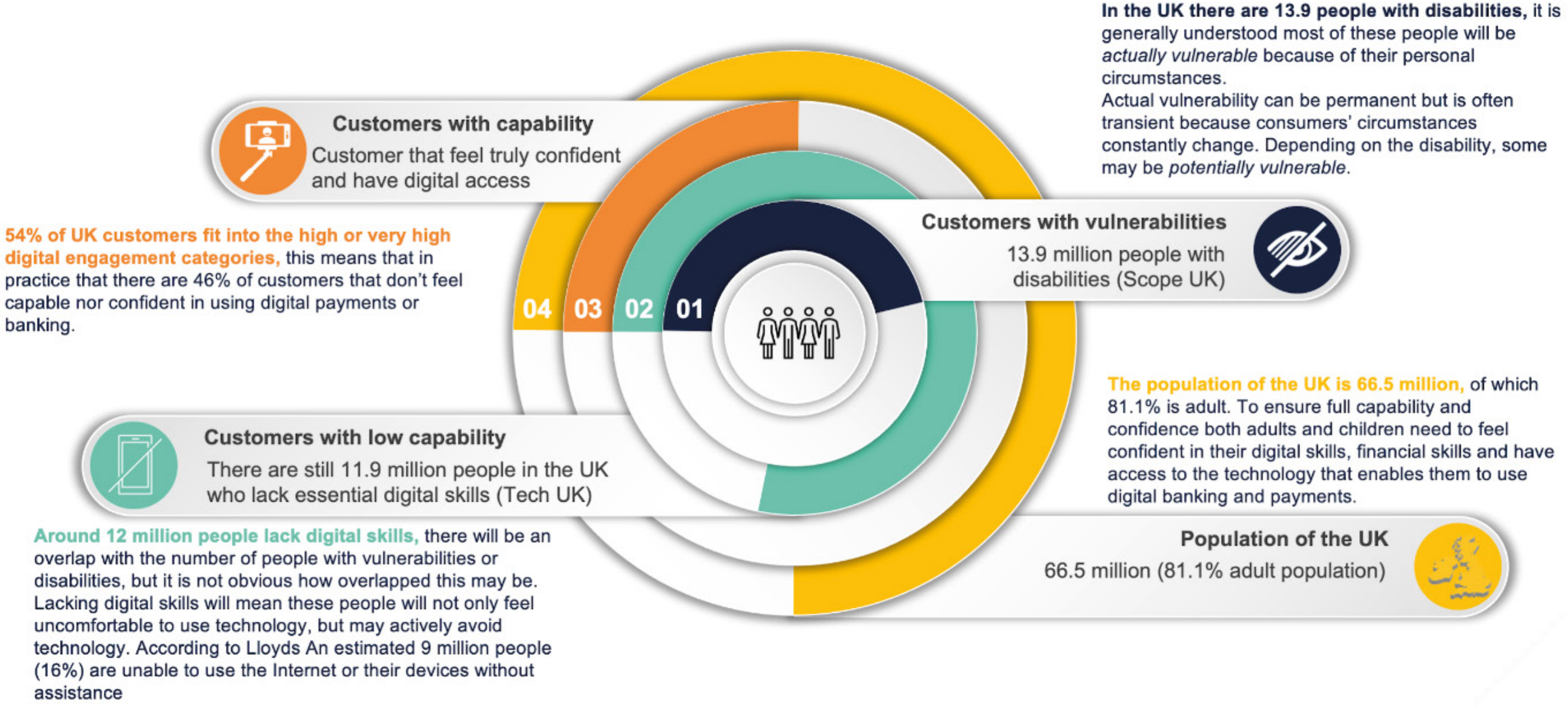


1 UK Consumer Digital Index 2020 p. 7
2 UK Consumer Digital Index 2020 p. 4
3 NCVO, "Executive summary" available at: https://data.ncvo.org.uk/executive-summary/
4 UK Charity Digital Index 2019 p. 6
5 UK Charity Digital Index 2019 p. 3

Certain parts of the UK still lack adequate connectivity to give consumers access to all the digital payment options available. In Ofcom's Connected Nations 2019 report, research found that 5% of the UK landmass does not have sufficient mobile coverage to make calls or send texts, and 9% of the landmass cannot access 4G reception from at least one operator.[1] Broadband remains a point of active concern, with 155,000 UK properties unable access decent broadband (with 10Mbit/s download and 1Mbit/s upload) at the end of 2019.[2] As digital availability is unlocked for the UK, we expect that UK consumers will be able to take advantage of the environmental benefits offered by digital payments.

Availability is only part of the puzzle; in the segmentation diagram opposite we outline the current state of digital inclusion and confidence. We then go on to discuss the reasons for this, the risks associated with making little progress on this agenda, and finally offer recommendations. We also undertook research comparing the provision of digital payments in the UK to other nine national markets. For details see Appendix 5.4.

Customer segmentation - Digital inclusion and confidence



1 Connected Nations 2019: UK Report p 23
2 Ofcom, "Latest UK broadband and mobile coverage revealed" : https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2019/latest-uk-broadband-mobile-coverage-revealed

The debate around improving digital inclusion and confidence is nuanced. There is a danger of assuming a universal understanding of what successful inclusion and confidence looks like. There is also a risk of falling into the trap of seeing those who are not included or who lack confidence as 'deprived' of digital payments. The industry recognises that this is not normally how non-users of digital payments see themselves.

The root causes of any lack of inclusion and confidence can vary widely; ranging simply from inadequate network coverage; lacking the financial means to engage with the digital world (being able to purchase a smartphone or access the internet easily) and comfort with existing non-digital methods; to more fundamental issues of trust in technology or broader issues such as awareness of digital payment options and the benefits of them.

Our aim is to build trust in the UK's digital payments ecosystem, so that consumers feel they have a wider understanding and choice about how to make payments.

This is clearly an area that will require further consideration and research by the industry working with government and other sectors. We believe there is benefit in the industry considering further work to establish an industry group on digital inclusion and confidence. Given there are several concurrent workstreams on access to cash and digital alternatives, for example, the PSR/FCA Access to Cash working groups and the outputs from the HMT Call for Evidence on Access to Cash, we suggest that further engagement between all the relevant parties will be helpful to minimise duplication of future action.

In the medium to long term, we recommend that the government should take a leading role in bringing together disparate industries to work together on the issue of digital confidence.

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Enabler 3: Building Digital Financial Inclusion and Confidence

Recommendation 8: Access to digital payments
A key ambition for the industry over the coming years will be to promote customer access to digital payments. The industry will work together where necessary to identify opportunities to enhance digital inclusion for its customers and address any issues.

Recommendation 9: Digital inclusion
In order to achieve our vision for digital payments, the industry will consider ways in which to support existing initiatives and research on digital inclusion to ensure a coordinated and transparent approach to identifying and understanding consumer needs.

2. Deliver further innovation

Historically, the UK has been at the forefront of payments innovation and the vision for the future is that we remain so.

Current innovations are yielding significant customer benefits

Confirmation of Payee is already in place, providing many UK customers with confidence in who they are paying, helping to reduce fraud and helping consumers avoid accidental misdirected payments. **Request to Pay** solutions are being deployed, allowing customers, particularly the self-employed and freelancers, flexibility in scheduling payments and splitting them into instalments. There is also **the renewal of the Bank of England's Real Time Gross Settlement (RTGS) system**, combined with Pay.UK's **New Payments Architecture**: both will support competition by increasing access and delivering many other benefits such as increased resilience.

Another ground-breaking innovation is the introduction of Open Banking in the UK, driven by the requirements of PSD2. **Open Banking** APIs are reshaping the industry, enhancing competition and access and delivering speed, ease and resilience. Innovation is emerging in firms outside the traditional financial services world, for instance in areas such as ticketing, concierge and gaming. Open Banking is facilitating an acceleration of digital innovation within the UK and our vision is to harness its capabilities for the benefit of our society as a whole - whilst of course allowing competition to flourish.

The industry has invested £1.5 billion into the world leading Open Banking ecosystem since its conception.

Making the most of the digital world

Undoubtedly a digital future awaits, biometrics, digital identity and Central Bank Digital Currencies (CBDC) could all provide new opportunities, business models and increase security and protection.

It is essential that regulators continue to provide the right frameworks for firms to innovate and deliver new products and services to consumers that meet their changing needs and expectations. Fortunately, the UK starts from a good position. The technological products, capabilities, and functionalities already exist.

Working with the Fintech community will be one of the ways in which the industry can find solutions to address any challenges, as they offer a rich vein of innovation, agility and expertise, and we can work collaboratively to enrich the customer payment experience.

Collaboration, competition and regulatory intervention – achieving our vision will require a mix of all three. For instance collaboration will be needed if we are to develop a single set of minimum standards for both digital identity and authentication. A successful outcome would deliver multiple benefits: not only making payments safer for customers but it would help build their trust and confidence.

Any collaborative innovations should support payment providers to develop their own competitive strategies, enabling them offer products and services effectively and efficiently to customers.

To unlock further benefits for customers and further support competition in the market we have identified the following optimum innovation outcomes for 2030. Some may be delivered as competitive offerings; others may benefit from a collaborative approach.

- **Digital Identity solution** in use by customers giving them easier access to digital payments whilst supporting a collaborative ecosystem.
- **An enhanced end-to-end consumer experience** through value-based products and services such as personalised mortgage offerings, better budgeting and control etc.
- **Biometrics** being used to help in the fight against economic crime and enable frictionless payments.
- **An enhanced infrastructure** supporting a variety of consumer-centric use cases, for instance reducing friction in cross-border and transport payments.

Three key innovation enablers can be progressed in the collaborative rather than competitive space.

- **A Digital Identity use case:** A consistent approach to a Digital Identity ecosystem could deliver better outcomes for customers by providing new identification and authentication methods for different use cases.
- **Tackling economic crime through prevention and detection**: The increasing reliance on digital payment market infrastructure is opening up opportunities for greater collaboration on economic crime prevention and detection between network participants and infrastructure providers. New innovations may be identified as a result.
- **Liquidity optimisation:** Enhanced liquidity management techniques should be considered as part of any future infrastructure enhancement. This would include efficient use of collateral to meet payment demands.

2.1 Developing a Digital Identity use case

The development of a Digital ID use case would be an important step towards delivering an innovation that has the potential to yield benefits that stretch far beyond the payments industry.

Viewed solely from a payments industry perspective, it is clear that the enablement of a Digital Identity ecosystem that facilitates payments use cases could provide many benefits. Such an ecosystem could support interoperability at scale across the competitive market-place and critically deliver better outcomes for customers.

Customers would be the main beneficiaries of a consistent identification and authentication process across multiple channels or services: it would reduce unnecessary transaction friction and improve security. A digital identity ecosystem would potentially entail the creation of a trusted electronic identity for each person that could be used by both UK payers and payees.

Making it easier and more certain for providers to verify payments' users and for users to authenticate each other could broaden access to financial services and foster greater trusted in payments.

At present, the UK lacks a digital identity ecosystem. The benefits of a digital ID and risks of continuing without one, have been identified as follows:

Risks

- Customers unable to benefit from easier access to services and better control of their data.
- An inconsistent approach across channels and services creates friction for customers and does not provide the optimum customer experience.
- Continued process inefficiencies, operational costs and reduced economic crime prevention and detection capabilities.
- Missed opportunities for further private sector innovation including developing and offering new products.
- Some customers lack confidence using digital payment methods as they want greater certainty that the people they are paying are who they say they are.

Benefits

- It could enable faster and more secure customer onboarding enabled by stronger identity validation and verification. Firms will be able to exploit opportunities to reduce inefficiencies and improve financial inclusion by providing UK consumers and businesses a route to gaining access to financial services.
- A unified ecosystem could enable a consistent authentication experience for users between multiple services and channels. A consistent approach across the public and private sector could magnify all benefits.
- The potential deployment of a consistent technology for all customers across the ecosystem would boost economic crime prevention and detection in the UK.
- It could allow new services to be developed, such as a method for redirection or the operation of proxy services. For instance services could utilise the data associated with a single digital identity to enable customers to direct payments securely via an email, phone number or perhaps even a Legal Entity Identifier or other identification schemas.
- Depending on the design, the cybersecurity of the financial services infrastructure could be enhanced, specifically the authentication of payments made through third parties or other overlay services.
- Businesses could be supported to implement more secure digital sign-off procedures on payments requiring multi-authorisations.

Requirements for a Digital ID use case:

The UK must set **outcome-based standards and rules** aimed at protecting end users, which minimize fraud while improving consumer experiences.

It must ensure rules are **technology-agnostic and open to innovation** e.g. PISP, QR, Voice etc. It must identify areas where industry standards are needed for consistent end user experiences.

It must ensure there are **no barriers or dependencies in technical interfaces which limit innovation in authentication**.

To deliver this innovation we believe a collaborative approach, that brings together stakeholders, customers and the industry to work closely with Government and regulators will ensure the best outcome.

While the UK currently lacks a holistic and societal approach to digital identification, there is work already underway to enhance the UK payments industry's ability to authenticate a customer – particularly for transactions. The requirements of Strong Customer Authentication (SCA), as implemented under PSD2, has also helped wider industry stakeholders, ensure that UK customers are able to benefit from the latest authentication and verification technology. While implementation is still underway for some users of these services, there remains further work to be undertaken by industry and regulators to consider how to ensure that the requirements of SCA enable the right balance of fraud prevention while enhancing customer experience and enabling innovative approaches to deliver on these objectives.

Enabler 4: Developing a Digital Identity use case

Recommendation 10: Industry and government collaboration
UK Finance will work with its members and Innovate Finance to establish a Taskforce to explore use cases and develop views on standard frameworks that could support interoperability. The industry will input into the Department for Culture Media and Sport's Digital Identity Trust Framework taking into account the wider regulatory and legislative agenda (including data privacy and cyber security considerations) to help ensure the Framework delivers for payments and financial services providers.

Recommendation 11: Industry SCA development
UK Finance will continue to work with industry stakeholders and regulators in 2021 to consider how to enhance and adjust Strong Customer Authentication to further reduce digital fraud and enhance the payment experience outcomes while encouraging innovative approaches to deliver this.

2.2 Tackling Economic Crime

Reflecting its critical importance, the UK payments industry continues to make significant investments in innovations to prevent, detect and deter economic crime, and to ensure that UK customers benefit from world leading levels of protection. An obvious recent example is introduction of Confirmation of Payee.

Recent public priorities have once again highlighted the importance of economic crime prevention and detection within the development and management of the UK's payment networks and infrastructure.

While we consider some of the impact of these issues in the previous section 1.2 on consumer protections; a key priority for the payment market infrastructures and networks over the next ten years will be to enable next-generation economic crime compliance and risk management approaches. The payments industry can deliver these objectives by working collaboratively to facilitate access to enhanced levels of data sharing, though this can only be achieved through an appropriate legal and regulatory framework.

For instance, **payment market infrastructure providers could provide additional information fields with payments messaging to better support financial crime compliance and enable best practice data analytics**. Implementation of this additional information, supported by enhanced data standards such as ISO 20022, could enable a number of services, such as a sanctions screening service, to benefit customers and reduce the impact of economic crime.

This could include information required on both the payer and payee under the Funds Transfer Regulation. Current messaging standards used by UK payment market infrastructure can result in the truncation of the required information due to limited field lengths. Further work will be required for the industry to benefit from the sharing of information as a payment is made. This should consider issues, including:

- The method of data sharing; whether through existing payment information contained within current messaging sets, additional services developed specifically for the purpose or through functionality requiring the redesign and enhancement of existing services.
- How the definition and implementation of standards, such as ISO 20022 and the Legal Entity Identifier (ISO 17442), in UK and international payment market infrastructures meet the requirements for greater structured data transfer and whether they can be customised to meet the requirements of economic crime prevention. **It is important to ensure that the enhanced ISO 20022 standard is used to its full capability to tackle economic crime**.
- Whether firms, both sending or receiving economic crime data, have regulatory comfort to challenge the mandate to make a payment when requested by the account holder.
- Current data protection and GDPR regulations which may otherwise be barriers to the development of new data sharing opportunities to protect customers and prevent fraud.
- Operational issues, including whether all financial institutions will be able to access these services and whether there can be an appropriate justification for the cost involved in establishing these systems.
- The legal and business grounds under which risk scoring of payments - based on trends and payment attributes - could be shared between firms in real-time.
- How real-time assessments of risk may be able to inform effective and personalised warnings to consumers.
- How publicly held data might be used to support information sharing protocols.
- How cross-border payments might be assessed.
- How alignment might be achieved with work to improve cross-border payments in collaboration with the G20, the Financial Stability Board, the Committee on Payments and Market Infrastructures (CPMI) and other relevant international organisations and standard-setting bodies.

Benefits of Confirmation of Payee

Confirmation of Payee, delivered by Pay.UK, is one example of an innovation that is helping to prevent customers become a victim of fraud. After only 6 months following implementation, over a million CoP requests are successfully being made every day with many more firms participating or are looking to participate in 2021.[1]

Despite its obvious merits, Confirmation of Payee is not a silver bullet and, whilst it is a beneficial mechanism to alert consumers and businesses that they might be at risk; Confirmation of Payee is not yet implemented by the whole industry, it does not address all push payment fraud types and industry sources report that fraudsters are already circumventing Confirmation of Payee. The industry will continue to support this important service, working with Pay.UK to develop it and enable all financial institutions to participate in this network. In future, a Confirmation of Payer type service could also be utilised more widely to help avoid misdirected Bacs Direct Credits or Debits.

Confirmation of Payee has also been used to support Government efforts to tackle fraud. During 2020, Pay.UK and UK Finance coordinated industry collaboration to enable a Confirmation of Payee verification check on any payment account set to receive funds from the “Self Employed Income Support Scheme” (SEISS). This helped HMRC avoid paying out on SEISS fraudulent claims by checking that the account name matched the name of the SEISS applicant.

The Economic Crime Plan

Prevention is only one part of the puzzle: it is important that both law enforcement and firms are able to detect fraud. The right legal framework is needed giving the ability to stop, hold and freeze funds in order to investigate the payment’s legitimacy in an appropriate way. However, there also needs to be accompanying mechanisms to prevent customer detriment and ensure any funds – if not able to be returned to the payer – can be seized by law enforcement or administratively released to support economic crime outcomes. UK Finance and its members are working with the Home Office to consider these issues as part of the work under the Economic Crime Plan.

The Economic Crime Plan represents a step-change in the response to economic crime and will lead the future response to this threat. It builds on the commitments made in the UK’s 2016 Anti-Money Laundering and Counter-Terrorist Financing Action Plan, 2017 Anti-Corruption Strategy and 2018 Serious and Organised Crime Strategy to provide a collective articulation of the action being taken by the public and private sectors to ensure that the UK cannot be abused for economic crime.[2]

Enabler 5: Tackling Economic Crime

Recommendation 12: Information Sharing
UK Finance will work with members to consider mechanisms to improve data sharing within and beyond the financial services sector. This includes the sharing of data in real-time to help identify threats to customers and the industry. This can only be achieved through an appropriate legal and regulatory framework provided by government and regulators.

Recommendation 13: Unblocking Frozen Funds
UK Finance will continue to work with members and the Government to examine if and how funds held in suspended accounts can be unlocked and put towards economic crime outcomes.

1 Pay.UK internal research.
2 GOV.UK, “Economic Crime Plan, 2019 to 2022, accessible version” available at: https://www.gov.uk/government/publications/economic-crime-plan-2019-to-2022/economic-crime-plan-2019-to-2022-accessible-version

2.3 Ensuring Liquidity Optimisation

A functioning payments system requires firms to be able to provide appropriate intraday central bank money, or other liquid assets, in order to satisfy the obligations to each other that might arise through the course of the service. This means that payment systems can often become liquidity intensive for participating firms, reducing the ability of these firms to utilise, potentially trapped, liquid assets for other purposes. As a key enabler within the payment's ecosystem – making liquidity optimisation is a key part of our vision. To this end we focused on identifying principles to help central banks, regulators, settlement systems and financial institutions best innovate to build new, or enhance existing, settlement services.

For many years financial institutions have been looking at ways to improve the efficiency of their liquidity management processes, whether for their own house business or as a product for their clients. **Considering that the total value of CHAPS payments made in 2019 was £83.4 trillion, liquidity management is essential to drive further efficiencies within financial services**. The drivers for this efficiency historically were cost and enhanced services. Since the 2008 financial crisis, regulators intending to enable better management of the balance sheets of regulated firms have enhanced the regulation on firms, in particular around intraday liquidity risks. This has enhanced the stability and resilience of the ecosystem, bringing these important considerations into how firms manage their intraday liquidity. These enhancements have come at increased costs for firms.

Much of this intraday liquidity requirement is driven by the needs of the various cash and securities settlement systems operating in the UK and globally - as well as the credit provisions provided by correspondent banks for settlement services. Good progress has been achieved by payments and securities settlement systems to improve liquidity requirements, for example the introduction in 2013 of the Liquidity Saving Mechanism for CHAPS payments in RTGS by the Bank of England. This helped reduce the amount of intraday liquidity required by CHAPS direct participants. Another example is the introduction of automated repo transactions for the collateralisation of settlement in CREST, this significantly reduced the liquidity provision of financial institutions providing settlement services to clients. **These liquidity savings allow financial institutions to undertake other vital economic activity, such as lending, which has a positive macroeconomic benefit for the functioning of financial services in the UK and globally.**

We recognise the progress currently being made by the Bank of England on the development of a renewed RTGS service for a more efficient high value payment system (including revisions to the Liquidity Saving Mechanism), and together with Pay.UK on the design of prefunding and retail settlement for the NPA. We are very supportive of this work and **would welcome the development of processes that can lower the liquidity cost of participating in both the RTGS service and the retail payment schemes**.

However, much of this improvement has been implemented in silos or in single payment schemes. Where financial institutions are operating in many domestic and global clearing systems or schemes, as is often the case, **there needs to be a more holistic and global approach to liquidity management, especially for intraday liquidity and cross-border payments**. With the desired outcomes recommended in the G20 commissioned report[1] on cross-border payments, central banks, regulators and the industry need to deliver more efficiency and transparency around these transactions and, as such, liquidity provision forms an important part of achieving this. There is also more focus now on the balance sheet costs of inefficient liquidity structures; for instance, it may be trapped because systems or schemes are not interoperable; the liquidity is in a different currency and jurisdiction; or the liquidity is inaccessible due to the closing of transfer windows in different time zones. All these scenarios result in financial institutions being unable to maximise the use of their liquidity. The G20 report helps to focus attention on enhanced liquidity management through, for example, increased adoption of Payment versus Payment (PvP) for FX trades (Building Block 9) and reciprocal liquidity bridges between central banks (Building Block 11). Work in these areas, plus others relevant to better liquidity management mentioned in the report, will commence in 2021.

The recommendations set out below illustrate principles for consideration as central banks, regulators, settlement systems and financial institutions consider how best to innovate to build new, or enhance existing, settlement services. These innovations could deliver enhanced liquidity management facilities and increase the productivity and stability of UK financial institutions.

Enabler 6: Ensuring Liquidity Optimisation

Recommendation 14: Global Liquidity Optimisation
Regulators, central banks, and industry bodies to support global initiatives to enhance cross border liquidity management.

Recommendation 15: UK Infrastructure Optimisation
The Bank of England and industry, with the support of UK Finance, should continue existing work to improve liquidity efficiency in the renewed UK payment systems. They should also explore potential further innovations in future – including options for improving liquidity efficiency between and across multiple payment and securities settlement systems.

1 The Roadmap was developed by the Financial Stability Board and the Committee on Payment Market Infrastructure – currently chaired by Sir Jon Cunliffe, the Bank of England's Deputy Governor for Financial Stability – available at: https://www.fsb.org/wp-content/uploads/P131020-1.pdf

3. Supporting competition

The payments ecosystem is undergoing unprecedented amounts of change. This makes it more important than ever to consider how the UK's payments infrastructure, including those parts under active development, might be enhanced to support a competitive and innovative ecosystem, offering lower barriers to entry and increased flexibility to new and existing participants. The infrastructure needs to remain cost-effective delivering a scalable, smart, instant and frictionless payments experience for end users whilst remaining resilient and reliable.

Vital enablers to support interoperability and improve the user experience include; ensuring a unified approach is taken on standards; that domestic and international standards are aligned; and that the governing supervisory regime facilitates safe access by participants.

If we are to realise our vision for the UK to have a world-leading infrastructure we also believe that more needs to be done to move payments regulation forward with greater coordination, coherency and consistency between regulators.

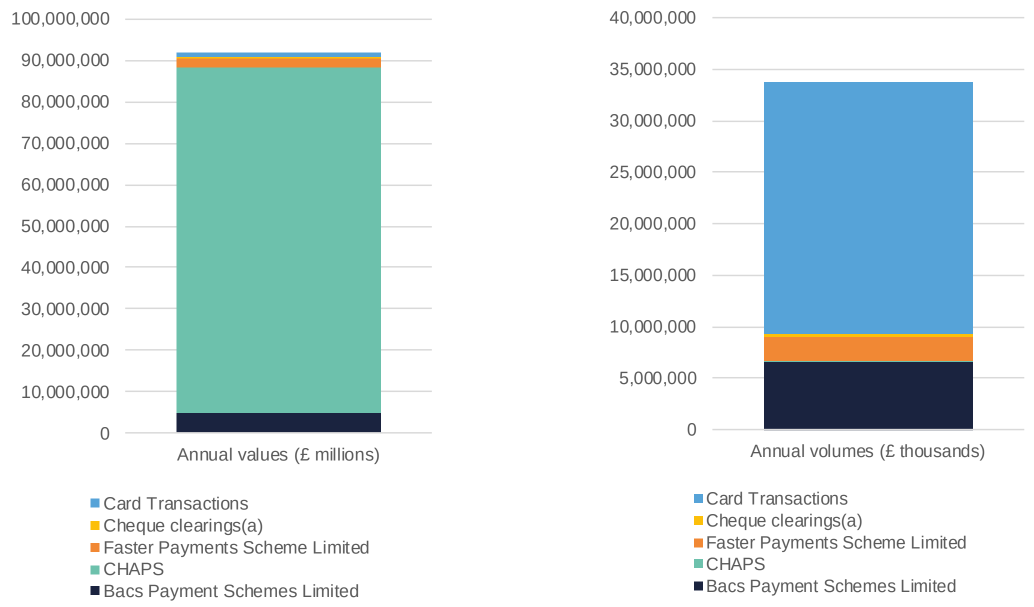
By 2030, our overarching vision is of an infrastructure that supports:

- **Commercial and innovative services** – Central infrastructure services that provide cost effective services to financial institutions, third party providers and other users; enabling innovative, commercially viable, business models and fostering competition by increasing access to services.
- **Continued access to established payment systems and services** – In order to support accessibility, it is important that the industry maintains existing infrastructure and associated heritage payment services – evolving these if appropriate to meet new requirements.

Our work considered the role of infrastructure across legacy and future systems, and its essential function in enabling payments processing and driving value in exchange for goods and services. Going forward it should be a prerequisite that the infrastructure is set up to allow industry innovation without the need for central change to achieve this.

Although not specifically considered within our review of infrastructure, it is pertinent to note the existence of the recently developed Image Clearing System (ICS), which has delivered digital cheque clearing in the UK. Also the extensive activities undertaken by the cash distribution network to which we briefly pay consideration to in section 1.1 on Access to Cash. While of vital importance to certain customers and the functioning of the UK economy, both networks support payment methods that continue to decline. This said, while cheque volumes continued to fall, in 2019 accounting for less than 1% of UK payments and cash volumes fell by 15% in 2019; the industry remains committed to ensuring appropriate access to these networks for those who wish to use them.

Chart 4: UK payments values and volumes 2019



3.1 Aligning Payments Standards

A great opportunity exists for common standards to be deployed across payment market infrastructures to facilitate the exchange of data, enabling firms to offer new services and innovate. This would build on changes already being driven through initiatives such as the implementation of ISO 20022 by SWIFT, Pay.UK and the Bank of England. As the UK's interbank payments infrastructure is increasingly benefiting from the adoption of ISO 20022, the world-leading work of the OBIE has developed a comprehensive set of Open Banking standards and guidelines, including a set of APIs to support the UK market's implementation of PSD2, and laid the foundation for innovations in open finance. These developments have raised questions as to whether the cards infrastructure would also benefit from a similar migration to ISO 20022.

Such changes have a direct and tangible impact on all users of payment services including the operation of UK payment providers. Historically, payment standards have developed via an evolutionary approach, focused on the needs of individual communities. This has resulted in a fragmented landscape where governance of these standards is concerned. At present, payments standards are owned or governed by a variety of bodies including Pay.UK, UK Finance, the OBIE, the International Organization for Standardization (ISO), EMVCo, the international card schemes and the Bank of England.

In light of the continuing change in the market, there is opportunity to focus on the strategic potential that payment standards can enable and to consider how the UK could realise significant benefits from a more coordinated approach to setting and maintaining payments standards.

3.1.1 Investigating a co-ordinated standards approach

Changes to payments standards involve significant investment and to incentivise stakeholders to adopt and deliver them a clear business rationale spelling out the transformative benefits to industry and end users is always needed. Moving beyond financial services, the end-users of payments – government, large corporates, SMEs and consumers also have an interest in the development of these standards.

To facilitate the adoption of common standards in the UK, the industry is planning to further investigate the benefits of a coherent and co-ordinated approach to standards management.

The benefits of adopting common standards across the UK payments ecosystem in the UK include:

- **Global alignment** - International engagement to ensure that UK and international standards have a uniform approach.
- **Improved customer experience, interoperability and resilience.**
- **Coordinated implementation** - The creation of market practices to coordinate implementation, for example on timing and harmonisation, where it is appropriate and enable more consistent offerings to the market.
- **Active reviews to achieve harmonisation** - Review of other standards in the industry (such as those covering point of sale terminals and security) with the aim of including them within the same leadership framework.
- **Supporting trade outside of the UK** - The ability of the UK payments industry to provide easier engagement with overseas-based providers and suppliers.

UK Finance has set up a cross-industry Standards Strategy Group to assess the standards ecosystem. It will review the current standards governance processes associated with all relevant payments standards in order to consider opportunities for coordinated action. Work will include:

- Establishing the value and significance of standards.
- Developing an overview of the key standards for the UK payments ecosystem, including interbank, cards and Open Banking.
- Considering current and longer-term challenges and opportunities to increase the effectiveness and efficiency of the UK payments standards landscape.
- Recommending how industry can best prepare for the future, actively seeking to maximise the benefits of coordinated action on standards setting.

In order to deliver this to industry, coordination with all stakeholders is essential and the responsibilities of existing firms to adhere to standards is vital. The work will additionally need to consider the merits of developing guidance on implementation, and appropriate governance processes to manage implementation across the UK. Advocacy in this work is critical as the implementation of standards can only be achieved when the competitive market sees mutual benefit in the creation of standards to raise the value of products and services amongst customers.

Enabler 7: Aligning Payments Standards

Recommendation 16: Improved Standards Governance
UK Finance has established a cross-industry group to consider opportunities for coordinating the development and governance of payments standards across inter-bank, cards and open banking; with appropriate consideration of the international standards landscape.

3.1.2 Card Standards

Given the wider adoption of ISO 20022, **we believe that it could be an appropriate time for the cards industry to revisit previous assessments on potential migration to ISO 20022**. This would enable the industry to reconsider and weigh up the potential benefits against the significant implementation cost across such a wide and diverse stakeholder environment and the timeline for achieving it.

The card industry currently uses ISO 8583 for messaging - implemented globally by card schemes - and supported by the UK implementation guidance of Standard 70[1]. Other global card scheme standards are also in use, developed by a variety of standards bodies and EMVCo. These standards support an essential part of the UK payments ecosystem; by volume, **the cards network is the largest payments network in the UK, fulfilling 24,778 million payments in 2019, a figure that far exceeds the 9,271 million payments made over CHAPS, Faster Payments, Bacs and cheque clearing combined**.

Almost 25 billion

card payments in the UK in 2019 compared with just over 9 billion CHAPS, Faster Payments, Bacs and cheque payments combined

Some stakeholders believe that moving from ISO 8583 could open up the card ecosystem to innovation in the use of new data formats, enhanced data capacity and modern security solutions. Additionally, applying ISO 20022 to cards, the same standard that retail interbank infrastructure is adopting, could unlock broader benefits including increased resilience, ease of data transfer and the enablement of innovative services.

Migrating current card systems from ISO 8583 is likely to be expensive and time consuming. The stakeholder map for card payments is far more complex than that of interbank payments and many acquirers, issuers and merchants would have to switch from their current systems. As there are differences in appetite for this change between financial institutions and retailers, it may be difficult to gain support across the whole market. Some segments of the market do not consider that the switch to ISO 20022 is necessary for their use case.

To understand the potential benefit of migration, and weigh the potential risks to the UK economy, we recommend that the industry works collectively with all stakeholders to understand what benefits could be derived from migrating to ISO 20022 and whether this outweighs the effort of change, the timeline for migration and the implementation cost. This assessment should consider, among other items, whether this migration will:

- **Make processing card payments easier** by allowing common standards to enable better integration between payment providers, potentially decreasing the number and complexity of interfaces.
- **Enable improved economic crime prevention and detection.**
- **Reduce the cost to cards providers** by widening the pool of developers familiar with the relevant protocols.
- **Reduce risk** by removing any single point of failure.
- **Increase the data available**, which would enable greater innovation with the associated benefits to consumers and society.
- **Increase competition** for new and existing providers to develop card payment applications.

Enabler 7: Aligning Payments Standards

Recommendation 17: ISO 20022 adoption
In order to support our vision, it is recommended that the industry further explores whether the UK cards market should move to the ISO 20022 standard. Such a change could enhance interoperability of payments across the ecosystem. However, there are a large number of stakeholders and widespread, international implications that must be considered.

1 Standard 70 defines messaging protocols for card payments between a card acceptor and an acquirer; it includes guidance on how card transactions should be processed, how merchants should interact with cardholders, receipt requirements etc to meet the needs of the varying card schemes and present a uniform cardholder experience.

3.1.3 Open Banking Standards

There is a growing demand for open data-based services within finance, and beyond. The work of the OBIE has established an excellent basis for further innovation, and it is essential that we ensure that Open Banking rules and API standards are developed consistently via international initiatives, particularly with reference to the industry's wider migration of interbank payment infrastructure to ISO 20022.

Specifically, the industry should build in changes to the Open Banking standards to enable the kind of enhanced data provided by internationally adopted ISO 20022 standards. This change is underway, so the industry needs to educate all the relevant stakeholders and plan for adoption of new capabilities by providers in the Open Banking community.

Enabler 7: Aligning Payments Standards

Recommendation 18: Open Banking alignment
The industry, in particular the Open Banking Implementation Entity, UK Finance, Pay.UK, the Bank of England and other stakeholders will ensure that the open banking API standards are developed in line with wider adoption of ISO 20022. The aim of this work is to support a wide range of payment types and ensure interoperability with underlying payment formats.

3.2 Ensuring an Accessible and Competitive Infrastructure

In recent years, an increasing number of new services have been made available to customers, and over the next ten years, the payments infrastructure needs to continue to support such positive change by enabling payment providers to compete commercially in an open and innovative market.

Much innovation is being driven by the rapid growth in the adoption of Open Banking payment initiation with monthly volumes from November 2019 to November 2020 climbing eleven-fold.[1] While this growth is significant, it has only been achieved with substantial industry investment. UK Finance estimate that over £1.5 billion has been invested into the Open Banking ecosystem since its conception.

In addition a significant investment has been made to upgrade cards and point-of-sale terminals with contactless functionality. The rise of contactless payments, which made up 21% of all payments by volume in 2019, has become an increasingly popular and trusted way for customers to make payments. At the end of 2019, 132 million contactless cards were in issue.

£1.5 billion +

has been invested into the Open Banking ecosystem since its conception

To encourage further innovation and competition, it is essential that firms that innovate and deliver new products and services to address customer needs are able to recoup such investment. Future infrastructure enhancements must continue to deliver cost-effective networks for the market that are accessible by a diverse range of firms while delivering a safe and secure environment for all customers. **To ensure the UK's payments ecosystem is future proofed in the context of ongoing global change, our infrastructure must be developed on a model that provides long term economic sustainability**. Economic analysis of any potential enhancement will help achieve this.

Sustainability extends beyond the commercial environment and, as digital payments enable customers to reduce their environmental footprint, **infrastructure providers should also consider opportunities to reduce their own environmental footprint and support the UK's commitment to achieving net zero carbon emissions by 2050**. This ambition is challenging given the rate of change of payment market infrastructure; however, this is an also an opportunity for firms to exploit new technologies, such as open API infrastructures. These new technologies could enhance firms' ability and capacity to build overlay services atop existing payment market infrastructure, delivering enhanced services to customers for reduced infrastructure investment.

As technology and modern business practices continue to drive further payments innovations and commercial opportunities, **the infrastructure market should continue to be supportive enabling the delivery new services to customers by**:

- **Ensuring infrastructure is designed to enable competition and innovation** - For example by providing a choice of methods to connect with the infrastructure and ensuring efficient and cost-effective access. This means implementation of cost-effective access models for payments infrastructure and lean development processes to ensure effective delivery of functionality to market.
- **Ensuring ease of access** - Providing clear access policies, open technical standards, and supportive supervisory regimes to facilitate access by service providers.
- **Promote safe, secure and accessible networks** - Risk aware processes for onboarding new network participants, including international remittance providers, in order to promote safe, secure and accessible networks.
- **Supporting interoperability** - The development of standards, including conventional messaging and open API standards, should aid consistency and be developed in collaboration with UK and international initiatives to support a wide range of payment types. This will enable firms to build overlay services atop existing payments market infrastructure.

1 November 2019 payment initiation calls were 300,327; these climbed to 3,436,123 calls in November 2020 – Open Banking, "API performance – Open Banking" - retrieved 2020-12-1 and available at: https://www.openbanking.org.uk/providers/account-providers/api-performance/

- **Achieving the best regulatory outcomes** - Advocating for, and facilitating the implementation of, regulation and oversight for Payment Initiation Service Providers (PISPs) and Third Party Providers (TPPs) that represent global best practice and maintain consistency and harmonisation. Infrastructure providers and wider industry should continue to work with regulators to ensure that financial crime compliance for international payments remains a priority alongside objectives to deliver innovation and improved consumer experience. The industry should support the government's strategy on Money Services Businesses (MSBs) and for the Financial Action Task Force (FATF) to drive international harmonisation. It is pertinent to note that the US are consulting on enhancing their regulations for international payment information (reducing the value threshold).

Access to the payments infrastructure will continue to be vital: seamless and frictionless connectivity can only be achieved with appropriate access. Over the past five years, the level of access to interbank payment schemes for payment service providers has been of increased importance to infrastructure providers. **By 2030, easier connectivity to infrastructure will be needed in order to support the implementation of innovative customer services and to support a competitive market.**

Industry efforts to improve access

Thanks to extensive work by both industry and regulators, the accessibility of the core UK retail and wholesale payments infrastructure has increased dramatically. Faster Payments now has over thirty direct participants,[1] and allows non-banks to join this critical infrastructure, thanks also to the supporting work of the Bank of England and by 2020 CHAPS had thirty-five Direct Participants; which is an increase of sixteen firms over the last decade. The renewed RTGS service is expected to expand the connectivity capacity to several hundred CHAPS Direct Participants making it easier, quicker and cheaper to join. Increased levels of participation in Faster Payments and CHAPS can help to reduce 'tiering risks' - whereby additional credit, liquidity and operational risks between indirect and direct participants are reduced by direct participation. Increased direct access can also contribute to the ability of firms to compete more effectively and deliver greater innovation to the market.

Common standards are key enablers

Common standards are important to deliver technical interoperability for participants, and to give them easier access to the market particularly between different payment market infrastructures. **The adoption of ISO20022 will achieve technical alignment between the design of the NPA and the renewed RTGS service**, and the industry expects this change to reduce the technical cost of joining these services.

The implementation of open API standards through the Open Banking ecosystem has already spurred the engagement of a swathe of new providers developing and delivering new services. Over 200 firms offering new financial services to UK customers are now enrolled in the directory provided by the OBIE.[2] Financial service firms are also increasingly finding benefit in the migration to cloud services as an efficient means of managing IT infrastructure and connectivity.

It is expected that the continued innovation in all these areas will further facilitate access for payment firms to connect and interoperate.

Faster, frictionless cross-border payments

The need for interoperability to facilitate access extends further than just the UK's domestic schemes. Other markets and international networks have benefited from the adoption of ISO 20022. The SWIFT network is migrating both cross-border and cash management messages to this standard and the European market has already implemented ISO 20022 through its SEPA networks and other related infrastructure. Where relevant, infrastructure providers should endeavour to ensure interoperability between cross-border and domestic payment schemes. A good example of this is the recent technical implementation that allows participants connected to Faster Payments to access SWIFT's global payment innovation (gpi) service to track international payments which are processed in this domestic network.

1 Faster Payments, "Directly Connected Participants | Faster Payments" available at: https://www.fasterpayments.org.uk/directly-connected-participants
2 Open Banking, "Regulated Providers – Open Banking", available at: https://www.openbanking.org.uk/customers/regulated-providers/

3.2.1 Supporting Access through International Payments Standards

The international payments landscape is a complex ecosystem with multiple stakeholders meaning that it is likely to be a fast follower of domestic payments when it comes to infrastructure change and new service delivery. Industry initiatives, such as SWIFT's gpi service, are already improving the traceability of payments and reducing the cost of payment processing, through straight-through processing (STP). This also delivers faster payments over international networks. **Recent research shows that 91% of gpi cross-border payments are credited to the beneficiary's account within 24 hours and 35% are processed within 30 minutes**.[1] International payments are getting faster but the UK industry needs to continue to concentrate its efforts towards supporting truly frictionless and real-time international payments, and increase the uptake of services that deliver these improvements. Speed and access do not come without introducing risk and both infrastructure providers and financial institutions need to be cognisant of both national and international requirements around anti-money laundering (AML), counter terrorism financing (CTF) and other economic crime considerations.

For example, failure to meet AML liability requirements in the UK can result in regulatory fines and criminal prosecution. Requirements include risk-based customer due diligence and ongoing monitoring, with additional strict liability consequences flowing from any breach of financial sanctions. These requirements are backed by other national and international laws which could result in access providers, and potentially their staff, sanctioned for failures to identify and prevent criminal economic activities. Regulators, infrastructure providers and financial institutions must take these factors into consideration when developing access arrangements into payment networks and infrastructure. These requirements also impact the speed at which payments can be made. Research by SWIFT on their gpi service indicates that countries with high regulatory barriers and capital controls contribute significantly to the volume of cross-border payments that take longer than thirty minutes to complete.[2]

All parties must be encouraged to collaborate if payments networks are to remain safe, supportive of risk-based access criteria and to remain appropriately responsive to economic crime considerations. To support industry efforts to manage access in light of these risks, UK Finance worked with industry stakeholders to produce its Access to Payment Account Services guidance.[3] While this document provides good practice guidelines on how the market can gain access, and grant access, to vital payment networks, it is pertinent to highlight that it only tackles the symptoms of larger issues rather than offering a solution. Regulatory support would be required, to work with the industry and international communities, to investigate the causes of any access issues in the UK market as they are intrinsically linked with wider, international, economic crime considerations.

Prudential management risks

Risks also exist from the perspective of prudential management. **The UK's financial stability rests on the bedrock of strong regulators who actively engage with the industry to support innovation and manage risk, as well as the direct management of the provision of central bank money by the Bank of England**. The Bank of England's efforts to increase access to this vital enabler of safe, secure and resilient payment methods have already been mentioned; it is also pertinent to note that the industry expects the Bank of England to continue to enable access to firms in such a manner that ensures the appropriate management of risk to all participants in payments markets; balancing this access with appropriate prudential controls and oversight arrangements. We expect payment scheme managers, regulators and supervisors to continue to work together to identify appropriate controls for the industry; just as access to payment market infrastructure and networks raises the need to ensure effective management of prudential risk, so too additional risks of systematic resiliency and cyber-security considerations need to be managed.

Regulators are already responding to these developments. The industry recognises the Bank of England's work with other central banks to develop a roadmap[4] to improve cross-border payments in collaboration with the G20, the Financial Stability Board, the Committee on Payments and Market Infrastructures (CPMI) and other relevant international organisations and standard-setting bodies. The implementation of the SEPA network has delivered substantial benefits to the UK and European firms. Our work with the industry indicates that SEPA and other international payment mechanisms process payments of over €1 trillion a year between the EU and UK. Access to this network will likely remain a key conduit for trade between the UK and EU, even in a post-Brexit environment. While there may be future circumstances which justify the UK diverging from this network, for the foreseeable future, continued payments compliance with the functional equivalence criteria, and access to the SEPA networks, should be achieved by:

- Ensuring ongoing alignment with any changes to geographic scope criteria as well as changes in the important areas of the PSD and Anti-Money Laundering regulations.
- A bespoke framework which replicates the functional equivalence criteria which applies to transactions in Euro through the qualifying area defined in the UK's on-shored regime.

Enabler 8: Ensuring an Accessible and Competitive Infrastructure

Recommendation 19: SEPA access
UK Finance will work with government and regulatory stakeholders to ensure ongoing adherence to the SEPA geographical scope criteria to ensure the UK can maintain its participation in SEPA.

1 BIS, available at: https://www.bis.org/
2 SWIFT, available at: https://www.swift.com/swift-resource/249536/download
3 UK Finance, "Access to Payment Account Services" available at: https://www.ukfinance.org.uk/policy-and-guidance/reports-publications/access-to-payment-account-services
4 FSB, "Enhancing Cross-border Payments: Stage 3 roadmap" available at: https://www.fsb.org/2020/10/enhancing-cross-border-payments-stage-3-roadmap/

3.2.2 Interbank Payments Standards

The implementation of standards have traditionally been essential to enable infrastructure providers to ensure that the networks they operate function correctly. In recent years, the adoption of common standards by different infrastructure providers has been seen as a catalyst of competition and innovation. While, internationally, SWIFT and SEPA have provided different examples of how these common standards can be built, maintained and implemented; closer to home the collaboration of the Bank of England and Pay.UK in pioneering the implementation of the UK Common Credit Message (CCM) has clearly set out the future for interoperability in the UK.

Going forward, the payments infrastructure should be able to provide scalable integrations and interoperability for national and international payment systems. This is similar to the work of the SEPA network which enables a common payment method throughout the Euro area.

Utilising standards to deliver increased data

A common, data-rich ISO 20022 standard for the UK's interbank payments is a massive transformational opportunity for payments providers. The provision of increased data could support new services and innovations for the industry while delivering clear benefits to customers. For example, payments made using this standard could provide data that enables users to know the purpose of the payment, who made the payment, what they made it for and whether other parties were involved in the transaction. Data rich payments standards could also enable services provided through the Open Banking ecosystem to deliver additional information to benefit the customers in their payment initiation journey.

As the payment market infrastructure continues to adopt these common and data-rich standards, further benefits will be unlocked for participants. We expect that the migration of interbank payments standards will enable:

- **Greater levels of competition** in the provision of payment market infrastructure systems.
- **The use of common data models and rulebooks** in the provision of services, making overlay services interoperate alongside each other.
- **The delivery of new and innovative services utilising data rich standards** to the end-user, making their payments easier to make and understand.

Enabler 8: Ensuring an Accessible and Competitive Infrastructure

Recommendation 20: Interoperability and access
Payment market infrastructure providers to continue setting clear standards and utilising modern connectivity technology, such as the use of cloud services and APIs, in order to ensure that future developments align with interoperability principles, as well as meeting market requirements for resilience, safety and security.

3.2.3 Central Bank Digital Currency (CBDC)

Around the world, payment schemes, commercial players and central banks are investigating the potential benefits of launching digital currencies – or, in the case of central banks, central bank digital currencies (CBDCs). Recently the Bank of England published a discussion paper on the opportunities, challenges and potential design of a retail CBDC in the UK. The development of such an initiative could have a dramatic impact on the function of the current financial system. Conversely, it could also open up a number of benefits to the UK and enable a number of features that the current structure of central bank and commercial money and retail deposits does not allow.

Should the Bank of England introduce a CBDC, this could have fundamental implications not just for payment infrastructure providers and the financial industry, but also for the wider UK economy. Though the Bank of England's discussion paper focused mostly on a retail CBDC - which could be used by households and businesses to make payments - and appeared to be inspired from the potential of a CBDC to be used to answer wider considerations of access to cash; the industry is also interested in looking more closely at the benefits that a wholesale CBDC could deliver to the industry.

Whilst the Bank of England has not yet made a decision regarding a CBDC, the potential development of such an initiative could have a dramatic impact on the current function of the financial system. Consideration needs to be given to whether the policy objectives justifying introduction of a CBDC in the UK can be delivered by alternative, conventional, measures. For instance, the introduction of such a distinct monetary structure could result in a great degree of uncertainty in the market, and a thorough analysis of the risk of any implementation should be undertaken. The Bank of England is yet to publish the response to its discussion paper and the industry notes its interest in continuing a constructive dialogue with the Bank of England on any proposals, as well as ensuring that commercial parties are able to engage with, and deliver similar services to the UK market; subject to appropriate regulatory oversight.

Potential use cases for digital currencies

There are certainly a great number of potential use cases of a CBDC, or commercial digital currency. It could enable a more innovative, competitive and inclusive payment system by supporting future payments use cases such as: **programmable money** – enabling payments to be automatically made on completion of events or triggers (such as the delivery of a good service); **micropayments** – facilitating payments below the value of a pound or pence; **increasing the speed and availability of domestic payments; enabling cross-border payments; as well as allowing greater accessibility to financial services**.

Recommendation 21: Central Bank Digital Currency (CBDC)
Further collaboration with industry, Government, the Bank of England and other stakeholders on the possible use cases for Central Bank Digital Currency in payments including exploring what functionality it would deliver as well as how the build and run costs would be met.

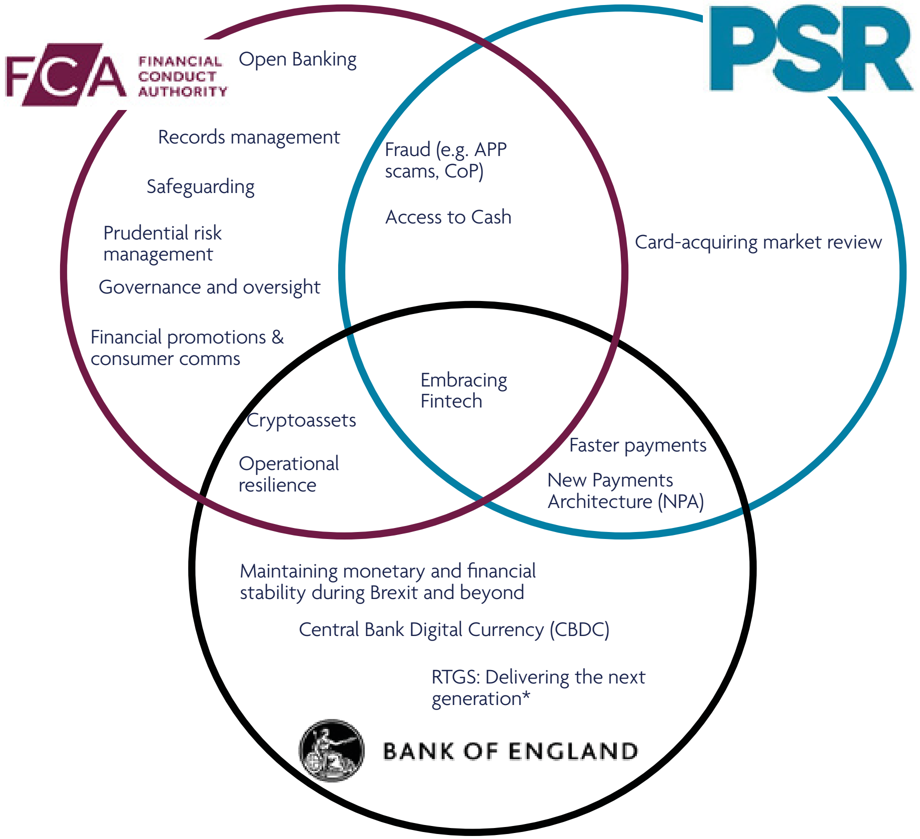
3.3 Effective Regulation

Payment industry regulation is complicated, with three main regulators (the Bank of England, the FCA and the PSR) and several other public bodies (including HMT, Financial Ombudsman Service, the Competition & Markets Authority and the Information Commissioner's Office) able to intervene.

The 2018 Memorandum of Understanding[1] between the Bank of England (including the PRA), the FCA and the PSR goes some way towards setting out how these bodies will cooperate with one another in relation to payment systems in the UK. Their priorities are nonetheless an overlapping patchwork, as set out in the diagram below.

The 2020 launch of the Financial Services Regulatory Initiatives Forum and subsequent publication of the Regulatory Initiatives Grid[2] has helped to increase coordination, visibility and understanding of the different initiatives across various regulators. Regulatory coordination is sometimes effective. For example, on competition matters, the FCA, CMA, and the PSR coordinate well.

Too often, however, this complexity leaves questions unanswered, for example on which regulator should take the leadership in the response to concerns around access to cash, with the Bank of England, the PSR and the FCA all working on this single issue.[3] The need for many firms to meet regulatory requirements across multiple jurisdictions adds an additional layer of complexity.



* RTGS responsibilities relate to the Bank of England's role in running payments infrastructure rather than regulating it. The activities of the PRA are included, where relevant.

1 Bank of England "Payment systems memorandum of understanding" available at: https://www.bankofengland.co.uk/news/2018/july/payment-systems-memorandum-of-understanding
2 FCA, "Regulatory Initiatives Grid" available at: https://www.fca.org.uk/publications/corporate-documents/regulatory-initiatives-grid
3 As noted in the Public Accounts Committee's November 2020 report on "The production and distribution of cash" - UK Parliament, available at: https://committees.parliament.uk/publications/3833/documents/38384/default/

Moving payments regulation forward

Our core recommendations on regulation are offered in a context in which work is already underway to consider the future regulatory framework for financial services. HMT has already received responses to its call for evidence on its Payments Landscape Review[1] and is consulting on Phase II of its Future Regulatory Framework Review[2] (which will close on 19 February 2021). We also recognise the importance of the PSR's formal consultation on its strategy in early 2021.

In its 2012 document, Setting the Strategy for UK Payments[3], the Treasury set out its priorities for the industry as follows:

- Developing UK payments networks that operate for the benefit of end users, including consumers.
- A UK payments industry that promotes and develops new and existing payments networks.
- Developing UK payments networks that facilitate competition by permitting open access to participants or potential participants on reasonable commercial terms.
- UK payment systems that are stable, reliable, and efficient.

These principles were first set out in the FPC's Financial Policy Summary and Record in October 2019[4]:

1. Regulation should reflect the financial stability risk, rather than the legal form, of payments activities – or, said another way, "**the same level of risk should attract the same level of regulation"**.
2. Payments **regulation should ensure end-to-end operational and financial resilience across payment chains** that are critical for the smooth functioning of the economy.
3. Sufficient information must be available to **monitor payments activities so that emerging risks to financial stability can be identified and addressed** appropriately.

Recognising these interventions, the payments industry believes that more needs to be done to move payments regulation forward and foster the innovation and competition which could make the UK system world-leading by 2030.

Enabler 9: Effective Regulation

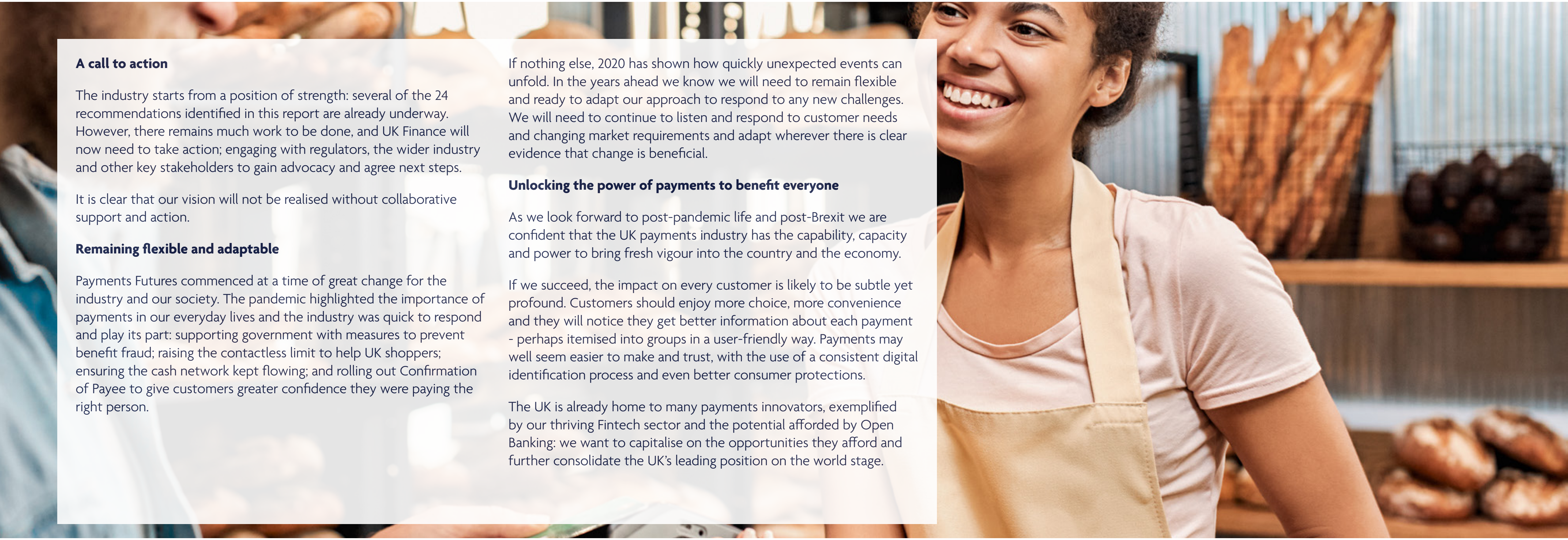
Recommendation 22: Co-ordination
The Regulatory Initiatives Forum should continue to develop the Regulatory Initiatives Grid (RIG) to provide the industry with a pipeline of planned interventions. It should reduce regulatory overlap and clarify the respective roles of each regulatory body, including which takes the lead where shared responsibility for initiatives continues. To promote alignment with industry initiatives, it is important that the Government and regulators clarify and confirm what they want from the payments industry through HMT's Payments Landscape Review and Future Regulatory Framework (FRF) Review, as well as the PSR's strategy.

Recommendation 23: Coherence
The Government should extend to payments regulators its FRF Review proposals for a clear allocation of responsibilities between Parliament, HMT and regulators, with the latter subject to enhanced transparency, scrutiny and accountability. We believe this model will make the most of independent regulators' expertise and flexibility in setting regulatory standards while at the same time ensuring they take full account of broader public policy issues and priorities when designing those standards.

Recommendation 24: Consistency
A coherent, future-proofed framework should subject the same activities and risks to the same regulation - with the same consumer protection - irrespective of the nature and legal status of the service provider.

1 GOV.UK, "Payments Landscape Review: Call for Evidence" available at: https://www.gov.uk/government/consultations/payments-landscape-review-call-for-evidence
2 GOV.UK, "Future Regulatory Framework (FRF) Review: Consultation" available at: https://www.gov.uk/government/consultations/future-regulatory-framework-frf-review-consultation
3 GOV.UK, "Assets Publishing Service" available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/81567/setting_strategy_uk_payments190712.pdf
4 FPC's Financial Policy Summary and Record, October 2019 available at: https://www.bankofengland.co.uk/-/media/boe/files/financial-policy-summary-and-record/2019/october-2019.pdf?la=en&hash=5AC2F4CC658151FCFA3B4BA438CDAA37D5996310

4. Conclusion



A call to action

The industry starts from a position of strength: several of the 24 recommendations identified in this report are already underway. However, there remains much work to be done, and UK Finance will now need to take action; engaging with regulators, the wider industry and other key stakeholders to gain advocacy and agree next steps.

It is clear that our vision will not be realised without collaborative support and action.

Remaining flexible and adaptable

Payments Futures commenced at a time of great change for the industry and our society. The pandemic highlighted the importance of payments in our everyday lives and the industry was quick to respond and play its part: supporting government with measures to prevent benefit fraud; raising the contactless limit to help UK shoppers; ensuring the cash network kept flowing; and rolling out Confirmation of Payee to give customers greater confidence they were paying the right person.

If nothing else, 2020 has shown how quickly unexpected events can unfold. In the years ahead we know we will need to remain flexible and ready to adapt our approach to respond to any new challenges. We will need to continue to listen and respond to customer needs and changing market requirements and adapt wherever there is clear evidence that change is beneficial.

Unlocking the power of payments to benefit everyone

As we look forward to post-pandemic life and post-Brexit we are confident that the UK payments industry has the capability, capacity and power to bring fresh vigour into the country and the economy.

If we succeed, the impact on every customer is likely to be subtle yet profound. Customers should enjoy more choice, more convenience and they will notice they get better information about each payment - perhaps itemised into groups in a user-friendly way. Payments may well seem easier to make and trust, with the use of a consistent digital identification process and even better consumer protections.

The UK is already home to many payments innovators, exemplified by our thriving Fintech sector and the potential afforded by Open Banking: we want to capitalise on the opportunities they afford and further consolidate the UK’s leading position on the world stage.

	2020	2030
Deliver customer benefits	Digital payments well- established in UK and ground breaking potential of Open Banking starting to be felt	Customers enjoying even wider access to digital payments with improved functionality, security, speed, convenience, control, clearer choices and less friction. Open Banking supporting yet more services and providers – enabling digital alternatives to existing payment methods.
	Wide range of **consumer protections** in place across different payment types	Opportunities exploited to enhance or harmonise consumer protection across payment types built on fair and sustainable business models. Customers aware of their protections.
	Competition and innovation giving UK customers more **choice** than ever before - but some customers unable to benefit	Choice is maintained and increased. Any barriers removed. Customers understand their choices and able to choose the way to pay that best suits their needs. Any costs are transparent, fair and equitable.
Deliver further innovation	Ongoing investment by industry yielding **steady stream of collaborative innovations** to benefit UK customers e.g. Confirmation of Payee, Open Banking and contactless	Full potential of existing innovations - such as Open Banking, open finance and confirmation of payee - are realised. Technological and infrastructure innovation giving customers more information about every payment whilst data sharing and analytics helping to tackle economic crime. Any new opportunities for collaborative innovation explored with regulators to ensure best outcomes.
	Digital ID solutions in place but vary widely across sectors and services creating unnecessary friction in customers' digital lives	An interoperable digital ID solution in place across sectors - simplifying and standardising the authentication process for customers whilst increasing safety, adopting new authentication methods (such as biometrics) and building trust in the digital world.

	2020	2030
Support competition	**Fintechs, Open Banking and technological advances** are invigorating competition and innovation in the UK opportunities in the domestic and global market	Easy-to -access, smart, cost-effective, economically sustainable yet resilient and reliable infrastructure providing optimum conditions for new and existing providers to plug and play and to develop new services running over effective payment market infrastructure. Consolidate UK's position as a global centre for payments innovation and expertise.
	Payment messaging standards and APIs in play across ecosystem but opportunities exist for greater alignment	Unified approach to deployment of common standards across ecosystem. Adoption of ISO 20022 and APIs standardisation yielding multiple benefits and promoting competition by lowering barriers to entry. Harmonisation, where appropriate, with global standards.
	Strong UK regulators operating in complex regulatory landscape	Greater coordination, consistency and coherency of approach between regulators delivering visible and well-understood pipeline of regulatory requirements. Supporting competition and delivering best outcomes for customers.

Next steps - setting clear priorities

UK Finance has published this Future of Payments report on behalf of the industry and we expect that this report will help to shape our policy and advocacy work for the next decade as we continue to share these proposals more widely amongst UK Finance's membership, the wider market and with regulators and Government.

As an immediate next step, UK Finance will work with members, regulators and Government to prioritise the recommendations for the year ahead and agree responsibilities, resources and timelines and reporting mechanisms. We expect to be able to communicate to the industry how we propose to take forward these recommendations, including any priority actions, in early 2021.

Any firm wishing to get involved with this work can contact **futurereadypayments@ukfinance.org.uk**

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1 Regulatory bodies attended in observer capacity and in their roles as industry stake-holders.
2 In discussions relating the RTGS and CHAPS services, the Bank's contributions at the meetings were in its operational capacity as operator of these services rather than in any supervisory capacity.

Appendices

5.1 Report Background

5.1.1 How this report was compiled

To create this report, UK Finance established the Payments Futures initiative, bringing together more than 100 payments practitioners from over 40 organisations, overseen by a Steering Group chaired by Marion King of NatWest and with the support of PwC. Our work identified three key objectives to:

- Define the long-term vision for the payments industry to ensure that it continues to provide a diverse range of payment services.
- Identify industry challenges and enable engagement with regulators for collaborative and co-ordinated response.
- Make tangible recommendations to the industry based on our extensive and comprehensive engagement with firms across industry.

5.1.2 Working Group structure

Under the Payments Futures Steering Committee, three Working Groups chaired by key market experts were formed. These groups consisted of representatives from the main UK high-street banks, mid-tier banks and new banks, digital and fintech players, payment services providers, schemes and technology companies. All observed by a number of regulators. The groups were organised as follows:

- **Digital Payments Working Group** chaired by Conor Langford at Visa, which considered how consumers, business and all payment users could easily access and confidently use digital payments in the future.
- **Consumer Protections Working Group** chaired jointly by Matthew Hunt at Pay.UK and Rebecca Clements at UK Finance. This group mapped all current consumer protections considerations on how the payments industry, including participants, operators, and regulators, can work together to ensure appropriate consumer protection for payments.
- **Payments Infrastructure Working Group** chaired by Vikesh Patel at SWIFT, which assessed the opportunities from the transformation of payment market infrastructure in the UK and beyond, including the economics of the payments systems to enable future innovation and enhance the customer experience.

5.2 A note on terminology

The payments ecosystem is a diverse and competitive market that subsumes many smaller markets and payments methods, including the retail interbank networks, wholesale payment systems, e-money provision, the cards ecosystem and the infrastructure that supports the use of notes, coins and cheques. References to the **payments ecosystem** or **payments infrastructure** should be understood to describe this wide-ranging ecosystem, rather than any specific sub-sector or singular market infrastructure, unless otherwise noted.

In this report, when we refer to the **payment's infrastructure**, we refer to the following:

- The **RTGS service** and **CHAPS system** operated by the **Bank of England**, which provide, respectively, the mechanisms by which firms are able to access central bank money at the Bank of England and provide the means by which consumers and businesses can make high value payments and time-sensitive payments via the RTGS system. The RTGS platform is currently undergoing renewal by the Bank of England.
- The retail schemes operated by **Pay.UK** – including **Bacs**, **Faster Payments, Image Clearing System (ICS)** and their accessory services (including **Confirmation of Payee, CASS** and others). Pay.UK are in the process of developing the **New Payments Architecture** to enable the retail schemes to meet future requirements.
- The international payments infrastructure which connects the UK to the EU and the rest of the world. Various networks and infrastructure support this; including, **SWIFT** networks, the **SEPA** network and other European payments ecosystems such as **TIPS**.
- The **card ecosystem**, as made up of **card schemes**, **issuers, acquirers,** and including the various technical devices (**POS devices, cards, digital wallets etc.**) that enable payments.
- Infrastructure supporting the connectivity of **Account Servicing Payment Service Providers (ASPSPs)** and **Third Party Providers (TPPs)** under the requirements of **PSD2** and the wider **Open Banking ecosystem**.

Similarly, the payments systems are used by a wide variety of institutions and individuals within the UK, from government, individuals, businesses small and large – and payment providers even procure services from one another in order to facilitate payment use cases. This stakeholder landscape is problematic to navigate clearly; for the sake of this report, where we refer to **consumers** we intend to communicate the use of payment services by individuals, where we refer to **customers or payment users** this includes consumers, businesses, government and any other category which may use payment services for a fee or under licence. Finally, in reference to **providers or suppliers of payment services**, the reader should understand that this covers the function of companies engaged with the offering of payment services under fee or licence to their customers; notwithstanding the fact that these institutions may also be customers or clients of other payment service providers.

There are occasions when it is necessary to distinguish between the entity making a payment and one receiving a payment. In this context, we use the term payer to indicate the person or entity making a payment and the term payee to indicate the person or entity receiving the payment.

Digital payment definitions can vary. For the purposes of this report, digital payments refer broadly to any payment made over the internet, mobile or by phone. We also include payments involving a card, contactless card or other card payment devices. While other channels may exist, and numerous payment channels may have digital and physical aspects to their completion, we believe this perspective covers the majority of use cases for the purposes of our work.

Finally, payments are not only put to legitimate uses; attempts to make illegitimate payments come from many sources. **Fraud, money laundering, bribery and corruption, terrorism financing and economic sanctions** are all, among other causes, reasons why payments should not be permitted. Where we refer to **economic crime** considerations, we are referring to the use of payments for illegitimate purposes, whatever their source. Our report also considers items related to specific areas enumerated above and, where necessary, we are specific as to the area we are commenting on.

Future Ready Payments 2030 draws on a variety of sources. Unless otherwise noted, data is drawn from the various reports that are published by UK Finance, and the underlying data that supports these reports. This data comes from the clearing and card payment statistics provided by UK Finance members and their National Payments Study (NPS). The NPS is an ongoing quantitative survey which provides a wealth of information about personal financial holdings, payments and cash acquisition. The NPS has been undertaken since the late 1980s. Further market research and stakeholder liaison undertaken by UK Finance are also valuable inputs.

Payments are closely linked to society and the economy. This report has also therefore relied on a wide range of data from third parties; references to publicly available sources have been provided where possible. On occasion, our partners in producing this report have made available to us additional, unpublished, information. Where this is the case, we have noted the source.

5.3 Data sources and overview of methodology

The industry statistics and insight referred to are supplemented with information and forecasts from the Bank of England, the Office for National Statistics, HM Treasury, the Office for Budget Responsibility and other organisations.

UK Finance data separates payments into two categories; those made by **individuals or consumers** and those made by **businesses**. Individual payments are analysed by the purpose for which they are made, and by distinctions in use of payment methods by select demographic groups. Consumer payment forecasts are given by each payment method.

Business payments are analysed by their two markets. These are payments to individuals and payments to other businesses. The definition of a business used is broad and includes the public, private and non-profit sectors unless otherwise stated. UK Finance forecasts are given by each payment method.

For further information on the work of our data and research publications, please contact ukfstatistics@ukfinance.org.uk

In addition, please note the following publications referenced in our Report:

Lloyds Bank; UK Consumer Digital Index 2020 – https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/lb-consumer-digital-index-2020-report.pdf

Access to Cash Review; Final Report – https://www.accesstocash.org.uk/media/1087/final-report-final-web.pdf

Pay.UK; Exploring Perceptions of Consumer Protections in Payments - https://www.wearepay.uk/wp-content/uploads/20201211-ConsumerProtection_PrimaryResearchPaper.pdf

Pay.UK; Consumer Protections in Payments summary paper; https://www.wearepay.uk/wp-content/uploads/Consumer-Protection-Summary-Paper.pdf

Lloyds Bank; UK Charity Digital Index 2019 – https://resources.lloydsbank.com/businessdigitalindex/

Ofcom; Connected Nations 2019: UK Report - https://www.ofcom.org.uk/__data/assets/pdf_file/0023/186413/Connected-Nations-2019-UK-final.pdf

5.4 International outlook (digital payments)

This section provides information on research undertaken by the Digital Working Group when comparing the provision of payments in the UK to other national markets. We looked at nine markets and eleven global payments initiatives; key learnings have been incorporated throughout the Report. The changing technology landscape, regulatory adjustments and the impact of Covid-19 have all illustrated the imperative to build an even more robust, resilient and innovative payments infrastructure to support consumer and business-led digital payments initiatives.

5.2.1 Research Conclusions

Our international comparisons led us to conclude that:

- Real-time domestic and cross-border payments could support all payment methods and enable initiation through a variety of means, such as QR codes, mobile phone numbers, and email – this can be delivered by a competitive and innovative market.
- The near ubiquity, and growth, of the UK's Open Banking ecosystem should be leveraged to offer intuitive consumer-led products, ranging from digital identity to providing businesses with enhanced account management functionality and payment services.
- A universal payment method using, for instance, a Payment Initiation Service Provider (PISP) or other standardised service, could accelerate the adoption of consumer digital payments in the UK.

5.2.2 International Examples

Innovation (Brazil): Banco Central is offering everyone a sandbox to develop and embed more services and products around the PIX ecosystem – including IoT, artificial intelligence and other technology mechanisms. Merchant and consumer adoption figures would provide a good benchmarking and learning process.

Regulation (P27, Nordics): P27 is an initiative to set up a pan-Nordic payment market infrastructure for Denmark, Sweden, Norway, and Finland.

Account-to-account payments (Netherlands): iDEAL is an e-commerce payments provider integrated with most Dutch banks including ING Bank and ABN AMRO. It is immediately recognisable and carries a credibility that provides consumers with confidence and reassurance when using their 'account-to-account' payment service. A universal payment method using PISP, with similar trust and credibility connotations, could accelerate the adoption of PISP in the UK. iDEAL is not yet available in the UK and is not currently integrated with UK-based banks.

Alternate digital payments (China, India and Netherlands): QR code payments and micro financing can enhance the consumer experience. For example:

1. AliPay is one of the largest e-wallet services in Asia used in-store, online and for international money transfers. Tourist and business travellers are able to sign up for a 90-day pass to use the service. QR codes are used for desktop and in-store payments. Alipay has collaborated with Barclaycard in the UK, delivering it to UK retailers.
2. In China, WePay is a digital wallet service incorporated into WeChat (similar to WhatsApp), which allows users to make mobile payments and send money between contacts. QR codes are used for face-to-face retail payments. Chinese users can also use WeChat Pay in 25 countries outside China, including Italy, South Africa and the UK. Social media payments can enable similar use cases in the UK.
3. QR codes have been successfully adopted in India and some other Asian markets as a 'minimal infrastructure' way of enabling digital payments. The UK already has high numbers of POS terminals so the role for QR codes is less clear, but in 2020, under Covid-19 conditions, formerly cash-only merchants needed a 'quick fix,' and solutions such as PayPal and QR codes proved popular.

Open Banking (India): Aspects of India's Unified Payment Interface (UPI) could be further explored to review whether lessons could be learned for incorporation into the UK's Open Banking initiative.

Mobile phone numbers or emails (USA, Sweden, Kenya): Mobile phone numbers or emails are used to access an individual's bank account, for a quick and simple replacement for cheques – an option that is particularly useful in Covid-19 conditions. For example, Zelle is a P2P payments solution in the USA which uses mobile numbers and emails as tokenised means of accessing a consumer's bank account to send and receive funds. In the UK, Paym could be channelled to achieve similar benefits.

5.4 International outlook (consumer protection on interbank payments)

Different countries have approached the uptake and management of real-time interbank payments in different ways. In Asia, countries leading the adoption of real-time payments have encouraged uptake by creating innovative use cases to increase acceptance. In contrast, in the UK, Australia, and Europe the roll-out of real-time payments has been encouraged centrally, with involved regulatory entities taking a structured, collaborative approach.[1]

The three examples below highlight three territories currently using real-time payments for C2B transactions and how their adoption has been managed:

The Netherlands has one of the most advanced use-cases of real-time payments for C2B transactions – the e-commerce payment system, iDEAL.

Unlike in the UK, credit card transactions in the Netherlands are comparatively low, due to a cultural emphasis on saving and a resistance to debt.

As in the UK, C2B real-time payments in the Netherlands have no built-in consumer protections for disputes. This is significant as the Dutch market for C2B real-time payments is much more developed than the UK.

Singapore's retail payments landscape is predominately split between cheques, eGIRO, card payments, and real-time payments, made through the country's Fast and Secure Transfers (FAST) Service.

As in the UK, real-time payments were originally rolled out in Singapore as a peer-to-peer transfer system, and in Singapore it was with the intention of moving the country away from cash and cheque payments. Also, as in both the UK and the Netherlands, Singaporean C2B real-time payments do not have any built-in consumer protections for disputes at present.

Australia's payments landscape is similar to the UK; most transactions are made by debit cards, followed by credit cards, cash, and bank transfers.[2]

Australia's real-time payments scheme, the New Payments Platform (NPP) was launched in February 2018. Like Singapore, Australia makes use of proxies and aliases for real-time payments. Consumer payment protections in Australia are similar to those available in the UK, and though there are no built-in dispute protections for real-time C2B payments, real-time payments are covered by consumer retail protection law.

With regards to C2B consumer dispute protections there are a number of key considerations in the above comparisons for the UK:

- Both the Netherlands (strong uptake of real-time C2B payments) and Singapore (growing real-time C2B payments) have a lower proportion of credit card usage than the UK – it is therefore arguable that consumers in these territories have less expectation of built-in consumer payment protections, and that legal and retailer protections are the first port of call
- Like the UK, Australia has a higher proportion of credit card usage than Singapore and the Netherlands, and consumers are arguably more accustomed to chargeback protection
- Australia is similar to the UK in that trust is considered an important driver in the uptake of Open Banking and real-time consumer-to-business payments. In the Netherlands and Singapore, low cost and ease of payment are the main drivers respectively
- However, as in the UK, research on the Australian market has highlighted that association with a well-known and trusted brand may be a stronger way of building consumer trust than implementing payment protections. It will therefore be worth monitoring how Australian PISPs build trust going forward, and the impact this may have on the consumer protections available in real-time payments

Given the similarities between the stages of uptake, and lack of consumer protection for disputes, specifically around real-time C2B payments in the UK and these international markets, continued research and focus on Australia, the Netherlands and Singapore could prove to be beneficial for the UK. Continued market tracking could help trace factors that act as accelerators and barriers to the take up of real-time C2B payments, and the consequent approach to consumer protection.

1 FIS Global, "Flavors of Fast Report" available at: http://empower1.fisglobal.com/rs/650-KGE-239/images/FLAVOR-OF-FAST-Report-2018.pdf
2 JP Morgan, "E-commerce Payments Trends: Australia" (2019) available at: https://www.jpmorgan.com/merchant-services/insights/reports/australia

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