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Thematic Review

TR14/15

Mobile banking and payments

September 2014



Contents

1	Executive summary	2
	Introduction	2
	High level findings	3
	Who should read this paper?	3
	Next steps	3
2	The mobile banking market	4
	Mobile banking products and services	4
	Market developments	4
3	Regulatory environment for mobile banking	6
	The Financial Conduct Authority	6
	The Payment Systems Regulator	7
	European developments	8
4	Our approach	9
	Scope of the thematic review	9
	Methodology	9
5	Key findings	10
	Consumers' understanding of their rights and responsibilities	10
	Senior management	11
	Security and technology resilience	11
	Third party oversight	12
	New payment firms	13
6	Next steps	14

1.

Executive summary

Introduction

The way people do everyday banking and make payments is changing. The retail banking sector, alongside firms that fall outside of financial regulation, has delivered innovation by enabling everyday banking and payments to be made through mobile devices.

It is clear that mobile banking is growing in popularity. Research published by the British Bankers Association (BBA)¹ reveals consumers of the UK's largest retail banks made more than 18 million mobile transactions per week in 2013 – twice as many as in the previous year. It is predicted that take up of mobile banking will continue to rise.

There are some real advantages to mobile banking. These services offer consumers a convenient way to bank flexibly, save time and even money by enabling them to better manage their finances. We are keen to support innovation that benefits consumers.

The purpose of our thematic review is to determine how firms are achieving good outcomes for consumers when delivering mobile banking products. As a forward-looking regulator, our aim is to take a relatively early view on developments.

Following initial work to understand mobile banking and payments, we published an interim report in August 2013 setting out the areas where we believed firms should focus their attention.² We then conducted an assessment of a sample of firms offering banking and payment services through this channel. As well as regulated firms such as banks, building societies and payment institutions, we also engaged with a range of other participants in the industry, e.g. technology providers, mobile network operators and other firms that may not be regulated by us.

This report summarises our findings from the thematic review.

We encourage firms to consider the areas identified within this report, how they apply to their business and how they can ensure their mobile banking products and services are working well for consumers.

¹ Banking on the move, BBA, April 2014

² TR13/6, Mobile banking and payments – supporting an innovative and secure market, FSA, August 2013, www.fca.org.uk/static/documents/thematic-reviews/tr13-06.pdf

High level findings

We identified the following areas which are relevant to whether firms are delivering good outcomes for their consumers.

1. How easy it is for consumers to understand their legal rights and obligations when using mobile banking products and services, and what firms are doing to aid consumer education.
2. How firms ensure that the knowledge and understanding of key decision makers in the business is in line with the pace of innovation.
3. How firms ensure consumers' sensitive personal data and funds are secure, and technology is sufficiently robust to cope with changes in consumer behaviour when making payments.
4. How firms providing mobile banking products and services retain oversight of third parties and outsourced functions involved in the delivery of their product offering to consumers.
5. How new entrants to the mobile payments arena ensure they have adequate knowledge and understanding of the regulatory framework surrounding payments.

Other areas of focus highlighted in the interim report, such as fraud against firms and anti-money laundering, have not been prioritised in this report. We are satisfied that firms are addressing these areas and encourage firms to continue to do so as the products and services develop in popularity and complexity. We did not find any evidence of crystallised consumer harm.

Who should read this paper?

This paper will interest firms operating, or considering operating, in the mobile banking and payments market, whether regulated by us or providing unregulated products and services. It may also interest consumer groups and consumers that use mobile banking.

Next steps

We will be working with the industry to ensure firms have a clear understanding of the key areas identified in this report. Our findings will also support our other work, such as Project Innovate, which is designed to help businesses bring innovative ideas that benefit consumers to financial services markets, and work on digital transformation where we are considering our regulatory approach to technological developments. In addition, we will continue to work closely with the new Payment Systems Regulator and at an EU level on developments that have an impact on mobile banking and payments.

2. The mobile banking market

Mobile banking products and services

Mobile banking and payments covers a range of products and services. Both the market and the services offered are still evolving.

Mobile payment services enable consumers to make payments to an individual or firm using a mobile phone, tablet computer or other handheld device. There are different methods of making mobile payments, for example by storing credit or debit cards in a mobile wallet or making payments to businesses or individuals from within a mobile banking application (app). Consumers can also use contactless technology built into the mobile device (hardware), SIM card or mobile software to 'tap and pay' at merchant terminals.

Mobile banking is a broader term that encompasses mobile payments (described above), in addition to information services such as checking balances and viewing statements. There are a range of options for accessing mobile banking, such as accessing banks' internet banking (mobile optimised) webpages using a browser or using a bespoke banking app for a mobile phone or tablet.

Throughout this paper we use the broader term of 'mobile banking' to encompass all of the products and services above.

Market developments

In our 2014 Risk Outlook, we noted that technological developments are affecting the way consumers engage with financial services and how products and services are distributed.³ The UK's retail banking sector is undergoing significant business model transformation as a result of advances in technology. Traditional banking and payment channels have evolved to include digital distribution channels. The drive to a more digital approach is delivering cost and convenience benefits for both consumers and firms.

The mobile channel has had an increasing prominence in the digital strategies of retail banking firms, with the majority of firms now spending more than 5% of their IT budget on mobile development.⁴ At the top end of the spectrum, one firm has recently announced that it will be investing £1 billion on mobile and digital developments within the next three years. Many firms state that the rapid pace of change is being driven by consumer demand. We estimate that around 25% of current account holders (the equivalent of 42% of smartphone owners) are active users of mobile banking and this number is increasing.

³ FCA Risk Outlook 2014, www.fca.org.uk/static/documents/corporate/risk-outlook-2014.pdf

⁴ Mobile Banking – Testing times for apps development – survey report, Finextra and CSC, February 2014

Mobile banking consumers engage with banking services in a different way to consumers that bank using other channels. On average, mobile banking consumers interact with their bank more frequently - up to three times more than consumers that bank online and 20 times more than those that bank via their branch.⁵ But these interactions tend to be for short periods of time, also known as 'snacking', and for simpler tasks such as checking balances and paying bills. Consumer interaction appears to be driven both by the functionality available through mobile banking services and by consumer demand.

In addition to increasing consumer engagement, the mobile channel, and digital more widely, enables retail banks to reduce costs. According to a US study of transaction costs, handling a transaction at a branch can cost 50 times more than handling the same transaction on a mobile phone, or 20 times the cost of doing so online.⁶

The press has linked recent branch closures to the rapid growth of mobile and digital channels, which has resulted in a reduced footfall of consumers using bank branches to do their banking. Our work suggests that in the UK there has been an 18% net reduction in the total number of bank branches in the 10 years to 2013. This has led some industry analysts to speculate that a reduced branch network will be reserved for personalised services such as mortgage advice, while digital channels will become the norm for routine transactions.

According to Ofcom's technology tracker, 65% of UK adults use smartphones, 44% of households have a tablet computer and 82% have access to the internet at home via a broadband connection or their mobile handset.⁷ There is the potential for those consumers that do not have access to mobile or online banking to find themselves financially excluded as everyday banking and payments facilities are moved onto digital channels.

The breadth of consumer information available to firms provides an opportunity to make targeted offers based on consumers' profiles. We have also seen firms starting to use the mobile channel to distribute simple financial products such as insurance products and personal loans. The range of products and services accessed through the mobile channel is likely to continue to expand. There are likely to be benefits from a convenience perspective, but there will also be challenges as firms offer more complex products and services through the mobile channel.

⁵ Deutsche Bank, The Future of Banking, 2013

⁶ Diebold, 2010

⁷ Technology Tracker Q1 2014, Ofcom, April 2014

3.

Regulatory environment for mobile banking

The Financial Conduct Authority

We regulate part, but not all, of the mobile banking market in the UK. Figure 1 provides an overview of the different participants within mobile banking. Many products and firms that fall outside of our regulatory scope have a significant impact on the market and subsequently our objective to ensure financial markets work well. So although our work is primarily aimed at regulated firms offering mobile banking products and services, all firms active in the market should, in our view, consider how mobile banking can work better for the benefit of consumers.

Figure 1: The mobile banking market

Consumer

End-consumer that uses mobile banking products and services of consumer-facing firms.

Consumer-facing firms

These firms deliver mobile banking products and services directly to the consumer. These can be made up of:

- FCA-regulated firms, for example banks and building societies authorised under the Financial Services and Markets Act 2000 (FSMA), Authorised Payment Institutions and E-Money Institutions
- firms not regulated by the FCA, such as firms offering unregulated (or exempt) mobile banking products to customers
- firms authorised in the European Economic Area (EEA) and passporting into the UK

Intermediaries

Intermediaries provide services to consumer-facing firms to facilitate their mobile banking products and services. This can include technology providers, firms supporting payment schemes, payment systems and card schemes.

In our 2012/13 Risk Outlook we identified that innovation in banking and payment technologies had the potential to have an impact on our objectives. This led to a commitment in our 2013/14 Business Plan to carry out a thematic review. There was no evidence of crystallised harm to consumers or market integrity, but we knew these innovations were likely to be transformational for retail banks and consumers. As the pace and scope of innovation increased in the future, it had the potential to cause risks to our objectives as well as benefits to consumers. We wanted to encourage firms to address these potential risks early, in line with our approach to be a forward-looking regulator.

We have an operational objective to promote effective competition in the interests of consumers in the markets for regulated financial services. More effective competition can lead to many things, including wider choice, and can encourage improved services and better outcomes for consumers. There is a general recognition of the need to make retail banking more competitive.⁸ We recognise that innovation in financial services, including the development of the mobile channel, can promote effective competition. We have seen the emergence of new participants in the payments area, such as mobile network operators and technology providers. We want to see a positive and competitive environment that benefits consumers.

We have other work that touches on mobile banking and payments. In May this year we announced a new initiative, Project Innovate,⁹ which will help both start-ups and established businesses bring innovative ideas to financial services markets, where these are in the interest of consumers. Our recent Call for Inputs¹⁰ on our proposals to achieve this objective has now closed and we will publish further information in due course. There is also ongoing work around technological developments and business model transformation.¹¹ We want to ensure that positive innovative developments in financial services are understood and supported by the regulatory environment.

The Payment Systems Regulator

Where money is transferred between individuals and businesses, including through some mobile banking propositions, these transfers are made through payment systems. Firms bringing innovative mobile banking products and services to the market may require access to these payment systems.

On 1 April 2014 we established a new regulator, the Payment Systems Regulator (PSR), to oversee UK payment systems. The PSR's objectives are to promote competition, innovation and the interests of end-users. The PSR will consider concerns around access to the UK payment systems, the industry's pace of innovation and the governance of UK payment systems.

In March 2014 we launched a Call for Inputs.¹² This invited stakeholders to provide their views on the current UK payment systems landscape to help inform us in setting up the new regulator. Since its formation, the PSR has held a series of stakeholder workshops to explore issues raised in the Call for Inputs and has commissioned research on areas of concern. Of particular relevance to mobile banking and payments are the areas of innovation and access to payment systems.

⁸ Speech by Clive Adamson, FCA Director of Supervision 'The FCA and the future of retail banking', November 2013, www.fca.org.uk/news/the-fca-and-the-future-of-retail-banking

⁹ www.fca.org.uk/news/making-innovation-work

¹⁰ www.fca.org.uk/about/what/promoting-competition/project-innovate

¹¹ FCA Risk Outlook 2014

¹² www.fca.org.uk/your-fca/documents/payment-systems-regulation-call-for-inputs

We have been working closely with the PSR to ensure a consistent and joined up approach. The PSR will use insight gained from the Call for Inputs, stakeholder engagement and research to form its policy proposals, due for consultation in autumn 2014. The PSR will be fully operational by April 2015.

The PSR also launched a joint study with Ofcom in spring 2014, looking into innovation and UK payments, including mobile payments. The report on their findings is scheduled to be published in the autumn.

European developments

Our review was conducted in the context of a number of developments in Europe that will have an impact on payments, including payments made via mobile, such as the proposed Payment Services Directive II and security recommendations coming from the SecuRe Pay forum.¹³ The European Banking Authority is also doing work on risks arising from the innovative payment methods that have emerged in the market in recent years. We are fully engaged in these discussions and will continue to apply knowledge gained from our thematic work in this area to inform the UK's stance and influence discussions.

¹³ The SecuRe Pay forum forms part of the European Central Bank and has produced draft recommendations for increasing the security of mobile payments.

4.

Our approach

Scope of the thematic review

All of the mobile banking and payment services detailed in chapter two were included in our thematic work. The thematic project did not focus on contactless card payments or online banking other than those online services accessed through mobile optimised browsers. It also did not cover other products and services distributed through the mobile channel, such as personal loans.

Methodology

Our thematic review first mapped the different ways in which consumers may carry out mobile banking and payments on their smartphones or tablets, the challenges that these services could present to consumers and the market, and how firms are addressing these challenges.

We held initial discussions with firms, which informed our interim report published in August 2013. This report set out areas of potential risk to consumers and the wider mobile banking market. At that time, we identified that firms should pay particular attention to fraud and anti-money laundering controls, security, use of third parties, technology resilience and consumers' awareness and understanding of how to use the products and services provided, their rights and responsibilities.

We then conducted further thematic work on these areas to inform this, our final report. We included firms with a range of business models, at different stages of their mobile banking development and offering different mobile banking products and services.

The review was made up of two strands.

Firstly, we conducted in-depth assessments on a sample of regulated banks, building societies and payment institutions. This included desk-based reviews of strategy, governance processes, policies and data for mobile banking. We followed up with interviews covering a cross section of staff in firms, from senior management to those holding consumer-facing functions. This gave us a view of how firms manage any current risks around their mobile products and services, and how they deliver consumer outcomes. We also looked ahead, seeking to understand future developments in mobile banking and payments and firms' emerging thinking about the benefits and risks these developments could pose to consumers.

Secondly, we held discussions with a range of other regulated and non-regulated market participants including card schemes, technology providers and mobile network operators. This enabled us to take a wider view of the market, for example the role played by firms authorised in other jurisdictions and firms providing unregulated products.

5. Key findings

Mobile banking is an emerging channel, with the potential to provide considerable benefits to consumers. We want to encourage innovation and competition, however this must not come at the expense of consumer protection. We are encouraged that our thematic work did not find any evidence of crystallised consumer harm. This was expected, given this is an early intervention into an emerging channel.

Our August 2013 interim report summarised our early view of the potential risks that firms should manage to help prevent future harm to consumers or the market. Following our more detailed work, we have identified five areas that were important in influencing consumer outcomes for firms developing mobile banking products and services.

It is worth noting that financial crime, identified in the interim report, is not one of the key areas covered in this report. Based on our review of a sample of firms, we believe this is already an area of focus for firms, which we expect will continue, particularly as mobile banking becomes more mainstream and its functionality increases.

Consumers' understanding of their rights and responsibilities

Mobile banking is still a relatively new development and there is the possibility that consumers may be unclear about their rights and obligations when using mobile banking products and services. It is important that consumers understand they have the same regulatory protections in place when using these products and services as when making payments by other means, particularly protections against losses incurred as a result of fraud.

There are steps consumers can take to help protect themselves, and firms have a role in providing advice to consumers on how they might do this. We found that, in general, firms do provide information to consumers, mainly on how to maintain a secure device. This advice should not underplay consumer rights in the case of fraud.

With all types of payments, there is the possibility that transactions may appear on consumers' accounts that they have not authorised. We found no evidence to suggest that consumers are currently losing money as a result of this happening through payments made via mobile. Even so, firms have the opportunity to help consumer understanding of when and how to report an unauthorised transaction and to encourage them to do so. For instance, if a consumer is able to identify through statement information whether the mobile channel was used to make a transaction, this may help them identify fraud. We found that the most effective messages to consumers – whether in legal documents, such as terms and conditions, or informal advice – were clear, consistent and reflected consumers' legal responsibilities.

Our interim report recognised the potential for consumer error as a result of smaller screen and keypad sizes, for example paying the wrong recipient or entering the wrong amount. We did not see evidence of significant problems in this area and we are satisfied that the majority of firms have built safeguards into their products to mitigate the risk of such errors.

Senior management

As with any technical innovation, the development of mobile banking and payments requires staff with specialist skills and deep technical knowledge. Our work showed that senior management needed to retain sufficient knowledge and understanding of their products and services to ensure they are right for consumers and are delivered in the right way.

We found that, where senior management provided the most effective challenge, they considered the impact on consumers as well as the impact on the business. This was done both pre-launch and throughout the product lifecycle as functionality changed.¹⁴ Our thematic review saw firms focus extensively on consumer satisfaction. However, where this was done particularly well, firms also conducted research on consumer behaviour when using mobile banking products and when interacting with their smartphones in general. By understanding the way in which consumers are likely to use their mobile banking services, for example 'snacking', and then considering how to manage any challenges this presents, firms have the opportunity to ensure that they deliver quality products and services for consumers.

As the key decision makers, senior management will want to be equipped with the necessary knowledge and information to be able to make accurate judgements about their mobile banking products and provide robust challenge. There are technical challenges in evolving management information (MI) to capture this new channel. In our sample of firms, we found that senior management were most informed where firms were able to draw out relevant information, data and consumer indicators on mobile banking in MI to assess performance and outcomes. We also saw the importance of having a strong governance and control framework in place so that appropriate information about the mobile banking channel is escalated up to senior management in a timely manner.

Security and technology resilience

Security and resilience considerations are important for ensuring a safe and reliable consumer journey. Concern around the security of mobile platforms is one of the principal reasons for consumers choosing not to adopt mobile banking products and services.¹⁵

Our work suggests firms understand the importance of having high standards of security to protect consumers' personal data, as well as the funds that they hold. All firms in our thematic review encrypt data to safeguard its security and it is reassuring that there have been no instances of data loss in the sample population. The potential for increasingly sophisticated fraud attacks mean it is important that firms continue to invest in implementing strong security measures for consumers.

¹⁴ The FCA has produced guidance for authorised firms on this area in The Responsibilities of Providers and Distributors for the Fair Treatment of Customers (RPPD) <http://fshandbook.info/FS/html/FCA/RPPD>

¹⁵ Mobile usage: attitudes and payments insight report 2013, Vocalink

Mobile banking and payments services provide consumers with the ability to access their funds and make payments at flexible times and locations. This flexibility has meant that mobile consumers currently interact with their bank up to three times more than consumers that bank online.¹⁶ This, in addition to the increasing popularity of mobile banking products and services, will put extra pressure on firms' systems and may require additional system capacity.

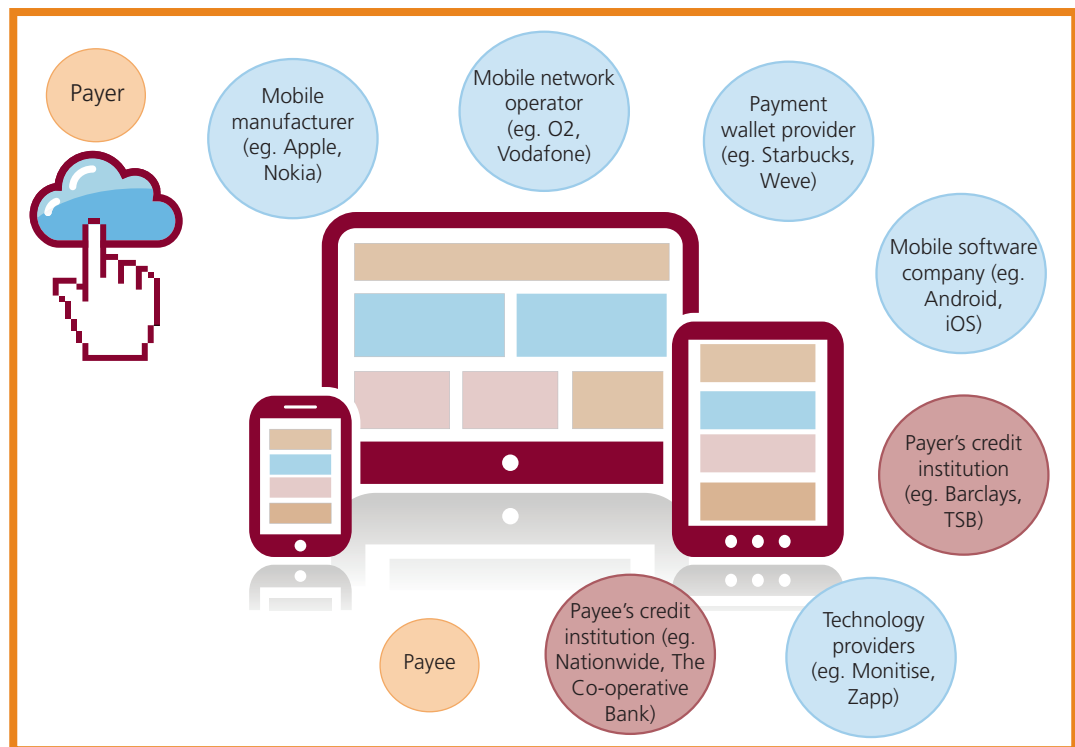
We are aware that, in some cases, recent outages of the mobile services of large banks have been the result of an inability to cater for large transaction volumes. We found that where firms monitor consumer behaviour, for example the time of the day and frequency of logging in, they were more likely to ensure sufficient system capacity is in place to cater for peak transaction times and volumes.

It is important that robust recovery processes are in place to ensure mobile services are restored in a timely manner in the event that services do fail.

Third party oversight

The ability for consumers to use their mobile phones and tablets for banking and payment services relies on a number of different services and solutions providers coming together, for example mobile network operators and app stores among others. The simplified diagram at Figure 2 illustrates the number of potential third parties involved in a mobile payment transaction. To ensure the effective delivery of products and services it is important that everyone involved in the delivery chain understands their responsibilities to each other and to the end consumer.

Figure 2: Potential parties in a mobile payment transaction



¹⁶ Please see footnote 5.

It is important that the regulated firm with ultimate responsibility for providing the mobile banking service to the consumer has appropriate oversight over the key parties involved in its delivery. In our sample of firms, this was done well where thorough due diligence was performed before contracting with third parties, which were then monitored on an ongoing basis to ensure delivery standards were being met. We saw that some firms have an increased level of oversight where security or consumer-facing functions such as helpdesks were outsourced.

New payment firms

The mobile banking and payments market opens up exciting opportunities for innovation. With increasing use of smartphone and tablet technologies, we can expect a rise in consumer demand for these services. We have seen greater choice for consumers as different types of firms establish themselves in the market with a variety of mobile banking products and services.

It is important that new payment firms entering the market consider consumer rights and protections in bringing new products to the market, including the rules around immediate refunds for fraudulent transactions.

We acknowledge that it can be difficult for new, innovative firms to enter into regulated financial services and navigate through our rules. We are seeking to address this through a number of means, one of which is Project Innovate, designed to help businesses bring innovative ideas that benefit consumers to financial services markets. As part of Project Innovate, we have published proposals to build an Incubator and an Innovation Hub.¹⁷

The Incubator will help innovator applicants through our authorisations process. The Innovation Hub will provide a dedicated contact for firms which have been authorised with the help of the Incubator. It will also work with a range of businesses with innovative ideas, using our expertise to understand whether their innovation is compatible with our existing regulation.

¹⁷ www.fca.org.uk/about/what/promoting-competition/project-innovate

6. Next steps

We encourage firms operating in the market to consider the key areas we have outlined in this report. Firms should satisfy themselves that, as they embed the new mobile channel and plan for future development, they have appropriate controls in place to prevent consumer harm and damage to the market. Firms should adopt an approach most suitable to their business to produce good outcomes for consumers. It is important that firms address these challenges before mobile banking becomes even more mainstream and products and services available on the mobile channel potentially become higher risk. We will be doing further work to engage the industry to ensure clear understanding of the key areas identified.

We will be taking forward our findings into the supervision of those regulated firms offering, or considering offering, mobile banking products and services. Our findings will also support other relevant work that we are doing, such as the work on Project Innovate, technological developments and business model transformation. We will continue to work closely with the PSR on the areas of innovation and access to payment systems, and at the European Union level on developments that are underway and have an impact on mobile banking and payments.

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