
FEDERAL DEPOSIT INSURANCE CORPORATION

Opportunities for Mobile Financial Services to Engage Underserved Consumers

Qualitative Research Findings



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EXECUTIVE SUMMARY

The FDIC recently conducted qualitative research on the potential for mobile financial services (MFS) to increase economic inclusion. This paper reports on the findings from this qualitative research with consumers and industry stakeholders and identifies a set of strategies for banks to consider that can better position them to meet underserved consumers' needs.¹

The results of this research show that great potential exists for MFS to improve account sustainability by helping underserved consumers obtain more control over their funds and better manage their bank accounts.

Consumers make trade-offs when selecting financial services or products based on a set of financial services needs that are important at a given time. The study identifies the following seven core financial services needs for underserved consumers:

- ***Control over finances*** – Consumers want to know exactly when and why money is deposited and withdrawn from accounts; and they want to be certain about the terms and conditions of the product.
- ***Access to money*** – Consumers expect financial providers to make their funds available quickly because they often need to use funds as soon as they are received to pay bills and make purchases.
- ***Convenience*** – Consumers value features of a financial product or relationship that save time or effort when conducting transactions.
- ***Affordability*** – Consumers are sensitive to the predictability and level of fees for account maintenance and everyday transactions, such as accessing cash.
- ***Security*** – Consumers want protection from physical and electronic theft of funds or personal information.
- ***Customer service*** – Consumers expect to have the ability to access live help through their preferred banking channel.
- ***Long-term financial management*** – Consumers seek advice on money management or the availability of tools to meet financial goals (e.g., spending reports, savings trackers).

Banks were perceived as strong in some areas, such as security and customer service, but weak in others, including control over finances and access to funds. Among study participants, banks were generally perceived to offer superior security, customer service, and long-term financial management, especially when compared to nonbank prepaid card providers. However, many felt financial institutions were not convenient because of limited operating hours or locations. Consumers also often felt that financial institutions did not afford them enough control over their finances or fast enough access to funds, noting a lack of clarity and consistency in timeframes for posting transactions and updating account information.

Mobile banking helps meet consumer needs in areas where traditional banking is perceived to be weak. It improves the convenience of banking services, consumers' control over finances, and in some cases the affordability of banking services. Some study participants reported that MFS alerts and monitoring tools have helped them reduce fees, better track their finances, and improve on-the-spot decision making. Mobile banking also increased their ability to keep records that can be easily accessed when disputes about payments arise. Mobile bill pay and peer-to-peer (P2P) payments also help consumers manage payments conveniently and quickly. Some participants had experience with or expressed interest in using mobile features to help improve long-term financial management through tools that track account trends and products that encourage savings and build credit. Thus, MFS can potentially be used to grow consumer banking relationships. Challenges remain, though, to using MFS as an access point to banking, since many participants preferred to open bank accounts in person and are hesitant to open accounts using

¹ Underserved consumers are those whom the FDIC defines as either unbanked or underbanked. Unbanked households are those that do not have an account at an insured banking institution. Underbanked households have an account but also obtain financial services from nonbank alternative financial services (AFS) providers such as check cashers or payday lenders.

their mobile phones. Further, financial and cultural obstacles to banking, such as lack of money and distrust of banks, remain firmly entrenched among certain customer segments and are not easily addressed by MFS in isolation.

Banks can implement MFS in ways that better meet the needs of underserved consumers.

As they continue to enhance and market their mobile banking features, banks will be better positioned to engage the underserved by considering opportunities for mobile banking to address the needs of these consumers. Underserved consumers repeatedly noted several opportunities for their financial providers to meet their needs more effectively. Though not a comprehensive list, several of the opportunities raised by consumers follow:

- ***Increase consumer control over finances by improving access to timely account information***
 - Post transactions in as close to real-time as possible and communicate more precise timing of when payments and deposits are expected to clear (as opposed to a range).
 - Clearly identify transactions not factored in the current available balance.
- ***Expedite access to money***
 - Clear mobile remote deposit capture (mRDC) deposits faster, while maintaining sound risk management practices. For example, offer mRDC with faster availability options in exchange for a reasonable fee.
- ***Make banking more affordable through better account management***
 - Promote the use of MFS as a tool to help consumers reduce unexpected fees. For example, low balance alerts or using MFS to conduct timely balance and transaction monitoring can help avoid overdraft or insufficient funds (NSF) fees.
- ***Address real and perceived security shortfalls***
 - Develop and communicate security measures to allay widespread fears about MFS, both real and perceived. Inform consumers about best practices they can implement to minimize MFS security risks, such as setting password protection on mobile phones and being mindful when using untrusted networks.
- ***Increase awareness of mobile tools***
 - Promote the use of MFS as a tool to help improve consumers' control of their finances. Identify and target customer segments that might benefit from strategies to help them manage funds, reduce unanticipated fees, maintain minimum required balances, increase savings, or avoid having transactions declined.
 - Offer MFS set up as part of the account opening process and demonstrate available alerts and functions.
- ***Encourage Long-Term Financial Management***
 - Provide aggregate or trend account information that can be accessed through mobile tools to help consumers more effectively monitor progress towards fulfilling financial goals (e.g., spending, saving, budgeting).

I. INTRODUCTION

The FDIC is committed to increasing the participation of unbanked and underbanked households in the financial mainstream by ensuring that Americans have access to safe, affordable banking services.² An inclusive financial system that serves the broadest possible set of consumers helps strengthen public confidence in mainstream banking, and ensures that consumers have opportunities to deposit funds securely, conduct financial transactions, accumulate savings, and access credit. In 2013, more than one in four households was unbanked or underbanked, obtaining some or all of their financial services outside of the mainstream banking system.³

Recently the FDIC has been exploring ways in which mobile financial services (MFS) can help increase economic inclusion among unbanked and underbanked consumers, who this report will refer to collectively as underserved consumers. Mobile devices such as smartphones have emerged as a technology that has the potential to change the way consumers interact with banks, and banks are rapidly making MFS available to their customers.

FDIC research has suggested that MFS may especially benefit underserved consumers. The FDIC National Survey of Unbanked and Underbanked Households found that three-quarters of all underbanked households have access to a smartphone, and more than one-third of underbanked households used mobile banking in the past year⁴. In fact, underbanked households are more likely to have access to smartphones and to use mobile banking than fully banked households. In addition, a 2014 FDIC white paper concluded that MFS has the potential to be implemented in ways that address the specific financial needs of the underserved and help draw them more comprehensively into sustainable banking relationships, thus expanding the number of individuals who obtain financial services safely and securely.⁵ See Tables 1 and 2 in the Appendix for more detailed information about access to smartphones and mobile banking use.

To gain a more in-depth understanding of the financial needs of underserved consumers and their perceptions of MFS in relation to these needs, the FDIC undertook a multi-phase qualitative research project as an extension of the survey research and white paper. This research project was designed to examine the potential for MFS to improve access to, sustain, and grow banking relationships for underserved consumers as well as to understand the factors limiting its potential. As part of this effort, the FDIC engaged underserved consumers in a series of focus groups. The FDIC then shared consumer impressions with financial services industry participants that develop, deploy and/or use MFS technology, including representatives of banks, credit unions, community groups, and technology service providers, to gather their reactions to some of the concerns and ideas arising from the consumer focus groups. This paper reports on the findings from the FDIC's qualitative research with both consumers and other industry participants.

The focus groups demonstrated that underserved consumers have diverse financial services preferences and needs and that MFS is well positioned to meet some of these needs. The results show great potential for MFS to improve account sustainability, in particular, by helping underserved consumers successfully manage and maintain bank accounts. Consumers reported that MFS helps to address weaknesses in traditional banking. Indeed, some focus group participants reported that MFS alerts and monitoring tools have helped them reduce fees, better track their finances, and improve on-the-spot decision making. Mobile bill pay and P2P payments also help consumers manage payments conveniently and quickly. Some participants had experience or expressed interest in using mobile features to help improve long-term financial management through tools that track account trends and products that encourage savings and build credit. Thus, MFS can potentially also be used to grow consumer banking relationships.

² Unbanked households are those that do not have an account at an insured banking institution. Underbanked households have an account but also obtain financial services from nonbank alternative financial services (AFS) providers such as check cashers or payday lenders. Fully banked households are those that have a bank account and do not use any nonbank AFS providers.

³ 2013 FDIC National Survey of Unbanked and Underbanked Households.

⁴ 2015 FDIC National Survey of Unbanked and Underbanked Households (forthcoming October 2016).

⁵ "Assessing the Economic Inclusion Potential of Mobile Financial Services," FDIC White Paper, June 2014.

However, MFS may not be the best or preferred solution for every identified need. In particular, challenges still exist to using MFS as an access point to banking, since many participants preferred to open bank accounts in person and are hesitant to open accounts using their mobile phones. Further, financial and cultural obstacles to banking, such as lack of money and distrust of banks, remain firmly entrenched among certain segments and are not easily addressed by MFS in isolation.

The remainder of this report discusses the qualitative methods used; examines the core financial services needs of underserved consumers and the types of providers and products these consumers currently use to meet those needs; explores underserved consumers' familiarity with and use of a range of MFS functions; and provides insights into consumers' perceptions of MFS and how well it can meet their needs, relative to traditional banking channels. Consumer quotations from the focus groups are included throughout the report. In addition, reflections from financial providers are presented when relevant. Finally, the report identifies a set of strategies to better position financial institutions to meet the needs of underserved consumers to provide more opportunities for the underserved within the traditional banking system.

II. METHODS

From May to July 2015, the FDIC conducted consumer focus groups on the use of MFS among underserved consumers to gain a more in-depth understanding of its potential to increase the participation of these consumers in the financial mainstream.⁶ There were two rounds of consumer focus groups. The first round explored the topic at a high level, gathering information on consumers' existing financial needs, the current ways in which they meet those needs, and consumers' understanding and use of MFS in relation to these needs. Based on the results of this round, the FDIC selected specific MFS features for more in-depth discussion during the second round of consumer focus groups. The topics discussed in greater detail were account monitoring tools, bill pay, and peer-to-peer (P2P) payment tools. The main objective was to assess how various MFS features could improve access to banking, sustainability of accounts, and banking relationship growth.

In total, across the two rounds of focus groups, eighteen were conducted in 3 metropolitan areas of different sizes. In the first round, eight total focus groups were conducted in Memphis, TN, and Los Angeles, CA, (including two Spanish language groups). In the second round, ten total focus groups were conducted in Kansas City, MO, and Los Angeles, CA, (including two Spanish language groups).

All of the consumer focus groups targeted underserved consumers: those whom the FDIC defines as either unbanked or underbanked. All focus group participants owned smartphones. Previous FDIC research shows that three quarters of underbanked households have access to a smartphone, a higher share than the 71 percent of fully banked households with smartphone access. Focus groups included a greater representation from low- and moderate-income and younger consumers, relative to their population proportions, because these segments may represent the highest potential for MFS to improve economic inclusion. Participants were selected to ensure participation by Black, White and Latino consumers, and to include both male and female consumers. Both users and non-users of MFS were included. Some participants used bank-provided mobile technologies, while others, including some unbanked participants, used MFS from nonbank providers. Throughout the report, MFS refers broadly to services provided by banks or nonbanks or both, unless otherwise specified.

In addition to consumer focus groups, the FDIC also conducted structured, in-depth interviews with industry executives about how financial institutions and related organizations are addressing mobile financial services and underserved consumers.⁷ The interviews also gathered industry reaction to the consumer focus group research. The interviews were conducted by telephone between November 2015 through January 2016 with representatives from 11 financial services industry participants and consumer groups.

Qualitative research, including focus groups and structured interviews, have inherent limitations and any findings reflected in this report should be considered with these limitations in mind. First, the samples were small, based on convenience sources, and selected among consumers and providers who were readily available for participation. Further, to ensure a lively discussion on specific topics, participants were not selected at random; rather, those who met preselected criteria were chosen over others. Together, these limitations affect the degree to which results can be generalized across the entire population of underserved consumers. Moreover, consumer comments were based on the consumers' perceptions, which do not always accurately reflect the current policies of banks or standards in the financial industry. In some instances, consumers may have strong opinions formed from misunderstood facts. Researchers did not correct these misunderstandings during data collection but instead aimed to gain insight into how consumers currently view the financial industry.

⁶ The FDIC contracted with a market research firm to conduct the focus groups.

⁷ The FDIC contracted with a market research firm to conduct the structured interviews.

III. UNDERSERVED CONSUMERS' FINANCIAL SERVICES NEEDS

To assess how mobile financial services can help financial institutions appeal to and benefit the underserved, the early stages of qualitative research were devoted to documenting and understanding consumers' core financial services needs and the products and services they use to meet those needs.

During focus groups, the FDIC observed that underserved consumers expressed many common core needs when managing their finances. Ultimately, across all 18 focus groups, seven general dimensions of financial needs emerged. This section of the report will discuss those core needs as well as the financial products and services that consumers use to address them.

A. Core Financial Needs

1. Control

An overwhelming majority of study participants seek a sense of control in managing their finances and prefer products and providers that enable them to achieve this feeling. In essence, these participants want to feel that they, not their financial provider, are in charge of their finances. Specifically, control refers to knowing exactly when and why money is deposited and withdrawn from accounts. This includes a desire for transactions to be processed quickly, without unexpected fees.

"It's so much easier for me to just go when I'm getting some gas, just to go ahead and pick up that money order at the gas station for rent or electricity or gas or water, whatever, and I'm done with it right then and there. I don't have to worry about oh, did this automatic debit come out of my account and, if so, what time did it come out, is it gonna clear before this fee clears or before this deposit makes it in." –Unbanked MFS User

"I'll give you a good example with my sister. She wrote a check for the kids to buy some candy for my sister. She deposited her check in that—nine o'clock that morning. Evidently the check went through that night or it went in the bank then bounced. She put the money in the account. They still charged her the \$35 overdraft but the money—on her record it shows that the money was deposited on the 10th and she put the money in on the 10th. I guess the time was off, but they still charged her the \$35 overdraft but the money was in the bank." –Unbanked MFS Non-User

Two important aspects of financial control are the consumer's ability to obtain proof or record of transactions to be used when disputes arise and the ability to quickly identify any erroneous overcharges. Finally, some participants noted the importance of predictable and transparent account terms and conditions.

"You know, with a standard bank account or say they don't charge you, they don't assess those fees for the first three to six months. You have the account but then after that they're twice as big, you know, or what have you, or the minimum balance doubles after a certain amount of time." –Unbanked MFS User

2. Access to Money

Universally, underserved consumers in the study want their deposited money to be available right away and do not want it subject to holds. This need stems from a desire for the ability to use funds as soon as they are received to pay bills and make purchases.

"I have to make it there between a certain window of opportunity to have access to my money or do certain things with it. And I just prefer to keep it liquid around me." –Unbanked MFS User

“The holds drive me nuts. On some of these checks they put three-, five-day holds on. It’s very frustrating. I’m going through one right now.” –Underbanked MFS User

Consumers also want a quick resolution of account problems (such as unauthorized transactions on an account or suspected fraud) that would otherwise lead to suspension of access to funds or to the account itself.

“You have to wait for them to put the money back in your account. It’s your money. It should go back right away just like they took it right away.” –Underbanked MFS User

3. Convenience

Nearly all study participants expect that financial services be convenient. Convenience means different things to different consumers, but often they reference those features of a financial product or relationship that save time or effort when conducting transactions. For example, some consumers prefer locations close to their work or home, while others want operating hours that cater to a variety of work schedules. For some consumers, online or mobile transactions are most convenient.

“It’s closer to my home. And it’s just convenient to just walk in.” –Unbanked MFS User

“You see, for me, since I get paid in cash it’s easier to spend cash. I’m not having to withdraw from a bank, I’m not having to deposit into a bank. It is more of a risk keeping it, you know, out of a bank, but I guess that’s the risk I take for the convenience.” –Unbanked MFS User

4. Affordability

For most consumers in the study, affordability is a prominent consideration in their day-to-day lives. They wish to minimize or avoid fees for account maintenance and everyday transactions, such as accessing cash. When fees are assessed, underserved consumers value predictability in fee amounts and timing and often want to find ways to minimize fees that could reasonably be avoided. For example, some underserved consumers described their displeasure with paying overdraft and NSF fees for transactions that occurred just hours before a large deposit.

“Because you could take money out and the balance would not necessarily reflect what you just took out. And so basically at 16 years old I had—I got over \$1,000 worth of fees from the bank.” –Underbanked MFS Non-User

“I don’t think [the total fees related to alternative financial services] exceeds \$20 a month for me. I’ve gotten in way worse situations with fees with banks in the past. I mean significantly more than \$20.” –Unbanked MFS User

“Like if they gave you 24 hours. I’m gonna run to the bank and put some money in, I’m good, that would be great, but they don’t.” –Underbanked MFS User

5. Security

Many consumers seek preventative measures against physical and electronic theft of funds as well as protection against identity theft, data breaches, and unauthorized account access. Consumers want security while maintaining privacy, which they recognize can be a difficult balance. The research found that for the underserved segment, “security” broadly refers to protection from various real and perceived threats.

“The biggest thing about that, not only will they take your money, but a person can take your name and have a whole little house and everything else in a whole other state.” –Unbanked MFS Non-User

6. Customer Service

When participants discuss their need for quality customer service, they typically mention three factors. They want customer service representatives to be available through channels and at times that are convenient for the consumer, although these preferences may vary. Consumers also want reasonable wait times to connect with a representative.

“If I’ve got a problem with my bank account, my money, I want to talk to somebody face-to-face, and over the phone.” –Underbanked MFS Non-User

“I would like it where I could call someone 24 hours a day, though. Because sometimes you have to wait until the next business day—they’ll keep you stressed out all night long.” –Underbanked MFS User

7. Long-Term Financial Management

Finally, a few consumers are interested in long-term financial management support. This may include financial planning advice and access to longer-term investment and credit products (mortgages, auto loans, etc.).

“And going back to more options, too, like you [were] saying with being able to get a loan... [banks] offer [investments], retirement plans, credit cards to help your credit.” –Underbanked MFS User

This may also refer to the availability of personal financial management tools. Some underserved consumers noted they had experience with visual tools and interactive graphics that made their income and spending behaviors easier to understand. These types of tools were sometimes found in bank apps, prepaid card apps, or third-party apps and websites.

“I do like where on my prepaid card it tells me how much I spend on transportation; how much I spend—I can also see where I’m spending too much money, like at restaurants.” –Underbanked MFS Non-User

See Appendix Table 3 for a summary of all seven underserved consumer core financial services needs.

B. Financial Providers and Services Used

Almost all consumers in the FDIC focus groups, by design, had used non-bank financial services. Many of the consumers used non-bank prepaid cards, while others went to retailers that offer money orders and other products, or AFS providers. Some of the consumer focus group participants had also used traditional depository institutions, such as banks and credit unions. Understanding the reasons consumers choose different providers at different times can help inform bank strategies for using MFS to complement their other offerings and better meet consumers’ needs.

Underserved consumers have varying preferences; thus, they will make different decisions and trade-offs. Consumers choose providers based on the financial needs a provider fulfills and the salience of a given need at a given time. They frequently make trade-offs to meet their most pressing needs and may switch between providers as often as necessary. For example, a consumer with an urgent need for funds availability may be willing to pay a substantial fee to cash a paycheck every month, even though he or she may prioritize affordability under most other circumstances. That decision may ultimately drive whether a consumer decides to form a relationship with a bank or an AFS provider.

Underserved consumers stated that they use a variety of financial products to manage their day-to-day finances. These products include cash, checks, money orders, debit cards, prepaid cards, and P2P payments. Each product has benefits and drawbacks, and, as with financial providers, most consumers use a mix of products to meet their needs. The section below includes consumer opinions on each product type.

"I guess it's just the situation. Like I use the cards to pay bills and I use my cash to have fun I guess. I just use it for two different things."—Underbanked MFS User

1. Cash

Consumers recognize that cash is free to use, widely accepted, provides immediate spending power (since no holds are associated with cash), and limits overspending, since consumers cannot spend more than they have.

"There are no fees when you pay cash. When you pay cash, they don't charge you a \$3 fee. You're paying your bill for the amount that it is."—Underbanked MFS Non-User

"You have more control when your money is in your hand."—Unbanked MFS Non-User

In addition, unlike other transaction products, consumers are not at risk of identity theft when they use cash. Cash, like money orders, also allows consumers to avoid disclosing any potential personal financial information that might be compromised.

"If you go into a place... where you are going to all these different stores, you can just pay cash and you don't have to worry about someone taking your credit card number or debit card number."—Underbanked MFS User

Using cash and other fast payments like money orders was also considered "simple," as the transaction was immediately settled.

On the other hand, consumers noted that cash requires physical effort to use, that large amounts of cash draw unwanted attention and may result in theft with little recourse, and that cash does not provide the same recordkeeping benefits of electronic alternatives.

2. Checks

Underserved consumers mentioned that checks are becoming a less common part of their lives with the introduction of direct deposit and other forms of electronic payments.

"I never get a check anymore. I don't see checks, except my grandfather pays the lawn guy with a check."—Unbanked MFS Non-User

For some consumers, however, checks are easy and convenient to use, particularly compared to retail bill payment alternatives.

"I don't have to go to the bank, I just write a check, and then the bills are sent off. I don't have to go stand in line."—Underbanked MFS Non-User

Underserved consumers mentioned certain drawbacks of paper checks, including that they typically cost money, require a waiting period to clear, and are not universally accepted by merchants. Finally, participants noted the unpredictability of relying on somebody else to cash or deposit a check they had written in a timely fashion. In some scenarios, this type of uncertainty led to consumers accidentally overdrawing their accounts.

"I forget about checks. Like ten days later I'm like, crap."—Underbanked MFS User

"And then with checks, I'll write a check, and then I forget to check my bank account, and it bounces... \$35 charge."—Underbanked MFS Non-User

In other cases, consumers are able to meet their bill pay obligations by taking advantage of the delays in check clearing.

"With money orders, I have to have cash. And I use checks because sometimes I don't have the money at that time, then you have five days to pay the rest of the rent, because they don't take out the money immediately."—(Spanish translation) Underbanked MFS Non-User

3. Money Orders

Some underserved consumers use money orders because certain payees, such as landlords, required this form of payment. Others favor using money orders because they cannot result in overdrafts or insufficient funds penalties like a check.

“You don’t have to worry about it bouncing. If it gets lost, a lot of times you can go and stop it.” –Underbanked MFS User

Moreover, money orders enhance feelings of control because the recipient cannot collect more than is intended. Also, using money orders produces robust and traceable documentation, and they can be easily replaced if lost or stolen.

“They can’t take more than what it says on the [money order]. Whatever is there is what they’re going to get.” –Underbanked MFS User

Underserved consumers noted, however, that money orders are relatively expensive and require time and effort to use.

4. Debit Cards

For underserved consumers, debit cards are intrinsically linked to checking accounts, and their opinions of one heavily influence the other. For example, some focus group participants expressed a general distrust of banks and thus shy away from using bank debit cards, even if they have access to one.

In some cases, fear that their account information could be stolen affects how or whether they will use their debit card.

“I use my debit card in stores if I’m just buying small items. But I use it as a charge card so they can’t get my debit number.” –Underbanked MFS Non-User

For other consumers, debit cards help them budget their money and keep better track of expenses.

“I like using debit cards because I can always track my expenses and finances. Sometimes when you use cash, you don’t pay attention to how quickly it goes or everything that you spend it on. I like the fact that I’m not walking around with money in my pocket, and the fact that I don’t spend as fast.” –Unbanked MFS User

Also, many underserved consumers recognize that unauthorized or fraudulent transactions on bank debit cards are likely to be satisfactorily resolved. Some noted that resolution may take longer than they would prefer, but generally this group was confident that their funds would be returned, eventually.

“If you deal with a bank, and your money [is taken] off the card, it’s nine times out of ten you’re going to get your money back.” –Underbanked MFS Non-User

5. Prepaid Cards

Prepaid cards were perceived to be more affordable than a bank debit card (largely due to the inability to overdraft most of these cards and the lack of associated overdraft fees). Some consumers, even those with bank accounts, prefer using prepaid cards to avoid overdrafts.

“Banks just don’t do right. I mean, you’ll get a fee for something that you didn’t know was coming out and then you have to go through hoops to get money back. And I just don’t like dealing with all of that. If it’s on a prepaid card it’s either there or it’s not, and that’s cut and dry.” –Underbanked MFS User

Several underserved consumers discussed using prepaid cards as a part of a broader strategy for maintaining a budget or controlling spending.

“I use [prepaid cards] just because I want to have my bills separate. Like she said, you can transfer [between a bank account and prepaid card] anyway. It doesn’t matter. You have more control.” –Underbanked MFS User

“Like if you travel, going out of town, you know you want to have \$500 to go out of town. You can transfer \$500 to that card without using your personal card.” –Underbanked MFS User

In addition, some participants felt that prepaid cards, compared to checking accounts, provide faster access to money through direct deposit, although this perception is likely flawed.

Finally, consumers expressed more comfort with the security of prepaid cards compared to other tools mainly due to their belief that a compromised prepaid card account would not risk any funds held elsewhere, such as in a bank account.

“The prepaid card is not tied to my main source of income. It’s just tied to what I want to have access to.” –Underbanked MFS User

“I don’t want my bank information out, the prepaid card is actually very good for that because then I can just pay with that [instead of a bank card].” –Underbanked MFS User

Conversely, consumers expressed concerns that their funds would not be insured the same way as bank funds, that using the cards is limited in other ways (such as inability to pay for services with a hold charge, such as a rental car), and that prepaid card companies provide relatively inefficient customer service compared with banks.

6. Peer-to-Peer (P2P) Payment Systems

P2P systems, both electronic and retail, are seen as easy to use and require minimal personal information. Underserved consumers noted that some online P2P services can be used to hold deposits as effectively as a checking account and with comparable customer service and error resolution policies. Consumers also highlighted the fact that transfers and payments are cleared and posted immediately to their P2P account.

“There’s really no point for me to go to the bank, if everybody’s paying me [with a P2P provider] for the most part. I can just move what I’m going to use for personal to personal [from my business account]. It’s just easy, and when I had a bank account, I wasn’t using it, because all the money was in the [P2P provider]. I would have to go to the bank to deposit, so I’m like, no, just forget it.” –Unbanked MFS User

“[P2P provider], well, to me, it almost functions like a bank.” –Unbanked MFS User

“So it’s just like, I send it right now. Like I can literally send it, and we can be right there, about to buy something, and I say ding, and she can swipe and get it, or whatever. It’s quick.” –Unbanked MFS User

Consumers are concerned, however, with the perceived lack of federal deposit insurance and, in the case of purely electronic P2P systems, with the lack of physical locations.

“See, your money is not insured with a [P2P provider], but your money’s insured with a bank, to a certain degree.” –Underbanked MFS Non-User

“For instance if you have [an account with a large bank] or something, you can find one in every corner of the United States, right? But when you have things like a prepaid or like a [P2P] account and stuff like that, let’s say you want to pay your bill and it’s like your water and light bill from here from LA and you’re at home visiting and you’re not from LA, and then you go—they don’t have the California check cashing store. They don’t have certain things.” –Underbanked MFS Non-User

For a complete description of consumer perceptions of the benefits and drawbacks of several of these everyday financial instruments, see Appendix Table 4.

IV. FAMILIARITY WITH AND USE OF MFS

Following discussions of core financial needs and financial product usage, the consumer research focused on underserved consumers' familiarity with and perceptions of MFS, both generally and with regard to specific MFS tools. Many underserved consumers are aware of MFS, although awareness is lower among unbanked consumers.

A. Learning about MFS

Underserved consumers who actually had experience using MFS stated that they learned about the capability to conduct financial transactions on their mobile phones in different ways. Many consumers learned about these services directly from financial providers. Providers informed consumers about apps and mobile capabilities through advertisements, emails, provider websites, paper statements, customer service representatives, and television commercials.

Others became aware of mobile financial services from bank branch employees, either while conducting transactions or during the account-opening process. Bank employees also played a role in educating some customers on how to set up and use the services; they also offered these customers ongoing assistance.

"[We learned from] the bank telling us... 'Now we have an app.' So it's like, 'OK, I'll download the app,' and you just start using that more than you use the website, because it's—It pretty much has, generally, almost all the features that you would have on the website—a small version of it."—Underbanked MFS User

"It seems like we're being pushed more to apps, because banks are going the way where less face-to-face is the way to push everybody. Even our teller machines... were shut down."—Underbanked MFS User

Traditional word of mouth was another important way consumers became aware of mobile financial tools. Indeed, many consumers initially learned about these tools by watching their friends and family use them. These personal sources helped spur adoption because consumers felt more comfortable asking questions of people they know and felt they could turn to those people if they encountered problems.

"[I learned] through my daughter. Because I used to bother her a lot, so she taught me."—Underbanked MFS User

"When I first got a smartphone, I was like 'oh wow' it opened up a whole new world. My brother had one before ahead of me and he was like 'now you can do this, you can do that'."—Underbanked MFS User

Consumers most comfortable with technology may have found out about financial apps by searching for them proactively. Because these consumers were more interested in and had greater faith in the benefits of technology, they sought new apps that might be beneficial to them.

"You just go look around on the app, see what they offer, what can you check, what information is there."—Unbanked MFS User

B. Initial Engagement with MFS

Consumers perceived the initial setup of mobile financial services as easy and straightforward. Even non-users believed that a hypothetical setup would be fairly easy and correctly guessed the steps necessary to enable MFS features on their phones.

“Easy. You... download the app, it takes five seconds. Then you’ll just create an account and... when you put in the number of the card...their system connects to the app.” –Unbanked MFS User

Some financial institutions were proactive in using branches to help consumers set up mobile banking access through “tablet stations” or by providing free Wi-Fi to facilitate the download of the bank app.

“I guess one of the things, just even visibility, one of the things we’ve done recently is we opened a branch, a new branch. And we have a tablet station so that we kind of give members visibility that, you know, we support several mobile devices. So, as you walk in, it’s very visible and it’s got a, like, touchscreen kiosk beside it that walks members through how to use mobile deposit and how to pay bills online and that sort of thing.” –Financial Institution

Consumers had different experiences initiating MFS capabilities for the first time and had varying expectations about the process. Some consumers wanted and expected to be able to complete the setup on their mobile device, and some MFS users reported that they had done so. In some cases, though, it was not possible to enroll in MFS without setting up an online banking account and using a computer to enable and set up certain MFS features. For example, consumers needed an online account to configure mobile alerts with some providers.

“Yeah. Once you set up on your computer you can do it on your phone, but if you just download the app first for [this bank] you can’t send money to somebody else just between your accounts.” –Underbanked MFS User

While some consumers in the study expressed frustration at having to go online to set up MFS, no one mentioned that this step prevented them from using these services. Some financial institutions in the study highlighted their mobile banking system’s ability to set up access without a computer, either by using just the phone or by obtaining a code from customer service.

“Well, today you can actually, if all you have is a phone, you can register directly on mobile for the first time.” –Financial Institution

“At first I could only set it up through a desktop or laptop computer. Then I could access through my phone. But now they have it set up to where you can always set it up from your phone now.” –Underbanked MFS User

Some consumers preferred to set up MFS on a computer, for a variety of reasons, among them: the computer screen is larger and can better display more detailed information; the computer keyboard is easier to use than a phone touchscreen for inputting information and the computer is more secure, according to consumer perceptions.

Several underbanked consumers said they would prefer to have a representative from the bank set everything up for them to ensure it was done properly and securely. This is especially true of those who were not currently using MFS.

“Because you have to go to the bank to set up an account; there’s no way around that. The person who sets up your account should ask you specifically: ‘Do you plan to download an app?’ Yes. Ok, then they can make that available.” –Unbanked MFS Non-User

For many, the use of mobile financial services grew from basic to more advanced features over time. It was not uncommon for consumers to start using mobile financial services to simply check account balances before progressing to more complicated processes, such as alerts, bill pay, and transfer features, as they became more familiar and comfortable with the technology.

C. Meeting Consumers' Needs With MFS

MFS, as currently offered in the market, address many of the core consumer financial services needs discussed above, including convenience, affordability, long-term financial management, and control in the form of access to information. This research explores ways in which specific MFS features meet, or fail to meet, consumer financial needs, and also identifies areas for potential improvement to benefit underserved consumers. These improvements may be applicable to other banking channels, but are particularly relevant to MFS because of the anytime, anyplace nature of that channel. While financial providers typically noted that their MFS strategies are designed to be broadly accessible rather than targeted to any particular customer segment, several MFS features seem well-suited to address the needs of the underserved, nonetheless.

1. Account Management Tools

One of the ways in which MFS can most directly meet underserved consumer needs is by providing account management tools and functions. Checking balances and transaction histories on mobile devices is the most popular mobile financial service, and nearly all underserved consumers who said they used MFS take advantage of this capability. Many consumers check their finances on their phones as part of their daily routine. Some described how they regularly check their accounts in the mornings when they wake up, or in the evenings before bed. Other consumers check their accounts in response to certain trigger events. For example, when out shopping, they may check to see if they have enough money to cover a purchase they are considering. Or, they might check after making a purchase to confirm that the transaction went through. Consumers find that access to information from their phones is convenient and helpful in monitoring their accounts, informing spending decisions, and providing them with a high level of control over their finances. Even those who do not use MFS think these tools are appealing, and feel that mobile account monitoring would be the most beneficial aspect of MFS.

"That's gotta be like the most convenient thing if I can be able to keep track of TV [bills], health insurance [bills], the whole nine yards, just right there in one place and then sign in and go." –Underbanked MFS User

"You can be in the line about to buy something. Turn around and enter your information, like she said, and listen to the balance, do you have enough. But when you're in line, it's like ch–ch–ch, and you've got your balance, OK, I've got enough." –Unbanked MFS User

"Almost every day, because if I know some money is supposed to come in on the first or the third, when I wake up that morning, the first thing I do is check and make sure it came in. I've had to make some purchases to [start a business]. So I check to see if the money has gone out to cover that so I know that I can go ahead and move forward because I know that that's on its way. So a lot of stuff I'm doing daily. And then sometimes, just to make sure, I've done this, this, this, and this. What do I have left?" –Unbanked MFS User

The primary concern that some consumers expressed about mobile account monitoring is that balance and account information is not always updated quickly enough to meet their needs. Consumers reported mixed experiences. While many said that their financial providers *do* display updated information, others said this was not the case. These consumers were frustrated with transactions showing as "pending" and account balances not reflecting recent transactions quickly enough.

"The gap in time between my perceived or, I guess, my personal perception of when money should be taken out and when it's actually taken out of my account is the bane of my life. And I understand it's not entirely up to my financial institution; it's also up to individual vendors and things like that. But the gap in between pending and all of this is just—I don't know about you guys, but it's one of the biggest frustrations with modern banking." –Underbanked MFS User

“There have been times when for example if I go get gas, it won’t post for two days... So if I’m expecting in my mind I have around... [a certain] amount of money, and then I go in and it’s less, and then I have to go check what happened and then things that I thought posted two, three days ago are just posting.” – Underbanked MFS Non-User

Traditionally, institutions process transactions in batches at specific times of day, so transactions are not necessarily reflected in account balances immediately as they occur. Some types of transactions, such as traditional check clearing and ACH, can require a day or more to clear.

Many of the financial institution representatives contacted for this study acknowledged the need to process transactions more quickly and realize that consumers often expect to see their account balances and information updated immediately when they make a transaction. Several institutions have enhanced their processing systems to post some transactions in real time, rather than according to a batch process, providing consumers with more up-to-date balance information. Some consumers in the focus groups noticed that their institutions were updating information more quickly, but they pointed out that the posting speed of transactions is dependent not only on the bank but also on the merchant accepting payment. Although not all providers post transactions in real time, some are able to provide specific information to consumers about when they will clear, which is also useful to those who are eager to understand exactly when money will enter and leave their account. Ongoing efforts to modernize the payment system may eventually result in the proliferation of more real-time account monitoring tools.

“When you submit [an mRDC] deposit we will tell you, your funds will be available on December 6th. So there is no question when it will be available. We said December 6th, and that’s when money will be available.” –Financial Institution

2. Alerts

Alerts are also popular among underserved MFS users, and their use is widespread. In contrast to account monitoring tools, which consumers access whenever they choose, alerts are proactive communications that arrive automatically through texts and emails at regular times, or when certain account activities occur. For example, many consumers receive alerts about their balances. These may be regular alerts with balance information that come at specific times, such as daily or weekly intervals, or whenever the balance drops below a specified amount. These types of alerts have benefited some consumers, especially in helping them avoid fees. Knowing when balances are low can help consumers avoid both low balance and overdraft fees, improving account affordability.

Consumers also like to be alerted when payments or deposits are posted to their account. These alerts help consumers monitor their account balance and identify unauthorized transactions. To this end, consumers also value fraud alerts when the provider notices suspicious account activity.

Consumers can receive alerts through email and text, and many reported receiving both types. Consumers see texts as beneficial because they feel that texts capture their attention in a way that an email does not. Email alerts, on the other hand, are seen as advantageous because they can provide more detailed information and are seen as a better way to document account history.

Some consumers mentioned a few concerns with alerts. Some are wary of alerts becoming too numerous or intrusive, or coming at inconvenient times. Notably, while consumers see a great deal of value in receiving texts and emails containing the types of information they have requested, many consumers do not want alerts to be used for other purposes, such as marketing or other unsolicited communications from the provider. Also, if consumers rely heavily on alerts as a primary way of communicating with their bank, they may have relatively few opportunities to learn about other bank products. From a financial provider’s perspective, it may be more difficult to promote new products and grow banking relationships under such circumstances.

“I do have alerts and stuff that keep me more on an accurate path. Because I have three kids really young. So it’s always nice and convenient to get my alert, to say ‘Hey, you’re under \$1,000. This is where you’re at.’ It’s perfect. I could be feeding a child and starting to get one bathed, and just look real quick at my phone and see where my account is at.” –Underbanked MFS User

Alerts are a common feature of mobile banking offerings, and some banks offer highly customizable alerts. Conversations with industry providers suggest that providers are interested in assessing the content, frequency, and characteristics of alerts that would increase consumer adoption of these tools.

3. Mobile Bill Pay and P2P Services

Mobile bill pay and P2P services are also useful features in meeting consumer needs, a key benefit being the convenience of making payments from any location at any time. Many consumers like the fact that the payments can be automated, reducing the likelihood of late or skipped payments, although some feel the need to control the initiation of payments and are wary of payment automation through bill pay tools.

“With that whole setting out the payment thing—like you want to set up a payment for Friday for your electric bill for it to automatically come out. What if there was a problem with your paycheck and it didn’t hit on Friday, and they automatically pulled that money out? Would they take into consideration that that money wasn’t deposited, and you’re going to get a bunch of overdraft fees from that preplanned payment going through?” –Unbanked MFS User

In addition, these services create a record of transactions that consumers feel they can refer to if a dispute arises about a bill payment. Consumers can access the transaction history showing cleared payments as well as email or text alerts showing when the transaction was completed, both of which enhance their sense of control.

“Somebody always magically says that they didn’t get paid. So, you know, I know I can take a screen shot and send it over and let them know it’s paid.” –Underbanked MFS User

Consumers noted, however, that MFS tools are not sufficient when bills must be paid immediately. Instead, consumers use the payee’s mobile site or app or make payments in person when a payment due date is fast approaching. In particular, consumers noted that when they need to pay a bill that is due right away, they often make the payment on the payee’s website because their accounts are credited more quickly if the transaction is made directly to the payee rather than through a financial institution. This is because payees typically credit accounts once the consumer submits his or her payment information, even if the funds have not yet cleared. When processed through a financial provider, consumers must wait until the funds have actually been transferred, which adds time to the transaction and can result in late fees, undermining consumers’ sense of control.

“For the most part, you know it’s going to take a couple of days before [a payee] acknowledge[s] that they received that payment so... I’m always going right up against whatever day it is that I need to pay it.” –Underbanked MFS User

“I can go to [the payee’s] website. I can go to another mobile app that will also help me with the bill payment et cetera that is completely free, that is completely upfront and it won’t give me the headache and the anxiety that the bank bill payment will. And that’s why. There’s just way too many options there for me to even bother with it.” –Underbanked MFS Non-User

A somewhat less commonly available and used MFS feature is P2P payments, typically money transfers to family and friends. Conversations with financial institution representatives suggest that banks are currently thinking about ways to provide and enhance these services.

“Person-to-person payments right now is a really, really hot space. It’s something that everybody is paying a lot of attention to. There is a lot of activity. We’re certainly very tuned in and thinking lots of interesting thoughts about person-to-person payments and how that continues to scale and become more ubiquitous over time so that it is truly anybody can send money to anybody.”—Financial Institution

Consumers who do use P2P tools often use nonbank apps and services, though a few described using P2P tools offered by financial institutions. Consumers have high expectations regarding the speed of P2P services and feel that these transactions, because they are electronic, should be instantly debited and credited. Users with experience making P2P payments are generally satisfied with the speed of the transactions, and find that mobile tools are easier to use than wiring money and faster than sending a check. Consumers who use these services to send money also like that they are required to provide only minimal information about the payee, such as an email address or mobile phone number. Any additional information that is required by the provider to process the payment is then provided by the payee.

Some peer-to-peer transfer services specialize in sending money overseas. These services often market themselves as having the best exchange rates or the lowest fees with the purpose of attracting consumers who frequently move money between different countries. Spanish-speaking consumers spoke about sending money home to their families, but the majority use retail money transmitter services, bank branches, brick and mortar-based nonbanks, and prepaid cards and are less familiar with exclusively mobile-based remittance platforms. Retail money transmitters are popular because they provide quick transfers, sometimes in minutes, as well as what are perceived to be competitive exchange rates.

“For example, if I want to send money to Mexico, the bank [charges more] for sending that money. When you do it elsewhere, they can get it in ten minutes, and they give me more for that money than if I go to the bank. They charge me more and take more... They charge more for the transfer and the bank charges are higher, so the person receives less.”—Unbanked MFS User

4. Mobile Remote Deposit Capture

Mobile remote deposit capture, or mRDC, allows consumers to deposit physical checks by capturing an image on their phone and sending it to their financial institution. These offerings are becoming increasingly widespread, as banks continue to explore ways to manage the risks associated with this mobile feature. Fraud risk remains a concern for banks, along with unintentional misuse, such as when a consumer accidentally deposits the same check twice.

“One of the mechanisms we have for managing risk is capping the size of the checks and the cumulative numbers and amounts of checks that customers can deposit through mobile deposit to make sure that we can manage the velocity of any sort of fraudulent behavior or that kind of stuff.”—Financial Institution

While many underserved consumers are aware of this feature, few said that they had experience using it. The main advantage of mRDC is the time saved by not having to travel to the bank or ATM to deposit a check. The length of time it takes for the check to be credited to an account is the main driver that determines whether consumers find the feature useful. Consumers generally expect that mRDC deposits should be processed quickly, perhaps even faster than deposits made through other channels, such as at the ATM. In practice, mRDC hold times differ, but some banks impose longer holds for mRDC deposits than deposits made at an ATM or with a bank teller. Users’ experience with mRDC is mixed; some said they received funds relatively quickly, while others reported long waits to access their deposited funds. In rare cases, financial institutions guarantee immediate access to mRDC deposits in exchange for a fee, similar to their in branch check-cashing programs.

“I picked a paycheck up after 5:00, so obviously I couldn’t go into the bank to go put it into my account. So just sitting at home, I can just take a picture of it, and then deposit it in my account. So that was really helpful.” –Underbanked MFS User

“At first I was really excited about it, but then it didn’t clear for a week so I was mad. I was like, I should have just gone to a teller and deposited it.” –Underbanked MFS User

The study identified some notable barriers to the adoption of mRDC. Some underserved consumers do not see sufficient value in the feature either because they receive direct deposit in lieu of regular paper checks, or because they already have methods for accessing money given to them through paper checks, such as nonbank check cashers. Consumers without experience using mRDC tend to like the concept but have questions about how it functions, while others are unwilling to try the feature for fear it would expose them to security risks. In many cases, these risks are associated with fears of having financial account information “stolen” during the electronic transmission of the check image.

“Once this is done, where does the image of the check go?” –Unbanked MFS Non-User

“There’s so many cheats in the world. How is it to keep [mRDC fraudsters] from running, from cheating me... So these guys, crooks are constantly thinking about taking your money, just as much as you are trying to keep it secure.” –Underbanked MFS User

“Well, if I got a check for \$4,000, I’m not taking a picture, and I’m not retaining the check. I’m taking a copy of it, or putting it in my files, and going to the bank with it. If you receive something that high, though, you want to just absolutely make sure... [to] hand deliver it.” –Underbanked MFS User

5. Mobile Account Opening

A small number of study participants said they had opened an account online, and many of these accounts were with financial institutions that do not have physical locations. The majority of underserved consumers did not express interest in opening accounts on their mobile phone or find it impractical to do so. Consumers prefer the security and personalized service of speaking face-to-face with a representative when opening a new account. There is, however, some interest among consumers in using a mobile phone to set up a new account if the consumer already has an account with that same financial provider.

“OK, so when I’ve opened up checking accounts before, I’ve had to show my Social. How would we do that? Because I definitely wouldn’t put my Social on my phone.” –Underbanked MFS User

“The [phone] screen itself [...] is so small. I want to be able to read everything. What if I’m missing something over here in this corner because my phone isn’t showing me the whole page? Or I have to enlarge it and then I miss something on the other side. I don’t know. It seems having the whole screen there and being able to read it instead of shifting it around on your phone seems like a—seems more secure to me.” –Underbanked MFS User

“I don’t have concerns about [mobile account opening], but usually you have questions and it’s easier to talk to somebody.” –Underbanked MFS User

Table 1 summarizes the benefits of important MFS features, according to consumers who participated in the focus groups, and the relationship of those features to their underlying financial needs.

Table 1. Ways MFS Helps Consumers Meet Core Financial Services Needs

MFS Feature	Benefits	Consumer Needs Addressed
Checking Balance and Transaction History	<ul style="list-style-type: none"> • Provides access to account information anytime and anywhere • Saves time/trips to providers • Helps budget • Helps inform on the spot spending decisions 	Control, Convenience, Long-Term Financial Management
Alerts	<ul style="list-style-type: none"> • Provides access to account transaction and balance information • Helps consumers avoid fees • Helps monitor accounts for fraud 	Control, Convenience, Affordability, Security
Bill Pay	<ul style="list-style-type: none"> • Ensures timely payment • Save money over other methods that carry varying convenience fees • Saves time/trips to providers • Provides ability to pay bills anytime and anywhere 	Control, Convenience, Affordability,
Peer-to-Peer Transfers	<ul style="list-style-type: none"> • Enables immediate settling of personal debts • Faster than other methods • Saves time/trips to providers 	Control, Convenience,
Mobile Remote Deposit Capture	<ul style="list-style-type: none"> • Helps deposit money faster • Saves time/trips to providers 	Control, Convenience, Access to Money

V. MOBILE BANKING RELATIVE TO TRADITIONAL BANKING

As mobile banking becomes more widely available, consumers will have yet another channel through which they can interact with banks, conduct transactions, and obtain financial services. To assess whether and how mobile banking might ultimately improve consumer banking experiences and relationships, it is useful to understand how the availability of MFS might change the way consumers interact with banks, and how specific MFS functions are more or less successful than other banking channels in meeting consumer core financial needs.

A. Impact of Mobile Banking on Traditional Banking Channels

MFS is an additional channel that consumers may use to replace or supplement traditional banking methods, such as teller banking, online banking, ATM banking, and telephone banking. Financial professionals expressed mixed opinions about whether and how mobile banking has affected consumer use of traditional banking channels. Some noticed a decrease in Internet and phone interactions, as mobile banking has become consumers' preferred channel.

*"If you look at our calls that we receive, if you look at the telephone banking usage, it's directly correlated, it seems to be directly correlated with the increase in mobile banking usage and decline in telephone banking, for example."
–Financial Institution*

Other bank representatives, however, generally do not feel that mobile banking is contributing to a decrease in in-person branch transactions and the use of other traditional channels. Rather, they believe mobile banking activity encourages consumers to engage more with the bank and to interact with their accounts more frequently, for more reasons, and through more channels.

*"I think what we've seen, mobile adoption as being...at least up to this point... almost entirely additive in terms of channel behavior. We have not seen customers flooding out of other channels as they adopt mobile and use mobile to the exclusion of the others. We've seen them just increase the intensity of their relationship and their interactions...and the frequency of their interactions... with us through mobile devices while they've continued to retain contact with the other channels."
–Financial Institution*

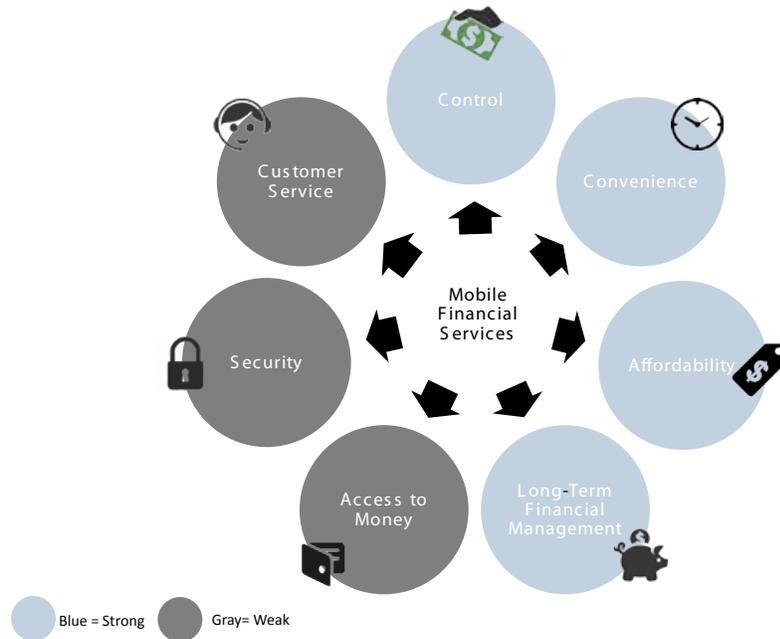
*"We kind of expected to see some cannibalization from branch check cashing. And we really haven't seen that. Customers are pretty channel-loyal. And if anything, we'd see more of an incremental customer base coming in through our mobile channel, as well as our ATM, as well as we add additional functionality through there."
–Financial Institution*

B. Advantages and Disadvantages of Mobile Banking in Meeting Consumer Financial Needs

Both MFS and traditional, non-mobile banking methods can meet many consumer needs, but MFS has certain advantages and disadvantages compared to non-mobile channels. The advantages specific to MFS can help address areas of weakness among traditional channels. While the research reveals that not all underserved consumers agree on the benefits and drawbacks of MFS, consumers generally believe that bank MFS has particular strengths in the areas of control, convenience, affordability, and long-term financial planning.

Security and customer service are seen as weaknesses of MFS; however, opportunities exist for financial providers to improve MFS in these areas and to address the concerns that underserved consumers shared. Concerns about security among current MFS users, for example, are clearly not strong enough to impede adoption. For MFS non-users, however, improving or better communicating existing security safeguards and enhancing customer service may help increase adoption.

Figure 1: Banks' Ability to Address Consumer Financial Services Needs with MFS, Relative to Traditional Methods



1. Control – MFS Is Seen as Superior to Traditional Channels

Study participants expressed frustration about the perceived lack of control over their bank account funds. Unexpected fees, changing terms and conditions, and lengthy transaction processing times create uncertainty about these funds, and make it more complicated for consumers to juggle incoming and outgoing payments and ensure that the correct charges and fees are applied. Many indicated a preference for cash, money orders, or prepaid cards because transactions made with those products are completed instantly.

Although consumers often stated that traditional banking does not provide them with enough control, MFS significantly increases the access to account information for underserved consumers, which directly addresses this weakness. Mobile tools allow consumers to check balance and transaction history at any time with minimal interruption to other activities.

“It’s just the sheer convenience—keeping yourself informed on your finances. If you ever got to a point where you got pretty lax, and it’s like ‘Oh, I haven’t checked my balance in, maybe, two or three days,’ but you have been spending in those two or three days, it’s nice to know that you’ll get an alert saying ‘Hey, your balance is below this point.’ Or you set yourself a threshold in spending. It’s just nice to know that you will always be aware of these things.” –Underbanked MFS User

“Easier to establish records, too, because it will send me confirmation texts or confirmation emails, and that just made it so much easier to say, like I said, if a mistake occurs, and mistakes do occur, I have something to back up what I did and when.” –Unbanked MFS User

With easy access to account information, consumers have a clearer understanding of when payments and deposits are processed. Also, some MFS users reported gaining better control of their account by spending more judiciously and, in turn, avoiding certain fees.

“Because, like I said, I can go into the grocery store and know exactly how much I can spend, instead of being up there and get embarrassed because something else came out that I forgot about—a \$20 something, or overdraft fees. I could always look at my bank account; make sure I’m not overspending. Or a check that I sent through. I could see that it’s pending in my account. If I’m \$10 short, I can hurry up and transfer funds. It’s just—It’s saved me money, and it also saved me time.” –Underbanked MFS User

A few MFS users, however, mentioned that having access to account information on the go can cause them to spend more, when they learn that money is available in the account.

“Say if you’re out shopping, you see this watch or something you want to buy, you’re not real sure, like, if I’ve got a [enough] to get it. And I just go on my phone, oh, yeah, I can get it, you know.” –Underbanked MFS User

Financial institution representatives in the study reported positive feedback from consumers regarding the greater control experienced with mobile banking.

“I’ve never seen another banking product where the customers use the word “love” to describe it as often as we see when reading some of these comments. People love being able to be in control over their financial lives.” –Financial Institution

MFS is not able to completely address all control issues pointed out by study participants. Some of these issues depend on underlying bank policies, such as the lack of transparency of fees or delays in bank transaction processing and posting. Some consumers recognize that many things that delay transaction posting are beyond the control of financial institutions and instead depend on merchant processing practices or limitations of various payment networks.

2. Convenience – MFS Is Seen as Superior to Traditional Channels

MFS also offers a significant advantage in convenience. Traditional banking is often perceived as inconvenient. Consumers noted that they do not always have time to visit the bank during the hours it is open, and do not like the hassle and expense of driving to the branch.

“So most people don’t know if you go to a little supermarket, they’ll cash your check for you. All you gotta do is show your driver’s license to get you in the computer. I use that as a last resort, because some banks close on a holiday and you cannot control when you get paid because it falls on a certain date. But we do know the holiday will fall on certain days of the month, and if the banks are closed, what do you do then? So you have to have a backup.” –Underbanked MFS Non-User

Underserved consumers reported looking for ways to save time and reduce spending unnecessary effort in their lives, and mobile financial services are uniquely suited to solve this problem. Checking account balances and transaction histories can be accessed with a few taps on a mobile device, requiring significantly less time and effort than using an automated phone system, driving to a physical location, or logging on to a computer. Further, users can pay bills and transfer money instantly from a device that is almost always on hand. Underserved consumers find mobile financial services to be more compatible with their lifestyles than other methods of financial management.

“Before, you had to wait to get the bank statement to see what you had spent on. But now it is much more accessible.” –(Spanish translation) Underbanked MFS User

“It seems to me that unless you’re changing it frequently, you’re just tapping your thumb. Boom, boom, boom, you’re done. That’s it. It’s over with, then. Like I say, if you want to do it at 3:00 in the afternoon, you don’t have to wonder if the office is closed.” –Unbanked MFS User

“I have to call in between their times. And then having to wait and listen for the system to go through, and sometimes it would be put in your card number, sometimes it’s put in your social security number. It’s a lot. [With MFS] I can just click, click, click and it’s all there on my phone.” –Unbanked MFS User

“Don’t have to deal with anybody else. Just do it yourself. Quicker. Don’t have to leave the house.” –Unbanked MFS User

3. Affordability – MFS Is Seen as Superior to Traditional Channels

Many consumers feel banks are unaffordable, reporting negative experiences with bank fees that they find to be too high or unpredictable. While mobile financial services offer no direct cost savings, many consumers believe these tools help them save money. Access to account and transaction information through a mobile device helps underserved consumers avoid overdraft and low balance fees. When consumers can keep a closer watch over their money, they are more likely to know when they are in danger of a fee and are thus more likely to take action to avoid it, if they have the means to do so.

“I feel a little less hateful when I’m not getting fees all the time, you know, and I think it makes a big difference banking on the phone for getting the fees.” – Underbanked MFS User

4. Long-Term Financial Management – MFS Is Seen as Superior to Traditional Channels

Consumers feel that banks are well-positioned to help them with personal financial management and long-term planning. Some said that banks are better than nonbank providers at developing long-term financial relationships with consumers, and that banks can help them build credit and access other products and services.

“For me, I’d like to buy a house, so when you have a relationship with a bank it kind of shows stability and continues all of that towards buying a house.” – Unbanked MFS User

“For me, having a bank account is as backup. It is never going to get lost and it helps when you need a loan. It speaks well or badly of you.” –(Spanish translation) Underbanked MFS Non-User

“[I use a checking account] just if I need it for [extra money] for something maybe, money that I actually forget is there, it’s there if I need it.” –Underbanked MFS User

Mobile financial services have considerable potential to enhance personal financial management tools and help consumers plan for long-term financial success. Consumers who adopt mobile financial services quickly make it a habit to check financial apps daily. This gives providers an opportunity to provide more detailed information to consumers that can help them with long-term financial goals, even if underserved consumers are not currently focused on such milestones.

Although still rare, some financial providers offer consumers mobile tools that help them understand income and spending patterns. These budgeting and planning tools often offer visuals and give consumers a quick, uncomplicated view of their finances.

Banks may also have an opportunity to use mobile tools to help grow or deepen their relationships with consumers who interact with the bank more frequently and may wish to learn about and use additional bank products and services. This may be challenging, though, because many consumers noted that they do not wish to hear about new products and special offers through the mobile app. So, for financial institutions to grow long-term relationships with consumers who increasingly interact with the bank through the mobile channel, they will need to explore the most effective ways of sharing advice or information about new products and services.

“When I’m in the app I just want to do what I’m there to do. I don’t want to be bothered with ads or offers.” –Underbanked MFS User

5. Access to Money – MFS Is Seen as Comparable to Traditional Channels

Consumers are often dissatisfied with banks’ ability to provide fast access to their money. Indeed, this is seen as one of the greatest weaknesses of traditional banks. Even though some consumers may expect quicker posting times and faster access to deposited money when using MFS, these tools are generally not able to change the speed of the underlying transactions. Hold times—the biggest barrier consumers face in accessing their funds—are dictated by financial service providers as well as certain merchants. Mobile financial services do not change these dynamics. These services may present an advantage by allowing consumers to deposit funds without having to visit a branch or pay a bill without having to mail a check, but they cannot offer access to cash and mRDC deposits often require more processing time than traditional check deposits. Thus, mobile financial services currently have little impact on satisfying this consumer need.

6. Security – MFS Is Seen as Inferior to Traditional Channels

Many consumers seem comfortable with the level of security provided by traditional banking. Consumers are aware of FDIC deposit insurance and feel it is an important reason why bank accounts are safer than other alternatives, such as prepaid cards. In general, consumers feel confident that if funds were missing from their account, banks would eventually credit the funds back. While consumers acknowledge that it might be a hassle for them to go through the process of resolving an error or fraudulent activity, they feel their money is protected in a bank account and that banks are the safest financial provider.

“I guess I dropped [my debit card]. Anyway, somebody end up using it. I mean, it took forever. I went through a lot to get that money back on my card and literally had to write to the bank. Oh, I was so mad. And I was at work when all this happened. I had to verify all this stuff.” –Underbanked MFS Non-User

Despite the sense that banks are safer than other financial providers, underserved consumers perceive that mobile financial services expose them to greater risk of fraud, “hacking”, or unauthorized account access than other banking channels, including online banking. Among consumers who do not use MFS, security concerns are one of the main reasons they have stayed away from this technology; even current MFS users often worry about security.

“A cell phone is just a computer; it can be hacked, and you can lose everything, which is why I don’t bank on a cell. I don’t do anything on a cell phone.” –Unbanked MFS Non-User

“How anything you put on the Internet is on there forever. It never goes away. Even if you think it’s deleted, it’s not deleted.” –Underbanked MFS Non-User

“I would be worried if I lost my phone they’d have access to all my banking information. If I lost my phone, you have access to all my banking.” –Underbanked MFS Non-User

“And then sometimes it’ll say loading depending on the signal like what you were saying. And then what if it charges you two times a \$150 ‘cause it’s loading and loading and loading, it’s like when you make your car payment online, it says please don’t refresh your button ‘cause you will get charged two times. Do they do that automatically or is that a possibility? Obviously like he said, if something happens and you just lose your signal temporarily, you’re on 3G instead of 4G and you get overdraft fees with your bank ‘cause you only have exactly 150 bucks.” –Underbanked MFS Non-User

In practice, these risks may not be as great as consumers believe, but the perception is very real. The combination of a lack of understanding of mobile technology and widely publicized data breaches of seemingly secure systems has left consumers wary about online fraud. Consumers are also concerned about risks that may arise in the future if current security measures are

circumvented. Some consumers are sophisticated enough to know what encryption and other security protocols to look for, but most lack the knowledge to understand when an MFS transaction presents a meaningful risk. Among consumers, there is a widespread awareness that they should be cautious about using MFS over public or unsecured Wi-Fi.

7. Customer Service – MFS Is Seen as Inferior to Traditional Channels

Customer service was perceived to be another strength of traditional banking. Bank customer service staff is viewed much more positively than staff of other providers, especially those of prepaid cards. Many consumers feel that bank staff is generally more interested in helping them resolve issues than nonbank provider staff. They particularly value the ability to reach a live person when needed, either at the branch or on the phone. However, underserved consumers do not think that MFS offers responsive customer service that meets this same standard. Mobile based services are seen as a way for consumers to serve themselves. Due to this perception, consumers expect to use mobile tools autonomously and without assistance. When assistance is needed, the bar for fast and efficient resolution is higher because of the expectation that MFS should accomplish tasks quickly and with minimal effort. Therefore, consumers expect immediate support over the phone or via email, text, or chat, but MFS does not always deliver that.

“It would be nice if you could reply and have it actually go somewhere so you didn’t have to log in. Like if you had a question about something.” –Underbanked MFS User

Table 2. MFS Relative to Traditional Banking Channels

Consumer Need	Consumer Perception	
	Traditional banking channels	MFS relative to other channels
Long–Term Financial Management	Very Strong	Superior
Control	Weak	Superior
Convenience	Weak	Superior
Affordability	Weak	Superior
Security	Strong	Inferior
Customer Service	Strong	Inferior
Access to Money	Very Weak	Similar

VI. CONCLUSIONS AND TAKEAWAYS

Mobile financial services meet many of the core financial services needs of underserved consumers, especially in areas where traditional banking channels may be perceived to be less successful. The FDIC's qualitative research reveals that MFS can encourage the sustainability of banking relationships for the underserved, but that potential is more limited for growing banking relationships and promoting access at the moment.

Underserved consumers make tradeoffs when selecting financial services based on certain financial needs: control over their finances, access to funds, convenience, affordability, security, customer service, and ability to engage in long-term financial management. Many study participants feel that traditional banking does not provide the level of control, access to funds, affordability, and convenience they need. Mobile banking is perceived to better meet consumer needs in some of these areas of weakness.

MFS improves the value of banking services for many consumers by enhancing the control, convenience, and, in some cases, even the affordability of having a bank account. Mobile banking users in the study were vocal about the ways that MFS increased their awareness of available account balances and helped them better understand the timing of when funds leave and enter their accounts. Mobile banking also provides underserved consumers the ability to monitor charges and fees, such as overdraft, and, in some cases, even avoid them. Mobile banking was also described as a convenient recordkeeping tool that can be easily accessed when disputes about payments arise. This type of control over managing funds is important for all consumers but particularly for underserved consumers who often have less leeway in their budgets.

In many ways, MFS is already working quite well to improve banking experiences. One important opportunity lies in raising awareness about current offerings. Banks, financial educators, and other stakeholders can help consumers understand the available features and their advantages. Specifically, these stakeholders may consider developing messages that recognize the financial needs of these consumers and highlight the ways that mobile tools address these needs, indirectly or directly.

Some concerns and misgivings about banking that persist in the minds of underserved consumers fall outside the scope of mobile banking. Many issues related to access to funds would require policy changes by banks and merchants, and modifications to the payments system that span the entirety of the banking system. Other obstacles that stand in the way of underserved consumers opening and maintaining bank accounts, such as lack of money or the absence of required identification, are not easily or directly addressed by mobile technology alone. Some consumers are averse to or uninterested in technology, and no realistic changes can be made to MFS offerings that will make them appealing to such consumers.

In focus groups, underserved consumers verbalized several opportunities for financial providers to better meet their needs. Several of those strategies follow:

- ***Increase consumer control over finances by improving access to timely account information***
 - Post transactions in as close to real-time as possible and communicate more precise timing of when payments and deposits are expected to clear (as opposed to a range).
 - Clearly identify transactions not factored in the current available balance.
- ***Expedite access to money***
 - Clear mobile remote deposit capture (mRDC) deposits faster, while maintaining sound risk management practices. For example, offer mRDC with faster availability options in exchange for a reasonable fee.

- ***Make banking more affordable through better account management***
 - Promote the use of MFS as a tool to help consumers reduce unexpected fees. For example, low balance alerts or using MFS to conduct timely balance and transaction monitoring can help avoid overdraft or insufficient funds (NSF) fees.
- ***Address real and perceived security shortfalls***
 - Develop and communicate security measures to allay widespread fears about MFS, both real and perceived. Inform consumers about best practices they can implement to minimize MFS security risks, such as setting password protection on mobile phones and being mindful when using untrusted networks.
- ***Increase awareness of mobile tools***
 - Promote the use of MFS as a tool to help improve consumers' control of their finances. Identify and target customer segments that might benefit from strategies to help them manage funds, reduce unanticipated fees, maintain minimum required balances, increase savings, or avoid having transactions declined.
 - Offer MFS set up as part of the account opening process and demonstrate available alerts and functions.
- ***Encourage Long-Term Financial Management***
 - Provide aggregate or trend account information that can be accessed through mobile tools to help consumers more effectively monitor progress towards fulfilling financial goals (e.g., spending, saving, budgeting).

APPENDIX

Table 1. Percent of Unbanked, Underbanked, and Fully Banked Households that Have Access to a Smartphone in 2015

Household Characteristic	All Households	Unbanked	Underbanked	Fully banked
All	67.1	42.9	75.5	71.1
<u>Race or Ethnicity</u>				
Black	63.5	43.6	73.3	70.9
Hispanic	66.3	43.7	78.6	72.3
Non-Hispanic Whites	67.3	41.2	74.3	70.4
Other	74.0	43.8	83.6	78.7
<u>Age</u>				
Age 24 or younger	82.5	63.6	90.7	87.7
Age 25-34	84.0	56.6	90.0	90.6
Age 35-44	80.9	53.5	86.2	88.3
Age 45-54	75.4	37.7	78.2	82.8
Age 55-64	63.9	22.3	66.2	70.3
Age 65 or older	38.2	9.3	43.1	41.0
<u>Household Income</u>				
Less than \$15,000	43.9	39.5	57.7	42.7
Between \$15K and \$30K	50.6	44.6	67.5	48.8
Between \$30K and \$50K	64.6	49.5	77.1	65.2
Between \$50K and \$75K	73.9	50.6	84.2	75.7
\$75,000 or more	84.1	44.5	88.5	87.7

Source: 2015 FDIC National Survey of Unbanked and Underbanked Households (forthcoming October 2016).

Table 2. Percent of Underbanked and Fully Banked Households that Used Mobile Banking in the Past 12 Months

Household Characteristic	All Households	Underbanked	Fully banked
All	31.9	35.7	31.0
<u>Race or Ethnicity</u>			
Black	33.0	35.0	31.9
Hispanic	34.2	34.2	33.8
Non-Hispanic Whites	31.2	36.2	30.3
Other	33.9	38.0	33.0
<u>Age</u>			
Age 24 or younger	51.6	55.5	49.6
Age 25–34	53.3	54.2	53.5
Age 35–44	47.7	46.0	48.8
Age 45–54	34.1	31.0	35.2
Age 55–64	22.0	21.5	22.2
Age 65 or older	9.2	10.8	8.9
<u>Household Income</u>			
Less than \$15,000	19.0	22.1	17.4
Between \$15K and \$30K	19.6	27.2	16.6
Between \$30K and \$50K	27.1	34.9	24.4
Between \$50K and \$75K	34.6	42.8	32.9
\$75,000 or more	43.2	49.6	42.2

Source: 2015 FDIC National Survey of Unbanked and Underbanked Households (forthcoming October 2016).
 Note: Based on banked households that accessed an account in the past 12 months.

Table 3. Summary of Underserved Consumer Core Financial Services Needs

Consumer Need	Dimensions of Need
<p>Control</p> 	<ul style="list-style-type: none"> • Knowing exactly when and why money is deposited and made available, and withdrawn from accounts • Confidence that transactions are processed quickly • Absence of unexpected fees • Choice in payment methods • Ease of long-term record keeping
<p>Access to Money</p> 	<ul style="list-style-type: none"> • Access to funds as soon as they are received by financial provider <ul style="list-style-type: none"> • Short hold times from financial provider • Short hold times from merchants • Quick resolution of account problems (such as suspected fraud) that lead to suspension of account access • Quick return of money debited from accounts in error
<p>Convenience</p> 	<ul style="list-style-type: none"> • Saves time or effort • Financial providers have locations close to work or home • Financial providers have hours outside of normal business hours • Access to online and mobile tools
<p>Affordability</p> 	<ul style="list-style-type: none"> • Low/no fees for account maintenance, individual transactions, check cashing, money order, bill paying, deposits, cash withdrawal, speaking with a customer service agent • Predictability in fees • Help minimizing “avoidable” fees
<p>Security</p> 	<ul style="list-style-type: none"> • Broad term used for protection from threats • Safety against theft, both physically and digitally • Protection against identity theft, data breaches and unauthorized account access • Privacy • Safeguards against financial institution failure or mistakes
<p>Customer Service</p> 	<ul style="list-style-type: none"> • Representatives available through consumers’ preferred channel (varies by consumer) • Representative available at convenient time to consumer (varies by consumer) • Lack of excessive wait times to connect with representative
<p>Long-Term Financial Management</p> 	<ul style="list-style-type: none"> • Advice on longer-term financial planning • Access to personal financial management tools • Access to longer-term credit products (mortgage, auto loans, etc.) • Access to investment products

Table 4. Summary of Consumer Perceptions of the Benefits and Drawbacks of Everyday Financial Products

Product	Benefits	Drawbacks
Cash	<ul style="list-style-type: none"> • Widely accepted • Quick access to money and information about funds • Limits overspending (can only spend cash on hand) • No risk of identity theft 	<ul style="list-style-type: none"> • Easier to spend • Large amounts draw attention • Must physically go to get cash or pay in cash • Lack of records • Can be lost or stolen with little recourse
Checks	<ul style="list-style-type: none"> • Easy and convenient way of payment 	<ul style="list-style-type: none"> • Costs money to purchase checks • Takes time to reach recipient • Not universally accepted • Can have long hold time • Can be a delay if payee does not deposit immediately • Checks can bounce
Money Orders	<ul style="list-style-type: none"> • Widely accepted • No threat of bouncing a money order • Payee cannot take more than expected as payment • Creates a record and is traceable • Can be replaced if lost or stolen 	<ul style="list-style-type: none"> • Fees to use • Must physically go to pick up money order • Cost to cash out if no longer needed
Debit Cards	Debit cards are intrinsically linked to banks in consumers' minds. Their perceptions of debit card transactions are tied to their opinions of bank checking accounts.	
Prepaid Cards	<ul style="list-style-type: none"> • Perceived lower fees than bank accounts • Funds cannot be overdrawn/no overdraft fees • Perceived faster and easier access to money • Bank account numbers not used in transactions making it safer from identity theft • Can be used when customers prefer not to disclose bank account numbers 	<ul style="list-style-type: none"> • Funds not insured the same way as bank funds • Cannot be used with vendors that require additional holds (hotels, rental cars, etc.) • Inadequate customer service
Peer-to-Peer Payments	<ul style="list-style-type: none"> • Easy to use • Focused on mobile technology • Can hold money like a bank account • Minimal information needed for peer-to-peer transfers 	<ul style="list-style-type: none"> • Funds not insured the same way as bank funds • Some consumers not comfortable with technology and lack of physical locations



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