

# Mobile Banking and Payments Survey of Financial Institutions in the Eleventh District Summary of Results

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Federal Reserve Bank of Dallas and  
SWACHA—The Electronic Payments Resource®

April 2015

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## **Mobile Banking and Payments Survey of Financial Institutions in the Eleventh District Federal Reserve Bank of Dallas and SWACHA—The Electronic Payments Resource<sup>®</sup>**

This survey was a joint effort conducted by the Federal Reserve Bank of Dallas<sup>1</sup> and SWACHA—The Electronic Payments Resource<sup>®</sup>. The Eleventh Federal Reserve District covers all of Texas, as well as northern Louisiana and southern New Mexico, and SWACHA membership consists largely of financial institutions (FIs) located within the same geographic territory.

Our goal in conducting this survey was twofold:

- To provide our community bank and credit union (CU) constituents (customers of the Federal Bank of Dallas and members of SWACHA) with a perspective on the current landscape of mobile banking and mobile payments in the United States, and to allow them to get a feel for what their peers are offering to customers in both areas.
- To compare the survey results with SWACHA’s 2013 Consumer Insights Survey—the Mobile Banking Excerpt, in particular—to determine whether FIs’ mobile banking and mobile payments offerings are in sync with the product needs or desires expressed by their consumer customers.<sup>2</sup>

### **Introduction – Mobile Banking: Current Landscape and What’s Ahead**

According to the Federal Reserve Board of Governors’ report *Consumers and Mobile Financial Services 2014* (FR Board of Governors’ 2014 report),<sup>3</sup> mobile phones are in widespread use: 87 percent of the U.S. adult population has a mobile phone, and 61 percent of mobile phones are smartphones (Internet-enabled). As of December 2013, 33 percent of all mobile phone users and 51 percent of smartphone users had used mobile banking in the previous 12 months. This is an increase from 28 percent in December 2012 for mobile phone users and 48 percent for smartphone users. Twelve percent of those mobile phone users who are not currently using mobile banking think that they will probably use it within the next 12 months.

#### **Product Offerings Are Expanding**

In the first wave of mobile banking in the United States, many FIs simply replicated their online banking sites and made them available to their customers through mobile devices. However, as customers increasingly compare their FIs’ offerings with tech giants like Google, and as FIs fight to keep the attention of their customers or members in the information age (especially “millennials”), FIs’ mobile banking offerings are becoming increasingly robust. Customers of

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<sup>1</sup> Questions about the survey should be directed to Donna Raedeke, Payments Outreach Analyst, Federal Reserve Bank of Dallas, at [donna.raedeke@dal.frb.org](mailto:donna.raedeke@dal.frb.org) or 214-922-6042.

<sup>2</sup> An Executive Summary of the Consumer Insights Survey Mobile Banking Excerpt can be found at: <http://www.swacha.org>. To purchase the full survey results, please contact Tim Quisenberry, SWACHA.

<sup>3</sup> For the purposes of this report, the Federal Reserve Board of Governors’ report *Consumers and Mobile Financial Services 2014*, will be referenced as FR Board of Governors’ 2014 report.

Chase, Citi and Bank of the West (San Francisco-based subsidiary of BNP Paribas), for example, can view account balances without logging in to mobile banking. BBVA's Simple, American Express, Discover, and Tangerine (formerly ING Direct Canada) are working with Apple's Touch ID biometric authentication technology as an alternative to mobile banking passwords and PINs. U.S. Bank, Wells Fargo, Barclays and Tangerine are all working with using voice authentication to access mobile banking.<sup>4</sup> Navy Federal Credit Union, the largest CU in the United States, allows members to apply for a credit card through their mobile devices.

But innovation in mobile banking is not just the reserve of big banks. Community banks and CUs are "upping their game," too. City Bank Texas, Lubbock, was one of the first FIs in the country to allow its customers to turn their debit cards on and off through its mobile banking app. City Bank and Abilene-based First Financial Bank were early adopters of mobile photo bill pay. Nearly two out of every three CUs have a mobile app, according to a December 2014 report by Malauzai Software, a mobile-banking solutions provider based in Austin,<sup>5</sup> and 21 of the 54 FIs that have gone live with Apple Pay since its October 2014 launch are CUs.<sup>6</sup>

### **Mobile Payments: Usage Climbs and Security Strengthens**

The FR Board of Governors' 2014 report indicated that 17 percent of all mobile phone owners have made a mobile payment in the past 12 months, up from 15 percent in 2012. (Interestingly, the share of smartphone users who have made a mobile payment in the past 12 months has effectively remained constant at 24 percent.) The most common mobile payment was bill payment through an online system (66 percent of mobile payment users, up from 42 percent in 2012).

In addition, the survey revealed that the use of mobile phones to make payments at the point-of-sale (POS) has grown substantially over the past several years, increasing threefold between the 2011 and 2012 surveys, and again between 2012 and 2013. In 2013, 17 percent of smartphone owners, representing nine percent of the U.S. adult population, reported using their phone to make a purchase at a retail store in the past 12 months. Of the respondents to the survey that indicated they are not using mobile payments, 76 percent indicated that it is easier to pay with cash or a credit/debit card, followed by 63 percent that indicated concern about the security of mobile payments.

Mobile payments are not new to the United States. Perhaps the biggest success in mobile payments to date has been Starbucks. Starbucks recently revealed that, of the approximately seven million transactions made at Starbucks' registers each week, 16 percent are made from a mobile device. The company claimed that its mobile payments accounted for 90 percent of the \$1.3 billion mobile payments market in 2014.<sup>7</sup>

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<sup>4</sup> "Why Banks Are Using Apple's Touch ID," by Mary Wisniewski, *American Banker*, Dec. 11, 2014.

<sup>5</sup> "Anticipating Users' Desires Frames 2015 Forecast," by Robert McGarvey, *CU Times Magazine*, Dec. 10, 2014.

<sup>6</sup> See "Apple Pay Participating Issuers," <http://support.apple.com/en-us/HT6288>

<sup>7</sup> "Starbucks Had 90% of US Mobile-Pay Share, Is 'Just Getting Started,'" by Daniel Wolfe, *PaymentsSource*, Oct. 30, 2014.

Beyond the apps launched by individual retailers like Starbucks, there are a number of “mobile wallets” in the market in the United States today. Google Wallet launched in 2011 and has been through several iterations since that time. Softcard (formerly known as Isis Mobile Wallet), a joint venture of AT&T, T-Mobile and Verizon, launched the following year. The merchant-led Merchant Customer Exchange (MCX) has yet to release its CurrentC mobile wallet, which is now being piloted.

Of the developments in mobile payments geared toward allaying the security concerns of potential users, perhaps the most significant so far has been the introduction by Apple of its Apple Pay mobile payments service, announced in September 2014 and launched in October. Apple Pay provides multifactor authentication, using something the customer *has* (the iPhone 6 or 6 Plus) and something the customer *is* (using Touch ID, with the user’s thumb- or fingerprint, as biometric authentication). This, along with its use of tokenization, which removes payment card numbers from the transaction process, may help to pave the way for more wide-spread use of mobile payments.

When Apple announced Apple Pay, many in the industry viewed it as a ringing endorsement of near-field communication (NFC), a technology for facilitating mobile payments that has been around for some time but that, to date, has not gained much traction. One of the hindrances to NFC has been lack of merchant acceptance, but as an increasing number of merchants upgrade their point-of-sale terminals to facilitate acceptance of Europay-MasterCard-Visa (EMV) chip cards, they may also incorporate acceptance of NFC. Some industry experts predict that Apple Pay will be a rising tide that will lift all boats; i.e., if Apple Pay is successful, it will herald success for other mobile payment offerings like Google Wallet, Softcard and CurrentC.

Another interesting development in the world of mobile payments is taking place away from the point of sale, in the area of business-to-consumer payments. Some FIs are offering their corporate customers the ability to make a payment to a consumer using either his email address or mobile phone number. Corporates can use these services to send rebates, refunds, or insurance claims, while governments can send tax refunds. Examples of this type of service include Bank of America’s Digital Disbursements and Fiserv’s PopMoney.

## Survey Overview

The Federal Reserve Bank of Dallas and SWACHA-The Electronic Payments Resource, conducted a mobile banking and payments survey of FIs in the Eleventh District in July/August 2014.

The survey was part of a broader initiative conducted in conjunction with the Federal Reserve Bank of Boston and the New England Automated Clearing House, which have been surveying banks and CUs in New England about mobile since 2008. This was the first time the Dallas Fed and SWACHA have participated in this survey. The Federal Reserve Banks of Atlanta, Minneapolis and Richmond also participated in this year's survey.

The term *mobile banking* as used in this survey is defined as “the use of a mobile phone to connect to an FI to access bank/credit account information (e.g., view balances, transfer funds between accounts, pay bills, receive account alerts, locate ATMs and deposit checks),” and the term *mobile payments* is defined as “the use of a mobile phone to pay for a purchase at retail point of sale (POS) or food service location, on the Internet for goods and services or digital content, or to pay for transit, parking or other transportation services, ticketing, etc. Payment may be initiated via SMS text message, mobile Internet, downloadable app, contactless near-field communication (NFC), and/or quick response (QR) code.”

FIs in the Eleventh District were sent an invitation to participate in the survey, to which 173 FIs responded.

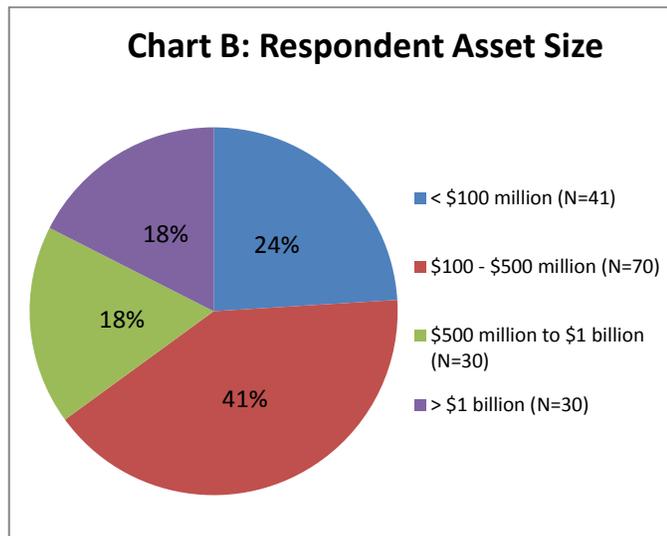
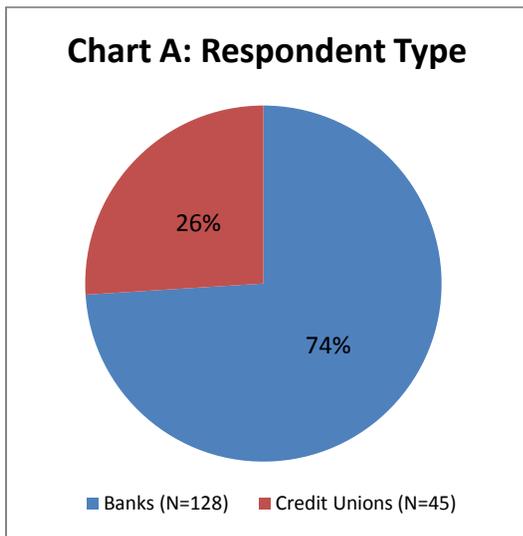
## Key Findings

- One hundred and sixty FIs (92 percent) reported that they currently offer or have plans to offer mobile banking services within the next 24 months.
- Thirteen FIs (8 percent) indicated that they do not have any plans to offer mobile banking or payments at this time, primarily due to security concerns and regulatory issues.
- The top security issues for FIs that offer mobile banking are malware or viruses, identity theft and/or inadequate customer protection.
- The most common mobile banking services currently offered by respondent FIs include checking balances (demand deposit accounts [DDA] and savings), transferring funds between an individual owner's accounts within the same FI, viewing statements/transaction history (DDA and savings), ATM/branch locator and bill payment.
- The most common plans for future services included mobile person-to-person (P2P) funds transfers, transfer of funds between an individual owner's accounts at different FIs and mobile remote deposit capture (mRDC).
- Offering of mobile payments remains low with 9 percent (16 FIs) currently offering, but 45 percent (78 FIs) plan to offer mobile payments services within the next 24 months. Forty-six percent (79 FIs) have no plans to offer these services.

## Demographic Information

As of June 30, 2014, there were 591 banks and savings associations and 557 CUs in the Eleventh District. Ninety-four percent or 1,148 of the FIs in the district fit the description of a community bank, having assets of less than \$1 billion.

Chart A shows that the respondents (173) comprise a mix of 128 banks (74 percent) and 45 CUs (26 percent). The majority of respondents (65 percent) have assets of less than \$500 million; 18 percent have assets between \$500 million and \$1 billion, and 18 percent have assets in excess of \$1 billion (Chart B).

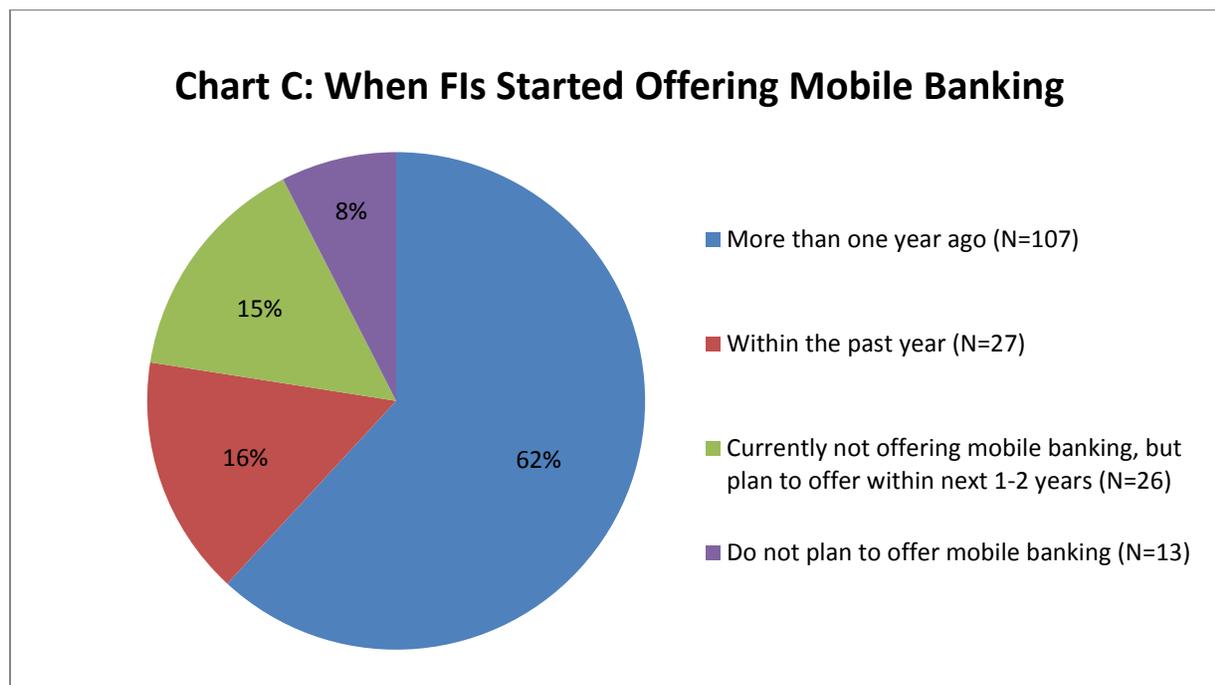


## Mobile Banking: Use, Applications and Features

### When FIs Started Offering Mobile Banking

To set a baseline for measuring growth in mobile banking offerings by FIs, the survey asked respondents when they started offering mobile banking to their customers. Chart C shows the results. Sixty-two percent (107 FIs) reported that they have offered mobile banking for more than a year, and 16 percent (27 FIs) began offering it within the past year. Fifteen percent (26 FIs) have plans to offer mobile banking within the next one to two years, and eight percent (13 FIs) have no plans to offer it. In total, 92 percent of FI respondents currently offer mobile banking or plan to offer it within the next 24 months. (Because this was the first year the Dallas Fed participated in the survey, we cannot compare the answers to previous years.)

As banks increasingly offer apps, consumers are increasingly using them. SWACHA, in its Consumer Insights Survey Mobile Banking Excerpt, found significant growth in consumer use of mobile banking apps. In its 2013 survey, SWACHA reported that the percentage of consumers using a mobile banking app was significantly higher than in 2011 and 2009 (32 percent versus 20 percent in 2011 and 7 percent in 2009). The percentage of consumers choosing not to use an app decreased from 54 percent of the respondents in 2009 to 29 percent in 2011 to 14 percent in 2013.



The previous chart reflected all FIs' (banks and CUs combined) answers about when they started offering mobile banking to their customers or members. Table 1 shows the answers broken down by banks and CUs.

**Table 1**

| Implemented Mobile Banking   | Banks      |     | CUs       |     |
|--|------------|-----|-----------|-----|
| More than one year ago   | 77         | 60% | 30        | 67% |
| In the past year   | 24         | 19% | 3         | 7%  |
| Currently do not offer mobile banking, but plan to offer within next 1-2 years | 17         | 13% | 9         | 20% |
| Do not plan to offer   | 10         | 8%  | 3         | 7%  |
| <b>Total</b>   | <b>128</b> |     | <b>45</b> |     |

### Reasons for not Offering Mobile Banking

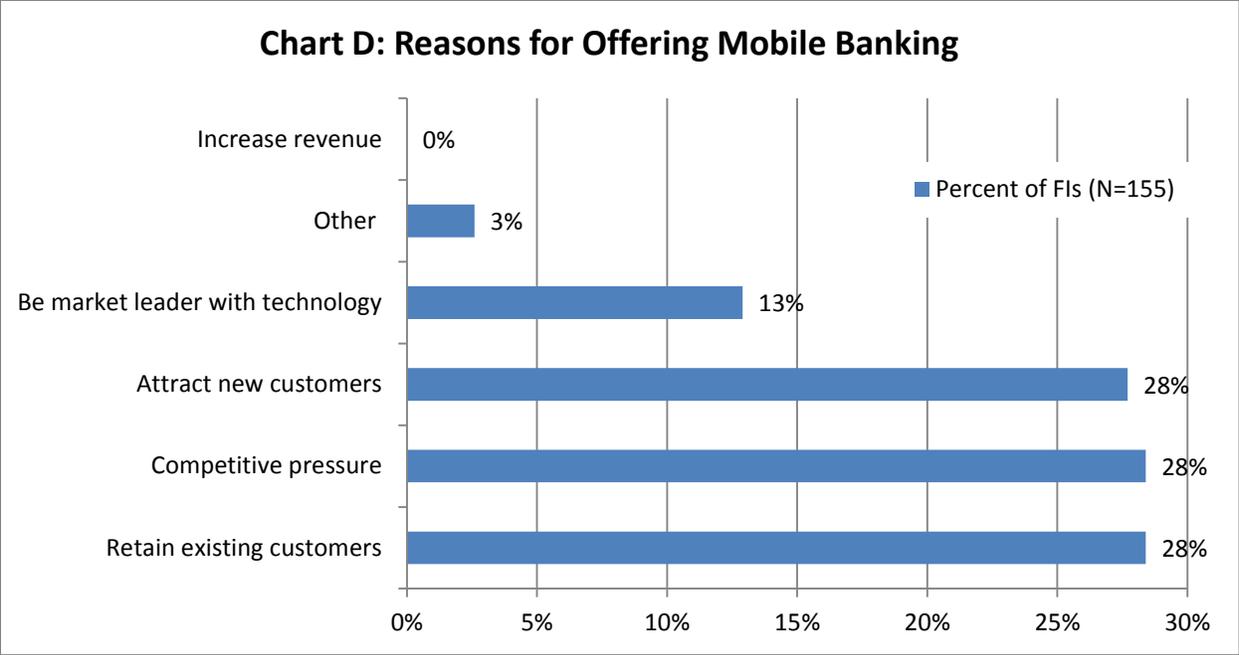
Of the 13 FIs that have no plans to offer mobile banking, nine had assets less than \$100 million and four had assets of \$100-\$500 million. These FIs were asked to rank the reasons they do not offer mobile banking in order of importance with “1” being the most important reason. Table 2 shows “security concerns” was the number one reason cited for not offering mobile banking, with “regulatory issues” being the second.

**Table 2**

| Reasons Not Offering Mobile Banking            | Ranking |
|--|---------|
| Security concerns                              | 1       |
| Regulatory issues                              | 2       |
| Lack of standards and interoperability         | 3       |
| ROI/Lack of business case                      | 3       |
| Lack of customer demand                        | 4       |
| Lack of consistent, reliable cellular coverage | 5       |
| Other  | 6       |

### Reasons for Offering Mobile Banking

For community banks and CUs, enhancing the mobile banking offering often becomes an issue of trying to ensure that their mobile offering is as good as, if not better than, those of their competitors—be those competitors large or small. In this survey, FI respondents that already offer or are planning to offer mobile banking showed this to be true with their answers regarding their primary business reason for offering mobile banking. Chart D shows the three reasons cited by nearly 85 percent of the respondents: to retain existing customers, competitive pressure and to attract new customers.



If the mobile banking offering is not consumer friendly and kept up to date, an FI’s reputation may be on the line. For example, a recent article in *American Banker* discussed a survey of mobile banking apps by MagnifyMoney.com, based on customer ratings submitted on the iTunes and Google Play sites. The apps of two FIs named in the article came off poorly. One FI’s customers “complained that the app crashed when they tried to make a deposit, and it limits customers’ mobile deposits to \$1,000 per day,” while the cofounder of MagnifyMoney.com called another FI’s app, last updated in 2011, “miserable ... It looks like it’s 10 years old and doesn’t have the functionality of other apps” like mobile remote deposit capture.<sup>8</sup>

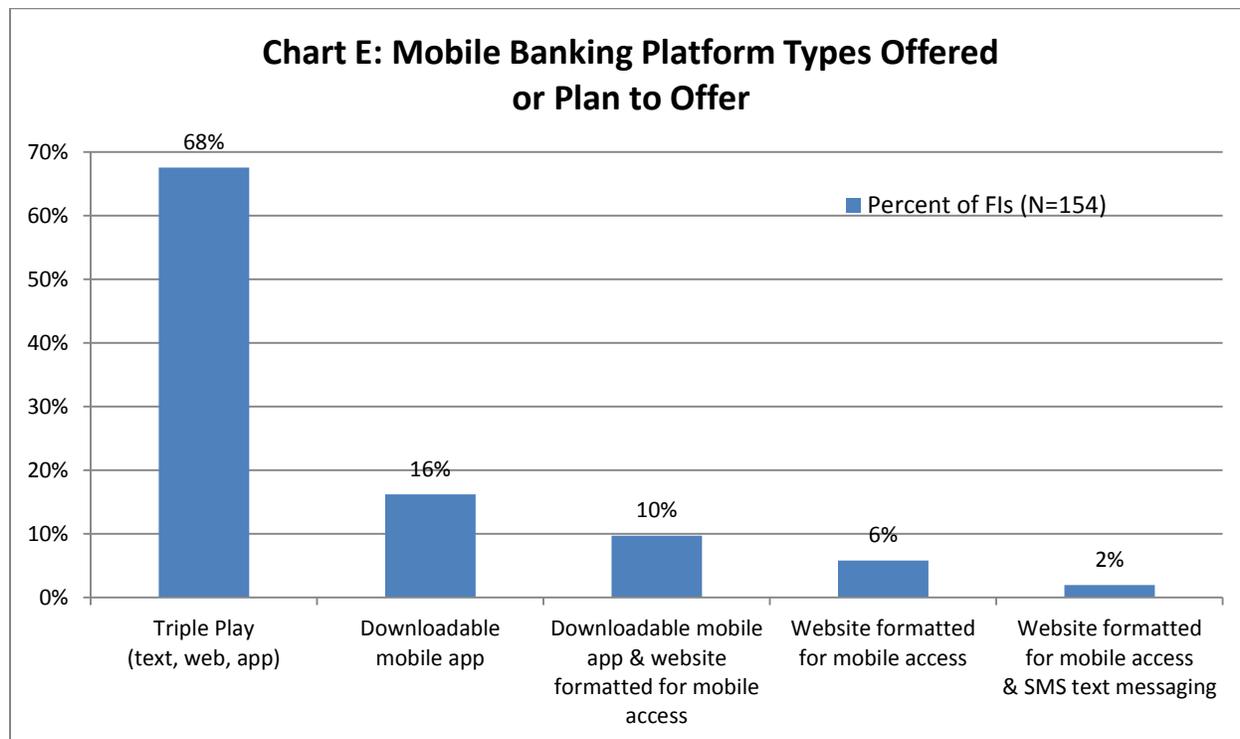
**Types of Mobile Banking Platforms Offered or Planned**

FI respondents use three types of technology platforms to deliver mobile banking services: a downloadable mobile app, a website formatted specifically for mobile access or SMS text messaging. FIs may offer one or a combination of these platforms (see Chart E). According to the FR Board of Governors’ 2014 report, 61 percent of U.S. adult-owned mobile phones are smartphones (Internet-enabled), and owners can use their phones to access their bank accounts. The majority of the FI respondents to this survey (68 percent) said they offer or plan to offer all three options (app, website and SMS), which indicates that FIs are attempting to satisfy the changing and diverse needs of their customers.

However, as smartphones are becoming more popular, SMS text message banking is becoming a less critical platform for mobile banking services. Javelin’s 2014 Mobile Banking Financial Institution Scorecard reported that 24 percent of mobile bankers used text message banking in 2014 and that it is losing its support by FIs. Javelin cited a drop in support by FIs for SMS text

<sup>8</sup> “There’s Still Time to Fix Your Bank’s App,” by Andy Peters, *AmericanBanker.com*, Dec. 12, 2014.

message banking from 77 percent of FIs in 2013 to 70 percent in 2014; and it was the only mobile banking access method to drop in support in 2014. Javelin recommends that FIs consider defunding SMS text message banking except for alerting customers.<sup>9</sup>

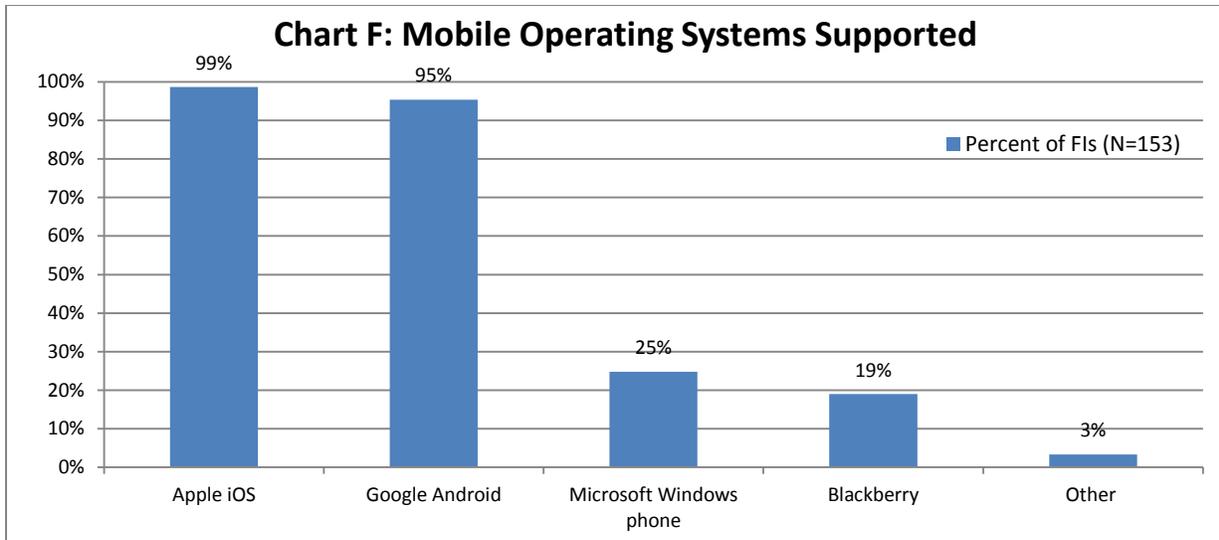


### Mobile Operating Systems Supported

According to market researcher comScore, Google’s Android operating system has 52.1 percent of U.S. market share, while Apple iOS has 41.7 percent.<sup>10</sup> Given these statistics, FIs must consider the cost to tailor their app for multiple mobile operating systems and also the number of customers that use each type. As shown in Chart F, nearly all FI respondents have built mobile apps that support both iOS and Android. A small percentage of FIs continue to offer their customers a mobile app for the less popular phones.

<sup>9</sup> “2014 Mobile Banking Financial Institution Scorecard: Competition Heats Up as Mobile Offerings Mature,” by Mary Monahan, Javelin Strategy & Research, December 2014.

<sup>10</sup> “Cyber Monday Online Sales Up Nearly 9% as Apple Continues to Outpace Android,” by John Stewart, *Digital Transactions News*, Dec. 1, 2014.

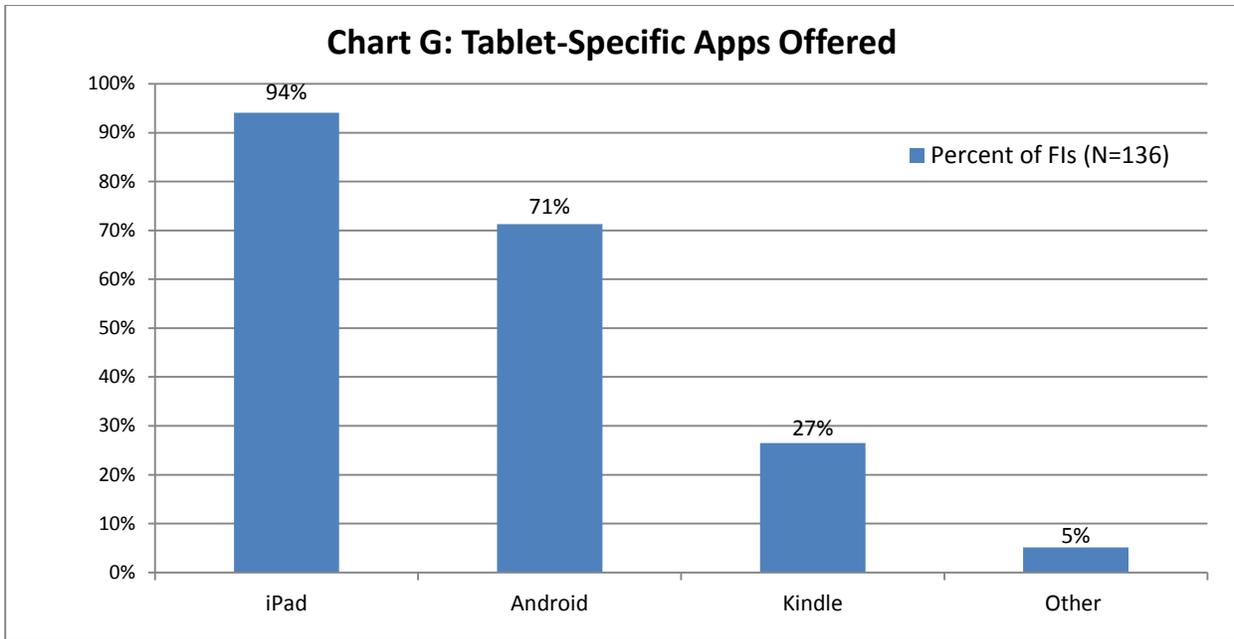


It is estimated that tablet use by consumers and businesses will increase greatly over the next few years. Gartner, Inc., a research firm, found that multidevice households are becoming the norm with tablet usage growing at the fastest rate of any computing device, and Gartner predicts that by 2018 more than 50 percent of users will choose a tablet or smartphone first for all online activities. For communication and information gathering when on-the-go, consumers tend to choose their smartphone first, followed by the tablet for longer sessions, and reserve the PC for when more complex computing tasks are needed.<sup>11</sup> SWACHA asked consumers about their tablet usage and found that of consumers who own a tablet, nearly 30 percent have a mobile banking app on it.

### Tablet-Specific Apps Offered

Chart G shows the FI respondents answers when asked about their tablet-specific mobile banking apps. The majority of FI respondents are keeping up with the growing use of the tablet, with 94 percent offering (or planning to offer) an app for the iPad and 71 percent for Android tablets.

<sup>11</sup> See "Gartner Says By 2018, More Than 50 Percent of Users Will Use a Tablet or Smartphone First for All Online Activities," Gartner Newsroom, Dec. 8, 2014, <http://www.gartner.com/newsroom/id/2939217>.

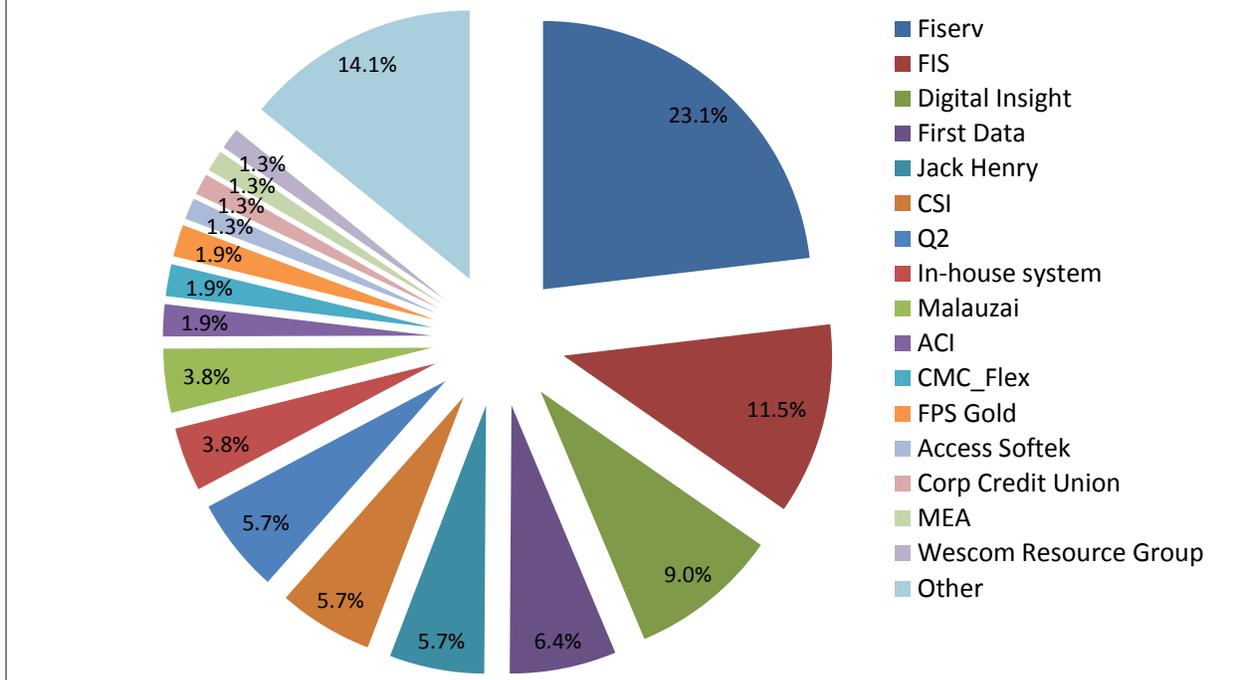


### Third-Party Provider Preference

Most FIs rely on a third-party provider to build and support their mobile banking offerings. There are many mobile banking providers to choose from, but, as shown in Chart H, of the 156 FIs that responded to this question, Fiserv was chosen by nearly one quarter (23.1 percent) of the respondents.

**Chart H: FI's Choice of Company to Provide Mobile Banking System**

(N = 156)



### Most Frequently Used Banking Features

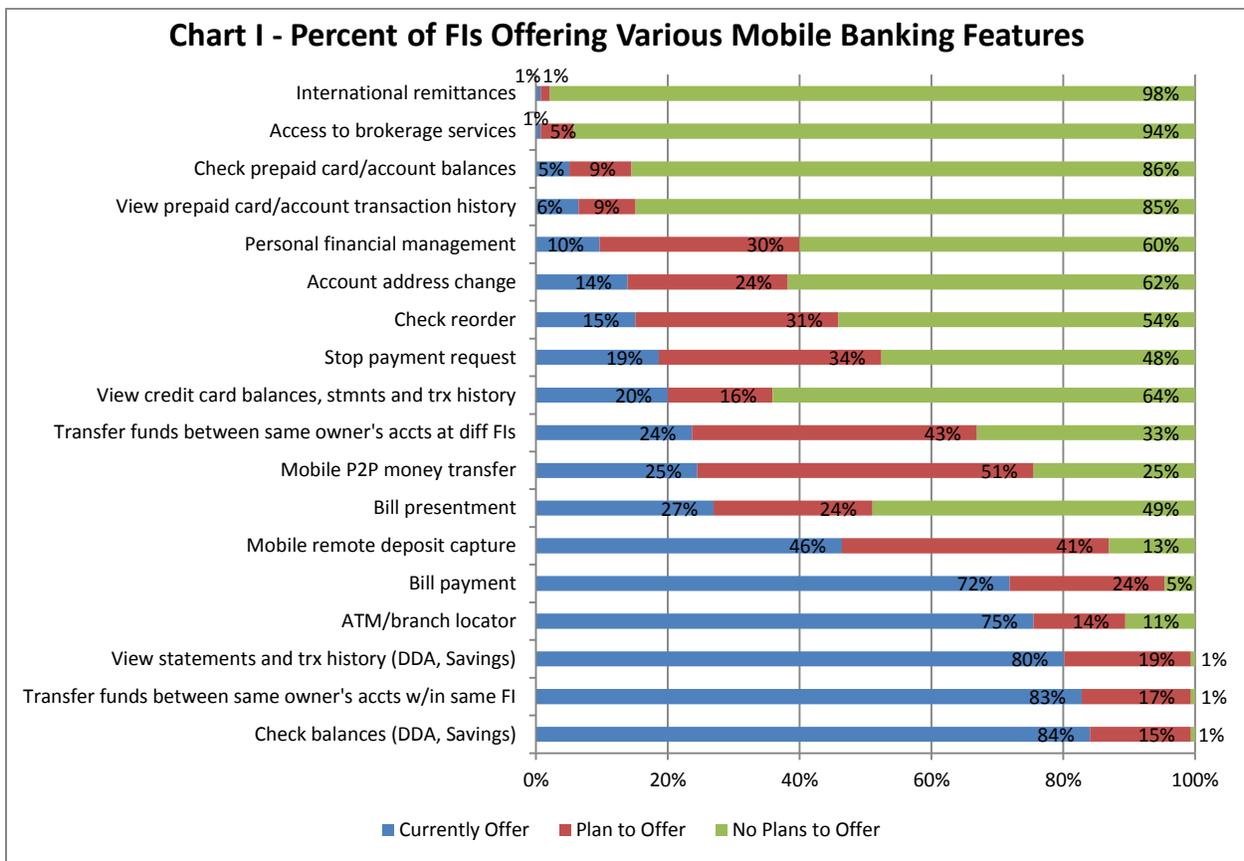
FIs offer different types of mobile banking features, which typically involve the monitoring of accounts and the movement of money into and out of accounts. Other features offered include an ATM locator, stop payment, check reorder, address change and personal financial management (PFM).

According to SWACHA's 2013 Consumer Insights Survey, as in 2011, consumers' most commonly used mobile banking app in 2013 was checking balances (94 percent versus 86 percent, respectively). The transfer of money between accounts was the next most frequently mentioned. The most notable difference between 2013 and 2011 was the percentage of those depositing checks remotely (through mRDC), which significantly increased to almost half of those who use a mobile banking app from just under one fifth in 2011 (46 percent in 2013 versus 16 percent in 2011). Consumer respondents' intended usage of banking apps mirrored their current usage of them; i.e., checking balances, transferring money between accounts and paying bills. Most notable is the significantly higher percentage of those who intend to deposit checks in the future (25 percent in 2013 versus 16 percent in 2011).

Similar to the growth SWACHA reported in consumer's use of mRDC, the American Bankers Association (ABA) reported mRDC as an increasingly popular banking service. In a recent survey

ABA found that in 2014, more than one in eight Americans deposited a check using a mobile device, and of those who have used mobile deposit, 80 percent use it at least once per month.<sup>12</sup>

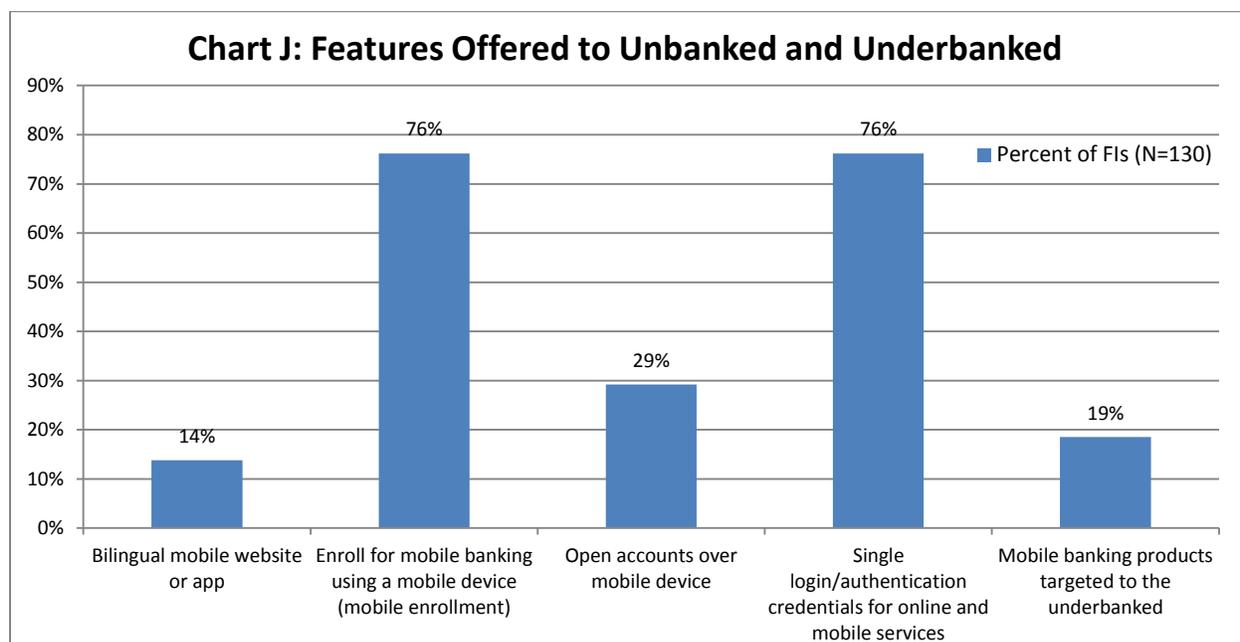
Chart I illustrates that FIs appear to be offering what consumers want. The two mobile banking features most commonly offered by FI respondents are the ability to check account balances and transfer funds between an individual owner’s accounts within the same FI. This parallels what consumers reported in the SWACHA survey as their most commonly used feature. Other features commonly offered by FIs include viewing statements and transaction history and locating ATMs. The most common features that FIs plan to add in the near future include mobile P2P funds transfer, transfer of funds between an individual owner’s accounts at different FIs and mobile RDC. The features least likely to be added in the future by FIs were international remittances, access to brokerage services, checking prepaid card/account balances and viewing prepaid card/account transactions.



<sup>12</sup> “Customers Embracing Mobile Deposit,” *Texas Banking*, October 2014.

## Features Offered to Unbanked and Underbanked

The FDIC estimates that 28 percent of U.S. households are unbanked (about 10 million) or underbanked (about 24 million).<sup>13</sup> According to the FR Board of Governors' 2014 report, 69 percent of the unbanked have access to a mobile phone and 49 percent of these are smartphones. Among the underbanked, 88 percent have a mobile phone, and 64 percent of these are smartphones. Additionally, the report cited that nearly 39 percent of the underbanked with mobile phones have used mobile banking in the past 12 months, while 22 percent report using mobile payments. Given these statistics, FIs could become a safe and trusted resource for this population by offering mobile banking services. FIs could be an alternative to business types that provide less secure and more expensive financial services to the unbanked and underbanked. FIs can offer access to safe loans and home mortgages, assist in building credit scores when needed and offer a safe, FDIC-insured bank account as an alternative to cash, which can be easily lost or stolen. Mobile banking could be the key to FIs reaching these households. To find out what FIs are doing to reach this sector of the population, this survey asked participants about their mobile banking and payment services that target the needs of the unbanked and underbanked. The results are shown in Chart J.

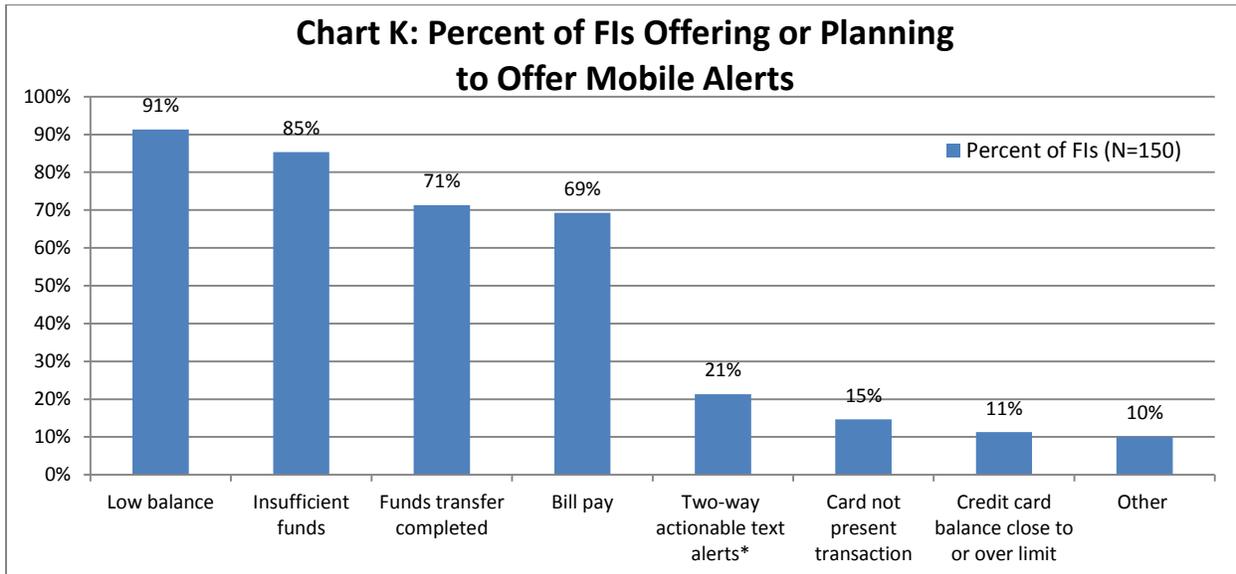


## Mobile Alert Offerings

Consumers and their smartphones are nearly inseparable as the mobile phone has become a mainstay in everyday life. A recent survey by Deloitte on consumer mobile trends showed that nearly 90 percent of consumers check their mobile device within the first hour of waking up. Additionally the survey asked how many times a day consumers look at their smartphones and

<sup>13</sup>See "The 2011 National Survey of Unbanked and Underbanked Households," Federal Deposit Insurance Corporation, September 2012, <https://www.economicinclusion.gov/surveys/2011household/key-overall-findings/>.

23 percent stated they check it more than 50 times a day.<sup>14</sup> As many as 44 percent of cell phone owners sleep with it next to their bed, and 67 percent check their mobile phone for messages, alerts or calls, even when it is not ringing or vibrating.<sup>15</sup> Given this constant presence and habitual use of mobile devices in consumer’s lives, FIs are increasingly using this technology to deliver various transaction information alerts to their customers. Chart K shows the types of mobile alerts that FI respondents currently offer or plan to offer.



\*(e.g., FI sends customer insufficient funds text alert, customer replies by text to schedule transfer.)

## Top Mobile Banking Concerns

Consumer respondents to SWACHA’s 2013 Consumer Insights Survey were equally likely to perceive mobile banking as providing convenience and being a risk. Security continues to be a key concern for FIs also. In the FR Board of Governors’ 2014 report, 69 percent of the respondents to the survey who indicated they were not using mobile banking cited security concerns.

Hackers now specifically target mobile devices. To date, this has primarily been an issue with Google’s Android operating system (OS); according to Cisco’s 2014 Annual Security Report, 99 percent of mobile malware in 2013 was targeted at the Android OS.<sup>16</sup>

<sup>14</sup> “Consumer Device Obsession Grows,” PRNewswire, Dec. 10, 2014, [www.prnewswire.com/news-releases/consumer-device-obsession-grows-internet-of-things-mobile-payments-show-potential-according-to-deloitte-global-mobile-consumer-survey-300007426.html](http://www.prnewswire.com/news-releases/consumer-device-obsession-grows-internet-of-things-mobile-payments-show-potential-according-to-deloitte-global-mobile-consumer-survey-300007426.html)

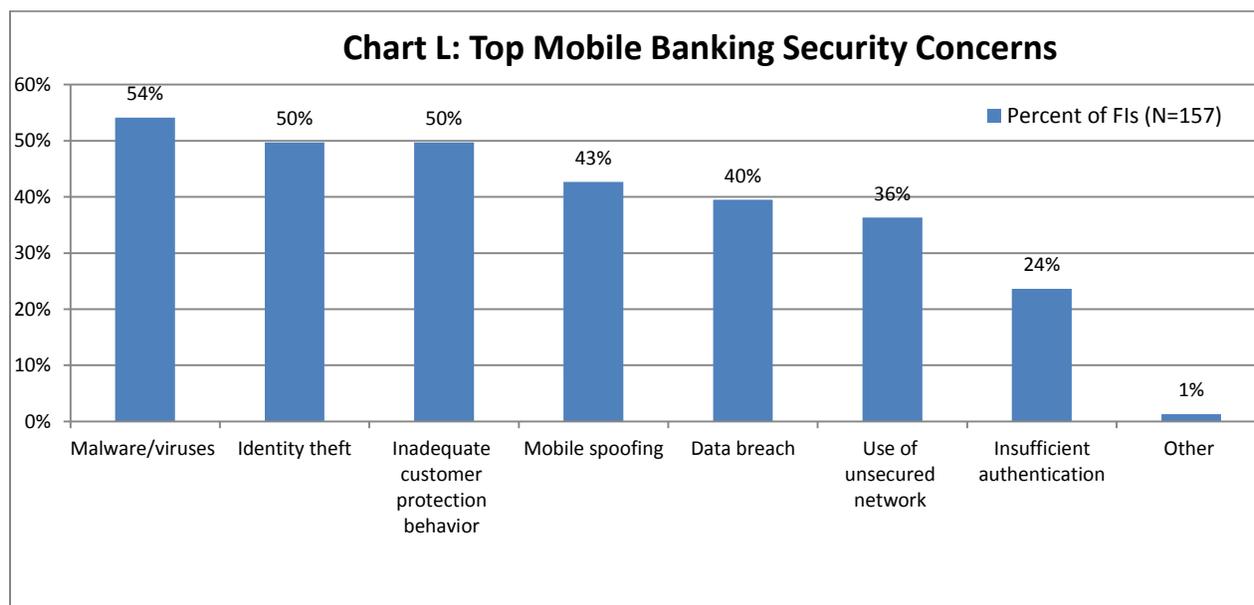
<sup>15</sup> See, “Mobile Technology Fact Sheet,” PewResearch Internet Project [www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/](http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/), and “The Best (and Worst) of Mobile Connectivity, Part IV: Cell Phone Attachment and Etiquette,” by Aaron Smith, Pew Research Center, Nov. 30, 2012, [www.pewinternet.org/2012/11/30/part-iv-cell-phone-attachment-and-etiquette/](http://www.pewinternet.org/2012/11/30/part-iv-cell-phone-attachment-and-etiquette/)

<sup>16</sup> See “Cisco 2014 Annual Security Report,” <http://www.cisco.com/web/offers/lp/2014-annual-security-report/index.html>

On the flip side, mobile banking may offer an opportunity for FIs to improve security. Location-based services can be used to confirm that a mobile device is being used within the typical geographic range of the owner; “out of pattern” use might generate an opportunity for the FI to flag the activity or transaction for additional follow-up. Some FIs are experimenting with various forms of biometric authentication that can be added to authenticate a user through a mobile device—Apple’s Touch ID for thumb- or fingerprint-authentication, or voice authentication, for example.

### Mobile Banking Security Concerns

Chart L shows that the top mobile banking security issues reported by FI respondents included malware/viruses<sup>17</sup> (54 percent), identity theft (50 percent), inadequate customer protection behavior<sup>18</sup> (50 percent) and mobile spoofing<sup>19</sup> (43 percent). Other security issues, such as data breaches and use of an unsecured network<sup>20</sup> were reported as top worries by over one third of the FIs.



<sup>17</sup> Mobile malware is malicious software such as viruses, Trojan horses, spyware and malicious active content. Malware is often delivered to mobile devices in plain sight of consumers, but they are unaware of the malicious function of the programs being downloaded. An example is when a consumer downloads an infected mobile banking app from an app store.

<sup>18</sup> An example of inadequate protection is when the consumer does not use a mobile device password and the phone is lost.

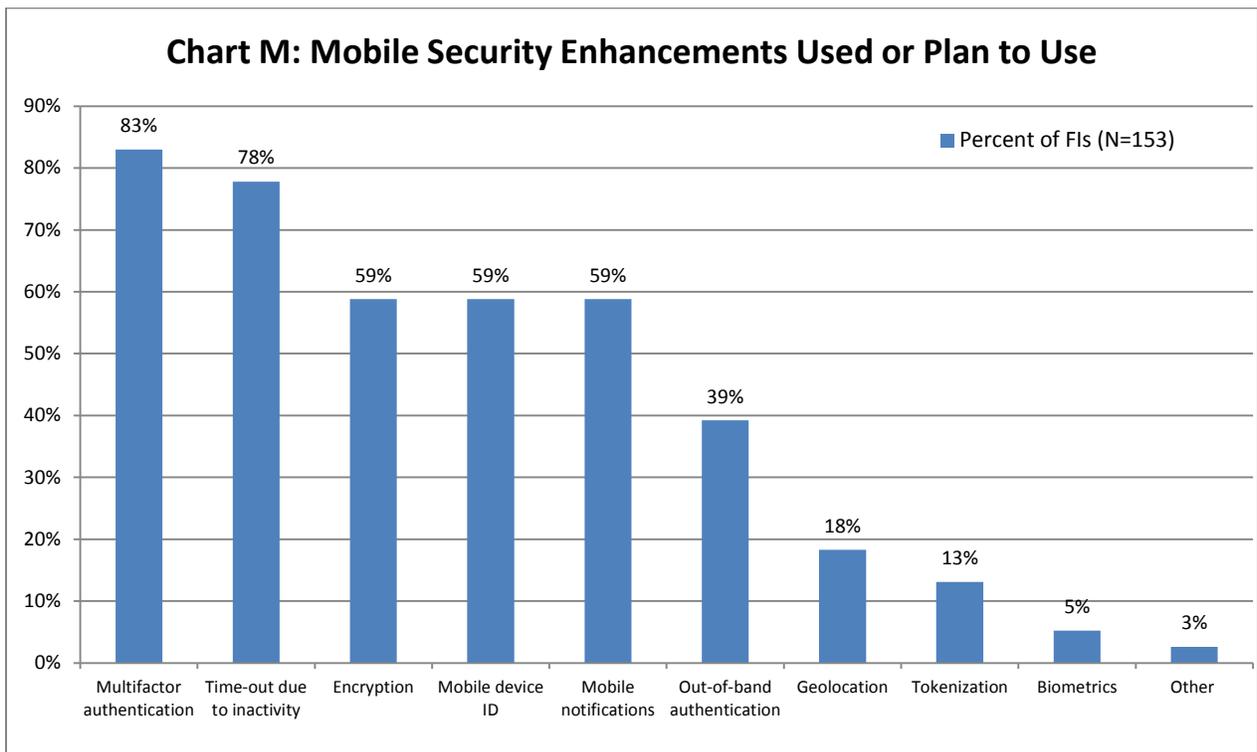
<sup>19</sup> Mobile spoofing is a misrepresentation or stealing of a legitimate brand through various methods, including: 1. Fraudulent messages (emails, SMS or phone calls) pretending to be from a legitimate sender, 2. Counterfeit screen inserted on a legitimate website that requests personal information in order to steal user information, 3. Criminal use of a brand to make a mobile app look like it came from a legitimate FI.

<sup>20</sup> An example of the use of an unsecured network is when a customer accesses an open WiFi network.

The SWACHA survey showed that consumers also have security concerns. Forty-eight percent of cell phone users and 33 percent of tablet users who do not like to use mobile banking listed security as the main reason.

### Mobile Banking Security Enhancements

Chart M shows the types of enhancements that FIs are currently using (or plan to use) to strengthen their security against the issues shown in Chart L. Multifactor authentication (83 percent) and time-out due to inactivity (78 percent) are the top choices FIs are using to enhance their mobile security. Over 50 percent of the respondents also use or plan to use encryption, mobile device ID and mobile notifications.

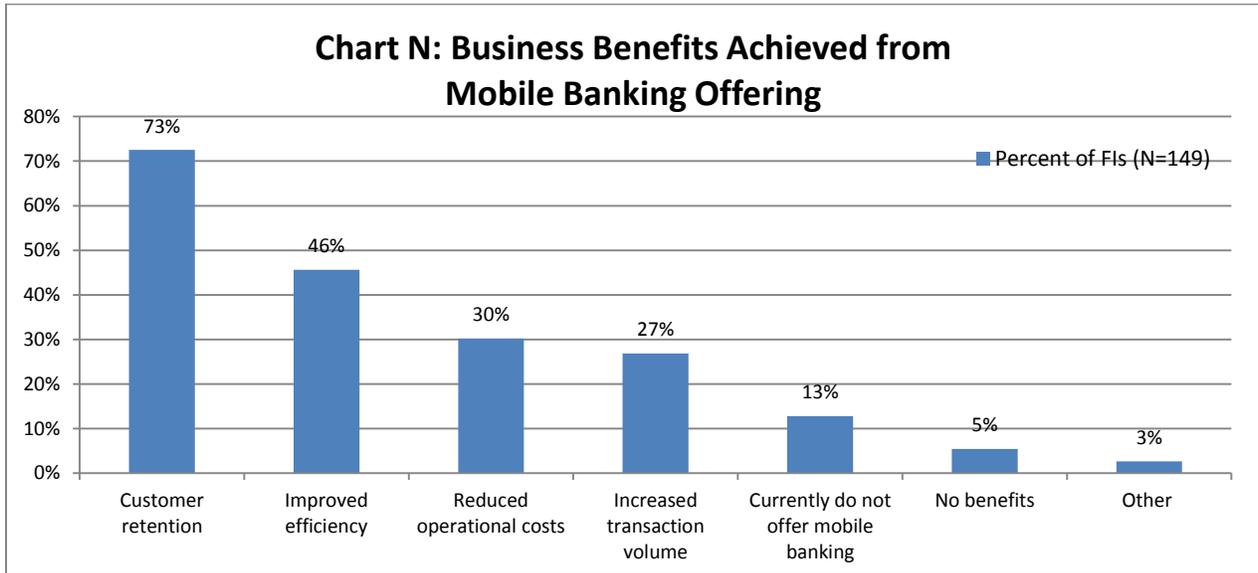


### Business Benefits from Offering Mobile Banking

Although some FIs offer mobile banking to retain existing customers and/or attract new ones or because of competitive pressure, many may still be trying to determine a good business case for offering mobile products because they are not a source of high revenue. On average, it costs an FI \$0.10 for a mobile transaction, which is about half that of a desktop computer transaction and much less than the \$1.25 average cost of an ATM transaction, according to data from Javelin Strategy & Research.<sup>21</sup> While offering mobile banking products may not generate revenue, it can cut costs. When asked if they have realized any business benefits because they

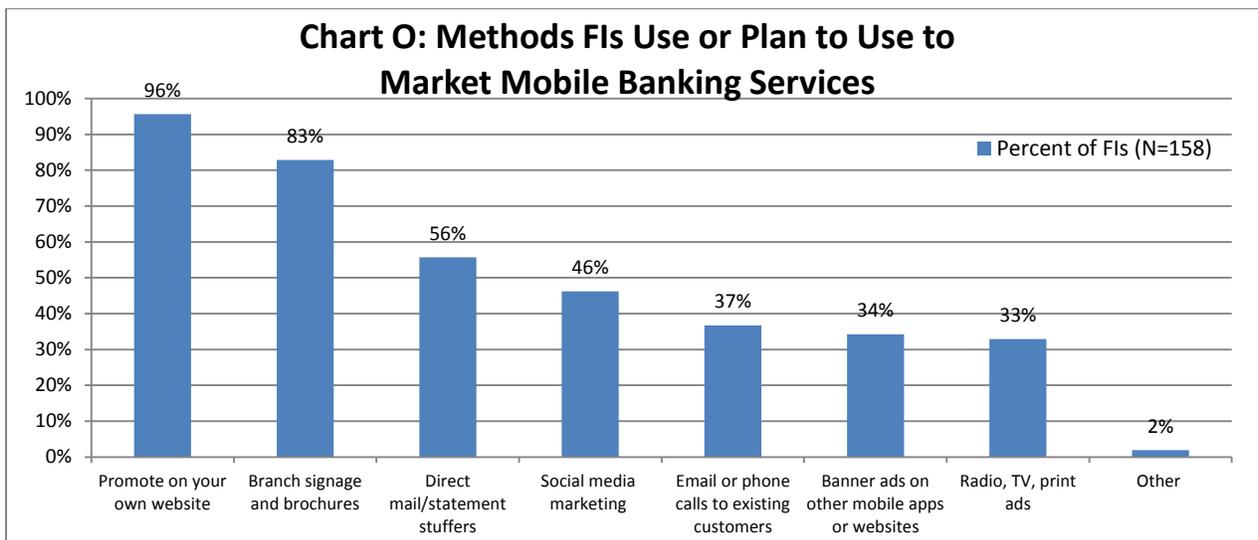
<sup>21</sup> “Lenders Place Their Bets on Mobile Banking,” by Saabira Chaudhuri, *The Wall Street Journal*, April 9, 2014, ([www.wsj.com/articles/SB10001424052702303847804579481811781070456](http://www.wsj.com/articles/SB10001424052702303847804579481811781070456)).

offer mobile banking, the majority (73 percent) of FI respondents cited customer retention as the top benefit, with improved efficiency as the second benefit cited (see Chart N). Customers will stay with a FI when they see value in the services. The SWACHA survey questioned consumers about the value of mobile banking, and 43 percent of the consumers perceived it as convenient.



## Marketing Mobile Banking Services

As can be seen in Chart O, the majority of FI respondents are marketing mobile banking services on their websites (96 percent) and through branch signage and brochures (83 percent). With fewer customers visiting branches, FIs have less face-to-face contact with them, so FIs may need to explore alternate opportunities to market their mobile banking services.

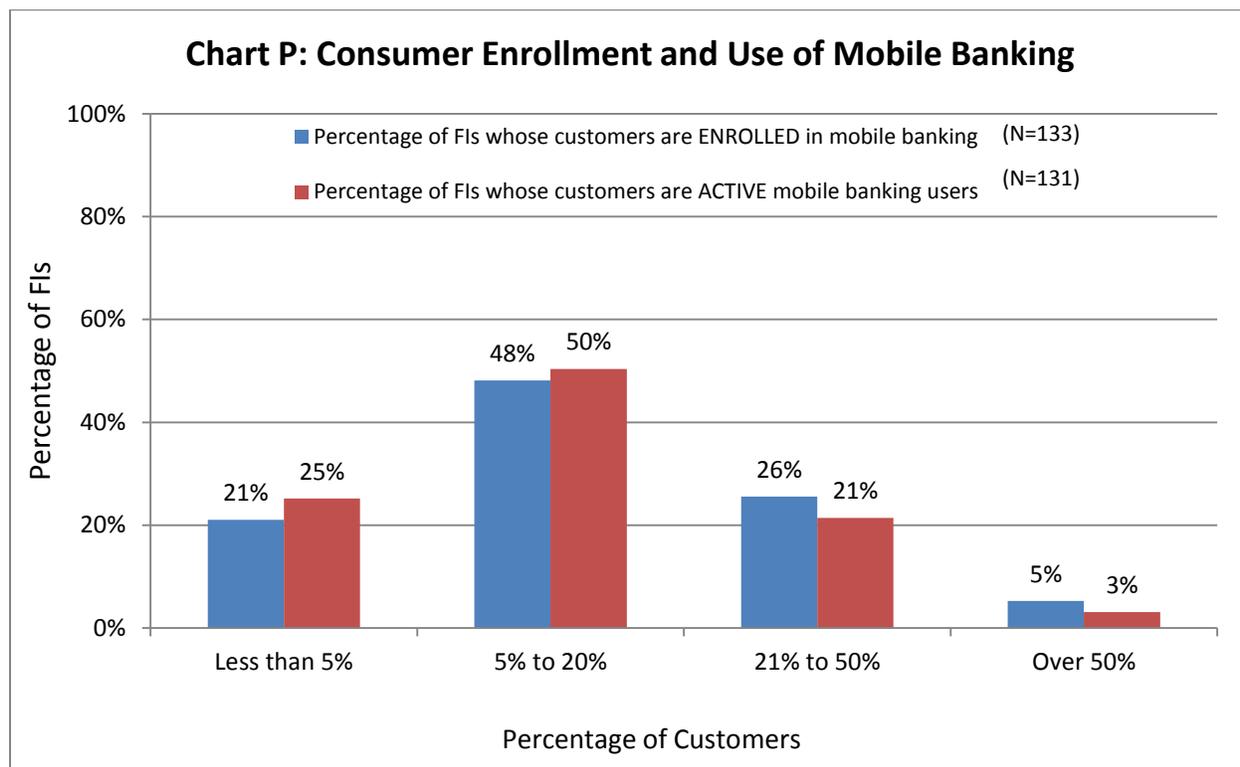


## Consumer and Commercial Customer Enrollment and Usage

Consumers have largely benefitted from the rapid changes in electronic payments and are showing fast adoption and use of mobile banking technologies. According to the SWACHA survey, two-thirds of the consumers that had a mobile banking app are using it at least once a week. However, consumer’s accessibility and adoption of mobile banking technology does not translate readily into the corporate world where there is a greater need for controls, security, regulatory compliance and integration of technologies. As FIs modernize their corporate products, they have an opportunity to become a trusted partner by offering more flexible and secure banking products and services that meet the changing and challenging needs of their business customers.<sup>22</sup>

### Consumer Enrollment and Use

Chart P shows the FI respondent’s consumer enrollment and usage of mobile banking services. Nearly half (48 percent) of the FI respondents have between “5% to 20%” of their consumer customers enrolled in mobile banking, and half (50 percent) of the respondents have “5% to 20%” of their customers active<sup>23</sup> in mobile banking. About one fourth (26 percent) of the respondents have “21% to 50%” of their consumer customers enrolled in mobile banking with 21 percent of the respondents having active users in this quartile.

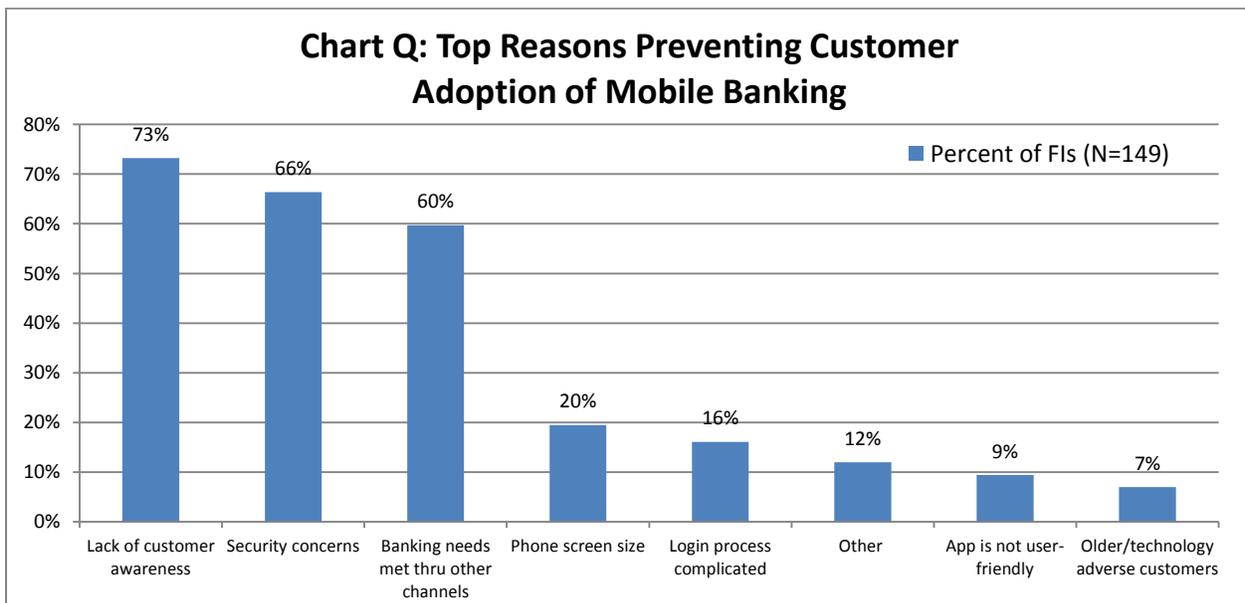


<sup>22</sup>See “*The Future of Corporate Payments*,” by Payments Innovation Alliance, a program of NACHA –The Electronic Payments Association, November 2014, <https://alliance.nacha.org/>.

<sup>23</sup> Active user is defined as a consumer or business that has used the FI’s mobile banking services at least once in the previous 90 days.

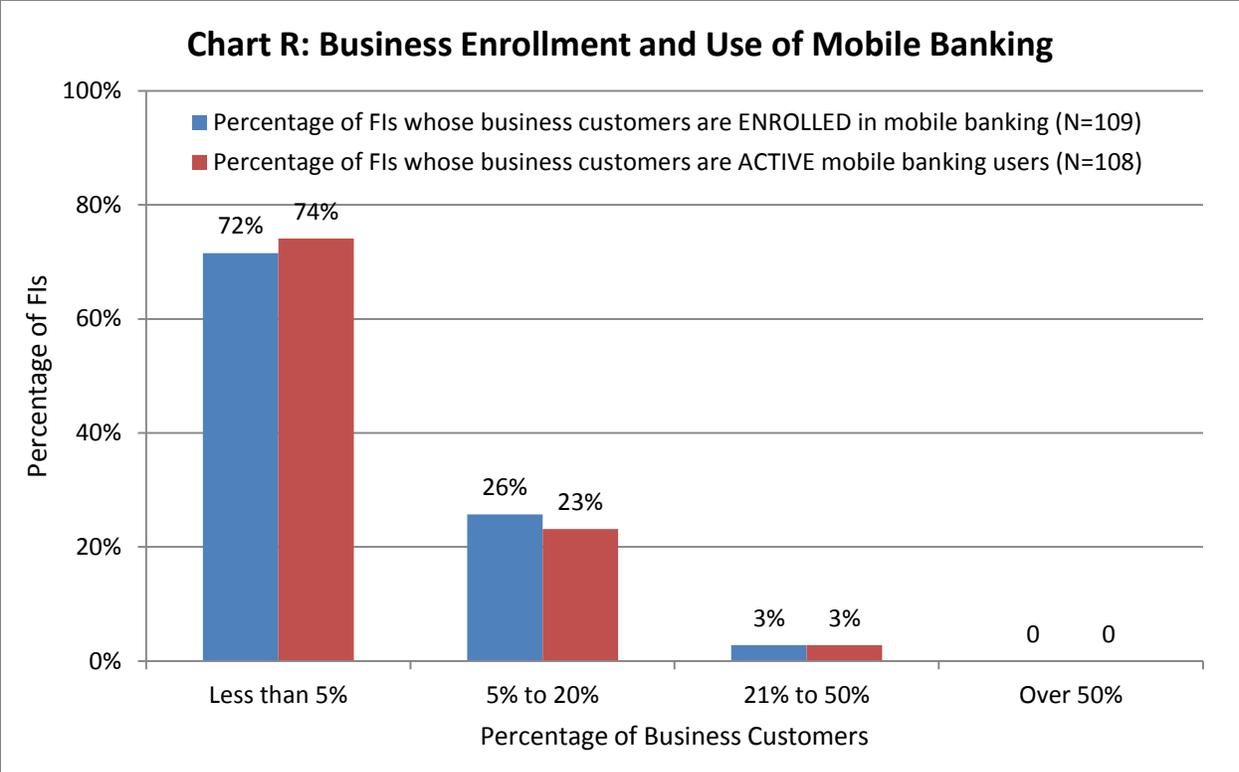
## Reasons Preventing Customer Adoption

FI respondents were asked what they believed were the three most common reasons preventing greater customer adoption of mobile banking. Chart Q shows that the majority of respondents cited three main reasons: lack of customer awareness (73 percent), security concerns (66 percent) and customer banking needs met through other channels (60 percent). Validation of the top two barriers viewed by FIs can be found in the SWACHA Consumer survey, which showed that 39 percent of respondents had concerns about security and 10 percent indicated that they did not know enough about the mobile banking app or did not understand their device enough to use the app.



## Business Enrollment and Use

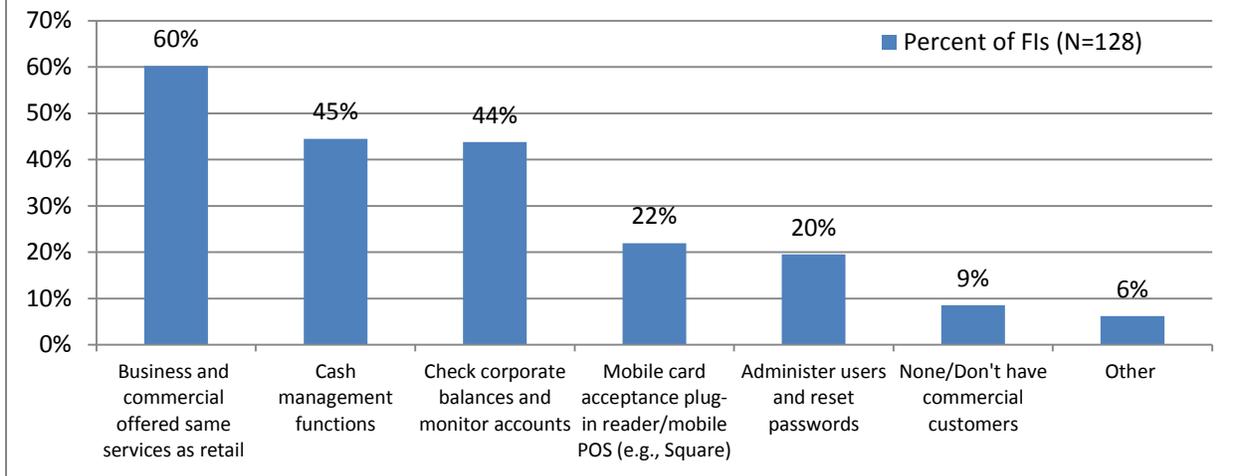
Chart R shows a lower adoption rate of mobile banking services by business customers. The majority (72 percent) of the FI respondents reported having less than five percent of their business customers enrolled with 74 percent having active users in the “less than 5%” quartile group. About one fourth of the FI respondents have between “5% to 20%” of their business customers enrolled (26 percent) or actively using (23 percent) mobile banking services. This relatively low enrollment in mobile banking services, especially for business customers, offers FIs a great opportunity to grow their mobile banking customer base.



**Additional Mobile Services Offered**

FI respondents were asked what additional mobile banking services they currently offer or plan to offer their commercial customers. Three answers, as shown in Chart S, were cited by most of the respondents: offer the same products as retail customers (60 percent), cash management functions (45 percent) and check corporate balances and monitor accounts (44 percent). A small number of FIs, fewer than 25 percent, are beginning to offer business-specific mobile services, such as mobile card acceptance and mobile point of sale (mPOS).

**Chart S: Additional Mobile Banking Services FIs Offer or Plan to Offer to Commercial Customers**



As FIs continue to enhance their mobile offerings, a number of FIs have begun to provide enhanced mobile functionality for their corporate customers. Corporates are looking to do more than just view balance information through mobile banking, but most mobile banking offerings don't currently facilitate treasury management functions such as approval of a wire transfer by an on-the-go approver. Some of the larger FIs (BBVA Compass, for example<sup>24</sup>) have begun to roll out treasury functionality such as initiation and/or approval of payments (ACH and/or wire transfers) and the ability to decision positive pay items. However, for community banks and CUs who serve small business customers, this seems to be an untapped opportunity.

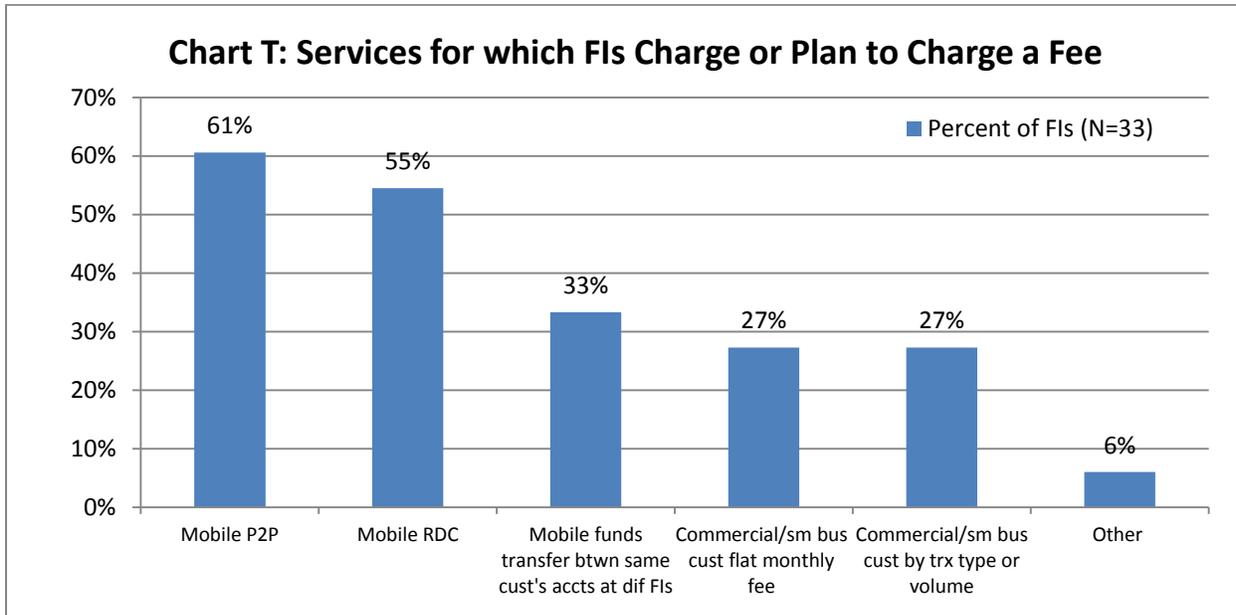
Mobile remote deposit capture (mRDC) may hold potential as a product offering by FIs for their corporate customers as well. TD Bank, for example, has added mobile check deposit for its business customers.<sup>25</sup> In another example, a large construction company has job sites throughout the United States, and many of those sites might receive one or two checks per month. Having a desktop scanner at every site would be cost prohibitive. The company's FI allows the company to use mRDC as a more cost-efficient solution. For a community bank or a CU that serves small businesses, this might be a way to remain competitive. It might even mean the difference between holding on to that customer's business and losing it.

<sup>24</sup> "BBVA Compass Expands Mobile Banking Suite for Treasury Management Customers," Aug. 18, 2014, <http://newsroom.bbvacompass.com/2014-08-18-BBVA-Compass-expands-mobile-banking-suite-for-treasury-management-customers>.

<sup>25</sup> "TD Bank Adds Mobile Check Deposit Feature," by Evan Nemeroff, *AmericanBanker.com*, Aug. 14, 2014.

## Services for Which Fees Are Charged

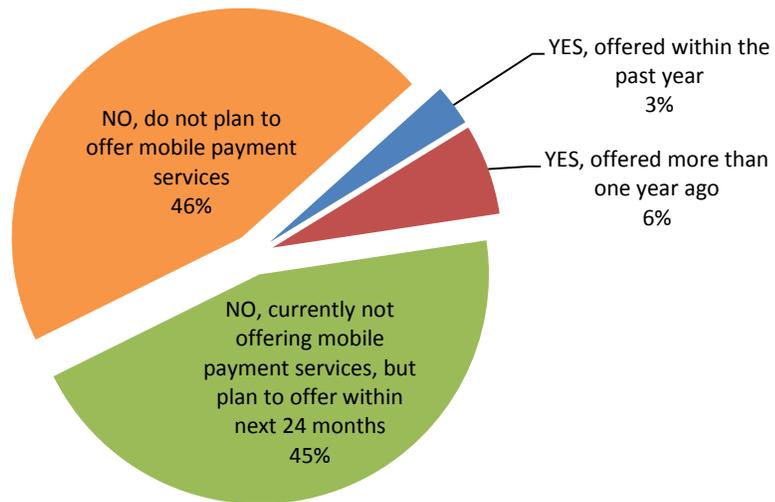
Mobile does not appear to be a channel through which FIs can increase revenue. When asked if they charge or plan to charge a fee for mobile banking, 79 percent of the FIs indicated that they do not charge or do not plan to charge a fee. Of the respondents that stated they do charge or plan to charge a fee, as shown in Chart T, the highest percentage of FIs are charging for mobile P2P and mRDC, 61 percent and 55 percent, respectively.



## Mobile Payment Services

In addition to mobile banking, this survey also asked FIs about their mobile payment services offered to their customers. Mobile payment services are defined here as “the use of a mobile phone to pay for a purchase at retail point of sale (POS) or food service location, on the Internet for goods and services or digital content, or to pay for transit, parking or other transportation services, ticketing, etc. Payment may be initiated via SMS text message, mobile Internet, downloadable app, contactless near-field communication (NFC) and/or quick response (QR) code.” Apple Pay is an example of a new mobile payment service that some FIs offer or plan to offer. FIs sign agreements with Apple so their credit and/or debit cards can be used with Apple Pay. Chart U shows that the majority of FI respondents (91 percent) are not currently offering mobile payment services, but 45 percent are planning to offer the services within the next 24 months. (As of Feb. 1, 2015, there were 54 FIs live with Apple Pay, but approximately another 700 have signed on.)

**Chart U: FIs' Mobile Payment Services Offerings**

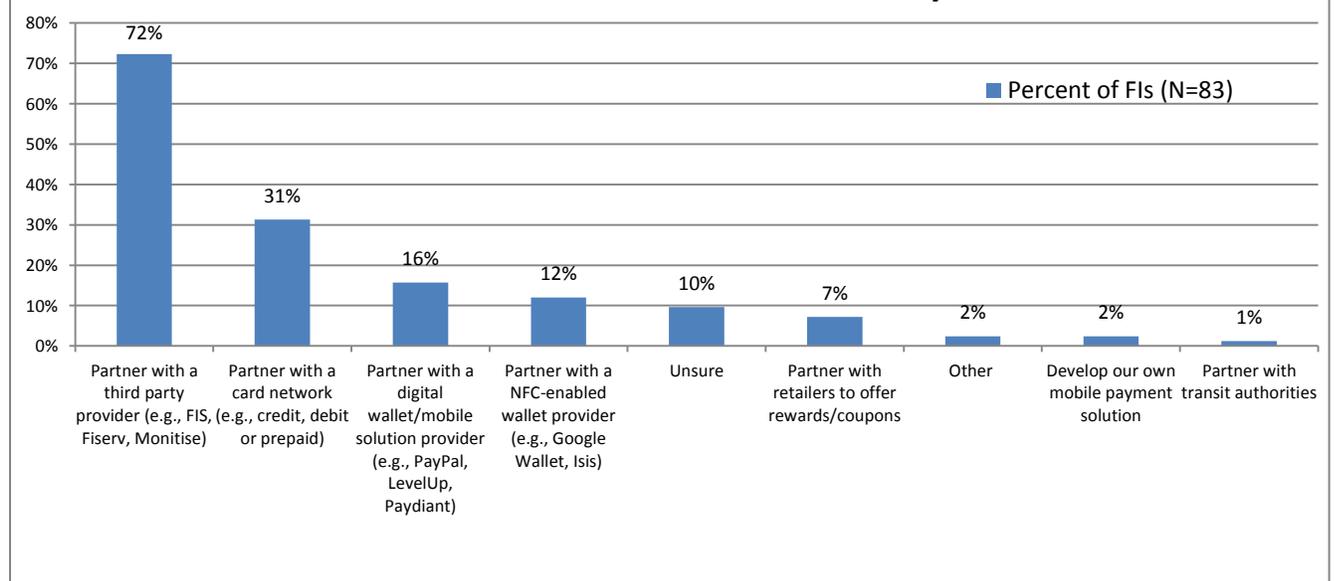


The SWACHA 2013 Consumer Insights Survey asked consumers about their use of mobile payment services and reported that of the consumers that have a cell phone or tablet, 10 percent are making point-of-sale purchases and 19 percent are making digital content purchases (i.e., iTunes, iBooks, movies).

**Strategies for Offering Mobile Payment Services**

FIs have many options when deciding how to offer mobile payment services. Chart V shows that the majority of respondents (72 percent) chose to partner with a third-party provider (e.g., FIS, Fiserv, Monitise).

**Chart V: How FIs Offer or Plan to Offer Mobile Payment Services**



FI respondents were asked which mobile payment strategy was the most valuable for their institution. Respondents were asked to rank the services based on the value of offering them as part of their mobile banking app and to rank them in order of importance, with 1 being the most important. Table 3 shows that partnering with a white-label provider<sup>26</sup> to offer a mobile wallet was the number one choice by the FI respondents.

**Table 3**

| Most Valuable Strategy for Offering Mobile Payments  | Ranking<br>(1 as most important) |
|--|----------------------------------|
| Partner with white-label mobile wallet provider (e.g., Paydiant)   | 1                                |
| Partner with merchants to pay for purchases by transferring money directly from their bank account to the retailer, under bank control (e.g., credit push) | 2                                |
| Link to mobile NFC provider (e.g., Softcard - formerly Isis)   | 3                                |
| Link to provider using QR code (e.g., LevelUp)   | 4                                |
| Other  | 5                                |

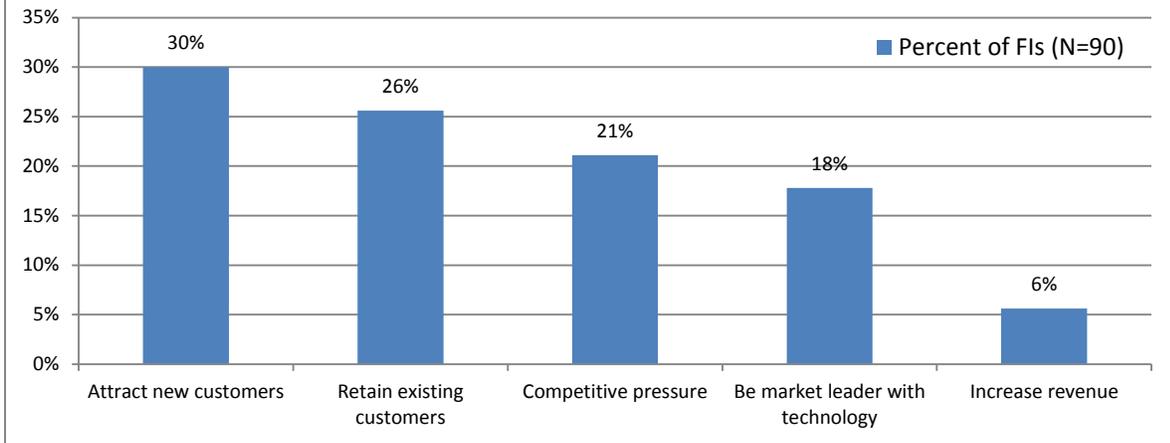
**Business Reasons for Offering Mobile Payment Services**

Those FI respondents that offer or plan to offer mobile payment services were asked what their primary reason was for offering the services. Chart W shows that FI respondents are deciding to offer mobile payment services largely for the same reasons they offer mobile banking services as shown earlier in Chart D. Recently, a president and CEO of a CU with 425,000 credit and debit cardholders described how difficult the competition is for FIs: “We are fighting a fierce battle for the hearts, minds and eyeballs of our members so we want to be relevant and exciting for them.”<sup>27</sup> While this shows that FIs want to attract new and retain existing customers by offering mobile payments, the 2013 SWACHA survey indicated that two-thirds of the consumers that had a cell phone or tablet would not make any purchases with either device.

<sup>26</sup> A white label provider offers a product or service which a company can use and apply its own brand and identity to it.

<sup>27</sup>“Global Finance: Banks Flocking to Apple Pay—Card Issuers See Mobile-Payments System as Way to Keep Customers Happy,” by Robin Sidel, *The Wall Street Journal*, Oct. 17, 2014.

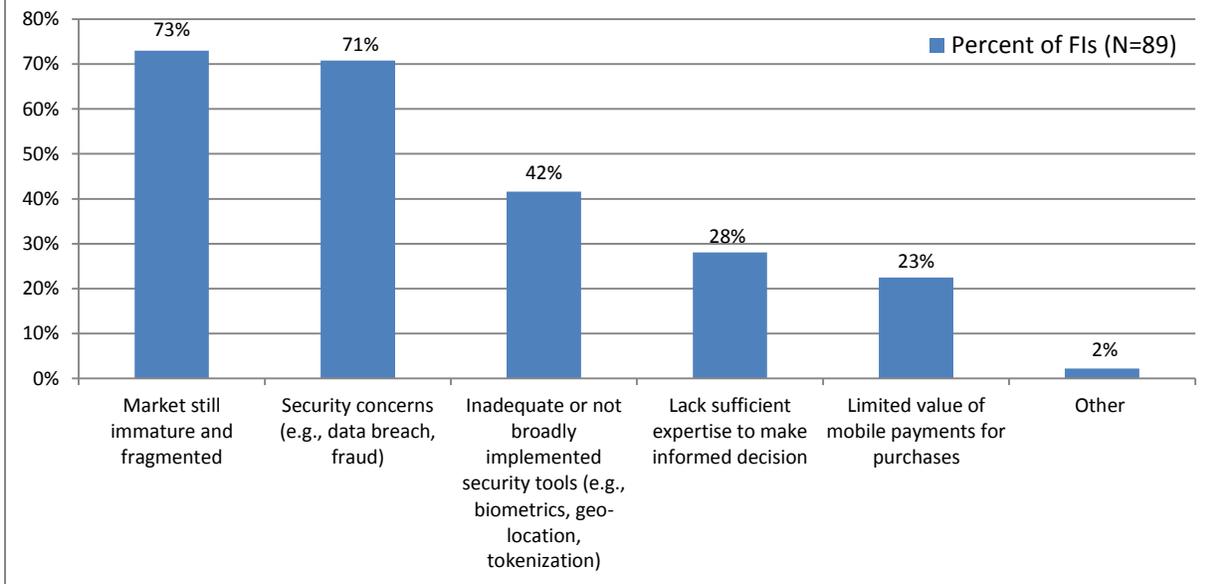
**Chart W: Primary Business Reason FIs Offer or Plan to Offer Mobile Payment Services**



**Barriers to Offering Mobile Payment Services**

FI respondents were further asked the barriers they see to offering mobile payments for purchases. Two barriers were cited by over 70 percent of the respondents: a still immature and fragmented market (73 percent)—as seen by the diverse mobile wallet options of Apple Pay, Google Wallet, Softcard and the nascent MCX/CurrentC—and security concerns (71 percent). The results are shown in Chart X.

**Chart X: Barriers to Offering Mobile Payments for Purchases**



FIs that do not offer mobile payment services were asked to rank the reasons they made this decision, in order from 1 to 8, with 1 being the most important reason for not offering the services. Table 4 illustrates their answers.

**Table 4**

| <b>Reasons Not Offering Mobile Payment Services</b>   | <b>Ranking<br/>(1 to 8, with 1<br/>being most<br/>important)</b> |
|---|--|
| <b>Security concerns</b>                              | 1  |
| <b>Lack of customer demand</b>                        | 2  |
| <b>Regulatory issues</b>                              | 3  |
| <b>Limited value or benefit</b>                       | 4  |
| <b>ROI/Lack of business case</b>                      | 5  |
| <b>Lack of standards and interoperability</b>         | 6  |
| <b>Lack of consistent, reliable cellular coverage</b> | 7  |
| <b>Other</b>  | 8  |

**Conclusion**

As the functionality and capabilities of mobile phones continue to increase, they are becoming an inseparable part of daily life. As a result, consumers’ diverse needs are creating a more dynamic competitive landscape for mobile banking and mobile payments in the United States. Survey results indicated that both FIs and consumers are embracing mobile banking, with FIs offering mobile banking services that consumers most commonly use, such as checking balances, transferring funds and viewing statements and transaction history. However, opportunities to increase the robustness of these offerings are hindered primarily by lack of customer awareness as well as the security concerns associated with adopting mobile banking technology. FIs are also hesitant to develop new offerings because mobile banking and payment services generate very little revenue. However, it is important for FIs to look at the potential benefits of reducing costs, improving security, increasing consumer convenience and gaining a competitive edge. With the significant growth that has been recorded in consumer mobile banking app use and mobile phone usage in general, consumers and FIs alike can largely benefit from taking advantage of untapped opportunities in the mobile banking and mobile payments market.

**Federal Reserve Bank of Dallas and SWACHA  
2014 Mobile Banking and Payments Survey**

Please complete this online survey to help us better understand your organization's mobile banking and payments initiatives and service offerings. Your information is very important. It will enable us to give you a detailed description of mobile banking and payments activities within our regional financial institutions.

Survey Instructions:

This survey contains **FIVE** sections.

Sections **1** and **2** are **REQUIRED** for all respondents.

For sections **3, 4** and **5**, please follow instructions within the sections.

If more than one person from the same financial institution receives this survey, please consolidate your responses into a single survey.

Thank you for completing this survey.

## Section 1: Respondent Profile

1. Financial institution name\*: \_\_\_\_\_
2. ABA number\*: \_\_\_\_\_
3. Contact name: \_\_\_\_\_
4. Contact title: \_\_\_\_\_
5. Functional area of contact (e.g., business line, operations, etc.): \_\_\_\_\_
6. Email\*\*: \_\_\_\_\_

\*Required fields

\*\* If you would like to receive an electronic copy of the survey results report, please provide an email address.

## Section 2: Demographics

7. Corporate address:  
Address line 1: \_\_\_\_\_  
Address line 2: \_\_\_\_\_  
City/town: \_\_\_\_\_  
State: \_\_\_\_\_  
ZIP: \_\_\_\_\_
8. What is your FI's asset size?  
 < \$100 million  
 \$100-\$500 million  
 \$500 million to \$1 billion  
 > \$1 billion
9. Please indicate your financial institution type:  
 Commercial bank  
 Credit union  
 Savings bank  
 Cooperative or mutual bank  
 Other (please specify): \_\_\_\_\_
10. Please indicate to whom you provide services. (Check ALL that apply)  
 Consumers  
 Corporate/commercial entities  
 Small businesses  
 Other: (please specify) \_\_\_\_\_

### Section 3: Mobile Banking

Please refer to the definition below for questions in the MOBILE BANKING Section:

**Mobile banking** uses a mobile phone to connect to a financial institution to access bank/credit account information, e.g., view balances, transfer funds between accounts, pay bills, receive account alerts, locate ATMs, deposit checks.

11. When did you start offering mobile banking to your customers? (Check ONE)

- Within the past year
- More than one year ago
- Currently not offering mobile banking, but plan to offer within next 1-2 years
- Do not plan to offer mobile banking [If respondent chooses this option, goes directly to Question 30]

12. What mobile banking technology platform do you use or plan to use in the future? (Check ALL that apply)

- 'Triple Play' (text, web, app)
- Downloadable mobile app
- Website formatted for mobile access
- SMS text messaging
- Other (please specify): \_\_\_\_\_

13. Which mobile operating system does your mobile banking application support? (Check ALL that apply)

- Apple iOS
- Google Android
- Microsoft Windows Phone
- Blackberry
- Other: (please specify) \_\_\_\_\_

14. Do you offer mobile services via a tablet or similar device? (Check ALL that apply)

- iPad
- Android
- Kindle
- Other (please specify): \_\_\_\_\_

15. What company provides your mobile banking system?

- FIS
- Fiserv
- Jack Henry
- Monitise
- In-house system
- Other: (please specify) \_\_\_\_\_

16. Which of the following **mobile banking services** do you currently offer or plan to offer?

| Mobile Banking Feature  | Currently offer          | Plan to offer            | No plan to offer         |
|---|--------------------------|--------------------------|--------------------------|
| Check balances (DDA, Savings)                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| View statements and transaction history (DDA, Savings)        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| View credit card balances, statements and transaction history | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| View prepaid account balances                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bill payment  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bill presentment  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Transfer funds between same owner's accounts within same FI   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Transfer funds between same owner's accounts at different FIs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mobile person-to-person money transfer                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mobile remote deposit capture                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ATM/branch locator  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Personal Financial Management                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Access to brokerage services                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Prepaid debit card or account                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| International remittances                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

17. Do you offer the following features? (Check ALL that apply)

- Bilingual mobile website or app
- Enroll for mobile banking using a mobile device (mobile enrollment)
- Open accounts over mobile device
- Single login/authentication credentials for online and mobile services
- Mobile banking products for the underbanked

18. What types of mobile alerts does your FI offer? (Check ALL that apply)

- Insufficient funds
- Credit card balance close to or over limit
- Funds transfer completed
- Merchant bill pay
- Low balance
- Two-way actionable text alerts (e.g., FI sends customer insufficient funds text alert, customer replies by text to schedule transfer).
- Other: (please specify) \_\_\_\_\_

19. Please select your FI's **TOP THREE** security issues associated with mobile banking. (Check THREE only)

- Data breach
- Identity theft
- Insufficient authentication
- Malware/viruses (e.g., customer downloads an infected mobile banking app from app store)
- Mobile spoofing\*
- Use of unsecured network (e.g., customer accesses open WiFi network)
- Inadequate customer protection behavior (e.g. no mobile password, lost phone)
- Other: (please specify) \_\_\_\_\_

**\*Mobile spoofing** is misrepresentation or stealing of legitimate brand through:

- Fraudulent messages (email, SMS or phone call) pretending to be from legitimate sender
- Counterfeit screen inserted on legitimate website that requests personal information to steal user information
- Criminal use of a brand to make mobile app look like it came from a legitimate FI

20. Which of the following does your FI use to enhance mobile security? (Check ALL that apply)

- Biometrics (fingerprint, facial or voice recognition, etc.)
- Encryption
- Geo-location
- Mobile device ID
- Mobile notifications (e.g., SMS text message, push notifications)
- Multi-factor authentication
- Time-out due to inactivity
- Tokenization
- Other: (please specify)

21. Please select your **primary** business reason for offering mobile banking. (Check only ONE)

- Retain existing customers
- Attract new customers
- Be market leader with technology
- Competitive pressure
- Increase revenue
- Other: (please specify)\_\_\_\_\_

22. What business benefits have you achieved since offering mobile banking? (Check ALL that apply)

- Reduced operational costs
- Improved efficiency
- Customer retention
- Increased transaction volume
- Other: \_\_\_\_\_

23. How do you (plan to) market your mobile banking services? (Check ALL that apply)

- Direct mail/statement stuffers
- Radio, TV, print ads
- Branch signage and brochures
- Email or phone calls to existing customers
- Promote on your own website
- Social media marketing (e.g., Facebook, Twitter)
- Banner ads on other mobile apps or websites
- Other: (please specify): \_\_\_\_\_

24. What percentage of your retail customers has used your mobile banking services?

| % of retail customers who <b>ENROLLED</b> in your mobile banking services | % of retail customers who <b>USED</b> mobile banking within the last 90 days |
|---|--|
| <input type="checkbox"/> <5%  | <input type="checkbox"/> <5%   |
| <input type="checkbox"/> 5-20%  | <input type="checkbox"/> 5-20%   |
| <input type="checkbox"/> 21-50%   | <input type="checkbox"/> 21-50%  |
| <input type="checkbox"/> >50%   | <input type="checkbox"/> >50%  |

25. What are the **THREE** most common reasons preventing greater customer adoption of mobile banking? (Check THREE only)

- App is not user-friendly (slow, performance issues)
- Login process complicated
- Security concerns
- Lack of customer awareness
- Customers feel their banking needs are met through other channels
- Other: (please specify)\_\_\_\_\_

26. What additional mobile banking services do you offer your commercial customers? (Check ALL that apply)

- Business and commercial firms are offered the same mobile banking services as retail customers
- Check corporate balances and monitor accounts
- Cash management functions
- Administer users and reset passwords
- Mobile card acceptance plug-in reader/mobile POS (e.g., Square)
- Other: (please specify) \_\_\_\_\_

27. What percentage of your commercial customers has used your mobile banking services?

| % of commercial customers who ENROLLED in your mobile banking services | % of commercial customers who USED mobile banking within the last 90 days |
|--|---|
| <input type="checkbox"/> <5%   | <input type="checkbox"/> <5%  |
| <input type="checkbox"/> 5-20%   | <input type="checkbox"/> 5-20%  |
| <input type="checkbox"/> 21-50%  | <input type="checkbox"/> 21-50%   |
| <input type="checkbox"/> >50%  | <input type="checkbox"/> >50%   |

28. Do you (plan to) charge a fee for any mobile banking services?

- Yes [If respondent chooses "Yes," goes to question 29]
- No

29. Please indicate **ALL** fee-based services. (Check ALL that apply)

- Mobile RDC
- Mobile P2P
- Mobile funds transfer between same customer's accounts at different FIs
- Commercial/small business customers flat monthly fee for services
- Commercial/small business customers by transaction type or volume
- Other: (please specify) \_\_\_\_\_

[Only for those who responded "No, Do not plan to offer mobile payment services" in question 11]

30. Please **RANK** the items that influenced your decision not to offer mobile banking services.

- Lack of customer demand
- Security concerns
- Regulatory issues
- Lack of standards and interoperability
- ROI/Lack of business case
- Lack of consistent, reliable cellular coverage
- Other: (please specify) \_\_\_\_\_

## Section 4: Mobile Payments

Please refer to the following definition in the **MOBILE PAYMENTS** Section:

**Mobile payment:** Use of a mobile phone to pay for purchase at retail point of sale (POS) or food service location, on the Internet for goods and services or digital content, or to pay for transit, parking or other transportation services, ticketing, etc. Payment may be initiated via SMS text message, mobile Internet, downloadable app, contactless near field communication (NFC) and/or quick response (QR) code.

31. Do you (plan to) offer mobile payment services to your customers? (Check ONE)

- Yes, offered within the past year
- Yes, offered more than one year ago
- No, currently not offering mobile payment services, but plan to offer within next 1-2 years
- No, do not plan to offer mobile payment services **[If respondent chooses this option, goes directly to question 36]**

32. How do you (plan to) offer mobile payment services? (Check ALL that apply)

- Partner with a card network (e.g., credit, debit or prepaid)
- Partner with transit authorities
- Partner with a NFC-enabled wallet provider (e.g., Google Wallet, Isis)
- Partner with a digital wallet/mobile solution provider (e.g., PayPal, LevelUp, Paydiant)
- Partner with third party provider (e.g., FIS, Fiserv, Monitise)
- Partner with retailers to offer rewards/coupons
- Develop our own mobile payment solution
- Other: (please specify) \_\_\_\_\_

33. Please RANK the mobile payment services below based on your perception of the value of offering them as part of your mobile banking app.

- Partner with mobile provider of white label mobile wallet (e.g., Paydiant)
- Link to mobile provider offering NFC contactless solution (e.g., Isis)
- Link to provider for access using QR code (e.g., LevelUp)
- Partner with merchants to allow customers to pay for purchases by transferring money directly from their bank account to the retailer, under bank control (e.g., credit push)
- Other: (please specify) \_\_\_\_\_

\*A **mobile wallet** is a secure container in a mobile phone that stores multiple payment credentials (debit, credit, prepaid cards and bank accounts) and value-added services, such as rewards and loyalty cards that can be securely accessed to manage and initiate payments. Digital wallet stores payment credentials on remote server (i.e., cloud)

34. If you (plan to) offer mobile payments, what is your **primary** business reason? (Check only ONE)

- Attract new customers
- Retain existing customers
- Be market leader with technology
- Competitive pressure
- Increase revenue
- Other: (please specify)\_\_\_\_\_

35. Which barriers do you see to offering mobile payments for purchases? (Check ALL that apply)

- Security concerns (e.g., data breach, fraud )
- Market still immature and fragmented
- Inadequate or not broadly implemented security tools (e.g., biometrics, geo-location, tokenization)
- Lack sufficient expertise to make informed decision
- Limited value of mobile payments for purchases
- Other: (please specify)\_\_\_\_\_

**[Only for those who responded “No, Do not plan to offer mobile payment services” in Question 31]**

36. Please **RANK** the items that influenced your decision not to offer mobile payment services.

- Lack of customer demand
- Limited value or benefit
- Security concerns
- Regulatory issues
- Lack of standards and interoperability
- ROI/Lack of business case
- Lack of consistent, reliable cellular coverage
- Other: (please specify)\_\_\_\_\_

### **Section 5: Financial Institution Feedback**

37. Please indicate the **first 2-digits** of your ABA number to help us link your response with appropriate Federal Reserve district\*:

- 01 or 21
- 05 or 25
- 06 or 26
- 09 or 29
- 11 or 31

**[Answer will direct respondent to corresponding District for questions 38 and 39]**

[Each District and RPA will be inserted for Q. 38 and Q.39]

38. Do you want the Federal Reserve Bank of **Dallas or SWACHA** to provide more information about the following services? (Check ALL that apply)

- Mobile contactless NFC payments
- Mobile/digital wallets
- Mobile P2P
- Mobile security
- Mobile banking services for the underserved
- Regulatory updates
- Other: (please specify)\_\_\_\_\_

39. Please share your ideas on what role(s) the Federal Reserve Bank of **Dallas or SWACHA** can play in helping to increase your knowledge of mobile banking and payments.

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