

2014
Mobile Banking and Payments Survey
of Financial Institutions in the Sixth
District

Federal Reserve Bank of Atlanta

Retail Payments Risk Forum

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The views expressed in this paper are solely those of the author and not necessarily those of the Federal Reserve Bank of Atlanta or the Federal Reserve System.

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Survey overview

The Federal Reserve Bank of Atlanta conducted a mobile banking and payments survey of financial institutions (FIs) in the Sixth Federal Reserve District¹) between July and August 2014. Concurrently, the Federal Reserve Banks of Boston, Richmond, and Dallas conducted an identical survey of the FIs in their districts. The purpose of the Atlanta Fed survey was to determine the level and type of mobile financial services offered by the FIs in the Sixth District, and to compare those offerings to the consolidated survey results after they are published. The Atlanta Fed also hoped to gain insights into the strategies and measures that FIs are pursuing to provide mobile financial services to their customers.

Methodology

As a complement to the Consumer and Mobile Financial Services survey conducted by the Federal Reserve Board’s Division of Consumer and Community Affairs—begun in December 2011 and conducted annually since—several of the Federal Reserve Banks collaborated on developing a mobile banking and mobile payments survey targeting FIs. The Federal Reserve Bank of Boston’s Payment Strategies group created the base survey questionnaire and first distributed it in 2008 and again in 2012. The base survey was updated by the various Federal Reserve banks participating in the 2014 survey. The survey questionnaire is in Appendix A. For the purpose of the survey, mobile banking is defined as “the use of 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, etc.”

The Atlanta Fed conducted the survey from July 17 through August 15, 2014. The almost 1,400 FIs operating in the Sixth District received an e-mail that included an electronic version of the survey with an online survey link. The invitation successfully reached an estimated 98 percent of the FIs operating in the Sixth District. The regional payment associations Alabama Automated Clearing House Association (ALACHA), Georgia Automated Clearing House Association (GACHA), Southern Financial Exchange, and Tennessee Automated Clearing House Association (TACHA) also sent the survey invitations to their membership² to participate in the survey.

Respondents were also allowed to print and return a completed survey via e-mail or regular mail. All but three of the FIs completed their surveys online. The three surveys returned via mail or e-mail were manually entered using the online survey tool. A total of 201 completed surveys were received for the Sixth District. An internal review process was used to detect if an FI returned multiple surveys, and a total of six sets of duplicate responses were received. The duplicate responses from each FI were compared and any major discrepancies were resolved with the FI’s designated contact before the responses for the FI were consolidated into a single response. An additional six responses were eliminated as they were either not from a financial institution

¹ The Sixth District covers Georgia, Alabama, Florida, southern Mississippi and Louisiana, and the eastern two-thirds of Tennessee.

² ALACHA, GACHA, and TACHA merged January 1, 2015, and now operate under the name of PaymentsFirst Inc.

supporting consumer or business customers, or the FI did not operate in the Sixth District. After culling the data, there were a total of 189 validated surveys for a response rate of approximately 14 percent. Table 1 shows the distribution by state of the 189 responding FIs.

Table 1. Survey Respondents by State and Asset Size

State	Banks			Credit Unions		
	# of Responses	With Assets < \$1 Billion		# of Responses	With Assets < \$1 Billion	
		#	%		#	%
AL	23	19	83%	4	3	75%
FL	30	29	97%	10	9	90%
GA	27	21	78%	9	7	78%
LA	15	14	93%	7	7	100%
MS	11	10	91%	4	4	100%
TN	35	27	77%	14	11	85%
Total	141	120	85%	48	41	85%

Financial institution demographic information

Based on Federal Deposit Insurance Corporation (FDIC) and National Credit Union Administration (NCUA) reports, as of June 30, 2014, a total of 1,797 FIs (commercial banks, savings banks, mutuals, credit unions (CUs), and co-ops) were operating in the six states of the Sixth District. However, since the district includes only portions of Louisiana, Mississippi, and Tennessee, the actual number of FIs in the District is estimated to be approximately 1,400. Of the total FIs in the states covered by the Sixth District, 94 percent of the institutions have total assets of less than \$1 billion, with little difference between banks and CUs—at 92 percent and 96 percent, respectively. Table B-1 in Appendix B provides a state-by-state breakout.

Of the 189 validated surveys, 75 percent were from banks and 25 percent from CUs. The distribution of validated surveys at the state level was moderately consistent with three of the states having variances of less than 5 percentage points. The exceptions were in Alabama, where the level of CU responses was 6 percentage points below the state’s overall distribution; Louisiana,

where the CU response rate was 9 percentage points below; and Tennessee, where the CU response rate was 10 percentage points higher than the overall distribution in the state.

Overall, both banks and CUs with under \$1 billion in assets were slightly underrepresented compared to the overall state profile (see table 2). For both the banks and the CUs, this difference was the greatest in Alabama, Georgia, and Tennessee. Florida had an overrepresentation of 10 percentage points of the banks with assets under \$1 billion.

Table 2. Differences in State Profiles and Survey Respondents by Asset Size

State	Banks			CUs		
	State Total % < \$1B Assets	Respondent % < \$1B Assets	Difference of %	State Total % < \$1B Assets	Respondent % < \$1B Assets	Difference of %
AL	95%	83%	-12%	96%	75%	-21%
FL	87%	97%	10%	91%	91%	0%
GA	93%	82%	-10%	96%	78%	-19%
LA ³	94%	94%	-1%	99%	100%	1%
MS ⁴	92%	91%	-1%	99%	100%	1%
TN ⁵	94%	76%	-18%	97%	79%	-18%
Total	92%	86%	-7%	96%	86%	-11%

Source: FDIC and NCUA data as of June 30, 2014

Overall, the majority (54 percent) of the respondents had total assets in the \$100 million to \$500 million range (Chart 1). The other three asset ranges were fairly evenly distributed. There was a significant difference between the responding banks and CU groups in the smaller asset sized segments. The banks that responded were primarily in the \$100 million to \$500 million range (61 percent). The smaller community banks (< \$100 million) represent only 7 percent of the bank respondents. For the CUs, the smaller CUs (< \$100 million), at 41 percent, were the largest

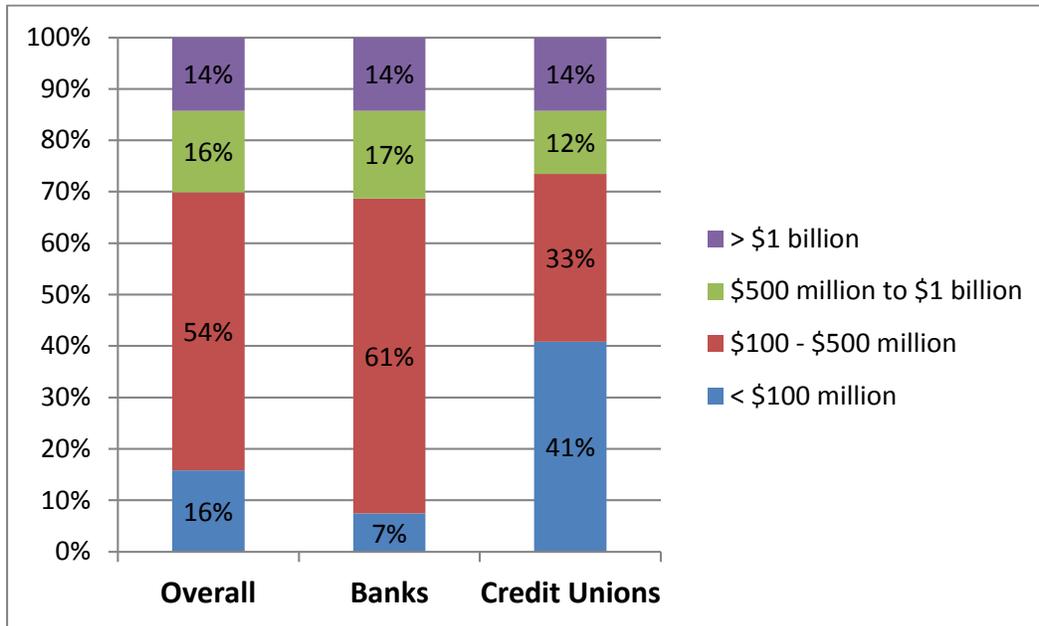
³ The Sixth Federal Reserve District covers the southern half of Louisiana, with the remainder of the state in the Eleventh Federal Reserve District (Dallas Fed).

⁴ The Sixth District covers the southern half of Mississippi, with the remainder of the state in the Eighth District (St. Louis Fed).

⁵ Sixth District covers the eastern two-thirds of Tennessee, with the remainder of the state in the Eighth District (St. Louis Fed).

segment, followed by the \$100 million to \$500 million segment representing a third (33 percent) of the CU respondents.

Chart 1. Respondents by FI Type and Asset Size



Mobile banking survey results

FIs not supporting mobile banking

Of the 189 qualified respondents, six (five commercial banks and one CU) indicated that they did not currently offer, nor had any plans to offer, mobile banking services. These FIs were asked to rank various elements that influenced their decision not to offer mobile banking services. One of the six respondents didn't answer the question, but the remaining five ranked the elements in order of importance with the number 1 as being the most important. The most important reason FIs indicated overall was their concern about security (weighted score of 1.0)—all five of the FIs that provided a response that identified this as the most important reason for not offering mobile banking. (See table 3.) Regulatory concerns were ranked the second most important by all five of the FIs, followed by a lack of customer demand (weighted score of 3.7). The lack of consistent or reliable cellular coverage in their service area scored the least important, with an average weighted score of 6.0. The scoring between the banks and CUs was similar, with the exception of the lack of a business case factor—the CUs' score was 5.0 on this point, and the banks ranked it as more important, at 4.0.

This left a total of 183 FIs currently offering or planning to offer mobile banking services (136 banks and 47 CUs), making up the body of the respondent data for the remainder of the survey.

Table 3. Items that Influenced the FIs' Decision Not to Offer Mobile Banking Services

Issue	Overall Score	Bank Score	CU Score
Security concerns	1.0	1.0	1.0
Regulatory issues	2.0	2.0	2.0
Lack of customer demand	3.7	4.0	3.0
Lack of standards and interoperability	4.0	4.0	4.0
ROI / Lack of Business Case	4.2	4.0	5.0
Lack of consistent, reliable cellular coverage	6.0	6.0	6.0

MOST IMPORTANT



LEAST IMPORTANT

Customer segments served

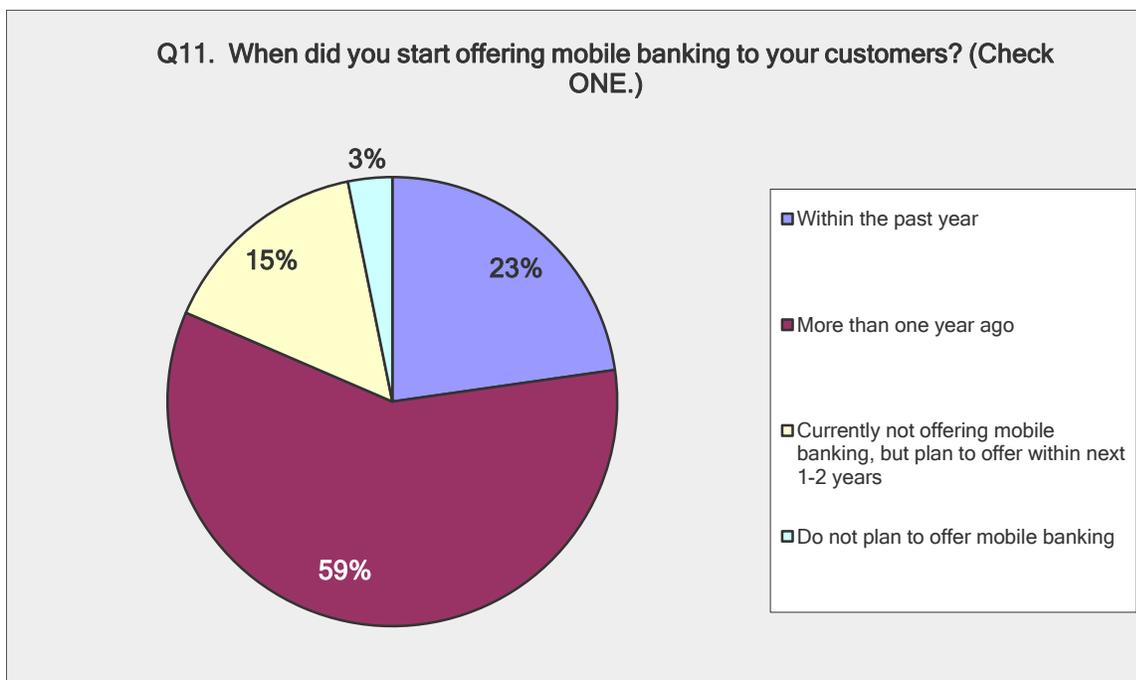
As expected, all of the survey respondents indicating support for mobile banking made (or planned to make) the service available to their consumer customer base. Other major customer segments were small business (85 percent), corporate/commercial customers (74 percent), and not-for-profit organizations (75 percent). Slightly more than half the respondents (57 percent) provided services

to both governmental and educational entities. There was very little difference between the bank and CU responses on this question.

Mobile banking offering longevity

Fifty-nine percent of the FIs have been offering their mobile banking service more than a year (see chart 2). Almost a quarter (23 percent) began their mobile banking service within the last year. This results in a total of 82 percent of the responding FIs having a mobile banking service in operation. Fifteen percent of the banks and 14 percent of the CUs responding indicated they did not currently support mobile banking but were planning to do so within the next two years. As noted earlier, six of the FIs (3 percent) had no plans to offer mobile banking within the next two years.

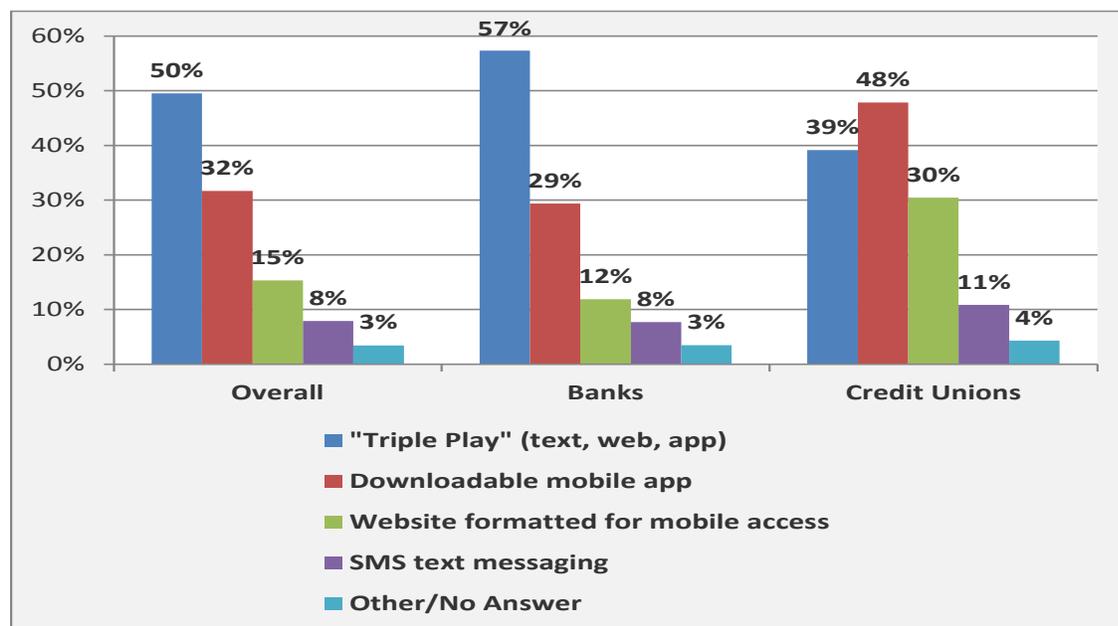
Chart 2. Length of Mobile Banking Service Offering



Mobile banking technology elements

Overall, half (50 percent) of the FIs supported the “triple play” of text, web, and mobile banking application. Interestingly, a much higher percentage of banks (57 percent) supported all three platforms than did the CUs (39 percent). CUs were more likely to offer a downloadable mobile banking app and to format their website for mobile access. (See chart 3.)

Chart 3. Mobile Banking Technology Platform Used

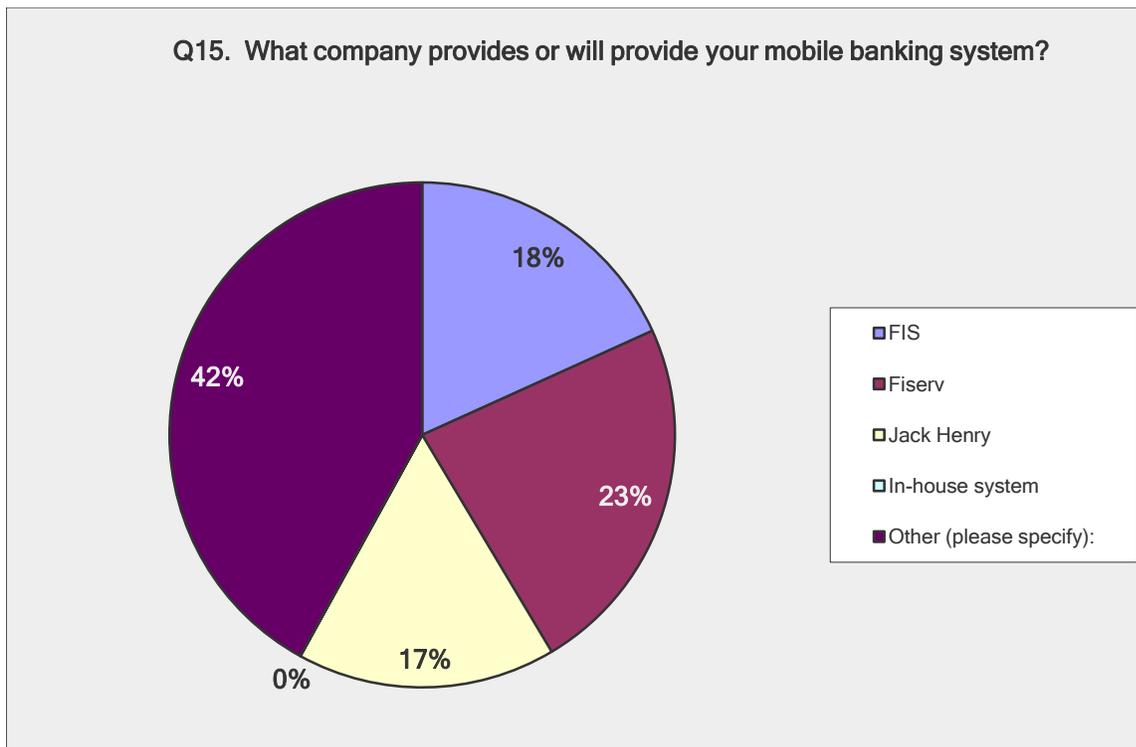


An overwhelming majority of the FIs supported both the Apple iOS (98 percent) and Android (96 percent) operating systems. Support for the Microsoft Windows and Blackberry operating systems was 23 percent and 18 percent, respectively, with minimal difference between the banks and CUs. A couple of the FIs were not sure or had not made a final decision on their operating system platform and selected “Other.”

Respondents were queried as to whether they currently offered or planned to offer mobile banking services via a tablet-specific application. Ninety-five percent of the FIs indicated support for the iPad, while only 69 percent showed support for Android tablets—a significant difference. CUs, at 83 percent, had a higher level of support for Android tablets than the banks, at 65 percent. The Amazon Kindle tablet was supported by less than one quarter (21 percent) of the respondents.

The vendors providing mobile banking systems were quite varied (see chart 4), with major differences between the banks and CUs. Fiserv, with an overall share of 23 percent, was the largest single vendor for both the banks and CUs, followed closely by FIS (18 percent) and Jack Henry (17 percent). However, the remaining 42 percent of the respondents used a total of 28 other vendors. None of these other vendors accounted for more than 10 percent of the total, but the most frequently named were First Data (14), Digital Insight (10), Q2 (7), MEA (7), and Access Softek (5).

Chart 4. Mobile Banking System Vendors Used



Services offered and planned

Mobile banking functions currently offered by more than half of the FIs include account balances, account statements and transaction history, transfer of funds between an owner’s accounts at the FI, bill payment, and branch/ATM locator (see chart 5a). Major functions not currently offered but planned included mobile remote deposits, mobile person-to-person transfers, and transfers between the same owner’s accounts at different FIs. Overall, there was little variance in the current and planned service offerings of the banks and the CUs, with the exception of the ability to view credit card balances. Fifty percent of the CUs indicated they currently support this feature compared to only 10 percent of the banks.

Of interest is that more than half the FIs (see Chart 5b) indicated they have no plans to support a wide variety of services on their mobile banking platform, including the ability to make address changes, reorder checks, make international remittances, check credit card or prepaid card balances, access brokerage accounts, and manage personal finances. (Please note that the totals in charts 5a and 5b don’t always sum to 100 percent as some of the respondents didn’t provide a response for each service option.)

Chart 5a. Service Elements Provided or Planned

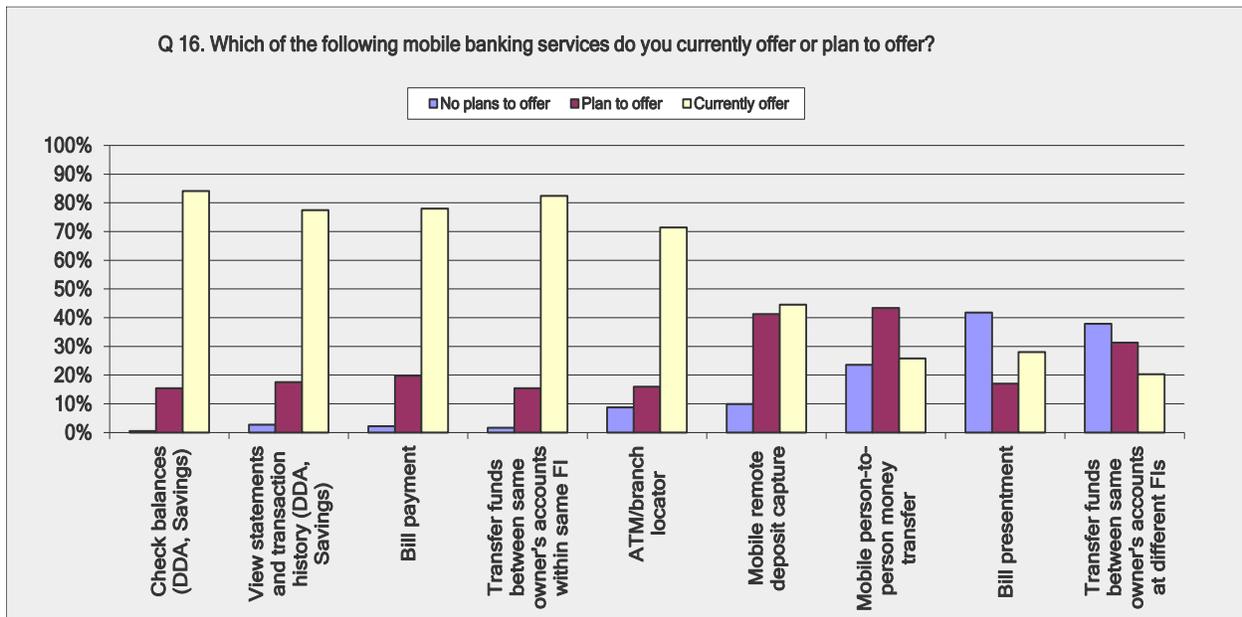
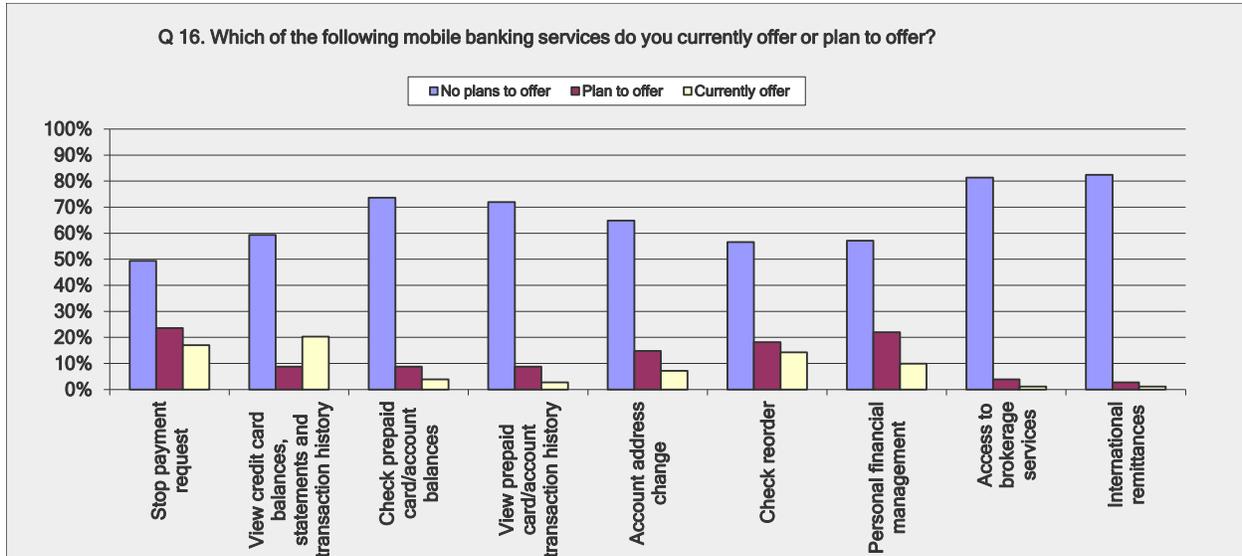


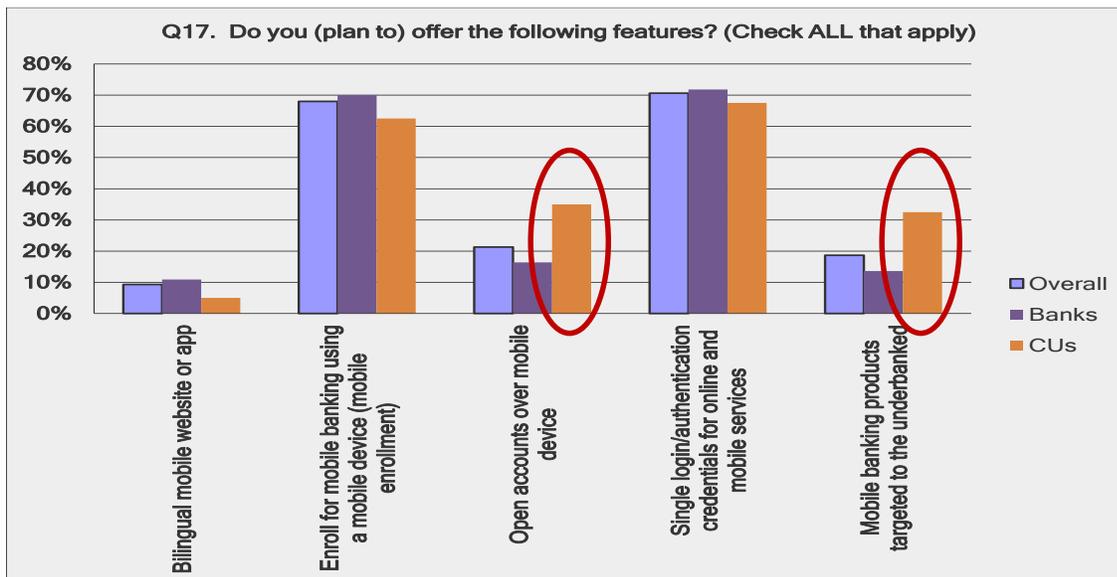
Chart 5b. Service Elements Provided or Planned (continued)



Question 17 of the survey also asked about FIs' plans to offer a variety of additional features to their mobile banking services (see chart 6). The two most popular new features offered by both banks and CUs were providing single login/authentication credentials for online and mobile services and the ability to enroll using a mobile device. The least popular feature was providing a bilingual mobile website or application. The popularity of the designated features is expressed in

chart 6 as the percentage of FIs that offer or plan to offer them. As highlighted, the CUs seemed to favor supporting additional services for the mobile device, such as account opening and targeting the underbanked, more than the banks did.

Chart 6. Planned New Service Features



Account alerts

In response to Question 18, approximately three-quarters of the FIs indicated support for some types of alerts. Table 4 provides a breakdown of the responses.

Table 4. Mobile Account Alerts

Alert Feature	Overall	Banks	CUs
Insufficient funds	66%	68%	60%
Credit card balance close to or over limit	13%	11%	19%
Funds transfer complete	55%	60%	40%
Bill pay	57%	60%	47%
Low balance	76%	79%	68%
Card-not-present transactions	10%	10%	9%
Two-way actionable text alerts	11%	10%	15%
Other	6%	5%	9%

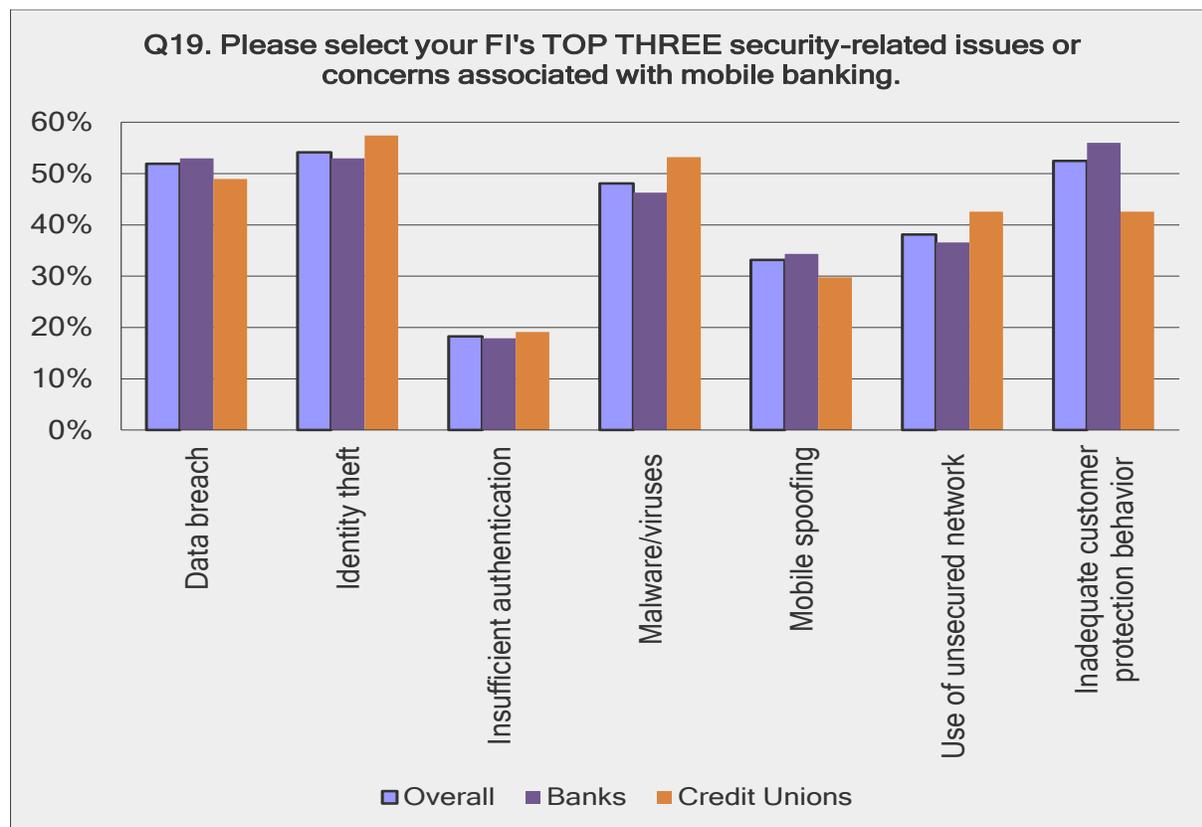
The most supported alerts by both banks and CUs are low balance and insufficient funds alerts. On the other end of the spectrum, less than 13 percent of the FIs were supporting credit card balance limit alerts, card not present transactions, and two-way actionable text alerts. Overall, banks were slightly more likely than CUs to support alerts for bill payments and account transfers. Some of the FIs indicated support for other types of alerts including:

- Personalized transaction alerts (type, value)
- Account balance reaches designated level or range
- ACH debits
- Pending transactions
- Deposits posted
- Security alerts (e-mail address change, password change, failed sign-on attempts)

Mobile security

The survey respondents were asked to select their top three security-related issues or concerns associated with mobile banking (see chart 7). Respondents had a wide distribution of the key concerns, which included identity theft (54 percent of respondents), inadequate customer protection behavior (53 percent), data breaches (52 percent), and insertion of malware/viruses (48 percent). The issues of mobile spoofing (33 percent) and the use of unsecured networks (38 percent) were in the next tier of concerns. The lack of sufficient authentication did not appear to be a major concern; only 18 percent of the question respondents identified it.

Chart 7. Top Security-Related Issues or Concerns



Question 20 of the survey asked the FIs whether they currently use or plan to use a range of features that can enhance mobile security. The leading features respondents identified were multifactor authentication (82 percent), session time-outs (80 percent), encryption (55 percent), mobile notifications (54 percent), and validating the mobile device ID (46 percent). Interestingly, by only 6 to 8 percent of the banks cited tokenization and biometrics, two of the most discussed security enhancements today. None of the CUs expressed interest in biometrics, and only 7 percent of them cited tokenization. Given the recent developments in mobile phone fingerprint sensors and payment card number tokenization, it will be interesting to see how responses to this question change in our next survey.

Business case elements

Respondents were asked to identify the primary business reason they offered or planned to offer mobile banking (see table 5). There was a wide distribution of responses with little difference between the bank and CU groups. Both groups cited customer retention and attracting new customers as their primary reasons. Being regarded as a technology market leader was a less important reason for offering mobile banking. The groups did not expect the mobile banking service to generate revenue as evidenced by most of the FIs providing the service free of charge.

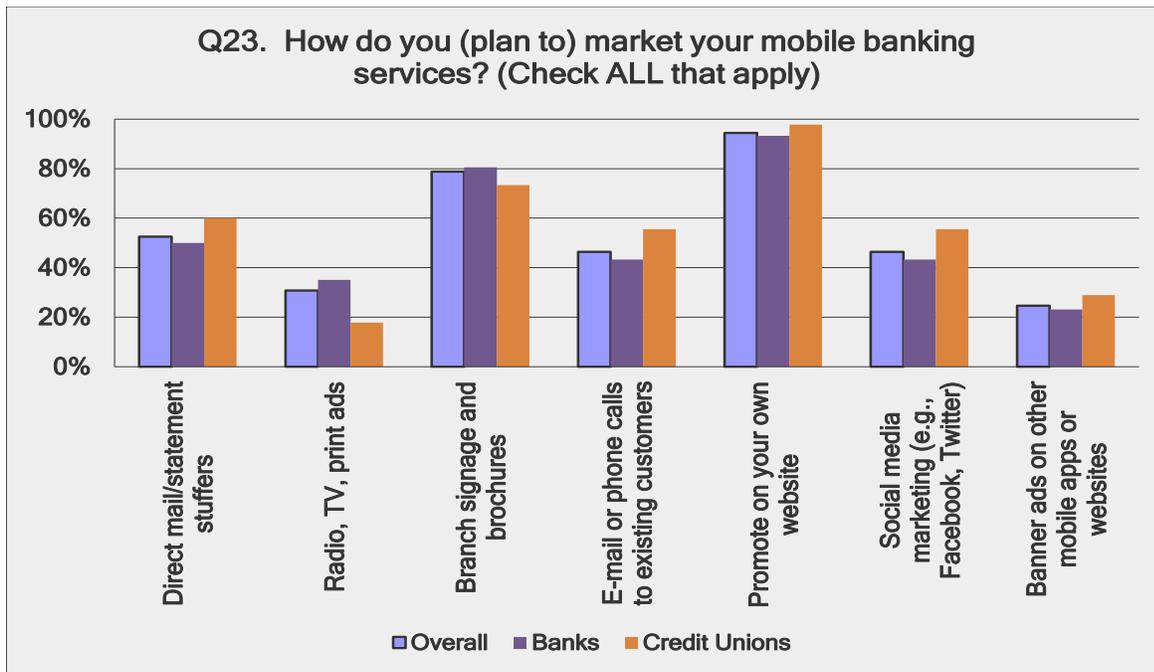
Table 5. Primary Business Reason for Offering Mobile Banking

Primary Business Reason	Overall	Banks	CUs
Retain existing customers	34%	34%	34%
Attract new customers	29%	27%	34%
Be market leader with technology	12%	12%	12%
Competitive pressure	23%	25%	20%
Increase revenue	1%	1%	0%

Question 22 asked respondents to identify all the business benefits that they have achieved since offering mobile banking. The most common benefit cited was customer retention, with an overall response of 71 percent, with 84 percent of the CUs and 67 percent of the banks indicating achievement of that benefit. Improved efficiency was the next most-often-cited benefit, with 39 percent of the respondents choosing it, followed by reducing operational costs (23 percent) and realizing increased transaction volume (21 percent). Roughly 6 percent of both groups indicated they haven't achieved any benefit from their mobile banking service. One FI indicated it offered the service to attract the younger generation customer segment, and another saw it as an advertising channel for the FI. The only factor where there was an appreciable difference between the two groups was that 34 percent of the CUs indicated that they had realized increased transaction volume, whereas only 16 percent of the banks indicated they achieved that element.

The survey next asked FIs how they planned to market the service (see chart 8, which displays the responses of the two groups as well as their consolidated response). The primary marketing methods used by both banks and CUs were promotions on each FI's own website, followed by signage in the branch and/or brochures. Direct mail and statement stuffers were the third most frequently cited marketing method, with CUs using it slightly more than banks (60 percent to 50 percent). CUs indicated they were slightly more likely to use direct customer calling and social media marketing than the respondent banks. Traditional media was cited by less than one third (31 percent) of the overall group, although CUs were less likely to use this method (18 percent) than were banks (35 percent). CUs were slightly more likely to use banner ads on other mobile applications or websites (29 percent) than were banks (23 percent). Other marketing methods cited include billboards, account statement messaging, overprinting on cash envelopes, employee buttons, and direct presentations to clients.

Chart 8. Marketing Methods Used for Mobile Banking Services



Question 24 had two parts: it first asked the FI what percentage of retail customers had **enrolled** in the mobile banking service, and then what percentage had **used** the service within the last 90 days (see charts 9 and 10). Almost three-quarters (72 percent) of the FIs indicated they had successfully enrolled less than 20 percent of their customers. Chart 9 shows that, for both groups of FIs, the most frequently identified percentage of customers enrolled in their mobile banking service was in the 5 to 20 percent range. The greater than 50 percent range was the least frequently cited by both groups, although the percentage of CUs reporting that achievement was twice that of the banks.

Chart 9. Retail Customers Enrolled by Percent of Segment

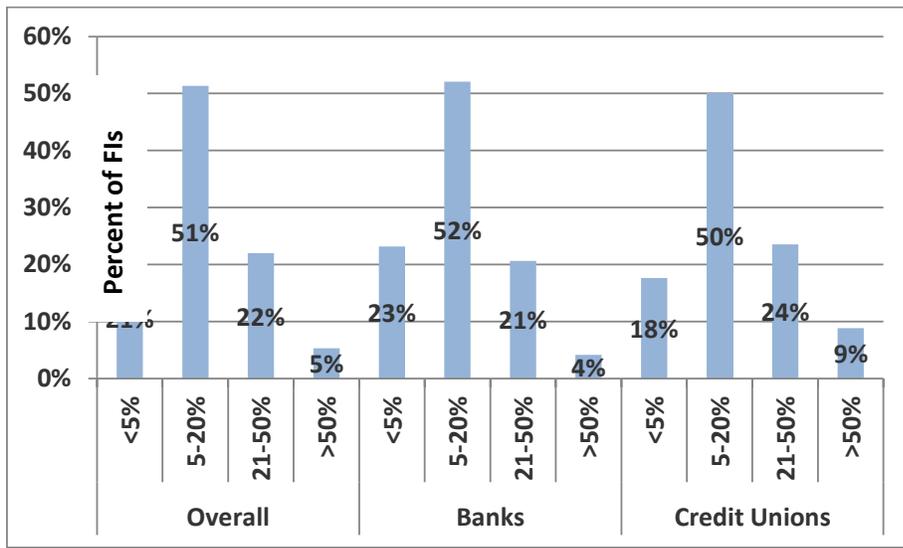
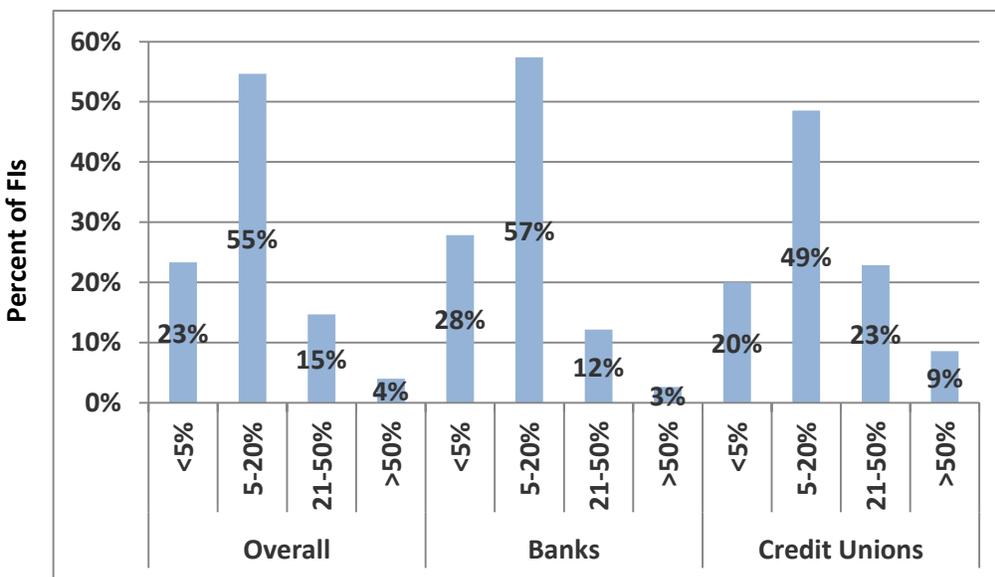


Chart 10 displays a similar distribution of FIs reporting customer usage of the mobile banking service within the last 90 days. Almost one-third (32 percent) of the CUs, compared to only 15 percent of the banks, indicated that more than 20 percent of their customers had used their mobile banking service.

Chart 10. Retail Customers Using Mobile Banking by percent Segment



Using an assumed range midpoint, calculating a weighted average suggests that CUs slightly outpaced the banks in both enrollment and usage. However, the relative percentage of retail customers engaged on an overall basis is low and represents major potential for growth. The usage results (weighted overall average of 16 percent) also appear low when compared to the 39 percent

reported in the Federal Reserve Board’s 2015 Consumer and Mobile Financial Service survey⁶. It will be interesting to compare these results to those of the other districts when their survey results are released.

Barriers to mobile banking

Question 25 attempted to probe the main reasons that FIs believe customers are resistant to adopting mobile banking services. For the 179 FIs that responded to this question, security concerns and the lack of customer awareness of the service were the most often cited reasons and were noted by more than two-thirds of the respondents. More than half of the respondents, with a fairly equal response by the CUs and banks, indicated they believed their other customer channels were meeting customer need. The least cited reason by both groups was that the mobile banking application was not user friendly. Respondents were also given the opportunity to identify other barriers. The most frequently mentioned theme revolved around older/elderly customers who were not technology-savvy or had set habits and were not motivated to try the service. Another reason mentioned by several of the respondents was the need to improve and increase the functionality of the mobile banking application.

Table 6. Most Common Reasons Preventing Greater Customer Adoption

Reason	Overall	Banks	CUs
App is not user friendly	15%	12%	22%
Login process complicated	21%	20%	24%
Security concerns	71%	71%	70%
Lack of customer awareness	69%	69%	67%
Phone screen size	27%	28%	26%
Other channels meeting customer's needs	54%	57%	46%
Other	15%	13%	22%

Commercial customer usage

Question 26 concerned the FIs’ intentions about the mobile banking services they offer to their commercial customers. Only 45 percent of the CUs answered this question even though 72 percent had earlier indicated they supported corporate and commercial entities. Over half (55 percent) of the respondents indicated that their commercial customers were offered the same mobile banking services as their retail customers. The ability to check account balances and monitor transaction activity was the next most cited capability, with the banks (55 percent) outpacing the CUs (25 percent). As expected, because of their attention to corporate customers, a greater percentage of

⁶ <http://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201503.pdf>

banks (44 percent) indicated they offered or planned to offer cash management services than did the CU respondents (30 percent). The ability to provide account administration and password resets was more favored by the CUs (30 percent) compared to the banks (12 percent). Both the banks (12 percent) and the CUs (15 percent) ranked mobile card acceptance support (for example, Square) low. Several of the respondents mentioned remote deposit capture.

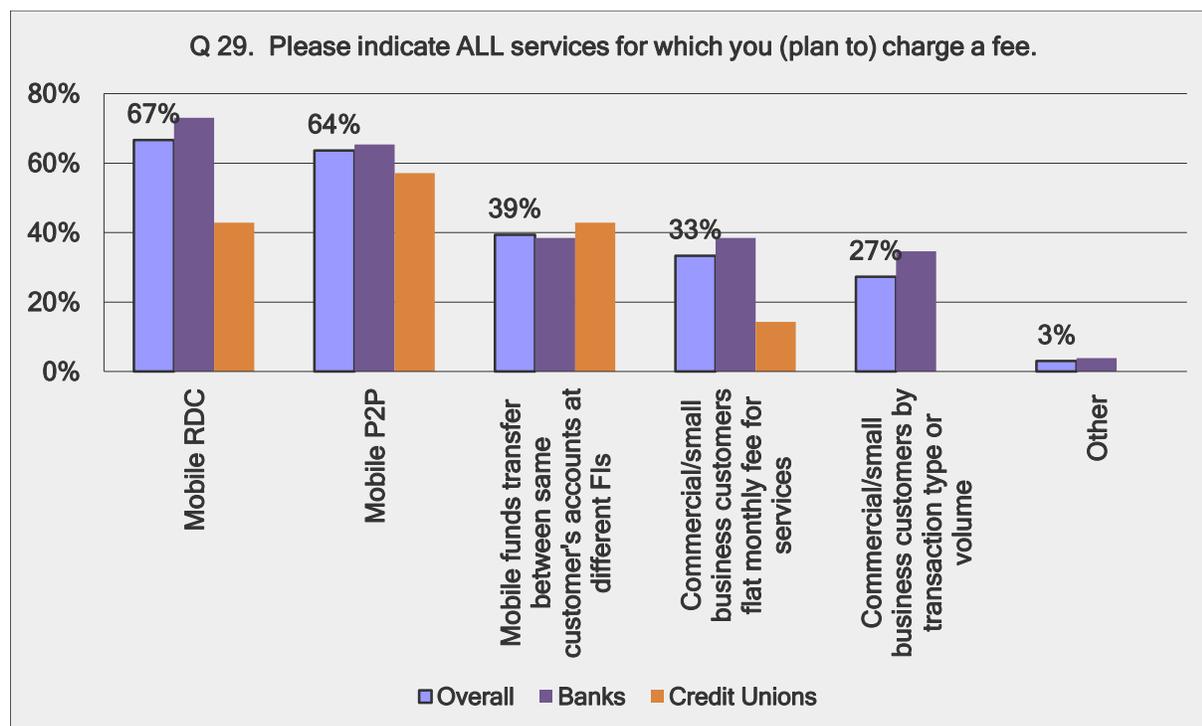
Question 27 probed enrollment and usage by commercial customers similar to the inquiry in Question 24 for consumers. As in that previous question, only 45 percent of the CUs provided responses, compared to 72 percent of the banks. As expected, enrollment and usage for commercial customers were significantly lower than for consumers in both groups. Three-fourths (75 percent) of the banking respondents indicated that enrollment and usage was less than 5 percent of their commercial customer base, and only 3 percent indicated the penetration was greater than 20 percent. The CUs reported lower results, with none of the respondents reporting that they enrolled more than 20 percent of their commercial customers and only 15 percent seeing more than 5 percent of their commercial customer base using mobile banking.

Mobile banking fees

Banks displayed a slightly higher willingness to charge for overall mobile banking services; 20 percent said yes, compared to 15 percent for the CUs.

Question 29 identified specific mobile banking services and inquired as to whether the FI charged or planned to charge a fee for that service (chart 11). Overall, the FIs expect to charge fees for mobile remote deposit capture and mobile person-to-person payments. CUs are more likely than banks to charge for mobile remote deposit capture and slightly more likely to charge for mobile P2P payments. Banks are more likely to charge fees for some of the other functions listed. One FI indicated it would have a tiered fee structure for mobile remote deposit capture (RDC) based on the customer's desired funds availability, although there would not be a charge for standard availability.

Chart 11. Charging Fees for Specific Mobile Banking Services



Mobile payments survey results

The second section of the survey dealt with mobile payments, which the survey defined as:

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.

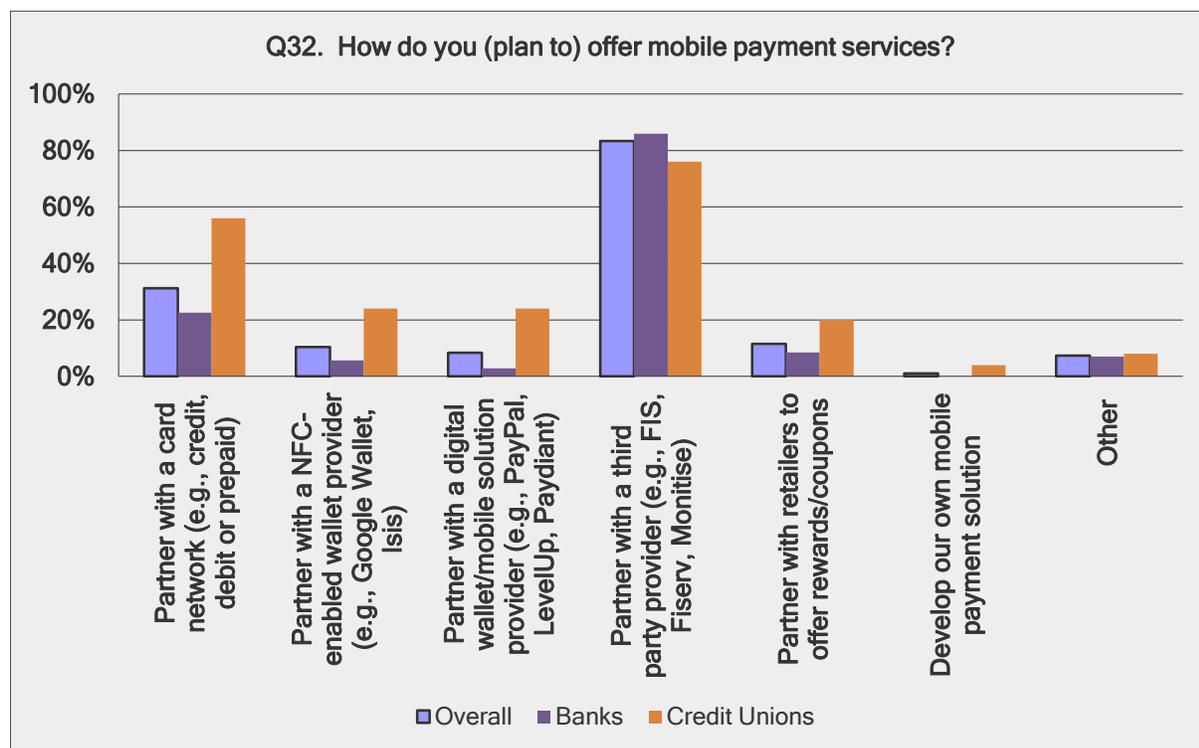
Mobile payments service offering

The 183 respondents to Question 31 were asked to indicate whether they currently offer or planned to offer mobile payment services to their customers. Overall, while only 14 percent have offered these services for a year or longer, another 45 percent indicated they planned to make them available in the next one to two years. In somewhat of a surprise, 42 percent of the respondents indicated that they had no plans to offer mobile payments services within the next two years. There was little difference in the response rates among the offering options between the banks and CUs, with the exception of the banks more likely not to offer the service (44 percent) compared to the CUs at 34 percent.

FIs were asked about the manner in which they were going to make the mobile payments service available (see chart 12). Eighty-three percent of the respondents who were planning to offer the

service indicated they would do so by partnering with a third party. The banks (86 percent) heavily dominated this selection, but it was also the number one selection of the CUs (76 percent). The option of partnering with a card network was selected by 23 percent of the banks and 56 percent of the CUs. The other options received minimal selections by the bank group. The CUs showed a bit more diversity, perhaps because for many of them their path is not set, with 20 to 25 percent indicating they might partner with a digital wallet, near field communication (NFC) wallet, or retailers.

Chart 12. Mobile Payment Service Offering Configuration



The survey next probed the participants on a number of mobile payment services and asked the participants to rank the services based on their perception of the value of the mobile payments offering (see table 7). They were to rank them in order of importance on a scale from 1 to 5, with 1 being the most important. The service offering through a “partnership with a mobile provider using a white label mobile wallet” had the greatest value (lowest weighted number value of 2.31) for both banks (2.26) and CUs (2.47). For the credit unions, this scoring was more than likely heavily influenced by the development of the CU wallet, which uses the Paydiant white-label model and is being specifically tailored for CUs. For the banks, a link to a mobile provider offering an NFC contactless solution was the second most important service. The tight range of scores among all the mobile payment service options demonstrates one of the key issues facing the mobile payments market, which is fragmented in terms both of players and of technologies.

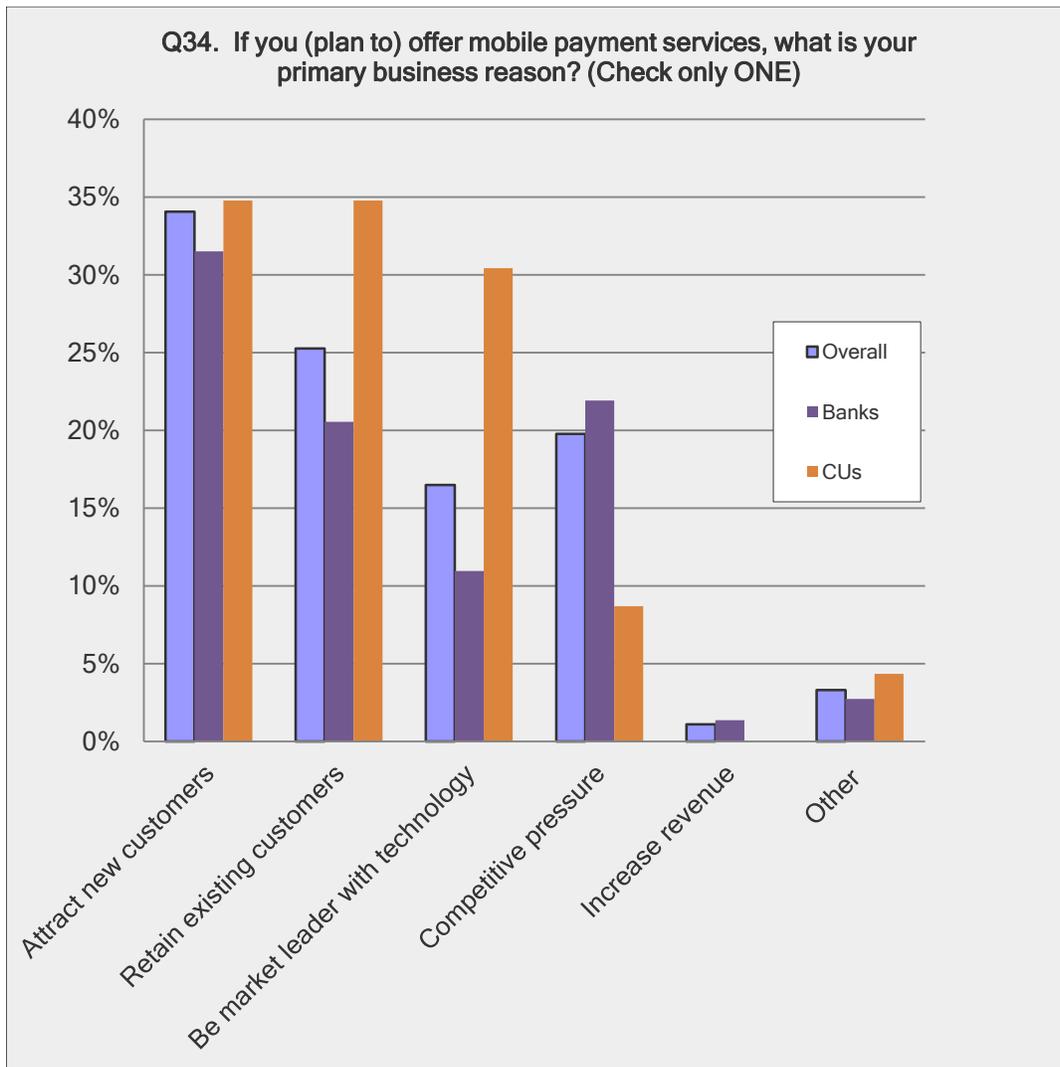
Table 7. Ranking of Mobile Payment Services

Answer Options	Overall	Banks	CUs
Partner with mobile provider of white label mobile wallet (e.g., Paydiant)	2.31	2.26	2.47
Link to mobile provider offering NFC contactless solution (e.g., Softcard)	2.68	2.67	2.69
Partner with merchants to allow customers to pay for purchases through a credit push	2.86	2.87	2.85
Link to provider for access using QR code (e.g., LevelUp)	3.09	3.08	3.11
Other	3.46	3.37	3.67

Mobile payments business case

The survey participants were then asked to select their primary business reason for offering or planning to offer mobile payment services. The overall results (see Chart 13) reveal some slight differences between banks and CUs. Attracting new customers was the primary reason for the banks (32 percent), with competitive pressure ranked second (22 percent) and customer retention a close third (21 percent). Thirty-five percent of the CUs equally scored both the attraction of new customers and customer retention as the most important business reasons. Interestingly, competitive pressure was scored low; only 9 percent of the CUs selected it as a primary business reason. As with the mobile banking service, there is no expectation of any significant revenues from mobile payments from either group.

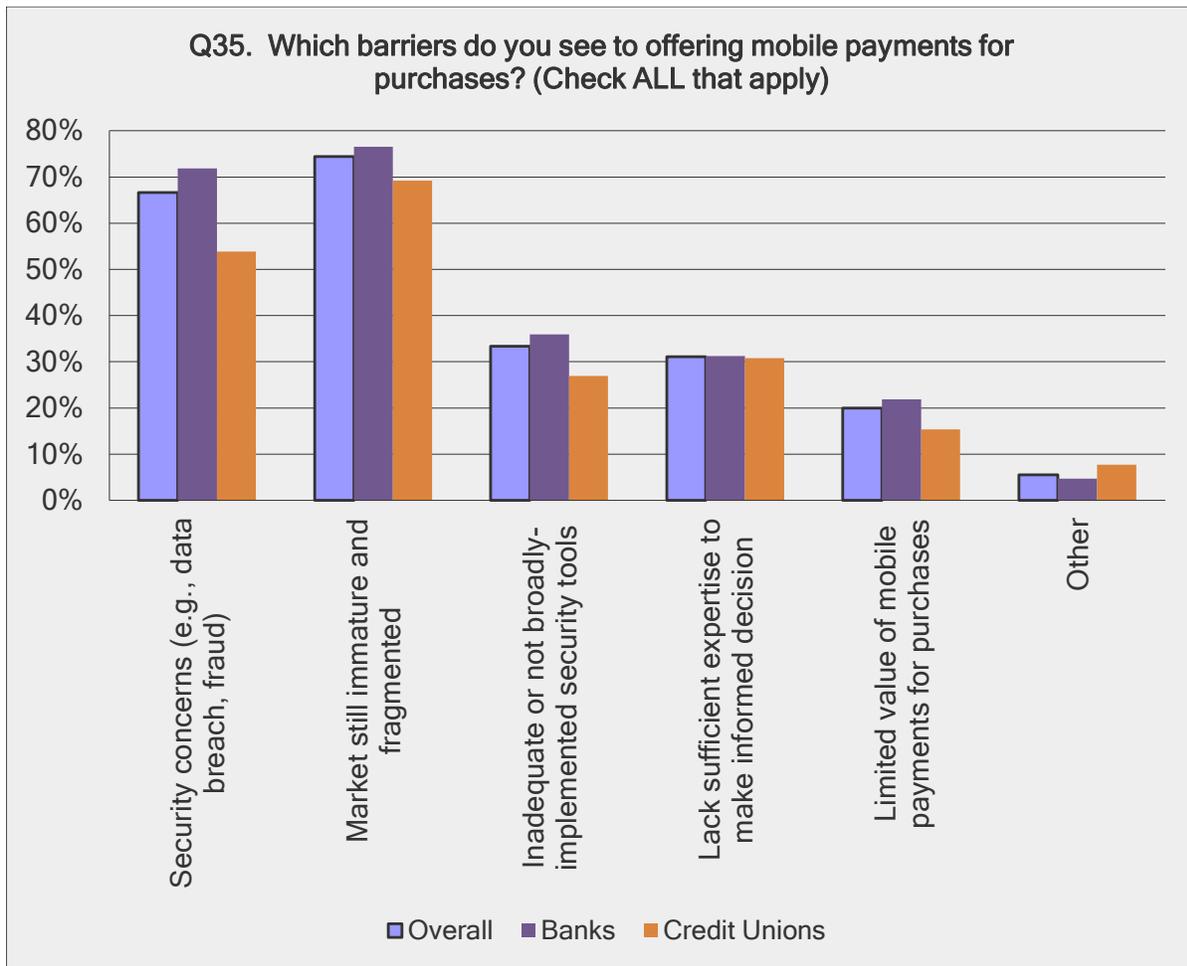
Chart 13. Primary Reason for Offering Mobile Payment Services



Barriers to mobile payments

In the final question of the survey, the respondents were asked to identify all the barriers they saw to offering mobile payments for purchases (see chart 14). The primary barrier that both groups cited was that the market is highly fragmented and still maturing. Security concerns was the second selection of both banks and CUs. Of interest was the number of respondents who indicated that they didn't believe they had enough information to make an informed decision. Since the smaller FIs are highly dependent on their processor for system and application information, this would appear to be a prime opportunity for those processors to assist their customers in developing a mobile payments strategy.

Chart 14. Primary Reason for Offering Mobile Payment Services



Survey learnings

Since this was the first mobile banking/payments survey conducted in the Sixth District, we have no prior results with which to compare the findings and identify trends or changes in the mobile banking environment. We intend to administer the survey every two years and will, once we have enough data, be able to incorporate our analysis of trends and developments within the mobile banking and mobile payments services.

Key learnings from the responses to this survey include:

- A small percentage (3 percent) of FIs do not currently believe that mobile banking represents a strategic need within the next two years. The primary reasons cited for their decision are security concerns, regulatory issues, and a lack of customer demand.

- Mobile banking is a relatively new service. Almost a quarter of the respondents began their service within the last 12 months and an additional 15 percent do not currently offer the service but plan to do so within the next two years.
- There are more than 30 mobile banking application vendors in the market with no single vendor having more than a quarter of the market, although there is a large concentration with three providers. Banks and CUs are generally served by different vendors, although some of the major processors overlap the two groups.
- There is very little difference in the basic functions that the banks and CUs offer.
- Perhaps due to security concerns, the vast majority of FIs do not plan to support with their mobile services such functions as stop payments, account address changes, credit card account access, and international remittances.
- Account alerts are an emerging feature that FIs are offering or planning. They notify customers of low balances, insufficient funds, and bill payments that are due, and confirm funds transfers.
- As other mobile banking surveys have consistently reported, security concerns related to identity theft, data breaches, malware, and poor customer security practices remain a primary concern of FIs.
- Despite biometrics and tokenization grabbing the current headlines, respondents expressed little to no interest in these features for enhancing mobile security.
- The primary reason FIs cited for offering mobile banking was as a defensive move, to retain existing customers, although they also saw it as an opportunity to attract new customers.
- Consumer enrollment and usage levels remain anemic. Almost three-quarters (72 percent) of the responding FIs indicated they had enrolled less than 20 percent of their customer base. With usage rates similarly low, there is a strong growth opportunity for this channel.
- Mobile banking functionality for commercial customers has been consolidated with consumer functionality by more than half of the FIs, while others are working to offer specific corporate functionality.
- FIs acknowledge the barriers of their customers' security concerns as well as a lack of awareness and expect to use online and direct mail marketing to promote the service.
- With the possible exception of remote mobile deposit capability, FIs do not expect to charge customers for mobile banking or payment services.
- The mobile payments environment is nascent and highly fragmented in both the number of vendors and the wide range of technologies, which has created some stagnation. The FIs are looking for the environment to sort itself out.

Appendix A

2014 Mobile Banking and Payments Survey

The Federal Reserve Bank of Atlanta and ALACHA, GACHA, SFE, TACHA

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.

If filling this survey out by hand, please send to the following address upon completion:

Mailing Address:

Dave Lott
Federal Reserve Bank of Atlanta
1000 Peachtree Street, N.E.
Atlanta, GA 30309-4470

Thank you for taking the time to complete 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. E-mail**:-

*Required fields

** If you would like to receive an electronic copy of the survey results report, please provide an e-mail 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 (plan to) use in the future? (Select 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 or will your mobile banking application support? (Check ALL that apply)

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

14. Do you (plan to) offer mobile services via a tablet-specific application? (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 (plan to) 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 targeted to the underbanked

18. What types of mobile alerts do you (plan to) 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-related issues or concerns 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 (e-mail, 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 currently use or plan to 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. If you (plan to) offer mobile banking, what is your **primary** business reason? (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
- E-mail 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 ENROLLED in your mobile banking services	% of retail 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%

25. What are the **THREE** most common reasons you believe are 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 (plan to) 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** services for which you (plan to) charge a fee. (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. *Please rank them from 1 to 8 in order of importance with 1 as the most important.*

- 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. Do you want the Federal Reserve Bank of Atlanta and ALACHA, GACHA, SFE, TACHA 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)_____

38. Please share your ideas on what role(s) the Federal Reserve Bank of Atlanta and ALACHA, GACHA, SFE, TACHA can play in helping to increase your knowledge of mobile banking and payments.

Appendix B

Table B-1. Total Number of Financial Institutions in Sixth District States

State	Banks			CUs		
	# of Banks	Assets < \$1 Billion		# of CUs	Assets < \$1 Billion	
AL	135	128	95%	118	113	96%
FL	188	164	87%	157	143	91%
GA	217	201	93%	138	133	96%
LA ⁷	140	132	94%	203	202	99%
MS ⁸	84	77	92%	85	84	99%
TN ⁹	176	166	94%	156	151	97%
Total	940	868	92%	857	826	96%

Source: FDIC and NCUA data as of June 30, 2014

⁷ Sixth District only covers the southern half of Louisiana with the remainder of the state in the Dallas Eleventh District.

⁸ Sixth District only covers the southern half of Mississippi with the remainder of the state in the St. Louis Eighth District.

⁹ Sixth District only covers the eastern two-thirds of Tennessee with the remainder of the state in the St. Louis Eighth District.