

2020 MOBILE DEPOSIT BENCHMARK REPORT

Customer experience rankings for 20 top retail banks and credit unions



The lure of ROI from digital-channel migration to mobile payments readiness is raising the bar among top retail banks. We're seeing significant changes in positioning within this year's scorecard.

Mitek

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Executive Summary

According to research conducted by CI&T, more than half (54%) of mobile banking customers used their mobile banking app's check deposit capability in the past year. In addition, 52% of respondents said depositing a check was one of the most important mobile banking features.

My, how times have changed. A 2013 study from FindABetterBank.com found that, among bank shoppers on FindABetterBank.com, only 8% indicated they must have mobile check deposit.

The mobile deposit customer experience is increasingly becoming a critical determinant of consumers' satisfaction with their banks' or credit unions' mobile banking capability—and ultimately their overall satisfaction with the institution.

THE 2020 MITEK MOBILE DEPOSIT BENCHMARKING STUDY

Now in its fourth year, the Mitek Mobile Deposit Benchmarking Report has chronicled the changes in mobile deposit customer experience (CX) from 20 of the largest financial institutions in the United States. The report is designed to pinpoint competitive best practices or gaps as the foundation for product roadmap updates that can best deliver measurable improvement in channel migration, customer satisfaction and end-to-end mobile payments readiness.

For the 2020 study, Cornerstone Advisors is honored to pick up the mantle from Futurion. Digital, which published previous versions of this study.

From our experience assisting hundreds of financial institutions to select and implement mobile banking platforms and our study of the previous years' reports, Cornerstone has seen a shift in the competitive focus regarding mobile deposit from user experience (UX) and design to policy changes.

According to research conducted by CI&T, 52% of respondents said depositing a check was one of the most important mobile banking features.

We believe, however, that this will be an ongoing, back-and-forth shift. As policy changes lead to more parity in mobile deposit CX, leading institutions will again leapfrog the competition with UX and design changes.

That leapfrogging is already evident in the 2020 rankings. With significant changes to its UX and policy decisions, JPMorgan Chase jumps five places from the 2018 ranking to become the new leader in this year's ranking. Citibank soars from last study's number 11 position to the number two bank this year, as last year's leader, Capital One, drops to the number three position.

All three leaders owe their rankings to a tight focus on simple UX design and the ability to offer confidence-boosting policies on both limits and a short check retention time. The difference between the leaders and the rest of the pack comes down to small details. The banks at the bottom aren't doing a bad job at mobile deposit—on the contrary, many do it well.

MOBILE DEPOSIT STILL REQUIRES IMPROVEMENTS

It's not all rosy in the mobile deposit world, however. Security is still a top-of-mind concern among consumers, and many express dissatisfaction with low deposit limits and long check hold times.

Banks should step into that security gap to increase adoption of the full suite of mobile services. If customers are limiting themselves to activities they perceive as being more secure, like checking account balances, or limiting themselves to their own home Wi-Fi networks, they're not leveraging the full power of mobile banking.

Banks should continue to focus on the customer experience when designing for mobile banking to make transactional features easier—and more attractive—to use and to create a customer perception that feels more secure.

Best in Mobile Check Deposit Customer Experience:

- 1. JPMorgan Chase
- 2. Citibank
- 3. Capital One

People are open to using mobile banking more, but they are taking steps on their own to keep their transactions secure, especially transactions that involve moving money around.

Banks should build the risk-management systems that curtail losses in the face of removing any digital-channel disadvantage in deposit limits, implementing personalized deposit limits, avoiding the use of check deposit limits as a marketing incentive, and recommending minimal paper check retention days.

Auto-capture has become a mobile deposit staple (with 19 of the 20 banks in this study offering it), and smaller institutions should press their mobile banking vendors to accelerate the development of this feature.

In 2020, financial institutions need to improve both the mobile deposit user experience and policies (i.e., risk, support and marketing) to ensure user satisfaction with mobile banking—and the overall banking experience.

Mobile Deposit Benchmark Report Scorecard

-2020-





19 out of 20 **FINANCIAL INSTITUTIONS**

Now offer Auto-Capture

BEST LIMITS

BBVA

\$45,000 daily or monthly

SANTANDER

\$15,000 monthly

Honorable Mention for Most Improved in User Experience

US Bank

Best Recommended Paper Check Retention:

2 days

CONSUMER STATS:



Percentage of mobile banking users who consider mobile deposit to be one of the most important mobile banking features



Percentage of mobile banking users who said they would be "very likely" to recommend mobile deposit to their friends or family



Percentage of 18-24 year-olds that said mobile deposit is their preferred method for depositing paper checks

About the Study

This report benchmarks the top 20 U.S. retail multi-channel financial institutions (FIs) and is aimed at banking institutions and digital banking and payment product leaders as well as design heads, UX specialists and business leaders.

Using an evolving methodology, every phase of this research project was conducted without influence from Mitek, CI&T or Cornerstone Advisors, including criteria selection, scoring methodology design, data collection and analysis, and reporting.

Digital strategy and design agency CI&T accessed live deposit accounts for each of the 20 FIs during August and September of 2019 with all ratings set by CI&T's UX design team. Existing live accounts in select cases (primarily for regional banks) were gained by working with a research partner, who facilitated the collection of screen captures.

The mobile deposit user experience was analyzed along six categories. FIs were scored based on UX measures, with modifications to fit the mobile deposit process. Two policy areas were rated, based on information found in the apps, on the FIs' sites, or provided by customer service agents.

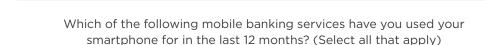
To develop the total ranking for each FI's overall mobile deposit customer experience, each FI's average standing within each of the six UX areas were summed and then compared to that of all other Fls. Following the heuristic review, a consumer survey was distributed to a sample of the U.S. population, using U.S. Census data to gauge attitudes, usage and behavioral reactions to mobile deposit and mobile banking.

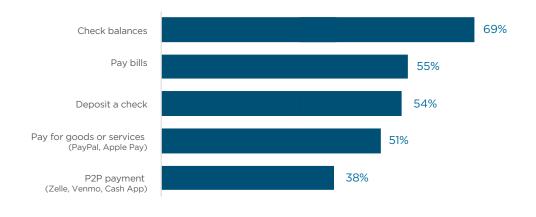
The Consumer Perspective

Key findings from the consumer survey include the following:

- Mobile deposit use is on the rise. Mobile deposit adoption grew to 45% this year from 40% in 2018. Among consumers who had used their mobile banking app in the week before the survey, half had used the app's mobile deposit feature.
- Mobile deposit has become a mainstream mobile banking activity. Overall, more than half (54%) of mobile banking customers used their mobile banking app's check deposit capability in the past year. That was virtually equal to the percentage who paid bills through a mobile banking app, and not far behind the most prevalent mobile banking activity, checking account balances (Figure 1). In addition, 52% of respondents said depositing a check was one of the most important mobile banking features.

FIGURE 1: **Mobile Banking Activity**

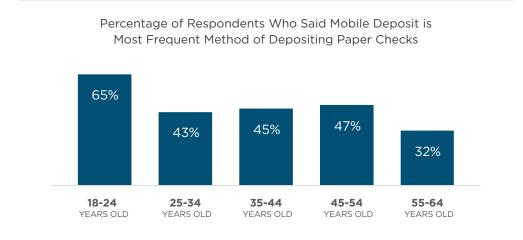




Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

 Mobile is the most prevalent deposit method for Millennials and Gen Xers. Two-thirds of respondents between the ages of 18 and 24 said that mobile deposit is now their preferred method for depositing paper checks. Even though that percentage drops to the mid-40s for respondents between the ages of 25 and 54, mobile deposit is still the preferred method of depositing for those consumers (Figure 2).

FIGURE 2: **Preferred Method of Depositing Paper Checks**

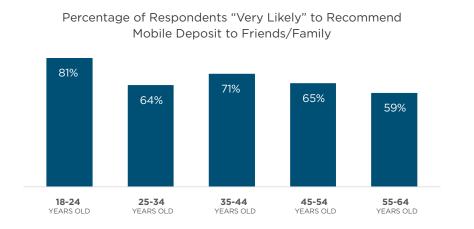


Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

• Referral intention regarding mobile deposit is strong. Among respondents who used mobile deposit in the past year, 68% said they would be "very likely" to recommend it to their friends or family. That percentage jumps to 81% among consumers 18 to 24 years old (Figure 3).

FIGURE 3:

Mobile Deposit Referral Intention



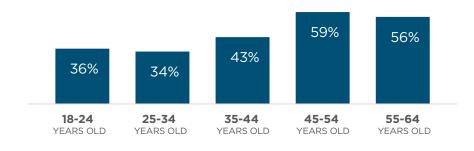
Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

• Mobile deposit issues still exist. Surprisingly, a larger percentage of younger consumers experienced problems with mobile deposit than older consumers did (Figure 4). The types of problems experienced differed by age group, with funds not available in a timely manner and issues getting a clear check being the most prevalent (Table A).

FIGURE 4:

No Problems With Mobile Deposit

Percentage of Recent* Mobile Deposit Users That Had No Problems with Service *Recent=Used mobile deposit in the past 12 months



Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

TABLE A:

Mobile Deposit Problems

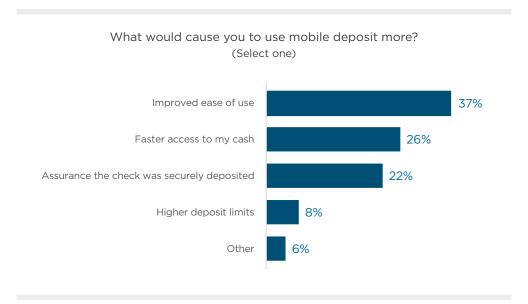
Which of the following problems have you encountered using mobile deposit?

	18-24 years old	25-34 years old	35-44 years old	45-54 years old	55-64 years old
Funds not available in a timely manner	48%	33%	24%	40%	21%
Issues getting clear picture of check	41%	22%	48%	33%	43%
Wasn't sure if deposit went through	37%	29%	31%	27%	0%
Low dollar limits	22%	16%	3%	13%	14%
Couldn't deposit large amount of checks at once	22%	24%	21%	7%	21%
Confusing to use	0%	8%	17%	7%	0%

Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

- Convenience drives mobile deposit use—and non-use. Nearly seven in 10 consumers ranked convenience as the number one factor leading them to use their mobile banking app's deposit capability. Ironically, convenience is the number one reason why mobile banking users don't use their app's deposit feature—roughly four in 10 said they were near an ATM or branch the last time they deposited a check without using the app.
- Mobile deposit improvements could drive higher usage. Nearly four in 10 respondents indicated that if their bank improved the use of mobile deposit, they would use the capability more often. About a quarter said faster access to cash would spur them to use mobile more often, and about one in five cited better assurance the check was securely deposited as their top factor (Figure 5).

FIGURE 5: **Drivers of Higher Mobile Deposit Usage**



Source: Mitek, CI&T survey of U.S. consumers, Q3 2019

• Security is still a concern. Three in 10 consumers didn't think that mobile deposit was secure when they learned about it for the first time. A lot of that uncertainty stemmed from low deposit limits and recommended check hold times of two weeks or more. These extended recommendations made users feel that depositing their checks left them vulnerable for that time period until the checks were processed.

Mobile Deposit Rankings

Year-over-year, valuating banks' mobile deposit offerings has become more difficult because 1) banks are putting a higher priority on mobile deposit as a mobile banking feature, and 2) many banks are paying attention to what others do and to how they are being evaluated in this report.

Across the board, mobile deposit designs tend to follow similar patterns offering simple, clean screen layouts; familiar hierarchy of process flow; and relatable nomenclature. The banks at the bottom aren't doing a bad job at mobile deposit—on the contrary, many do it well. But their design, UX and policies aren't at the level of the leaders. Top-level findings from the rankings include (Figure 6):

- Two new leaders emerge. With significant changes to its UX and policy decisions, JPMorgan Chase jumps five places from the 2018 ranking to become the new leader in this year's rankings. Citibank, which was ranked 11th in 2018, comes in at number two in 2020, dropping the previous leader, Capital One, to the number three position. All three leaders owe their rankings to a tight focus on simple UX design and the ability to offer confidence-boosting policies on both limits and a short check retention time of only two days.
- Three institutions make significant gains. With increases in deposit limits and a decrease in check retention limits, Navy Federal Credit Union rose seven places in the ranking from 17th in 2018 to 10th in the 2020 ranking. In addition, both BB&T and BMO Harris gained four spots in the ranking from the prior year (Figure 7).
- Differences in policy decisions have a strong impact on the ranking. Two policy-related functions—deposit limits and recommended paper check hold times—vary widely across banks and therefore have a strong impact on the banks' overall ranking. Banks that make customer-favorable policy changes could see improvements in their ranking in the next study.
- Two features have become non-differentiators. Auto-capture and real-time status updates have become "cost of doing business" functions in mobile deposit. All but one of the ranked banks were rated equally on auto-capture functionality, and 17 of the 20 were ranked equally for providing real-time status updates.
- Laggards shared common shortcomings. Fls toward the bottom of the list, however, typically suffered from too much text, a cluttered user interface, and the inability to access tips or help throughout the mobile deposit process. A few challengers succeeded in producing great designs with decent flows and the ability to stand up with the leaders but fell short trying to couple their UX with their policy and risk decisions.

FIGURE 6: **Ranking Heat Map**

	Deposit Limits	Recommended Paper Check Hold Times	Efficiency of Use	Match Between System and Users' World	Consistency and Standards	Error and Prevention	Auto-Capture Function	Real-Time Deposit Status Updates
Chase		1	1	1	1	1	1	1
Citibank	2	1	1	1	1	12	1	1
Capital One	3	1	1	1	1	12	1	1
US Bank	9		1	1	1	1	1	1
Wells Fargo	11		1	1	1	1	1	1
SunTrust		10	1	1	1	1	1	1
BBVA	1	4	1	1	15		1	1
Santander	11	13	1	1	9	1	1	1
Bank of America	4		1	12	15		1	1
Navy Federal Credit Union		4	14	1	18	12	1	1
Fifth Third		13	1	10	18	16	1	1
TD Bank	17	13	1	15	1	18	1	1
PNC	6	10	18	10	9	11	1	20
Citizens	13	10	1	19	13	18	1	1
BB&T	18	7	14	15	14		1	1
BMO Harris	13	18	18	20	1	17	1	1
Huntington	13	13	14	18	15	15	1	1
Regions	20	13	20	15	18		1	1
M&T	13	19	14	12	9		1	19
HSBC	20	20	1	12	9		20	18

Source: CI&T, Cornerstone Advisors

FIGURE 7: Change in Rankings, 2020 versus 2018

	2020 Rank	2018 Rank	Change
Chase	1	6	5
Citibank	2	11	9
Capital One	3	1	-2
US Bank	4	3	-1
Wells Fargo	4	2	-2
SunTrust	6	5	-1
BBVA	7	4	-3
Santander	8	9	
Bank of America	9	7	-2
Navy Federal Credit Union	10	17	7
Fifth Third	10	13	3
TD Bank	10	10	0
PNC	13	12	-1
Citizens	14	15	
BB&T	15	19	4
BMO Harris	16	20	4
Huntington	17	8	-9
Regions	18	14	-4
M&T	19	15	-4
HSBC	20	18	-2

Source: CI&T, Cornerstone Advisors

Chase

Summary -

We have a new winner this year, with JPMorgan Chase dethroning Capital One, which held the top spot for four years.

Chase climbed its way to the top and did it by improving not only its customer experience but also its policies—specifically, its limits and, most importantly, check retention time. Chase joins the other top three banks in confidently telling its customers to hold onto their checks for just two days before destroying them, infusing a level of trust and confidence in the bank's check processing abilities.

Indeed, these policy adjustments helped Chase slide into the first-place ranking, but the bank also made some minor adjustments to its UX. The flow from initiation to deposit is seamless and follows the hierarchy a user would expect. Limits are clearly stated when inputting the deposit amount as well as cut-off times and what to do with a check once it is deposited. The value in this app is also evident in the help and tips offered throughout—direction is provided in a way that's not overbearing, but rather clear and concise.

The app is also very well-branded, providing familiarity for existing and new customers. Another plus is almost everything can be done on one screen, making users feel less burdened by navigating back and forth between screens. Only the capture window takes users away from the main point of deposit, while the confirmation appears in the form of a modal on top of the main screen.

The pure simplicity and ease of use along with polished branding and improved policies made this 1st Place grab easy for Chase. Congratulations!

Heuristics -

Deposit Limits	8
Recommended Paper Check Hold Times	1
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

To keep the top spot in the ranking, Chase should raise the limits on mobile deposit and shorten check retention times.

Citibank

Summary -

Citibank is an example of a bank that took advantage of this report's open-door policy to find out exactly what it needed to do to improve its ranking. The bank took the advice in previous studies and ran with it, earning the 2nd Place spot, a significant improvement from its 11th Place rank in the prior study.

Although the UX played a major role, the big jump was helped by policy changes. Citi is included in the top FIs with its check retention time of just two days.

Some other noticeable facets of Citibank's mobile app include the outright and upfront option to deposit a check the moment the app is opened. The findability and "suggestion" to deposit a check is the focal point when users arrive on the landing screen. The bank also has brought its deposit limits front and center. Where a lot of Fls include this information, Citibank shows both daily and monthly limits, never leaving any room for doubt.

Most of the process can be done from one screen, allowing the user to take a photo of his or her check, then reversing the image on the same screen as the front. It's a nice trick and helps the process flow well. The confirmation messages are prompt and clear once a deposit has been made.

Heuristics -

Deposit Limits	2
Recommended Paper Check Hold Times	1
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	12
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

While the flow and process of Citibank's mobile deposit are clean and simple, the actual design of the app could be improved and made more visually appealing.

Capital One

Summary -

Capital One led the charge of mobile deposit since 2016 but was bumped to 3rd Place this year by Chase and Citibank. Over the past three years, Capital One set the example as the FI to beat and offered a design and policy path for other banks to follow. Capital One dominated the field, earning a 1st Place in almost every category of this report's heuristic review.

Capital One set the standard for clean and simple design, making users comfortable with depositing a check and being aware of their limits while doing so. The bank's app is one of the first to show deposit limits throughout the process—and most FIs have followed suit since the infancy of this report. Capital One also led the pack with check hold times, being one of the first to suggest a two-day retention before discarding paper checks. Another strong element keeping Capital One on top is its alerts system. While most other apps offer alerts, Capital One delivers them so quickly that the user gets confirmation while still logged in—a double whammy. This is a confidence booster and leads to increased trust from customers.

The race for the top three could not have been any closer, with each FI barely surpassing the others. The only fault we could find with Capital One is its options for help and tips. While the app does provide assistance throughout, the help is not as prominent as in Chase's and Citibank's apps.

Heuristics -

Deposit Limits	3
Recommended Paper Check Hold Times	1
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	12
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Similar to the last study, we found ourselves splitting hairs when comparing the top winners, but raising deposit limits could help Capital One return to the top position.

(TIE)

US Bank

Summary -

US Bank has come a long way. From starting out in 10th Place in 2016 to solidifying a spot at number three in 2018, the bank has made vast improvements to its app and policies after taking the time to reach out and discuss potential areas of improvement with Futurion Digital, the author of the previous benchmark report.

The improvements made by US Bank over the years are very noticeable and should be considered a great example of how to use this report for positive feedback. The bank upped its game by eliminating the service charge for mobile deposit and tackling design and policy prominence throughout the app.

With a modern and tactical new look, the mobile deposit option is front and center, second in the menu bar. The bank also has a help option that appears in the top right-hand area of each screen in case the user needs assistance. Daily and weekly deposit limits are also prominent when depositing a check, and it takes relatively few clicks, as most actions can be performed on one screen. The color palette is limited, but this provides familiarity with the brand, tying the bank's signature blue throughout to all things US Bank-related. Once a check is deposited, the check hold time suggestion appears, letting the user know what to do with his paper check after the deposit has been accepted.

One downfall of the app kept US Bank out of the top three—its check retention policy. Falling in the middle of all the FIs' suggested hold times, US Bank offers a seven-day window for making sure the deposit goes through.

Heuristics -

Deposit Limits	9
Recommended Paper Check Hold Times	7
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit	1

Recommendations -

The 2018 report stressed the importance of raising check deposit limits, and this year is no different. This year's findings, however, show that if US Bank had improved its check hold times to match or beat those of this report's top three banks, it could have taken 1st Place. The design and UX have improved that much.

(TIE)

Wells Fargo

Summary -

Wells Fargo is (and always has been) a strong contender in this race, maintaining a significant presence in the top tier. The bank has a design that is somewhat different from others that are close in rank, but that bit of differentiation is welcomed as it keeps it unique.

Check deposit is an important element in the Wells Fargo app, sitting second in its hamburger menu, below Account Summary, and one of three options in the icon menu on the landing page. The design feels a bit more corporate than some of the others, but it has a touch of gravitas that very much resembles the familiar Wells Fargo brand. When users are in the app, they almost feel as if they are sitting in a branch of the bank.

Another plus is the ability to perform most actions on a single screen. Many help, tips and account selection options pop up as modals, limiting the number of screens the user must navigate through to get things done. Like its competitors in the top five, Wells Fargo's limits and check hold times are visible and clear to the user. However, the help section, while answering many questions, is a bit overbearing. It could be trimmed down to not overwhelm a user who is just looking for tips. In addition, a few options provided are a bit self-explanatory and unnecessary.

Wells is still a very strong contender for a top-three FI, but its problems are similar to those in previous years—check hold times and deposit limits. Long-time users can possibly get increased limits, but new users will need to put their time in before being able to deposit larger checks.

Heuristics -

Deposit Limits	11
Recommended Paper Check Hold Times	5
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

The FIs in this report are paying attention and making changes, especially in the area of check retention. Unless it revisits its conversations about check hold times, Wells Fargo's five-day suggestion will keep it out of the top three.

SunTrust

Summary -

SunTrust wins the "most improved" award, having updated the design and look of its app. It's night and day from how it looked in the first report.

SunTrust has one of the best-looking apps out of the bunch, offering a sleek and smooth design aesthetic with an elegant yet modern font and color palette. The bank is obviously making serious efforts to propel itself in the ranks. It has demonstrated design and hierarchical changes to the flow and process each year, making it more pleasing to the eye and easier to use. The bank has taken great advantage of white space and made it easy to read by limiting the amount of text that is displayed, while still making important items available to the user in terms of limits and cutoff times.

SunTrust is among the top five in terms of earning a 1st Place in almost every category, from Consistency and Standards to Error and Prevention. The bank has improved its limits and offers decent beforeand-after incubation limits, meaning new and existing customers are allowed a certain check limit they can deposit. Where the bank is still failing is in check hold times, which have remained at a 10-day suggestion.

Heuristics -

Deposit Limits	8
Recommended Paper Check Hold Times	10
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

This one is an easy fix, as the look, feel and flow of the SunTrust app are all admirable. The bank needs to lower its suggestions for retention and allow users to feel confident that check processing can be done in a shorter amount of time.

BBVA

Summary -

BBVA has been among the leaders for the past four years of this report—as well it should with offerings of deposit limits upwards of \$45,000 for both daily and monthly maximums. Deposit limits alone, however, won't sustain a bank among the leaders.

While the BBVA app is great and the bank's customer service representatives were among the best encountered during the mystery shopping conducted for this report, the bank is falling behind in a few areas. BBVA provides plenty of information on how to use the app, 30-day deposit limits and cutoff times, as well as how to capture the best photo of a check. The problem is that this is a lot of information and seems a bit disconnected from a design perspective. The 2018 report touched on this and it warrants revisiting.

The Consistency and Standards ranking has taken a hit as many elements on the accounts page are not cohesive. There are multiple rows: one that offers to improve users' profiles, another that reads like a banner advertisement with a photo and advice to help users improve their financial success. This feels very much like an ad one might see when browsing the web or social media. The user's accounts are displayed, followed by a credit card activation and the ability to add more products. There are two calls to action, one at the top of the screen in a hamburger menu and one at the bottom in a pull-up menu. There is also an infographic showing how to make a deposit that feels a bit dated and could be done in a simpler way.

Heuristics -

Deposit Limits	1
Recommended Paper Check Hold Times	4
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	15
Error and Prevention	7
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

While BBVA's limits and even hold times have kept it near the top tier, the bank would be well served by dialing back and fine-tuning its design. There is a modern and clean aesthetic that so many competitors are keeping up with that helps them surpass BBVA as the years go by. The product is great, and the bank has everything at its disposal to retain a top position. Creating some cohesiveness and consistency within its app will go a long way.

Santander

Summary -

Santander has moved up a notch from 9th Place in 2018 and is standing strong with its design and flow.

Overall, the app is great, limiting the amount of information to keep the process simple, clear and easily manageable. The capture window is quite nice and includes not only corner borders, but a target in the middle for accuracy and a quick snap of auto-capture. The animation within the capture window is one of the coolest among the FIs in this year's report, reinforcing the Santander brand. While simple in nature, the help text sliding off screen and the logo transition really add a fun element.

Scoring high in the UX categories has enabled Santander to maintain its position—but holding the bank back from moving up is the dreaded check retention policy. Asking customers to hold onto their checks for 14 days is simply not building any type of trust or confidence in the bank or its technology.

Heuristics -

Deposit Limits	11
Recommended Paper Check Hold Times	13
Efficiency of Use	1
Match Between System and User's World	1
Consistency and Standards	9
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Santander's mobile deposit feature is able to thrive among the existing top-ranking Fls. A change simply needs to be made with the check retention policy.

Bank of America

Summary -

Bank of America has landed at 9th Place this year, dropping two slots from its standing in the prior study. While the bank has been included among the top FIs in this report over the years, it hasn't made many changes to the app—and especially to the mobile deposit feature—allowing competitors to leapfrog it in the rankings.

While Bank of America did well in the heuristics review and has strong deposit limits, the bank has not updated the look and feel of the app. Design, layout and flow took a hit in the Consistency and Standards ranking of the report.

With such strong monthly deposit limits, a few tweaks of the design could really benefit the bank's app. Getting into specifics, the menu bar at the top of each screen displays alerts, help, a cart icon and a sign out option. The spacing and alignment of all the text seems off, the icons appear disconnected, and the help button looks dated. At one point, when choosing which account to deposit to, the help button changes positions and shifts all the way to the right, in place of the sign out option. There is a progress bar that appears out of nowhere during the confirmation stages as well, confusing what is actually being tracked.

Bank of America's check retention suggestion is also causing it to rank lower than others, with a recommended seven days' time to discard the paper check.

Heuristics -

Deposit Limits	4
Recommended Paper Check Hold Times	7
Efficiency of Use	1
Match Between System and User's World	12
Consistency and Standards	15
Error and Prevention	7
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

While Bank of America's app is clearly not the worst of the bunch, there is so much possibility that it could be one of the best. However, this possibility is fading each year as other FIs improve on their designs and information architectures.

Navy Federal Credit Union

Summary -

Navy Federal Credit Union deserves congratulations after making a big jump from 17th Place in 2018 all the way to 10th Place this year. Although 10th Place is a long way from 1st, Navy Federal deserves credit for a huge improvement.

Navy has generously increased its limits to a hefty sum of \$10,000. This is far above most of the competition's limits and the credit union should be acknowledged for it. It has also decreased its check retention limits from 14 days to just five, which is a big change and also to be commended.

As stated in our prior report, a somewhat dated appearance needed a facelift. Having read the report or not, Navy made a vast improvement to the look and feel of its app. That being said, there are areas that can be focused on to improve the app even more. While the look is much more modern than before, there are many screens to navigate through while depositing a check.

The app lacks consistency as well. For example, the Front of Check Photo Checklist is a set of bullet points while the Back of Check Photo Checklist is an infographic. This may be splitting hairs, but when compared to the other competitors that are doing it slightly better, a callout is warranted.

Having lost points for error messages that were not clear and concise, Navy could improve Error and Prevention-related features.

Heuristics -

Deposit Limits	5
Recommended Paper Check Hold Times	4
Efficiency of Use	14
Match Between System and User's World	1
Consistency and Standards	18
Error and Prevention	12
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Navy has great momentum. It is exciting that the only credit union in the bunch is starting to make some headway. A bit more focus on the UX and error messaging will really help propel it to the top tier of this report.

(TIE)

Fifth Third

Summary

Fifth Third has landed on the 11th Place, up from 13 in 2018, but still out of reach of the top 10. Its design is on par with those in the top spots, branded well, clean and simple—but perhaps this simplicity is holding it back.

While the clean aesthetic is a plus, the bank still needs to display key information for the user. The Match Between Real World Systems and User's World took a hit in the heuristics evaluation. There are no clear cutoff times, nor many options for help and tips.

Fifth Third is to be commended for where it is design-wise, but there is a need for a bit more assistance and guidance when depositing a check. The app does display the user's limits guite clearly, the available dollar amount is very helpful, and the branding is spot-on. The ability to cancel out of the process if needed is a great feature. Previous reports called out for improvement in this area, so well done Fifth Third.

Fifth Third's deposit limits are stated very clearly at a generous amount of \$7,500 across the board, before and after the incubation period. But it all comes down to the ever-vexing check hold times, which keep the bank out of reach of its top 10 competitors.

Heuristics -

Deposit Limits	7
Recommended Paper Check Hold Times	13
Efficiency of Use	1
Match Between System and User's World	10
Consistency and Standards	18
Error and Prevention	16
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Fifth Third has so much potential to reign supreme with such good-looking designs and exceptional limits. The ability to make some minute design tweaks could really help the bank surpass the top 10 barriers standing in its way. Turning the two-week hold time into a two-day hold time would definitely clinch a top-three placement for Fifth Third.

(TIE)

TD Bank

Summary -

TD comes in at a tie with Fifth Third, holding onto the 11th Place slot. While it's a coincidence that these two banks are tied, the few things that hold them back are similar.

TD has a good-looking app, again following the guidelines of keeping information legible and not overdoing it with dated icons, text and pictures. The deposit option is a focal point at the top of the landing page, making findability very easy. TD does a great job displaying daily and monthly limits as well as remaining amounts allowed. There is not much to complain about in the app itself.

TD's incubation period of 30 days really amps up the limits and, to be honest, they are very good. While early customers are only able to deposit a daily limit of \$5,000, after a 30-day incubation period that figure soars to \$10,000, which really offers so much room for possibilities when coupled with the design and information hierarchy. Where the bank comes up short is exactly where Fifth Third did check hold time is an unacceptable 14 days.

Heuristics -

Deposit Limits	17
Recommended Paper Check Hold Times	13
Efficiency of Use	1
Match Between System and User's World	15
Consistency and Standards	1
Error and Prevention	18
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

A long hold time signifies that something "could" go wrong. To be sure it doesn't, users are asked to hold on to their checks for an uncomfortable two weeks. That simply will not fly when most other institutions are saying to go ahead and discard the check the next day because we know it will be in your account then.

PNC

Summary -

Although hovering around the same rank as in the prior report, PNC has made strides in improving the look of its app. The bank's limits are higher, and onboarding this year was much simpler.

The dated look of the app has improved, but it came up a bit short in the Consistency and Standards category. While the app is better than it was previously, each page has a bulky weight that's consumed by the card-styled design. The color palette is attractive, it reinforces the brand and reminds the user of physically banking with PNC in-store. Findability could use a boost, standing just one place above the last option on the sidebar menu. Still, it's a cleaner and much more striking design than in previous years.

PNC is offering a very impressive \$10,000 deposit limit to customers after their 30-day incubation period, but the bank is being held down by its 10-day recommended check hold time. Another area that could be improved is the Error and Prevention category, where help and assistance could be more abundant. There are not a lot of areas in which help is offered, and the few screens where it is are not obvious in terms of nomenclature and clarity.

Heuristics -

Deposit Limits	6
Recommended Paper Check Hold Times	10
Efficiency of Use	18
Match Between System and User's World	10
Consistency and Standards	9
Error and Prevention	11
Auto-Capture Function	1
Real-Time Deposit Status Updates	20

Recommendations -

The limits are great, and the redesign from 2018 is a step in the right direction. Continued work on the design and layout of the app as well as improving check hold times will help PNC improve its ranking in future studies.

Citizens

Summary -

Citizens is resting at around the same ranking as in the previous study, holding steady with a decent UX design that could position the bank as a contender for a top-five position.

With a comfortably branded app, Citizens has done a good job of creating a pleasant and seamless mobile banking experience. The UX of the app keeps up with Consistency and Standards and makes help and tips very accessible throughout the process. Citizens has a generous \$5,000 daily limit and \$10,000 monthly limit.

The only real downside of the app's design is a feeling of compression most actions and menu items are squeezed into the top of the screen, creating a small margin for error when proceeding through the process.

As in 2018, this report's mystery shoppers were a bit mystified by why it was so difficult to reach someone on the phone when looking for answers. The wait time at one point was well over 25 minutes—pretty unacceptable from a customer's point of view. Citizens scored highly in heuristics this year, but in this category, improvement is needed.

Heuristics -

Deposit Limits	13
Recommended Paper Check Hold Times	10
Efficiency of Use	1
Match Between System and User's World	19
Consistency and Standards	13
Error and Prevention	18
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Improvements from 2018 have been noticed and are greatly appreciated. As is true for most competitors in the 10th-20th Place rankings, improving check hold times from 10 days will vastly increase the bank's placement, as will better servicing customers over the phone.

BB&T

Summary -

BB&T has crept up from its ranking in the 2018 report to be closer to the top 10 than ever before. The bank drastically reduced its 30-day check hold time to just seven days. Still not the best, but a world apart from the previous recommendation.

In addition, BB&T has taken steps to improve its limits, which were raised to \$5,000 daily and \$10,000 monthly from \$2,500 and \$5,000, respectively, in the last study.

Problems still exist, however, in the Error and Prevention category. There is a lack of help and tips when moving through the app, and another miss is the ability to cancel out of a deposit if needed. The limits are clearly stated—which is good—but additional assistance could benefit new adopters.

The UX and design are commendable. The app stands right up with the clean and simple FIs that have taken note and eliminated the clutter. In league with Wells Fargo and Fifth Third, the app also conveys a corporate elegance that is right on par with BB&T's brand.

Heuristics -

Deposit Limits	18
Recommended Paper Check Hold Times	7
Efficiency of Use	14
Match Between System and User's World	15
Consistency and Standards	14
Error and Prevention	7
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

BB&T's aggressive approach to the risk-related areas of deposit limits and check hold time coupled with some UX improvements could push the bank up in the ratings next year.

BMO Harris

Summary

The auto-capture feature could make or break an app's ranking in this report, and BMO's implementation of auto-capture pushed it out of last place and into 16th Place this year.

The app also has a much-improved design, and the new look brings a more modern and playful feel to the FI. While the changes are good, some issues remain, mostly in the Efficiency of Use category.

Beginning with findability of the mobile deposit feature, there is no immediate direction on how to proceed with this function. Deposit does not live on the landing page, and the user has to select the MORE button located after HOME, Pay & Transfer and Mobile Cash. Another category where BMO falls short is Match Between System and User's World, where no limits, cutoff times or check hold times are displayed anywhere in the process. Displaying this information is a must today, and just about every other FI is already doing it.

Risk-related policies also need to be addressed with a check hold time of 15 days, as stated in previous FI reports. Fifteen days is just too long to ensure customer satisfaction and trust.

Heuristics -

Deposit Limits	13
Recommended Paper Check Hold Times	18
Efficiency of Use	18
Match Between System and User's World	20
Consistency and Standards	1
Error and Prevention	17
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

On par with last study's recommendation, a few slight UX adjustments need to be made to share pertinent information like limits, cutoff times and help. And the risk-related hold time of when to discard a check needs to be drastically reduced.

Huntington

Summary -

Huntington ranked an impressive 8th Place in the previous study, but the bank took a big hit this year as what helped it in the past is hurting it now.

The fun look and feel that set the app apart has now brought the bank down quite a bit as its competitors have focused on a clean, legible product. Consistency and Standards is a big hurdle for Huntington this year, with an over-cluttered and inconsistent design. There are multiple inputs, from square buttons to rounded buttons, an account selector, input fields and sliders. A very bulky landing page has simply compressed too much information.

While Huntington stands apart from competitors with its jovial approach, toning the app down slightly will drastically improve a first-time user's impression of how efficient it is.

The ability to view cutoff times and limits is present as well as what to do with a check once it's deposited, but this information comes in the form of links that need to be clicked in order to be viewed. This adds extra steps for users when so many competitors have these features visible throughout.

Error and Prevention also played a role in Huntington's fall from the top 10. Help, while available, is just not as accessible as it should be. Multiple screen clicks add to the process, where quick simplicity should be the aim.

Heuristics -

Deposit Limits	13
Recommended Paper Check Hold Times	13
Efficiency of Use	14
Match Between System and User's World	18
Consistency and Standards	15
Error and Prevention	15
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Huntington's retreat from the norm is admirable. The bank definitely stands on its own in terms of look and feel. The ask now is that the bank fine-tunes its originality and declutters what could be a great design.

Regions

Summary -

Regions has fallen in line with previous reports in just about every category, Consistency and Standards being prominent, maintaining the low ranking that has kept it in the bottom all these years.

Aside from its check hold times of 14 days, Regions has some issues regarding its UX and design. While the competition seems to improve or at least make changes each year to at least one component of their apps, Regions remains the same, conveying a feeling of living in the past rather than looking to the future.

There is an extreme over-abundance of text throughout that could be defended as necessary for compliance's sake, but Regions takes the cake with the excessive word count on its screens. Aside from that, the app feels out of touch with today's digital experience expectations, which could make new customers feel that the bank is as well. Regions is a formidable opponent in the financial world, which is why it is included in this report. It simply needs to convey that position through its mobile deposit app.

As for its risk-related policies, Regions would do well to reduce its hold times and increase its limits, which remain at \$3,000 for daily and \$5,000 for monthly.

Heuristics -

Deposit Limits	20
Recommended Paper Check Hold Times	13
Efficiency of Use	20
Match Between System and User's World	15
Consistency and Standards	18
Error and Prevention	7
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

An overhaul of the bank's mobile app would bring the strength that Regions shows to its customers into its digital offering. Adjustments to layout and user inputs and a decrease in extra text will set the bank in the right direction.

M&T

Summary -

M&T is somewhat of an anomaly, as the app itself is strong in design and UX, with just a few issues. The bank has decent deposit limits but the area that really falls short is its check hold time recommendation.

In terms of Efficiency of Use, the app opens to a somewhat congested landing screen with a variety of textured text, from bold to regular, with variation in font size. Mobile deposit is easy to find, located as an icon at the bottom of the page, among other calls-to-action.

Moving forward, the app takes a turn for the better as the simple, clean design provides a clear path of what to do. Limits are clearly stated—a comfortable \$6,000, a nice (if slight) increase from last year's \$5,000.

An area of UX that could benefit the team at M&T is Error and Prevention, since there is not much help available throughout the process. Cutoff times and check hold suggestions are also absent.

With a nice UX flow and clean design, how did M&T land at 19th Place? The answer lies with the bank's inexplicable suggestion for check retention, coming in at a whopping 70 days.

Heuristics -

Deposit Limits	13
Recommended Paper Check Hold Times	19
Efficiency of Use	14
Match Between System and User's World	12
Consistency and Standards	9
Error and Prevention	7
Auto-Capture Function	1
Real-Time Deposit Status Updates	19

Recommendations -

There is not much more to say about that check hold time, but it is pretty clear what M&T needs to do to work its way up the ladder. The app is great. The only thing holding it back is obvious.

HSBC

Summary -

HSBC was the newcomer in the 2018 report and did not score very highly, due to a few UX issues as well as the absence of an auto-capture function, which, as ever, is detrimental to high placement in this report.

This year, HSBC came back with a new design and really stepped outside of its box from the previous study. The new design represents a modern establishment with a technological edge, and the very clean and precise aesthetic hit top marks in many of the UX categories. (One issue with the new look is that the font is very small.)

Following the pristine look of the winning contenders, there is a lot of white space available in which to bump up the text that, at the moment, could be a bit difficult to read. Findability did not score as highly as other apps, with deposits nested a few screens below the landing page. Another fault that took hold was displaying limits. This is not a must, but a strong recommendation due to the fact that most all of the bank's competition is doing so.

This leads us to the crux of the 20th Place ranking. Similar to 2018, HSBC has not incorporated auto-capture into its app. The subtle assistance this feature offers to customers is a must-have. The other contributing factor to its last place ranking is the bank's unfathomable suggestion of holding onto deposited checks for 90 days. There is simply no reasoning behind this long-term suggestion.

Heuristics -

Deposit Limits	20
Recommended Paper Check Hold Times	20
Efficiency of Use	1
Match Between System and User's World	12
Consistency and Standards	9
Error and Prevention	7
Auto-Capture Function	20
Real-Time Deposit Status Updates	18

Recommendations -

Enlisting auto-capture will surely bump up HSBC's score as will vastly reducing its check retention time. The bank could also use some help raising its limits from \$3,000 daily and \$5,000 monthly. The app is in a good place design-wise; taking these recommendations to heart will help propel HSBC up from the bottom.

Additional Financial Institutions Evaluated

Ally Financial Inc.

Equivalent of 14th Place

Summary -

Ally Financial Inc. is one of the two outliers included this year to compare banks that serve a different set of financial scenarios from the rest of the Top 20 Fls. Similar to 2018, if Ally were to be included, it would be holding a position not too far off the bottom.

Ally's app has a decent design aesthetic, but, as has been observed in previous reports, it still looks dated. An institution with no branches to enforce the brand needs digital products that stand tall above the rest. Ally isn't clearing the bar on this.

User inputs, button designs and overall layout of each screen are not as attractive as many of the apps scored in this report. Findability is below standard as mobile deposit is nested under a menu item and took a few clicks to get started, making for a longer process.

What is notable is Ally's unbelievable deposit limits. A daily limit of \$50,000 and a generous monthly limit of \$250,000 puts Ally lightyears ahead of the rest. If only it could match the UX to its unique and admirable limits offering.

Heuristics -

Deposit Limits	1
Recommended Paper Check Hold Times	20
Efficiency of Use	15
Match Between System and User's World	12
Consistency and Standards	14
Error and Prevention	12
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

A re-skinning would do wonders for this app as would a reduction of check hold times. While Ally's limits may be great, recommending that customers hold checks for 60 days before discarding them is not a good practice.

Schwab

Equivalent of 7th Place

Summary

A warm welcome to this report for Schwab—even if it's in a class all its own. Although not included with the top 20 commercial banks and credit unions in this report, Schwab's app underwent the same heuristic checklist and was rated accordingly. Had Schwab been included, it would have broken in at a solid 7th Place.

The app is clean and organized, putting deposit front and center at the top of the landing screen upon login. Being that Schwab is investment heavy, there is a bit of clutter throughout, with a very "boxy" design aesthetic, but it is clean and simple, nonetheless. Generous daily deposit limits of \$25,000 are displayed for the user to easily see and help is offered, though it could be more prominent and legible.

One shortcoming of Schwab's app is the amount of clicking around users must do. There are a lot of screens to navigate, and the UX can get a little overwhelming.

Heuristics -

Deposit Limits	1
Recommended Paper Check Hold Times	20
Efficiency of Use	15
Match Between System and User's World	12
Consistency and Standards	14
Error and Prevention	12
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations -

Overall, the app is elegant and fits Schwab's brand. A little help decluttering the look and feel would do wonders, as would lowering its check hold time from 14 days.

Conclusion

In contrast to just a few years ago, mobile deposit has become a critical determinant of consumers' satisfaction with their banks' or credit unions' mobile banking capability. The year-over-year change in the 2020 mobile deposit ranking of banks is a result of the efforts that banks are making regarding this new reality.

COMPETITIVE REALITIES

The changes in 2020 reflect a shift in the competitive focus concerning mobile deposit from user experience and design to policy changes—a shift that will ebb and flow over the next few years. As policy changes lead to more parity in mobile deposit CX, leading institutions will again leapfrog the competition with UX and design changes.

The leaders in the rankings focus on simple UX design and confidence-boosting policies on both limits and a short check retention time of only two days. Fls toward the bottom of the list, however, typically suffered from too much text, a cluttered user interface, and the inability to access tips or help throughout the mobile deposit process.

Banks should continue to focus on the customer experience when designing for mobile banking to make transactional features easier—and more attractive—to use and to create a customer perception that feels more secure.

USER ISSUES AND CHALLENGES

For all the improvements that banks have made over the past few years regarding mobile deposit, issues and challenges still exist. More than half of mobile deposit users experienced at least one problem using the service in the past year.

Policy changes can help address issues regarding funds not being available in a timely manner, but banks should: 1) improve the mobile deposit UX to address issues regarding deposit status, and 2) enhance their technology solutions to improve check resolution.

SECURITY CONCERNS

Although consumers are open to increasing their use of mobile banking, they are taking steps to keep their transactions secure, especially transactions that involve moving money around. Banks should step into that security gap to increase adoption of the full suite of mobile services.

If customers are limiting themselves to activities they perceive as being more secure, like checking account balances, or limiting themselves to their own home Wi-Fi networks, they're not leveraging the full power of mobile banking.

FUTURE OUTLOOK

Banks should develop strategies to engage mobile users to use more products or services in mobile banking and consider how to make their mobile banking offerings work better within the larger digital payments landscape.

A better mobile user is a more profitable user. An engaged mobile user who uses more products and services is more profitable for banks and financial services.

Definitions: Heuristics

Efficiency of Use: The system should cater to both experienced and inexperienced users and allow users to tailor frequent actions.

- The system is easy to use All users are able to navigate and operate through the app with ease
- Findability The MD function is easy to locate within the app

Clear Terminology: The system should speak the user's language, with words, phrases and concepts familiar to the user, rather than system-oriented terms and banking jargon. Follow real-world conventions, making information appear in a natural and logical order.

- · Account information: The user can see all relevant account information clearly and concisely
- Help & documentation: User can easily locate help options and assisted documentation
- Monetary values: All monetary values are displayed clearly and concisely
- Limits: Deposit limits are easy to find and understand
- · Check image captures: Instructions for photographing a check for deposit are clear and easy to understand
- Buttons/Actions: Each button clearly conveys the action it performs
- Options: Users can easily see the options available (ex: change accounts, cancel deposit, read help topics)

Match User Expectations: All dialogues are easy to understand and able to clearly and easily instruct the customer to perform necessary actions. Users wish to be:

- · Able to select accounts/change accounts: User can select or change the account to which they will deposit their check
- Able to enter dollar amount seamlessly
- Able to open up help/tips easily: Easily access help and/or tips during the process
- Unable to take photos due to missed/incorrect action: The app should not let users proceed until they have captured a correct image of their check

- Given direction on photo capture: The user should be instructed to hold the camera steady, find clear lighting, etc.
- Funneled toward the objective: All actions should clearly be steps toward the final goal of a successfully deposited check
- · Able to easily correct errors: User can see and edit deposit information all through the process
- Able to cancel or sign off at any time throughout the process: Closing out a session should pose no risk of a prematurely or incorrectly deposited check

Consistency and Standards: Users should not have to wonder whether different words, situations or actions mean the same thing. Follow platform conventions.

- · Are style and colors for appropriate banking institutions being followed? The look and feel (colors, fonts, graphics) match what users associate with the bank's materials and branding and are appropriate for a fiduciary institution.
- Are user inputs consistent across the system? Actions users take work consistently across the app. For example, entering a dollar amount should work the same way every time.
- Are account information and limit values all readable and easy to understand? Users can clearly and easily locate and understand all account information, deposit limits, deposit cut-off times, etc.
- · Are titles, labels and actions clearly defined and do they follow the same design patterns? Text, labels, and buttons should work together to create a consistent experience.
- Do photo capture actions match for both front and back capture? The instructions users read and actions they take should be the same for photographing both the front and back of every check.

Hierarchy and Context: The hierarchy and context should easily funnel the user through their actions in order to reach their desired goal with no confusion.

- · Users must be told the daily cutoff time for deposits first, clearly displayed at the beginning of the process
- The help option must be easy to identify

- Users should be able to choose the account to which they will deposit before entering the dollar amount of the deposit
- · Automatic photo capture features should take accurate photos of the front and back of every check
- Photo tips should be easy to access
- Users must be able to cancel out of taking a picture at will
- Help should be easily accessible within the capture window
- Users should be able to manually capture an image of the front and back of their check and have the app accept such submissions
- The deposit should be easy to complete once a check has been properly photographed and the correct information entered

Error Prevention: Good error messages are a vital design element, preventing problems from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

- Help is available and accessible at all times
- Tips are accessible and functioning during photo capture
- Photo capture error messages assist in the capture
- The app alerts users who enter incorrect or insufficient dollar amounts when depositing checks
- Users are made aware of deposit amounts exceeding their current deposit limits

Auto-Capture: The check image is captured automatically when the "best" conditions are detected by the app.

- Users should be automatically taken to the Auto-Capture feature once all prior steps are completed
- The process of capturing an image is the same for both the front and back of a check
- Users should be able to toggle their phone's flash when photographing a check

- The app should provide an error message if the phone is too unsteady to take a clear image
- If the app provides a sizing window to frame or outline the check during image capture, this feature should function correctly
- The help window must be available and functioning properly during image capture
- Users must be able to cancel image capture at will

Item Processing: The transaction is processed and functions as expected, providing notifications and displaying the proper data.

- Are the correct limits visible (amount, cutoff time etc.)? The app clearly
 displays deposit limit, cutoff time and processing time in a way users can
 easily understand.
- Are they customer specific? Deposit limits are not based on a bank-defined amount but how much customers may have in relation to their current account balance. If you are a premiere account holder, your daily and monthly limits may be higher than the standard checking account.

Real-Time Deposit Status Updates: Is this information current, correct and occurring in real time?

- Are the deposits current? Deposits should be accepted in real time.
- Does the bank receive deposits in a timely manner? Deposit status is to be provided immediately, letting users know their deposit is being processed in a timely manner.
- Are funds available when promised? Funds must be available to the user no later than indicated by the app at the time of deposit.
- Does the user receive a confirmation message once the action is completed?
 Email or in-app confirmation should be sent immediately upon receipt of the deposit.
- Are the fund values correct? The funds deposited into the user's account should match their deposit submission exactly. However, if that is not the case, the bank should notify the customer that a correction was made.

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Have questions regarding this report?

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