

Sixth Annual



2022

MOBILE DEPOSIT BENCHMARK REPORT

Customer Experience Rankings for 20 Top
Retail Banks and Credit Unions

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Executive Summary

At the end of 2020 banking industry pundits postulated that even though some people will return to their old branch-based banking habits when the pandemic is over, the vast majority who have pivoted to digital channels will not switch back when things return to normal, highlighting the importance of developing strong digital capabilities.

While one could argue if the pandemic is truly over, two and a half years later the vast majority of bank and credit union branches have returned to normal operations. So how has mobile banking—and more specifically mobile deposit—utilization fared now that consumers can choose to go back to the way things were before?

According to a survey of 1,010 U.S. consumers conducted by Cornerstone Advisors in July 2022, nearly 88% of Americans accessed their checking account(s) using a smartphone or tablet during 2022—and 53% of them deposited one or more checks using those devices, showing that the use of mobile banking has actually increased despite branches being open again for business.

The breadth of mobile banking services used by consumers increased in nearly all areas that Cornerstone surveyed. The percentage of consumers who used mobile deposit increased from 40% to 53%, which was the second largest shift behind only statement viewing.

The relative importance of mobile banking capabilities also increased in nearly every category. Mobile deposit had the largest increase in importance, with 43% of consumers now considering it a “critical” capability, up from just 29% in 2020.

The increased adoption in mobile banking may have been driven in part by consumers’ comfort level with the security of their platforms. Over 90% of consumers say they are at least somewhat confident in their bank or credit union’s security/fraud capabilities. In addition, the percentage of consumers who had security/fraud concerns decreased in every fraud type we surveyed. Security concerns as a reason for not depositing a check through a mobile device was near the bottom of the list, affecting less than 10% of consumers.

In this year’s rankings, user experience, banking policies set by the institutions, and new innovations (such as digital assistants built into mobile banking apps) are what separated those ranked at the top from those at the bottom.

43% of consumers now consider mobile deposit a “critical” capability, up from just 29% in 2020.

U.S. Bank has held on to its top spot by making frequent and effective changes and innovations to its mobile deposit offering, including unique features such as the ability to add personal notes to deposits and the ability to initiate mobile deposit with voice commands through its digital assistant. Likewise, Chase and Capital One, which ranked second and third, respectively, have continued to improve UX design while driving innovation through their digital assistants. Navy Federal Credit Union finds itself at the bottom of the list in this year's report due not to a poor mobile deposit experience, but rather a failure to keep pace with the constant innovation of other competitors.

With more consumers than ever utilizing mobile deposit, the importance of maintaining a market-leading offering is critical. Since most institutions have implemented similar technological capabilities, an ongoing focus on user experience, competitive policies, and innovation will be differentiators. Banks and credit unions that are complacent about improving their mobile deposit capabilities are destined to fall behind.

Now in its sixth year, the Mobile Deposit Benchmark Report has chronicled the changes in mobile deposit customer experience 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.

MOBILE DEPOSIT BENCHMARK SCORECARD —2022—

1ST PLACE WINNER
U.S. Bank



BEST LIMITS
JP MORGAN
Personal Deposit Limits

**TOP 5 MOBILE CHECK DEPOSIT
CUSTOMER EXPERIENCE**

1. U.S. Bank
2. Chase
3. Capital One
4. Wells Fargo
5. Key Bank

Best Recommended
Paper Check Retention:

Capital One
1 DAY



DIGITAL ASSISTANT

- » U.S. Bank
- » Chase
- » Capital One
- » Bank of America

20 Out of 20 Financial Institutions
Now Offer Auto-Capture



Honorable Mention for **Most Improved in User Experience**

Citizens

Overview, Audience, Methodology

Overview

Mobile banking has become an integral and key component of society, constantly evolving and innovating to provide convenience and ease for the consumer. This report provides best practices for mobile deposit services, including current benchmarks, targets, and research-backed strategies for increasing consumer adoption, usage, and retention.

Audience

Designed for an audience of digital banking and payments leaders in U.S. financial institutions (FIs), this report uses a data-driven approach to lay out a strategic roadmap that will optimize retail mobile deposit offerings and deepen customer engagement and loyalty.

Methodology

This report focuses on the customer experience for 20 large U.S. retail multi-channel FIs. All phases of this research project—which includes criteria selection, scoring methodology design, data collection and analysis, and reporting—were conducted independently, without influence from this report’s sponsor.

Working with digital strategy and design agency CI&T, live deposit accounts were accessed for each of the 20 FIs during May and June of 2022 with all ratings set by CI&T’s user experience design team. In select cases (primarily for regional banks), access to existing live accounts were gained by working with a research partner that facilitated communication and collection of screen captures. From the live accounts of all 20 financial institutions, CI&T gathered and analyzed UX data across six user experience or heuristic categories (comprising a total of 24 individual categories). FIs were scored based on user experience measures pioneered by Jakob Nielsen, with modifications to fit the mobile deposit process. Two policy areas were rated, based on information found either within the app, on the website of the FI, or provided by customer service agents.

To develop the total ranking for each FI’s overall mobile deposit customer experience, the average standing for each FI within the six UX areas was summed, then compared to that of all other FIs.

Consumer Perspective

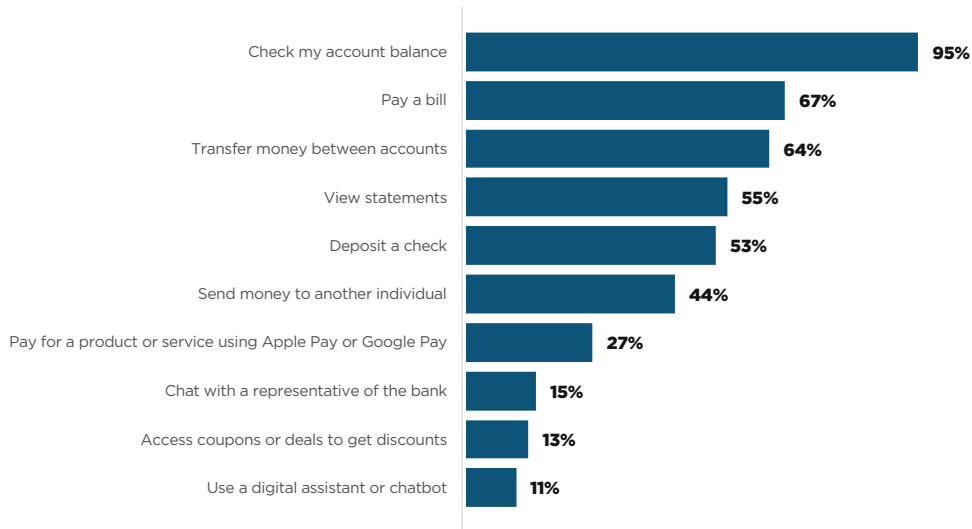
With the majority of pandemic related restrictions lifted and people free to return to banking the way they did before, it may be surprising to find that U.S. consumers actually increased their use of mobile devices to transact and interact with their banks and credit unions.

Roughly 88% of consumers used a smartphone or tablet to access their checking account(s) in 2022, up considerably from the 70% in 2020. Among those consumers, over half (53%) deposited one or more checks using their mobile devices. This makes mobile deposit the fifth most frequently used mobile banking function behind checking account balance, paying bills, and transferring funds between accounts (Figure 1).

FIGURE 1:

Mobile Banking Features Used in 2022

In the past 12 months, which of the following banking services have you done using a smartphone or tablet?



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

Usage of mobile banking services increased across nearly every category in 2022. The use of mobile deposit continued to increase, growing from 40% to 53% of consumers using the service, behind only viewing statements (Table A).

TABLE A:

Changes in Mobile Banking Usage

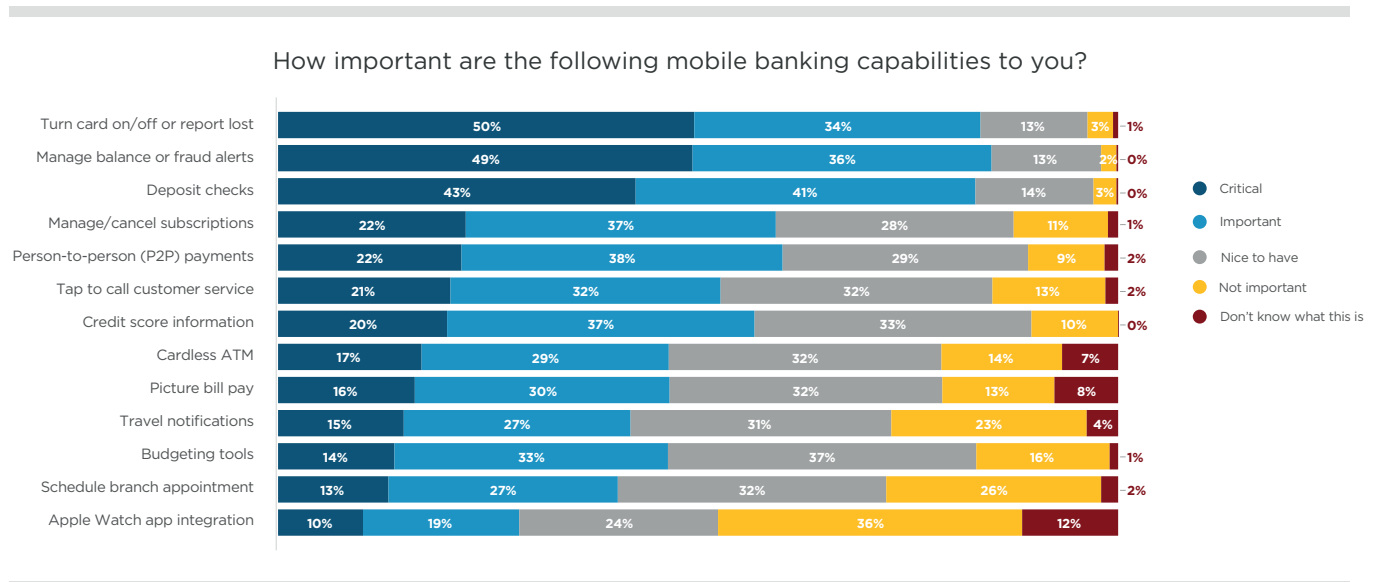
Percentage of consumers who used mobile banking service	2022	2020	Change
View statements	55%	34%	21%
Deposit a check	53%	40%	13%
Send money to another individual	44%	39%	5%
Pay a bill	67%	62%	4%
Pay for a product or service using Apple Pay or Google Pay	27%	24%	3%
Transfer money between accounts	64%	61%	3%
Check my account balance	95%	91%	3%
Access coupons or deals to get discounts	13%	14%	-1%
Chat with a representative of the bank	15%	N/A	-
Use a digital assistant or chatbot	11%	N/A	-

Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

Among a list of advanced mobile banking features, 84% of mobile banking users rated mobile deposit as a “critical” or “important” feature in 2022. The only features rated higher in terms of importance were card controls and balance/fraud alerts (Figure 2).

FIGURE 2:

Importance of Mobile Banking Features



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

In addition to increased adoption rates, the relative importance of each of the mobile banking capabilities also increased in nearly every category. The importance of mobile deposit had the most significant change in 2022, with 43% of consumers now considering the capability “critical,” up from just 29% in 2020 (Table B).

TABLE B:
Changes in Importance of Mobile Banking Capabilities

Percentage of consumers who consider capability “critical”	2022	2020	Change
Deposit checks	43%	29%	14%
Turn card on/off or report lost	50%	38%	12%
Manage balance or fraud alerts	49%	40%	9%
Tap to call customer service	21%	16%	5%
Travel notifications	15%	11%	4%
Person-to-person (P2P) payments	22%	18%	4%
Picture bill pay	16%	13%	3%
Cardless ATM	17%	14%	3%
Schedule branch appointment	13%	11%	2%
Budgeting tools	14%	12%	2%
Credit score information	20%	19%	1%
Apple Watch app integration	10%	11%	-1%
Manage/cancel subscriptions	22%	N/A	-

Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

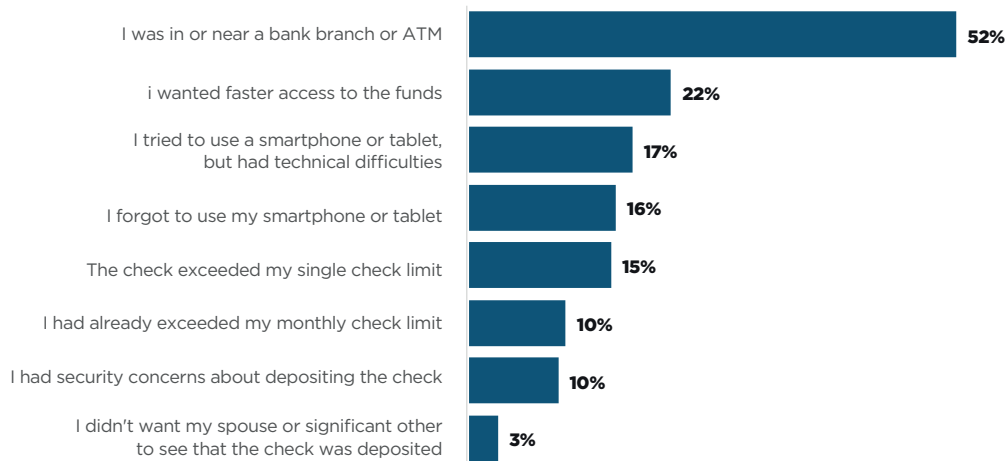
While this shift highlights the need for leading mobile deposit capabilities, it also shows the rising expectations for an institution’s mobile banking offering overall.

Among consumers who used their bank’s or credit union’s mobile deposit capabilities this year, 55% used their mobile device to deposit half or more of their checks on a mobile device. For deposits not made through mobile (and with branches back open for business), proximity to branches and ATMs was the most often cited reason why mobile deposit users didn’t deposit all their checks using a mobile device (Figure 3).

FIGURE 3:

Reasons for Not Using Mobile Deposit

For the checks you have received but have NOT deposited into your bank accounts using a smartphone or tablet in 2022, why didn't you use your smartphone or tablet?



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

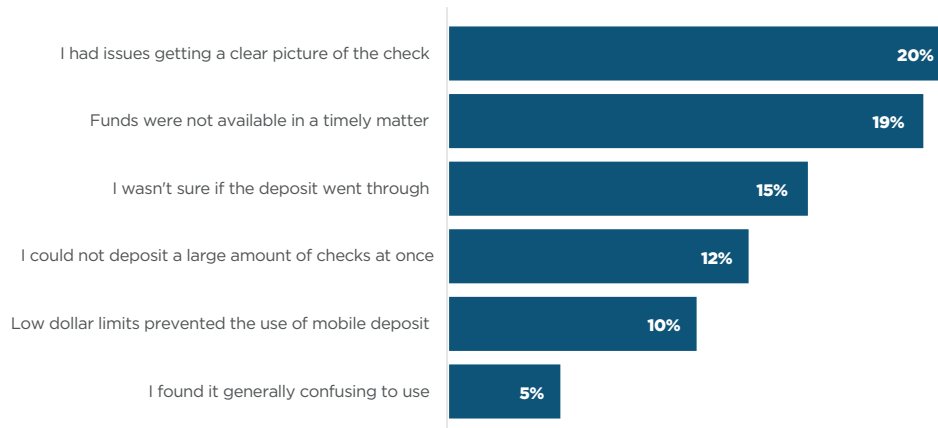
While the percentage of consumers that have experienced at least one problem or issue using their financial institution's mobile deposit offering has seen a slight decline since 2020, just under half (49%) of consumers still experienced a problem.

The mobile deposit problems users experienced continue to highlight the three critical components of mobile deposit: technology, design, and policy. The most frequent problem consumers had with mobile deposit was getting a clear picture of the check—a function of the technical quality of the institution's choice of mobile deposit tools. The second biggest issue for consumers was timely availability of funds—a policy decision on the part of financial institutions. And the third biggest snag encountered was not knowing if a deposit went through, a design or user experience-related consideration (Figure 4).

FIGURE 4:

Problems Experienced with Mobile Deposit

Since the beginning of 2022, which of the following problems have you encountered when depositing checks into your bank accounts using a smartphone or tablet?



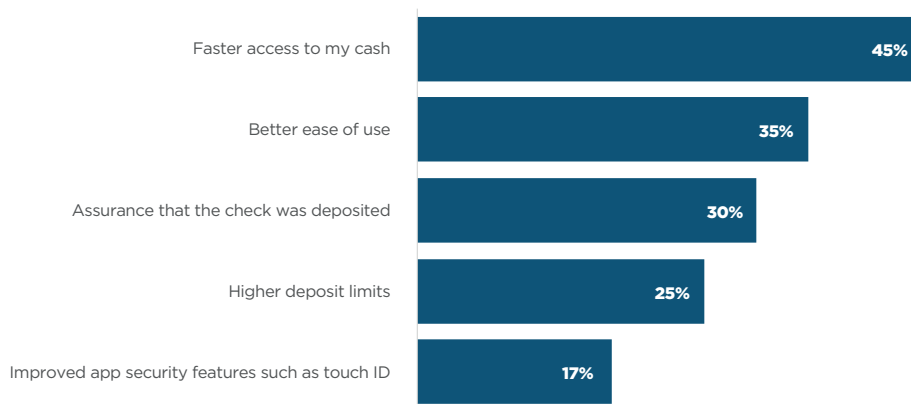
Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

The problems mobile deposit users experience provide clues as to what banks and credit unions could do to get their customers and members to use mobile deposit more frequently. Faster access to their cash was mentioned by 45% of respondents, 35% cited better ease of use, and 30% indicated that assurance their check was deposited would get them to increase their use of mobile deposit (Figure 5).

FIGURE 5:

Factors Driving More Use of Mobile Deposit

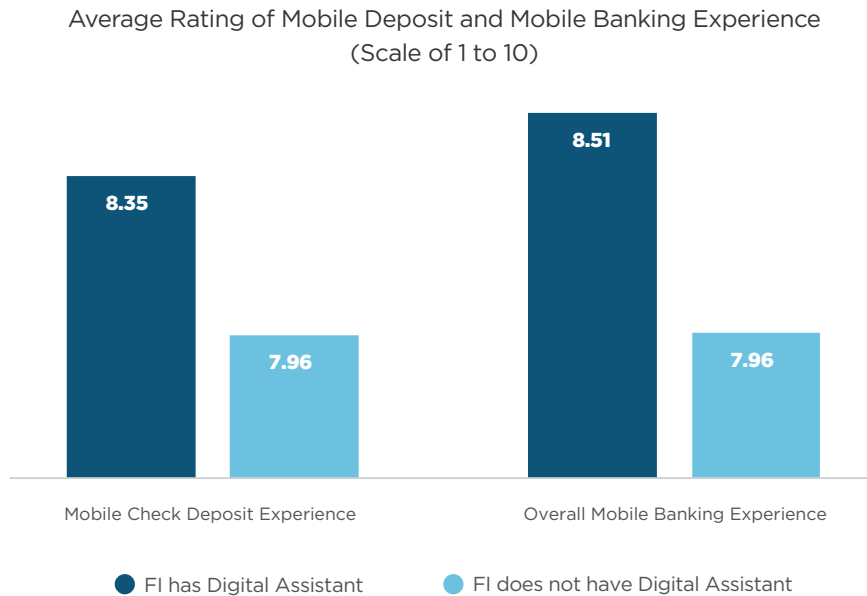
What would get you to deposit more of your checks with your smartphone or tablet?



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

Some banks and credit unions have started to implement digital assistants or “chatbots” into their mobile banking apps to help support customers with questions they may have. Six in 10 consumers said that their most used mobile banking platform had a digital assistant or chatbot. Consumers that said their financial institution had a digital assistant rated both the mobile deposit experience and mobile banking experience overall higher than those that said their institution did not (Figure 6).

FIGURE 6:
Impact of Digital Assistants on Mobile Experience



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

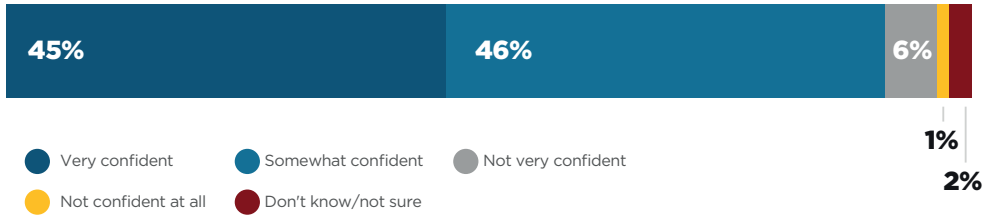
While there are many factors that have an impact on mobile banking experience, the ability to quickly get answers to questions consumers have about mobile deposit (limits, cutoff times, etc.) may alleviate some of the issues they have and thus improve overall satisfaction.

Security concerns with mobile banking may be beginning to ease somewhat. Consumers’ confidence with the fraud prevention and security capabilities of their mobile banking providers is high with 91% of consumers stating they are “very confident” or “somewhat confident” with these capabilities (Figure 7).

FIGURE 7:

Consumer Confidence in Mobile Banking Security

How confident are you with the fraud prevention and security capabilities of your bank’s or credit union’s mobile banking platform?



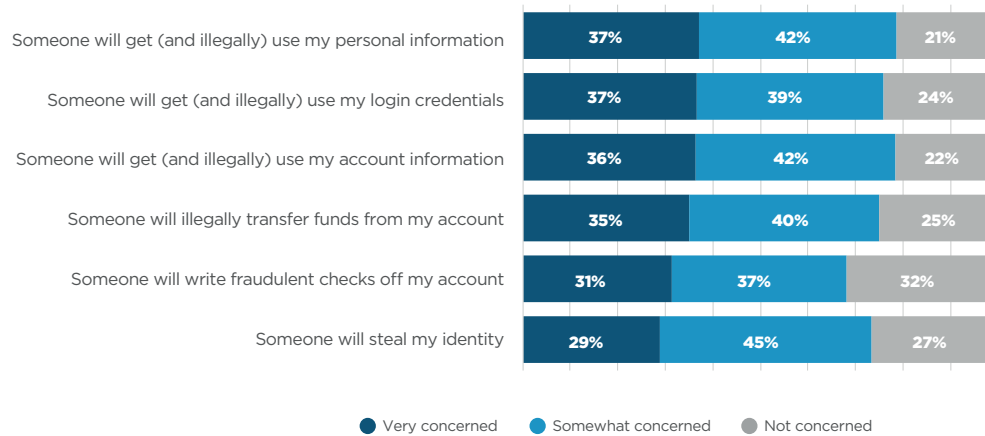
Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

Although confidence in platforms is high, fraud concerns still exist. Roughly a third of mobile banking users are “very” concerned with various types of mobile banking-related fraud (Figure 8).

FIGURE 8:

Mobile Banking Security Concerns

How concerned are you with the following types of fraud when it comes to mobile banking?



Source: Cornerstone Advisors survey of 1,010 U.S. consumers, Q3 2022

While a certain level of concern will always exist, the number of consumers who were “very concerned” has decreased across every fraud type since 2020. This suggests that banks and credit unions have done a fair job addressing security concerns through communication and education over the past few years.

As mobile deposit continues to increase in importance for consumers, banks and credit unions that are focused on user experience, competitive mobile deposit policies, and innovative capabilities such as digital assistants built into mobile banking apps will separate themselves from the competition.

Mobile Deposit Rankings

Mitek began compiling this report in 2016, and in the years since, the mobile deposit process has become largely homogenous throughout the banking institutions that use this technology. The apps contain most of the same features, even the same overall design. Now, what separates those ranked at the top from those at the bottom is user experience, banking policies set by the institutions, and new innovations such as digital assistants built into the apps.

The heart of this report is, once again, the UX design of the mobile deposit journey. That is the most accurate way to identify which financial institutions make the process easy to access, comprehensible, and secure, and which do not. In this report's perspective, security takes the form of the policies that banks use in order to convey confidence in their own mobile deposit process, and the level of control they give the user to personalize their experience. The first edition of this report in 2016 showed there was correlation between these areas and customer adoption, and that remains true for this year's edition.

Retaining number one: U.S. Bank has established itself as the one to beat in this report, retaining the first place stature it achieved last year. Over the years, U.S. Bank has risen to the top, making frequent and effective changes and innovations to its mobile deposit and overall mobile banking experience. This year U.S. Bank has included a new digital assistant voice activated feature in the mobile deposit experience that demonstrates the bank's innovative culture.

Wells Fargo is back in the top of the pack: Wells Fargo has always performed well in this report, maintaining a standard that is both effective and practical, but its design was beginning to fall behind with few to little changes over the years. This year has proven very different with a complete mobile app redesign and update. The rigid and boxy feel of the Wells Fargo banking app has been elevated to a clean tactical design that makes navigating through a mobile deposit experience a breeze.

Check retention times are still up: While this report focuses mainly on the user experience and design aspect of mobile banking apps, it maintains importance on risk policies such as deposit limits and check retention times. While most banks have fluctuated their deposit limits, with incubated personal and business class allowances, for some reason, the check retention times on more than half the banks in this report still fall below expectations with suggestions of 14 days to 60 days in some cases.

Get ahead with Innovation: Year after year this report becomes more difficult to review, following app upgrades, redesigns, policy adjustments, and UX advancements. Four of the top 20 banks reviewed included perspectives on their digital assistant innovations that include chatbot query executions to voice activated requests and engagements. U.S. Bank, Chase, Capital One, and Bank of America continue to provide forward thinking innovations to their mobile experiences.

Heat Map of All Individual Findings





Summary ▼

The winner this year is returning champion U.S. Bank, which has gone above and beyond when it comes to user experience and user-centered design. U.S. Bank retaining first place is no fluke and deserves recognition. Over the history of these reports, U.S. Bank has been on a constant uphill trajectory— innovating, designing, and keeping user needs clearly in mind.

The mobile banking app from U.S. Bank has a unique appearance and engaging tone. At the top of the mobile deposit process is almost a guided tour, featuring bolded text statements and questions to help users along the way. Everything is clear and to the point—including information on deposit limits, help and tip sections, even how to change the “Flash is On/Off” toggle in the capture window—without becoming overbearing. Creating informative design to ensure the user is aware of the application’s capabilities is something U.S. Bank does extremely well.

Another unique highlight in U.S. Bank’s app is its ability to allow users to add and record personal notes about their deposits. This past year, during the COVID-19 pandemic response, U.S. Bank developed a feature to enable the identification of a stimulus check or tax refund, which would not count against their users’ limits.

In addition to the above, U.S. Bank is also ahead of the competitors when factoring in the intelligence and automation behind the customer experience. This is demonstrated in the bank’s efforts to implement its voice-activated Smart Assistant, which, among other capabilities, enables users to initiate mobile deposit with voice commands. This has the potential to bring the user experience to another level and we are excited to see the technology unfold. Congratulations to U.S. Bank!

Heuristics ▼

Deposit Limits	9
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 ▼

U.S. Bank claims the throne for one more year, and for good reason—a well-defined strategy consistent with its users’ needs while creating an ideal customer experience. Retaining this top position means continuing to innovate and improve UX design and flow while maintaining competitive mobile deposit limits for its customers. That said, U.S. Bank’s clear attention to detail makes it tough for others to compete with it for the top spot in the foreseeable future.

Summary ▼

Chase solidly remains in second place this year, a result of its much-heralded innovation mindset. The mobile banking app that Chase has developed is a great example of a thoughtful, inviting, well-branded customer experience.

The app’s overall user journey is leveraged by simplifying the number of steps required to complete a transaction. Pop-up modals provide unique access to deposit limits, helpful tips, and cutoff times. The Chase app also informs users about the scanned routing and account number before their deposits are executed. This detail helps the app’s credibility and may improve customers’ confidence level with the mobile check deposit process.

From a design perspective, the bank has maintained its modern look with photo capture screens, showcasing the UX capabilities while ensuring that the user is continuously aware if the auto-capture and flash are enabled or not. Throughout the app, there is no question that you are a Chase member, with the company’s font and signature blue touching every screen. Help is available throughout, as is the ability to cancel at any time. Chase has also taken the suggestion from previous reports to improve deposit limits for new customers—it has done well in that department, but there is always room for improvement.

From the innovation perspective, the Chase Digital Assistant (chatbot) is a good example of how artificial intelligence can be incorporated into the product experience for FAQ-style questions that users may have about limits, cutoff times, etc.

Heuristics ▼

Deposit Limits	12
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 ▼

Claiming top placement in this report means paying attention to the details, going beyond the customer expectations, and including ways to delight the user. For Chase, this may mean adding a deposit option to the bottom of the navigation bar, increasing awareness and accessibility. Additionally, Chase could focus on further developing the Digital Assistant chatbot by improving an icon to better represent a digital support assistant or by utilizing this in the mobile check deposit experience as well.

Summary ▼

Capital One has taken the final spot in the top 3 this year, which makes sense, as the bank is well-regarded for being mobile deposit trend-setters and establishing the bar for a top user experience. Historically, Capital One has stood out as the first mobile app to produce clean and purposeful UX design, and it has always had decent deposit limits while leading the charge with the best check retention time of only 24 hours.

Capital One's design aesthetic and layout have been duplicated by many other institutions and praised by reviewers in previous reports. The company produces familiar systems, such as buttons and icons that feel comfortable and are clear in functionality. The capture windows are on brand with the bank, and simple enough to exist without much text, keeping the design tight and clean. Implementing capture buttons and making toggle switches easily recognizable make the process that much easier for users.

As with the other top banks in this report, Capital One has put outstanding effort in creating a supportive digital assistant in the form of a chatbot called ENO, with the potential to level-up the user experience within the app by answering inquiries related to the mobile deposit process as well as general account information.

Similar to other top positioned banks from a design flow perspective, Capital One has ensured that the user is well informed during the entire experience by including the crystal-clear delivery of information related to the deposit confirmation and fund availability.

Heuristics ▼

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

Recommendations ▼

As with every bank in this report, there are always opportunities for improvement. Capital One could do better in error prevention by keeping users from continuing further down the path if a mistake is made during data entry or image capture. While Capital One has always ranked high in the report, it may consider updating its aesthetic to keep up with the other institutions that are becoming laser-focused on improving theirs.

Summary ▼

Wells Fargo is back with a complete revamp of its mobile experience. In the infancy of this report, Wells Fargo held a strong presence in the top ranks, but was ultimately bypassed by institutions like Chase and U.S. Bank, which strived to innovate and improve their applications. Wells Fargo was in dire need of a new look and feel, and this year, it delivered exactly that.

The focus of the redesigned experience is less clutter and more visual appeal with clean design. Gone is the bright red and boxy feel that felt almost as if you were in an actual bank branch. Now, the digital experience contains a sleek, yet tactical look that clearly displays user cutoff times, limits and action items.

Restraint is perhaps the best word to describe the change. Users can locate the deposit feature easily, with entry points in more than one place. Navigation is also limited while making a deposit, as the app enables users to remain on one screen for most of the experience. The capture window directs users how to properly snap a good picture the first time, while the app's auto-capture function works better than most of the other banks in this report.

We salute Wells Fargo for the new look, and hope the new drive toward innovation and design is just the beginning.

Heuristics ▼

Deposit Limits	11
Recommended Paper Check Hold Times	6
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 ▼

Wells Fargo has improved its design overall, but it still needs to address policies regarding deposit limits for new customers and check retention times. Improvements to both will allow the bank to remain competitive with the other institutions.

Summary ▼

Key Bank breaks into this report for the first time at a solid fifth place ranking with thoughtful and clean design. The mobile deposit experience is on par with the rest of the current top five, offering clear, detail-oriented design that allows users to easily navigate without needing to leave the main screen—users can remain on their deposit screen, make account selections, and capture images all in one place. Additionally, users can initiate new deposits quickly upon the completion of a previous one. They can also download or save digital receipts once deposits have been completed.

Key Bank’s mobile app design and flow provide clear and concise displays of user information—disclosures, fund availability, limits, and check retention time—throughout the deposit process. Account selection and data entry boxes are spaced out well, but could soon feel dated. Colors and branding are related effectively throughout the app, including logo placement on the capture window.

The overall mobile deposit experience from Key Bank is simple and seamless. With subtle design improvements and continued attention to detail, Key Bank could be a driving force of digital user experience for mobile deposit. We couldn’t be happier to include Key Bank in our report this year.

Heuristics ▼

Deposit Limits	4
Recommended Paper Check Hold Times	11
Efficiency of Use	7
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 ▼

Unlike most institutions that enter this report for the first time, Key Bank came in strong with a top five finish. However, there are still details of concern that, if addressed, could propel them toward the top. The first thing to fix is its check retention time of 14 days. This time range is far apart from the top four contenders, and, if sustained, the institution may not be long among the top five. Meanwhile, including the deposit function in the navigation bar would greatly increase findability and help its rank.

Summary ▼

Fifth Third remains in the top 10 this year but moves down a few ranks. Despite its descent, the bank’s focused UX design and aesthetic keep it out of the bottom 10.

Overall, the bank’s mobile deposit experience is informative and provides users with great guidance in the form of tips and help, education, and constant displays of fund availability and deposit limits. The app promotes the bank’s mobile deposit function as part of its main navigation options as well as being nested within the menu. Fifth Third provides great transparency throughout the deposit journey, displaying a static progress bar with labeled touch points to indicate where the user is during the process. It also provides an option of rapid fund availability with an added fee in addition to its standard, free clearance time.

While Fifth Third remains a strong candidate in this report, some UX decisions that led to its decline from last year could be easily addressed. The app’s use of icons throughout the experience is not always clear and may cause some confusion. When users arrive at the initial check deposit screen, there is an icon in the top-right that is hard to identify and to distinguish its functionality. In addition, an arrow near the progress bar does not offer clarity as to where it will direct the users—back a single step, or back to the beginning? Finally, once check images are captured, the app displays a single image with a checkmark, which may confuse the user as to whether multiple checks have been captured and stored correctly. Finally, the app’s “Submit” button in the final deposit screen is in the top-right, which is very unconventional and easy-to-miss. These are small, almost hair-splitting observations, but considering how well and thoughtful the competition is focusing on their UX design, they must be addressed.

Heuristics ▼

Deposit Limits	17
Recommended Paper Check Hold Times	5
Efficiency of Use	1
Match Between System and User’s World	7
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Despite the critiques above, one thing that is clearly working is the app’s sleek and clean design. Going forward, Fifth Third needs to focus on the thoughtfulness of its UX components throughout the experience, thinking practically and intentionally with iconography, design, and navigation.

Summary ▼

Citizens Bank returns this year with a complete revamp, showcasing how a few simple design choices can make a mobile experience so much better.

Focused on a more professional appearance and thoughtful process flow, Citizens Bank has de-cluttered its app and utilized the excess white space that had gone unused for so many years. Past reviews in this report included comments on how account selection and text information had been packaged together, making it hard to read or complete a specific action. Now, the app provides padding all around, and spacing between features, text information, and tips. The branded colors are steady throughout the experience, but not overbearing. It also includes a navigation bar located at the bottom of the screen that remains static throughout. This navigation bar not only offers the deposit function, but also permits users to navigate the rest of the app better from any point of their mobile experience.

Another example of Citizen Bank’s app enhancement is a small addition to the deposit button—it now clearly displays the deposit amount, just like top-ranked U.S. Bank. It’s a small touch, but leaves the user feeling confident in their action. Limits are clearly stated as well as the option to quickly view deposit history, another attractive add-on. Citizens Bank also has decent deposit limits for new customers, but it is still sitting further back from the rest of the industry with a check retention time of 10 days. Regardless, we applaud Citizens for its redesign and are anxious to see what else it has in store.

Heuristics ▼

Deposit Limits	3
Recommended Paper Check Hold Times	9
Efficiency of Use	15
Match Between System and User’s World	19
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Recommendations besides shortening check hold times include allowing users to disable the “How to...” capture screens for existing users who do not want it displayed repeatedly. Making the option to capture manually vs. auto is also not visibly clear. Adding the deposit option as a menu item to the app’s hamburger menu will also increase findability and smooth out the user experience.

Summary ▼

Bank of America has retained a position in the top 10 once again. While we applaud the UX design improvements made in time for last year’s report, Bank of America is still in the lower echelon of the top 10.

A big advantage of Bank of America’s mobile deposit experience is its focus on minimizing the number of clicks needed to complete a mobile check deposit. The deposit screen includes all required fields on the same page, which offers a sense of simplicity and a better intuitive user experience. Kudos to Bank of America for that, as well as vastly improving the capture window design with a cleaner, more modern appearance, although the camera icon in the bottom-left does not clearly convey if its purpose is manual or auto-capture. The help screen that appears once the capture is engaged may also confuse the user’s perception of how to exit by including an “X” along with an “Ok” button, which feels redundant.

Like other banks that have concentrated on creating an innovative user experience supported by artificial intelligence, Bank of America offers ERICA, a text assistant that helps users by responding to basic questions they may have throughout via a chat-like experience. As this report continues to evolve, innovations like ERICA will be considered and included as a must-have feature for customers.

Heuristics ▼

Deposit Limits	5
Recommended Paper Check Hold Times	8
Efficiency of Use	7
Match Between System and User’s World	16
Consistency and Standards	1
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Bank of America has made changes to its UX over the past few years that has helped it maintain a position in the top 10, but it still needs to recognize small details such as displaying limits throughout the deposit experience, reducing check hold times, and of course, always improving its mobile deposit limits.

Summary ▼

Citibank has always presented a good overall mobile deposit experience. A special highlight of the app is its futurist-like user interface that incorporates clean, clear design and modern fonts.

In addition, Citibank has consistently produced a detailed design strategy that focuses on keeping users informed throughout the mobile deposit experience by displaying a wealth of information about fund availability, deposit limits, account balances, disclaimers, and more.

While we do appreciate the transparency and visibility, the app does come off as being very text heavy. Including disclaimers below the capture window and upon deposit executions take up space that adds weight to the deposit experience and could be considered cumbersome to users, as opposed to feeling light, simple, and easy.

Something that did catch the eye of our heuristic reviewers was the floating navigation bar at the bottom of the account screen. The navigation options are displayed as “pills” or “bubbles” that house options like “Edit,” “Pay & Transfer,” and “Deposit.” We do applaud a second, focused entry point for mobile deposit, but the aesthetic of this navigation looks out of place and, frankly, like unfinished design. It does not seem familiar to other systems and may create confusion for users.

Heuristics ▼

Deposit Limits	15
Recommended Paper Check Hold Times	1
Efficiency of Use	11
Match Between System and User’s World	7
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

As mentioned above, Citibank has always delivered a good overall mobile deposit experience, however, with a few design changes, it could inch its way closer to the top. Distilling the visible text throughout could simplify the aesthetic and leave the app with a less rigid appearance. Another suggestion would be tweaking the check deposit page. Currently, only one image is shown for the capture of both the front and back of checks, which may cause confusion to new users. Creating the ability to flip the image would help.

Summary ▼

Huntington has consistently delivered a quality mobile deposit experience with a high potential to improve its position in this report. Its design shows a minimalist approach with an effective solution.

The mobile deposit options are present and clearly displayed in the navigation, as well as nested in the menu. Compared to years previous, the app has minimized text throughout the experience while still including what is relevant and important for users, such as deposit limits and help sections. It showcases Huntington’s mindset of adding only what matters rather than cluttering design and, in turn, frustrating users. Huntington also provides users with easy access to their history, though the app could benefit from changing the title to “Deposit History” to avoid causing confusion.

There are, however, UX and design areas that could use improvement. Updating the selection or data input boxes may implement a more modern look to the app, which is beginning to appear dated when compared to the competition. These boxes currently take up the screen’s full width, and could be redesigned to maximize the space better. There is also some confusion once the check images have been captured. The app does not display the actual checks and includes extra navigation (arrows) once checks are captured. It’s not clear what these arrows do or why they are placed in the check capture icons.

Huntington has good limits for new customers that go above and beyond after their initial 30 days as a customer, but for some reason, the bank maintains a 14-day check retention time period, which keeps it from reaching a higher ranking in this report.

Heuristics ▼

Deposit Limits	2
Recommended Paper Check Hold Times	11
Efficiency of Use	16
Match Between System and User’s World	7
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Huntington has worked hard to improve its ranking over the years with substantial improvements, but more needs to be done to compete with U.S. Bank, Chase, and the rest at the top. First is to reduce its recommended check retention time. This is important as it instills a level of confidence in users to trust that the mobile deposit process will work quickly and efficiently. Second is to keep improving and evolving design. Small attention to details make all the difference.

Summary ▼

The 2019 news of Suntrust and BB&T—both competitors since the inception of this report—merging into the new institution, Truist, created much anticipation for the mobile banking experience. This year, we are excited to welcome Truist to the rankings.

Beginning with the overall look and feel, Truist has premiered with a forward-thinking, modern design, implementing a sleek appearance that touts impressive fonts and a deep purple color palette, bound together by the app’s default dark mode. The deposit option lives in the navigation bar below, and customers receive real-time text messages once transactions are complete.

However, Truist does have some work to do to improve the overall experience. Throughout the app journey, users receive pop-ups for informative content or decision points. This feels slightly dated and confusing at times due to some peculiar verbiage included. Users receive a pop-up with instructions to “Endorse Check,” followed by two options of “Ignore” or “Ok.” This information could easily be included elsewhere with no action required or decisions to be made. Also, once users capture their check images, their options are “Save” and “Delete,” as opposed to “Use This Image,” a more standardized and clear messaging option. Lastly, there are multiple steps in more than one instance that could be eliminated or reduced. Confirming manual or auto-capture is a two-step process that could be consolidated. The final capture confirmation screen includes a “Done” button, which feels redundant. Small details like these can affect how an experience ranks in this report.

Overall, we believe Truist is off to a good start with its experience but simplifying may help it in the long run.

Heuristics ▼

Deposit Limits	13
Recommended Paper Check Hold Times	5
Efficiency of Use	7
Match Between System and User’s World	7
Consistency and Standards	14
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

As previously stated, Truist may want to leverage impactful changes to satisfy users. We suggest doubling down more on the UX, UI, and overall copy/labeling, reducing the number of taps and using more conventional terminology when possible. There are also links on the application related to the manual or auto-capture that don’t seem actionable. Tightening up and simplifying would help put Truist on a winning trajectory.

Summary ▼

M&T Bank has placed at number 12 in this year’s report, four places higher than the previous year, and we are glad to see it. The mobile deposit experience from M&T has always had potential, garnering good UX practices in design and flow.

M&T’s design is highlighted by the clear deposits option in the navigation bar that lives at the bottom of each screen. There have been critiques regarding fund availability and cutoff times in the past, however, M&T’s app has been improved greatly with information clearly stated at the end of a deposit submission. Deposit details are also available at that stage if the user is so inclined. Additionally, the feature “M&T Flash Funds” gives users the option of paying extra for immediate access to their deposit funds.

While we do appreciate the efforts that M&T has made, there are still areas of the experience that can feel somewhat inconsistent. There is a variation of text styles, fonts, and sizes, sometimes displayed in multiple places on the same screen. There are also some alignments and padding issues that make certain screens feel cluttered, and executing a deposit still feels like too many steps—this process could drastically be trimmed down. There are many opportunities to reduce this flow down to one or two taps only.

Heuristics ▼

Deposit Limits	14
Recommended Paper Check Hold Times	17
Efficiency of Use	11
Match Between System and User’s World	1
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

There are some obvious low hanging fruits that we think M&T may want to consider working on to improve its mobile deposit experience.

Reducing the number of steps to complete a deposit should be top priority, as convenience and speed are crucial for busy customers. Also, it’s important to remove extra steps in order for users to understand error messages. Another important focus should be on consistency throughout the mobile deposit flow to increase customer satisfaction and confidence.

Summary ▼

Santander hasn't shown much progress on the mobile deposit experience as compared to last year, and with the improving efforts of its competitors, Santander is positioned lower this year.

The app's overall design is something that weighs in favor of Santander, with clarity and modern fonts. However, we noticed that the font size is pretty small, which can be easily fixed, as there is enough white space throughout the experience that could be better used.

Additionally, the small font size was also used for the check photo icons presented on the deposit page. The size of these icons could be adjusted to better utilize the overall available space on the screen, which could benefit vision-impaired users.

On the other hand, a noticeable positive trait of the app is how both manual and auto-capture are presented to the user on the photo capture screen.

Heuristics ▼

Deposit Limits	16
Recommended Paper Check Hold Times	11
Efficiency of Use	11
Match Between System and User's World	7
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

The Santander team might want to perform a full analysis of the UX/UI, revisiting the use of dated pop-ups and, again, re-evaluating the distribution of screen elements. Santander might also decide to remove elements such as the one at the top of the deposit screen used to edit the amount, which seems an unnecessary addition if the user was able to directly edit in the amount field. Another suggestion is for Santander to review copy/labeling to match with common market standards—for instance, the “Submit” button on the deposit screen could be named “Make a deposit” to become more intuitive.

Summary ▼

For the first time, we evaluated Schwab’s mobile deposit experience, and the results of our analysis show that Schwab hasn’t focused as much on UX/UI as those banks listed at the top of our ranking.

From the beginning of the app’s experience, the design as a whole looks cluttered, and in some cases, even broken. Also, the font and color combination looks dated and not very well thought out.

Additionally, some elements presented on the deposit screen may bring confusion to the users, perhaps best exemplified by the button named “Clear.” This button is not intuitive on what would be its overall impact. Would it clear all fields on the screen? What would be the impacted fields? Those are the type of questions the user may have in mind.

Expanding further on the UI aspects, there is an arrow presented along with the check photos on the deposit screen that could be removed if, instead, the action to open the photo capture screen is by tapping the overall check image frame.

A positive aspect of the app that we can highlight is the good intent of informing the user on the macro steps of the experience. However, as previously mentioned in this report, our preference is to trim the experience down to the least amount of steps, i.e, aggregating all steps in a single view. We also want to commend Charles Schwab on having the best deposit limits of this report, offering unlimited dollar amounts for new customers.

Heuristics ▼

Deposit Limits	1
Recommended Paper Check Hold Times	11
Efficiency of Use	20
Match Between System and User’s World	7
Consistency and Standards	14
Error and Prevention	3
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

All in all, Schwab’s app has a good number of items that could quickly be tweaked to improve the user experience. In addition to the aforementioned, another potential enhancement is on the screen used to capture a check photo—it could present at once both the manual and auto-form of capturing a photo.

Schwab may also want to reconsider showing the check deposit instructions every time the user makes a deposit, message and content that currently cannot be skipped. This may be annoying to some users who are already accustomed with the mobile deposit process.

Summary ▼

TD Bank is positioned lower this year than last, similar to other banks that haven't yet been able to catch up with the innovations of competitors.

The app's overall experience presented significant flaws to users, starting with a design that looks dated, not very clear, and shows an unbalanced weighting for the UI elements and components. There is ample white space that could be utilized better, and many of the fonts used in the app are quite small and hard to read.

Another example of poor design is the "Continue" button at the bottom of the deposit screen. For stronger usability and better use of white space, a more valuable location for the button may be higher on the screen.

Despite the number of improvements that should be made, there were positive aspects of the app. For example, the design of the check capture screen mimics the design of a real check quite nicely, with visual parameters so the user knows how to position their check for easy capturing.

Heuristics ▼

Deposit Limits	6
Recommended Paper Check Hold Times	9
Efficiency of Use	15
Match Between System and User's World	16
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Our suggestion for TD Bank is to profoundly restructure its UX/UI. That includes thoughtfully considering how components and elements are distributed within the screens, their meaning and applicability, and the overall aesthetics of the mobile deposit experience.

For example, it is not clear of the intent of the "Go" button that is presented on the top of the deposit screen, perhaps making the user think twice before clicking on it. Also, for that same button, a blue color is used, which does not feel like part of the company/app's overall branding style. Simple fixes like these could go a long way.

Summary ▼

PNC ranks higher this year, which might be a sign of a movement towards focusing more on the mobile deposit experience.

While we applaud aspects such as the clear information on the deposit limits, the overall application aesthetics look outdated, perhaps most strikingly with the use of italic font. And while it is notable that the account selection for the deposit process is all presented with a single click and listed on the same page, the UI listing of the accounts still looks busy, making it somewhat confusing to differentiate and choose between different accounts.

However, one positive aspect about the app noted by our reviewers was the clear messaging presented with the prerequisites needed in order to capture a check photo.

Heuristics ▼

Deposit Limits	18
Recommended Paper Check Hold Times	11
Efficiency of Use	11
Match Between System and User's World	7
Consistency and Standards	14
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Similar to the suggestions given to Schwab, PNC may consider performing a full analysis/redesign of its UI/UX for the mobile deposit experience.

An example of an UI element that might be redesigned is the icon on the photo capture screen. Currently, the button is extended in a vertical position, which is not very common in the industry. For example, Chase uses icons that are similar to what the actual operating system offers, a decision that benefits users as they are already accustomed to the action that the icon performs.

Summary ▼

Ally was included in our 2018 edition, and we welcome it back into the fold.

Considered an outlier in that report, Ally equated to the ranking of 15th overall, not too far off from this year. As a relative newcomer to this report, we would like to focus on the benefits the experience has to offer.

First and foremost are their generous deposit limits for new customers. Ally offers users deposit limits up to \$250,000, which is rivaled only by one other bank, the unlimited limits of Charles Schwab. Allowing customers to deposit up to \$250,000 demonstrates a level of confidence to their customers. Ally also offers the ability for users to customize their mobile banking experience with a level of menu customization that we have not seen in other apps.

However, once you begin your mobile deposit journey, things become less impressive. The overall look and feel for a digital-only app feels dated. The “Make a Deposit” screen is jam-packed at the top, while nearly half of the rest of the screen is wasted. Once initiated, there is a help/tip screen aimed at helping the user make a deposit, but the recommendations read as remedial and obvious, aimed at first-time check writers. Also, once the user is prompted to add the value of their check, the text entry box appears in an awkward placement at the screen’s very top, out of balance with the rest of the design.

Heuristics ▼

Deposit Limits	1
Recommended Paper Check Hold Times	20
Efficiency of Use	16
Match Between System and User’s World	16
Consistency and Standards	14
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Design and UX focused practices are at the heart of this report, and we expect these areas of focus to innovate frequently. Unfortunately, we have not seen that development with Ally’s mobile deposit experience.

Aside from having some of the best deposit limits in the report, it also has the worst check retention time overall. There are big disconnects in correlation to the risk policy decisions and personal limits, as well as in the overall UX design.

Summary ▼

BMO Harris returns once again to our report, performing slightly better than last year. BMO Harris has generally remained in the bottom of this report but ultimately has the potential to make its process into a great experience for its customers.

While there are many critiques worth mentioning, there are also a few perks to discuss. The deposit process does not drag out and flows well throughout. BMO also has a “lightness” about its mobile banking aesthetic and stays consistent on its branding with logos and appropriate color palette.

But where things fall apart are the UX and design choices from beginning to end of the deposit process. There are font issues where multiple sizes and font styles are displayed on various screens. The deposit option is nested and somewhat difficult to find, buried under “Pay & Transfer.” It is not good design for the user to search before making a deposit. There is also a lack of information displayed such as deposit limits, help and tips, and cutoff times. The order of account selection also seems out of place, as a function only available once the image captures have been completed.

Once a deposit has been executed, BMO does provide timely information in response with check retention time, wherein lies another issue—its check retention recommendation is 15 days.

Heuristics ▼

Deposit Limits	18
Recommended Paper Check Hold Times	17
Efficiency of Use	7
Match Between System and User’s World	19
Consistency and Standards	8
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

BMO has a lot of potential, but also a lot of work to be done. The mobile deposit experience feels like it is on its way, but never quite breaking through simple design tropes that hamper the process. BMO also needs to consider revisiting its risk policies and reducing its check retention recommendation. Extended retention requests can create trust issues with the brand from customers.

Summary ▼

Regions Bank made a splash last year with a valid and long-overdue application redesign. Our biggest complaints over the years have been the bank’s overuse and extremely distracting text-heavy screens that include disclosures and terms, aspects that did not need to be displayed how they were. Nesting this information can save space and not overwhelm the customer.

That said, Regions has made strides in improving its design. It has a more simplistic and natural process flow when executing a mobile deposit, but could still reduce steps during that process. The check image screen has an abundance of text and is located on an extra screen that users are unable to bypass. We did encounter a few error messages as well that did not provide any clarity on why they were caused nor how to resolve them or avoid them in the future.

We commend Regions for its vast improvement in design and UX, but have a few concerns. The capture windows resemble screens we reviewed six years ago. The standardized aesthetic of these screens was acceptable then, but are now in dire need of an upgrade. Regions also has decent limits for new customers, but its 30-day check retention risk policy directly contributes to the low ranking in this report. Compared to competition, this is an obscene request for customers. Capital One, U.S. Bank, and others have a simple 24-to-48-hour check retain request for customers. Regions needs to reduce its ask drastically to remain competitive.

Heuristics ▼

Deposit Limits	7
Recommended Paper Check Hold Times	17
Efficiency of Use	16
Match Between System and User’s World	16
Consistency and Standards	14
Error and Prevention	1
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

As stated above, Regions has come a long way. To improve, it needs to consider risk and how to accommodate its customers by asking them to hold onto their checks for a shorter time. Besides a few design improvements, this could propel Regions upward into a better ranking on this report.

Summary ▼

Navy Federal Credit Union has been through ups and downs in this report's history. It has always remained in the mid-to-low ranks and, unfortunately, this year it came in last place.

Is this due to a poor mobile deposit experience? The answer is no. Rather, the problem is that the other competitors have updated, innovated, redesigned, and adjusted their policies and risk assessments. A key takeaway from this report has been to drive constant innovation and to be aware of the competition. We have seen Navy Federal Credit Union grow and change over the years, but its pace is the problem. The competition moves quickly, if not with UX design, then by adjusting policies or adding new features like digital assistants or expedited fund availability capabilities.

We applaud Navy for improving its design over the years, and it does show, specifically by making the deposit option front, center, and focused in the middle of the navigation bar. The credit union has remained on par with its color palette and branding. But the issues become apparent once the user embarks on a mobile deposit journey.

The account selection screen has 65% of unused white space that ultimately packs the features and options at the top of the screen. The "Continue" button spans the width of the screen, making it feel dated in appearance. There are also arrows peppered throughout the app, in the account selection page, and on the review page, but none of them offer much help as to where they lead. Navy has also added many redundant, unnecessary steps that prolong the mobile deposit experience, like checklists before each check capture. Trimming down the number of steps could greatly improve customer satisfaction.

Heuristics ▼

Deposit Limits	9
Recommended Paper Check Hold Times	11
Efficiency of Use	16
Match Between System and User's World	7
Consistency and Standards	14
Error and Prevention	19
Auto-Capture Function	1
Real-Time Deposit Status Updates	1

Recommendations ▼

Navy's app has potential, but it needs a lot of work to raise its position in this report. More focus on simple, easy-to-digest design coupled with improved process flow would go a long way. There are currently too many steps to complete a mobile deposit, and there is a lack of consistency among the design of buttons, navigation, and help/tips. Navy has also retained its check retention time of two weeks, which at this stage of the game, is way behind its competitors.

Conclusion

Undeniably accelerated by the pandemic, adoption of both mobile banking and mobile deposit continues to increase despite normal operations returning for the majority of bank and credit union branches. The result for 2022 and beyond is that mobile deposit has become an opportunity for banks and credit unions to differentiate themselves from their competitors.

Competitive Realities

The ranking changes in this report reflect the ongoing competitive focus concerning mobile deposit user experience and design, innovation, and policy changes. The institutions that rose in the rankings did so with UX and design improvements.

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. FIs 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 banks have made over the past few years regarding mobile deposit, issues and challenges still exist. Just under half of mobile deposit users experienced at least one problem using the service in the past year—a slight improvement from 2020.

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 concerns regarding identity fraud and the illegal capture and use of personal information are still prevalent among consumers, they are starting to decline as consumers continued to increase their use of mobile banking in 2022.

For some—or even many—consumers, these security concerns and fears may never abate or disappear entirely. But banks can make design changes to help reduce these concerns. This is particularly important as mobile deposit has become a key component of both mobile banking and overall bank satisfaction.

Future Outlook

Banks should develop strategies to engage mobile customers to use more mobile banking products or services 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 mobile deposit 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 capturing 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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Tristan Green brings many years of research, strategy, business development, and data analytics to Cornerstone Advisors. As a director in the firm's Research and Fintech Advisory practice, Tristan works with a wide range of industry providers, fintechs, and investors. With nearly a decade of experience in financial services, Tristan has also played a key role across a variety of consulting engagements and has assisted hundreds of banks and credit unions with their strategic planning, M&A, digital strategy, and strategic growth initiatives.

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Ron Shevlin

Chief Research Officer

Ron Shevlin heads up Cornerstone Advisors' fintech research efforts and authors many of the firm's commissioned studies. He has been a management consultant for more than 30 years, working with leading financial services, consumer products, retail, and manufacturing firms worldwide. Prior to joining Cornerstone, Ron was a researcher and consultant for Aite Group, Forrester Research, and KPMG. Author of the Fintech Snark Tank blog on Forbes, Ron is ranked among the top fintech influencers globally and is a frequent keynote speaker at banking and fintech industry events.

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ABOUT

Cornerstone Advisors



At Cornerstone Advisors, our goal is to deliver tangible business impact to financial institutions. We know that when institutions improve their strategies, technology, and operations, enhanced financial performance naturally follows. Because we live by the philosophy that businesses can't improve what they don't measure, we show banks and credit unions how to use laser-focused measurement to make smarter technology decisions, reengineer critical processes, and develop more meaningful business strategies.

Learn more at
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CONTRIBUTOR

CI&T



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Customer experience metrics include heuristic data measuring user experience and mystery shopping research obtained in active partnership with CI&T. Fees, deposit limits, and check retention policies were obtained through publicly available data from each bank.

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Have questions regarding this report?

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