



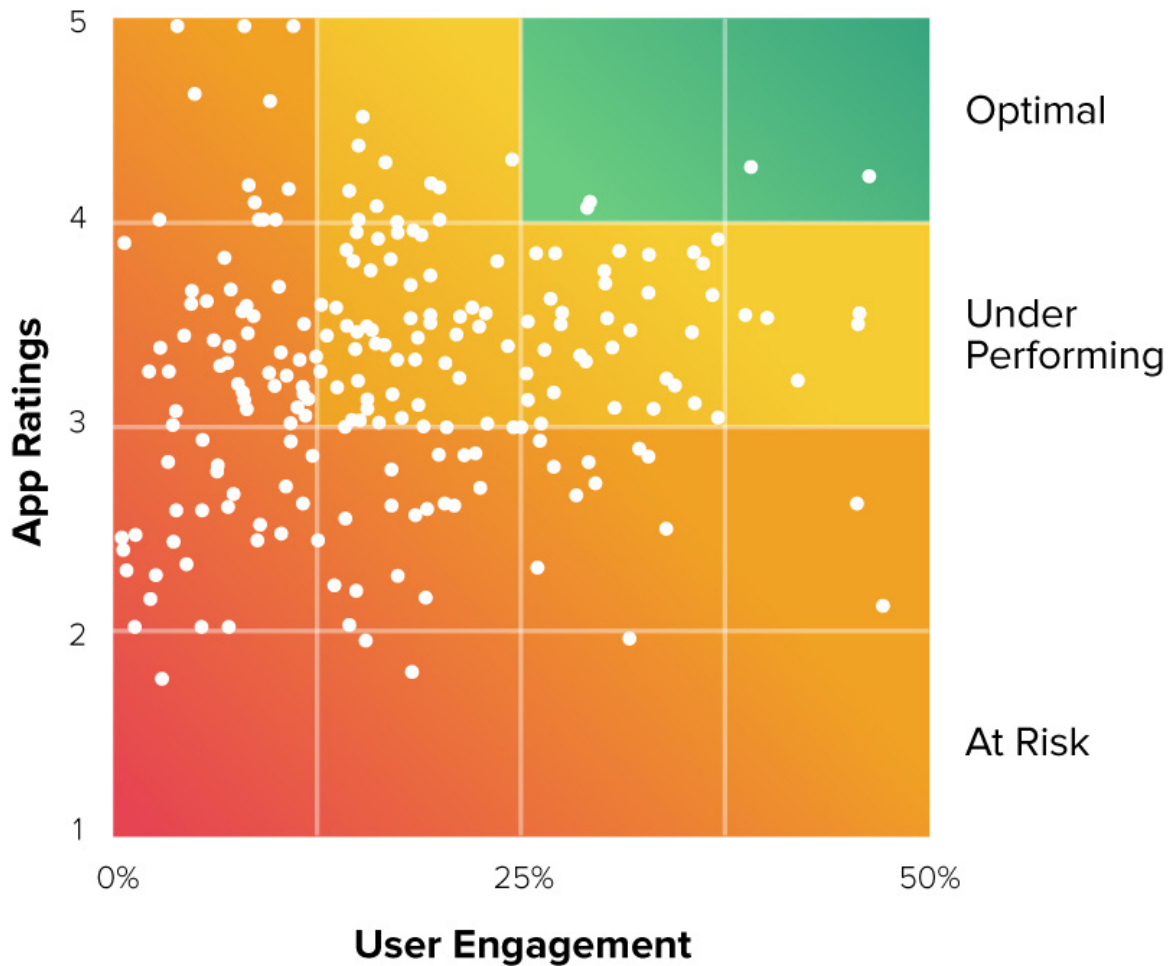
The **Ultimate Guide** to

# MOBILE BANKING

**MX**



## Few Mobile Banking Apps Have Optimal Engagement and App Ratings



Source: FI Navigator

## The State of Mobile Banking

Mobile banking has existed for more than a decade, and yet the financial services industry generally still isn't delivering. Only a portion of apps hit the sweet spot between high user engagement (as a percentage of those who use online banking) and high app ratings (on a 5-star scale).

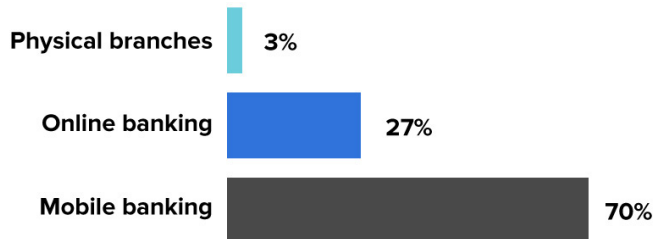
How do you stack up? If you're in the optimal category (high engagement and high ratings), congrats! You might not

need this guide. Get yourself an extra cup of coffee, set this guide aside, and enjoy your day.

However, if you're in the underperforming or at-risk categories, you're paying too much for a mediocre app. This guide will show you a way forward.

Having low engagement and low ratings isn't sustainable given all the innovation in this space. Just look at the progress that's been made in recent years in deposits (with companies like Varo, Acorns, and Moven), lending (LendingClub, Prosper, SoFi), investment (Betterment, Wealthfront, Robinhood), and payments (Stripe, Square). Then add innovations from big tech companies including Amazon, Google, and Apple — companies with ambitions to get into financial services.

### Which of the following do you feel represents the future of banking?

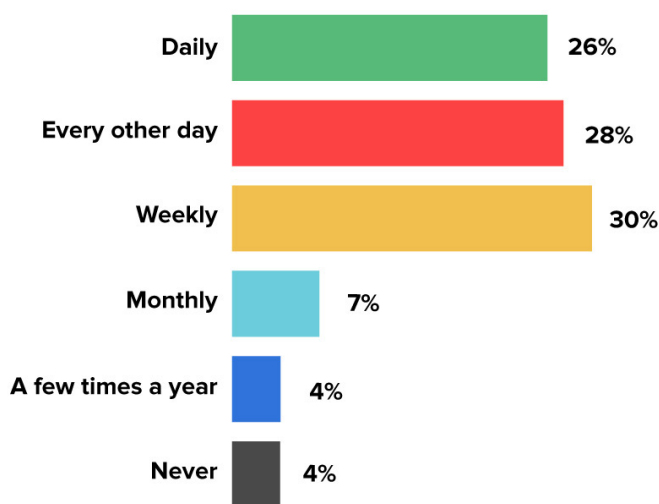


Source: MX Research Survey of 1,000+ US Consumers

For instance, Apple’s entrance into payments has quickly evolved from offering a digital card to [a physical credit card](#) with no late fees, no annual fees, no international fees, and no over-limit fees. In addition, with no visual card number, CCV, or expiration date, Apple Card is leading the way on security. Coupled with a great UI that helps users visualize their spending data, Apple is now a serious contender in the payments space.

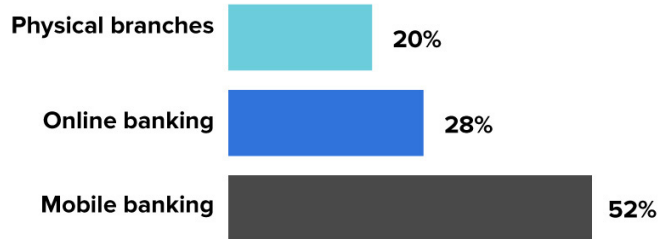
And that doesn’t even factor in innovations within the banking industry, particularly from megabanks that have adopted a mobile-first strategy — a strategy that has paid off in a big way. As proof, consider this: Millennials say that they don’t like megabanks, but they’re [most likely to most likely to bank with the megabanks](#). According to a study from [a study from J.D. Power](#), megabanks now get the highest ratings from customers under 40, almost completely because of digital innovation at these banks. The results?

### How often do you use mobile banking?



Source: MX Research Survey of 1,000+ US Consumers

### Which of the following do you wish your financial institution would invest more money in?



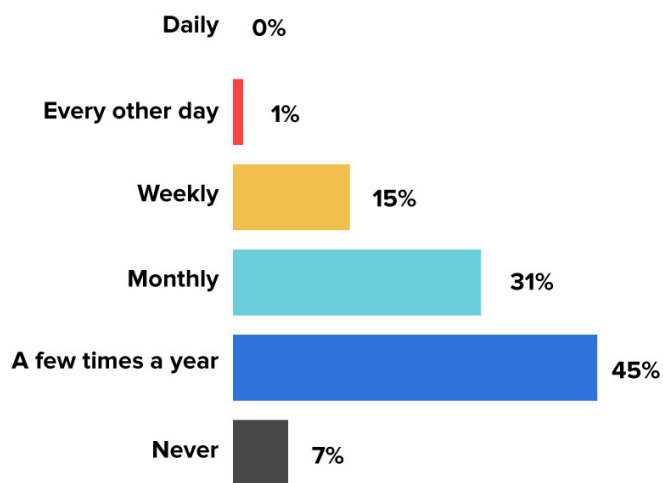
Source: MX Research Survey of 1,000+ US Consumers

The 10 largest retail banks now manage 48% of all deposits, up from 39% in 2009. It’s no wonder that innovation and satisfaction scores at large and mid-sized banks dropped significantly among customers under 40.

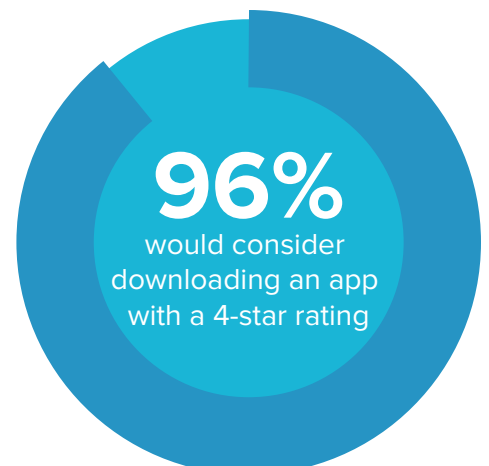
**The situation might seem hopeless for the majority of financial institutions, but it isn’t.** The good news is that you can move into the optimal category for mobile banking. If you work at a financial institution, you have the relationships, the branches, the call centers, the know-how, and the trust to succeed. Digital transformation is difficult, but you’re set to thrive... with a bit of help. That’s where this guide comes in.

That said, you’ll want to move quickly. Why? Because when asked whether branches, online banking, or mobile banking represents the future, 70% of consumers chose mobile and only 3% chose branches.

### How often do you visit a bank branch?



Source: MX Research Survey of 1,000+ US Consumers



And when asked where they'd like to see financial institutions invest their money today, consumers overwhelmingly chose mobile.

The truth is, consumers already use mobile a lot. According to a [Mobile Banking Study by Citi](#), 31% of consumers use their mobile banking app more than any other app on their phone. We've found that 84% of consumers use their mobile banking app at least weekly and 26% use it daily.

Compare this to less than 16% of account holders who visit a branch at least weekly and 0% who visit daily.

It's no wonder that finding a better mobile bank app experience is one of the top reasons consumers list for switching banks. In fact, of the reasons that consumers said they switched banks in the last year, mobile banking came in fourth — after lower fees, poor customer service, and moving. More than a fourth of people who leave their institution say they do so because of mobile.

It's not hard to see why this is. People check out mobile app ratings and talk about mobile banking options with their friends. Then they choose a best-in-class option. For many people the mobile banking experience is their banking experience.

Of course, in order for a mobile banking app to spread via word of mouth, it has to be exceptional — to generate average reviews of 4-stars or higher. (After all, only 15% of

consumers would consider downloading an app with a 2-star rating.)

Finally, it's critical to note that investment in mobile brings enormous returns. Mobile banking users have 2.3 products on average compared to branch-only users. In addition, the average transaction value also increases 46% for mobile consumers, and mobile consumers are also far less likely to leave the institution compared to branch-only consumers. Best of all, the relative cost per channel usage is roughly 2% of the cost of the branch, making it a relatively inexpensive way to win the hearts of account holders.

At MX, we have ideas. But more importantly, we have a proven record of innovation around mobile banking. We've helped clients go from 2-star app ratings with their prior offering to 4.8-star ratings with ours. In addition, we've [doubled user adoption](#) in 24 months and increased conversions by 5x via data-driven consumer engagement campaigns.

In this piece, we'll look at the 10 essential principles we've followed to get here. Even if you don't decide to partner with us for data-driven mobile banking, we hope you'll run with these principles. More than anything, we want to see the mobile banking experience get better for everyone involved. Our mission, above all, is to make the world financially strong, and we can't get there without encouraging the best mobile experience possible.

All of this brings us to our primary question:  
**What can you do to give your account holders an optimal mobile banking experience?**

# 10 Essential Principles of Mobile Banking

## 1. Start With Why

If a team can't clearly and succinctly articulate the "why" behind what they're building, it should be a deal breaker. And the why behind any worthwhile mobile banking app should be to empower users to be financially strong. Otherwise, why build mobile banking at all? Deposits, loans, and transfers — all aspects of financial services should alleviate the financial stress of individuals, communities, and nations, helping people enjoy higher standards of living.

"We need to reimagine how banks can truly enrich customers' lives." — Bradley Leimer, Co-founder of Unconventional Ventures

When financial technology empowers people to make smarter financial decisions it creates a ripple effect that spills over into other industries. This in turn helps solve the systemic problems facing society today. Broken healthcare, poverty, pollution, corruption — all of these systemic problems intersect with finances at a foundational level. The drive to empower the financial lives of users and fix these problems can and should motivate developers to build quality products.

When the "why" is right, many of the foundational problems in the development process take care of themselves. Developers and designers aren't just working for a paycheck. They're working for a cause. This matters because software is a messy business and the process of building an app requires difficult decisions on a daily and even hourly basis. Without passion for the cause, developers and designers will cut corners and end up creating a poor user experience. By contrast, a passionate team, driven by the right cause, will make the right structural and long-term decisions to ensure the quality of the final product well beyond the day it's launched.

This might seem like a strange viewpoint in an industry that some view as purely numbers-driven, but it's absolutely essential. The "why" should center on helping people get their finances in order, something everyone needs help with. [As Bradley Leimer, co-founder of Unconventional Ventures](#), says, "I want to see banks not just rebuilding the core, but rebuilding the core value proposition for the customers so it benefits all customers in the long term." Mobile is pivotal to making this core value proposition a reality.

## 2. Make it Secure

When we asked consumers what makes them hesitant to use mobile banking, 56% said they have no hesitations. However, 31% cited security as their top concern.

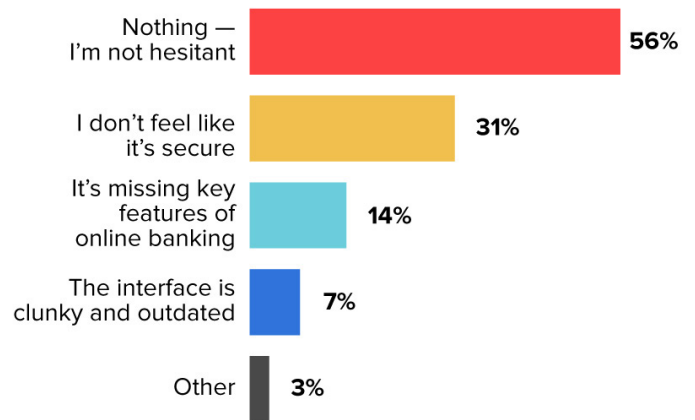
More than anything, this means that you have to deliver an optimally secure mobile banking platform — and develop the capacity to explain why your platform is secure.

To optimize your security processes, make sure you and all your partners can successfully pass this checklist. (If you aren't personally an expert in security, run this list by someone in your organization who is before committing to a project or a partner.)

### 1. Security Governance

- Implement a defense-in-depth security model — a model that protects user data via multiple security layers.
- Proactively test each layer via recurring security vulnerability scans, regular compliance and security audits, security alert reviews, and third-party assessments including rigorous external penetration tests.

### What, if anything, makes you hesitant about using mobile banking? (Select all that apply.)



Source: MX Research Survey of 1,000+ US Consumers

## 2. System Security

- Authenticate users via strong multifactor mechanisms that include a complex password and one-time pass code authentication token.
- Implement industry-recognized hardening standards such as Defense Information Systems Agency (DISA), Security Technical Implementation Guide (STIG) and Center for Internet Security (CIS) benchmarks.
- Use a baseline operating system (OS) image for every system build.
- Operate using 2N (redundant) production environments. Each production environment should be located in geographically separate, fault-tolerant zones—significantly reducing the likelihood of full system failure and impactful system outages.

## 3. Application Security

- Manage and deploy application code via a centrally managed software repository.
- Require a documented description of each change, a peer review, systematic code style checks, code security review (including checks against OWASP's Top 10 common coding vulnerabilities and other code vulnerability checks), and approval from a software engineering development lead.
- Limit the ability to deploy code to only authorized software development leads.
- Regularly backup code repositories to help ensure timely restore of applications in the event of catastrophic system failure.

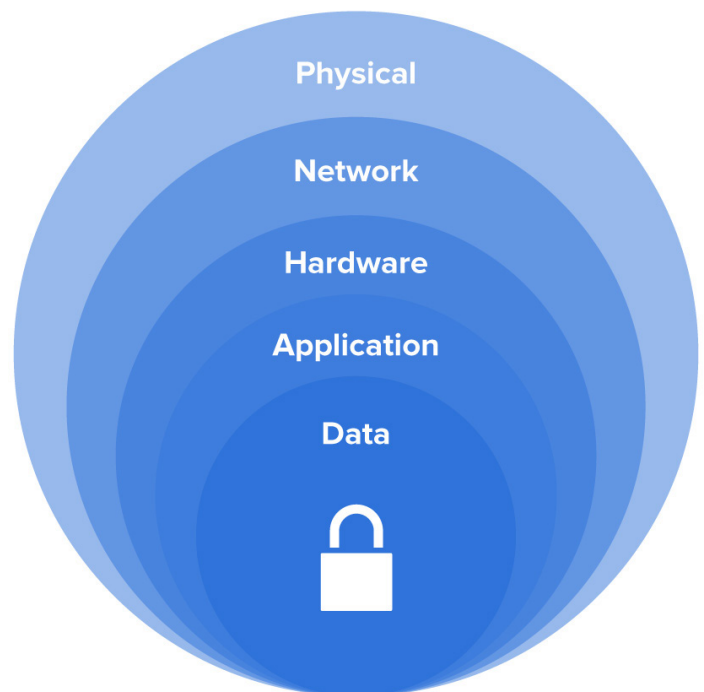
## 4. Data Security

- Classify data according to levels of sensitivity: public data, internal data, confidential data, privileged and confidential data.
- Encrypt confidential data and privileged and confidential data in transit using TLS 1.2. For data at rest, encrypt data using AES-256 keys.
- Securely destroy all data at the end of the useful lifecycle or when requested by customers. Destroy media (e.g., hard disk drives) by using Department of Defense (DoD) level drive shredding techniques.
- Limit data leakage protection access to only authorized personnel.

## 5. Third Party Security

- Maintain compliance with the AICPA's TSP and provide evidence indicating ongoing compliance with the TSP by providing a Report on the Design and Operating Effectiveness of Controls at Service Organizations (SOC-2 Type II Report).
- Maintain compliance with applicable security requirements listed in the Payment Card Industry Data Security Standard (PCI DSS) to help ensure that any data that may fall under this provision is handled accordingly.
- Update both the MX SOC-2 Type II Report and PCI DSS Attestation of Compliance on an annual basis.

If you and your partners can put a checkmark next to each item on this list, you can be sure that you're leading the efforts to offering a secure mobile experience. If not, you know you have room to grow.



**A defense-in-depth security model**

### 3. Build on a **Cross-Platform** Framework

The rise of smartphones and wearables has led to a fractured coding environment. Developers now have to worry about different platforms (Android, Apple, Windows, Kindle, etc.) and different devices (phone, tablet, TV, watches, glasses, etc.). Taken together, this complexity can make projects enormously expensive to maintain.

Some developers turn to HTML5 to fix this problem, but that approach can be crippling for financial institutions as it results in, a sluggish experience, higher security risks, and an app that can't cater to the specifications of all device types and platforms.

To fix these problems, it's critical that developers start from a solid and consistent codebase of C++. Developers should then create a layer of shared C++ user interface code. From there they should write a light wrapper for each platform in order to take advantage of features specific to each device. For example, to make the banking app work with the FireTV remote, they would code a section in NDK (the language specific to that device).

This means that no matter what device your account holders choose, the experience is complete and cohesive, combining the advantages of a native experience (including speed, security, and the ability to meet exact specifications) with the advantages of cross-platform development. That is, the app is native for end users, but developers don't have to start from scratch every time they code for a new experience. This results in dramatic cost savings for financial institutions and a better experience for account holders. In other words, having one codebase with a shared C++ application logic, shared C++ user interface code, and platform-specific code means that each feature is built once and deployed across all platforms.

This way, what you offer will stand the test of time. Say there's a new breakout mobile phone company, or a new type of wearable, or a new voice-enabled device. Whatever the latest invention is, you won't be caught flat-footed.



## 4. Listen to Your Users

If you want an app your users love, you have to meet and exceed their expectations. One key way to do this is to listen to what they have to say.

**Here are three practical ways to listen:**

**1.** Hold usability tests regularly. Communication is hard, and feedback from end users doesn't always reflect how these users actually interact with the app. Usability testing gives you the opportunity to watch users as they directly interact with the app so you can see where users get tripped up while performing certain tasks. Fortunately, you don't have to spend massive amounts of time testing. Just choose 3-5 people and outline a few tasks that you would like them to perform while you observe. To do it right, you must refuse the impulse to help them complete the task. If you notice that users get tripped up on one of the steps, take that information back to the developers.

**2.** Provide users with a way to voice their opinions. Create a way inside the app for users to comment on features, and request new features. This will lead to great insight into not only what needs to be built, but also in what order. Developers can review this information as it comes in and make changes accordingly.

**3.** Ask for feedback. This might seem simple, but it's surprising how often this step is overlooked. You will likely not get a highly rated app if you don't prompt users to rate it. Naturally, people who do not like something will be very vocal and those who love it don't always speak up. So if you don't ask for reviews, your reviews will most likely consist of users who are dissatisfied. You therefore have to ask your engaged users to share their love of the app with other users.

At this point you may be feeling like you don't have a system in place to do these things. If so, that's fine. You'll just want to be sure to partner with someone who does.

**“People ignore design that ignores people.”**

**Frank Chimero, Designer**





## 5. Innovate in Weeks, Not Years

It's not enough to carefully listen to your users. You also need the ability to quickly implement their feedback. Otherwise, what's the feedback good for?

In an era where consumers have expectations for instantaneous service, you can't wait months or years between updates. You have to iterate quickly — or you need a partner that will enable you to iterate quickly.

Here are two critical questions to consider:

1. How long do you have to wait to implement a change?
2. How much does it cost you?

If you have to wait a year for every single update while forking over \$500,000 each time, you're doing it wrong.

A better way to proceed is to release a feature quickly, get instant feedback in the form of user data, and release a new app iteration (based on the data you've gathered) in weeks. What's more, each update shouldn't cost you half a million dollars. It should be included as part of the deal right from the start. Iteration is simply part of what it means to create an app.

### Compare these two scenarios:

**Scenario A:** You spend \$500,000 on a major native mobile app update and wait around for a year or two for it to be released. When it's finally ready, you launch it only to realize your users hate it and slam you with two-star reviews.

**Scenario B:** You quickly create a simple mobile HTML page and embed it into your C++ mobile framework for a subset of users. From there you gather usage data and then polish the feature and code it using a software developer kit (SDK). You continue to polish the feature and ultimately code it for an optimal native experience for the full launch. Since you've properly vetted everything as you go, you release your updated mobile experience to rave reviews. In both scenarios you end up with a native mobile app,

but in the first you end up with an expensive, sub-par app. In the second scenario, you can start simple, gather data, iterate, and end up with a 5-star app.

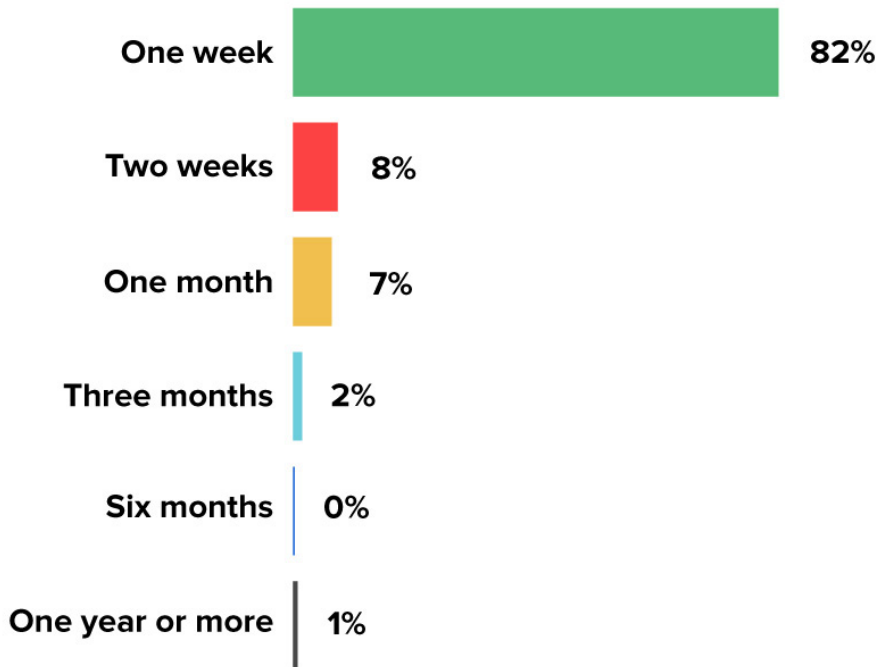
It's also worth noting that users have high expectations for you to update regularly. They overwhelmingly say that they shouldn't have to wait more than a week for you to fix a bug and that updates should happen at least monthly.

If you're waiting a year or more between updates (or even six months for that matter), your users are already looking for another option for their mobile app.

**“We must actively seek new opportunities to delight our customers, deploy assets to better understand what their needs and wants are, and leverage data to inform optimal decision-making process instead of blindly chasing new shiny objects.”**

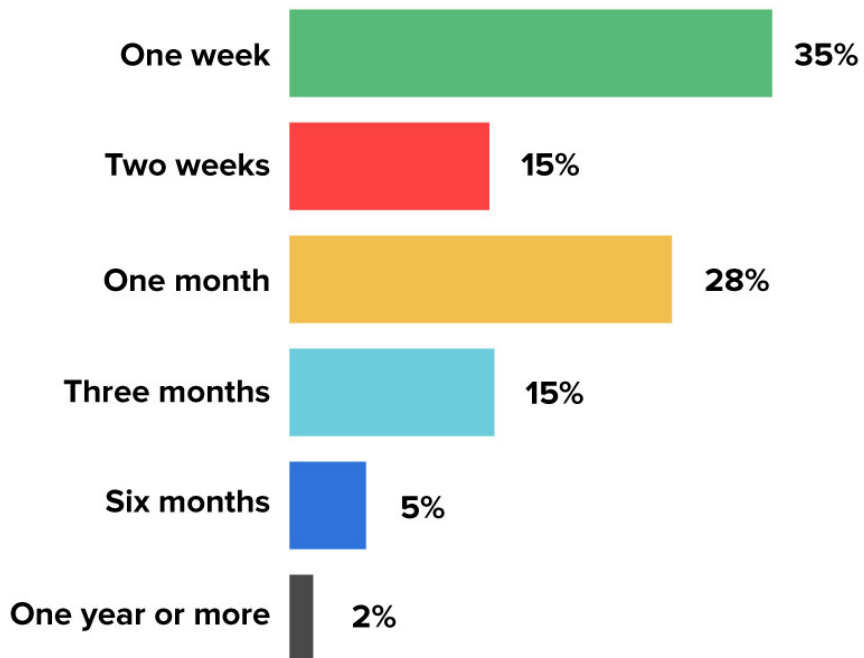
**Theo Lau, Co-founder at Unconventional Ventures**

## If you found a bug in a mobile app, when would you expect your financial institution to fix it?



Source: MX Research Survey of 1,000+ US Consumers

## How long do you feel is acceptable to wait between updates to your mobile banking app?



Source: MX Research Survey of 1,000+ US Consumers

## 6. Enhance Your Transaction Data

In addition to building on a foundation of C++, user feedback, and agile development, it's essential to build on a foundation of clean transaction data. Anyone familiar with transaction feeds knows that the raw data isn't pretty. It's often indecipherable and confusing for users. To fix this problem, you'll want transaction data that has been cleansed, categorized, and classified.

**Cleanse** - When your users can't understand a transaction description, they don't get upset with the vendor or the card provider. They get upset with you. They dial in to your call center and drain your employee's time. You can prevent this problem by cleaning all descriptions.

**Categorize** - Your users are looking for help with their finances, and they don't want to spend all their time tracking their spending habits. By adding automatic categorization to your transaction feeds, you help these account holders better manage their money while improving user loyalty, driving revenue growth, and paving the way for future technology.

**Classify** - When you properly classify transactions, you can see which of your users' transactions are marked as bill pay, direct deposit, fees, and more — giving you the ability to more precisely target end users. For instance, you might target account holders who use bill pay with your competitors to use bill pay with you instead (amping up your bottom line).

Enhancing transactions this way — through cleansing, categorizing, and classifying — sets the right foundation for not only a better mobile experience but also for whatever the future may bring. For instance, if you want to offer voice-assistance or AI-enabled features, you need clean data. (These features are useless without it.) As Ron Shevlin, Managing Director of Fintech Research at Cornerstone Advisors, asks, "If you don't have good data and analytics capabilities, what good will an AI-first strategy do?" You have to lay the right foundation with data before you start dreaming of an advanced user experience.



FIDNV-X871N0-\$17,062

FIDELITY INVESTMENTS - \$ 17,062



Turn a messy transaction string ("fidnv-x871n0") into something readable:  
Fidelity Investments.

## 7. Offer a **Full Range** of **Features**

Once you've laid the foundation with C++ and clean data, the next step is to offer a full range of foundational and advanced features in mobile banking. Regardless of whether you're a large regional bank or a mid-sized credit union, you can offer a mobile banking experience that's superior to anything on the market.

**Originate and enroll via mobile** - If users have to go into the branch to set up their mobile banking account, it defeats the primary advantage of mobile: Convenience. Users should be able to originate and enroll directly within the app.

**“You have to be able to deliver every product you have without a signature on a piece of paper. If you can do that, you can solve the problem of revenue outside of the branch.”**

**Brett King, Author and Host of Breaking Banks**

**Biometric sign-in options** - Users demand convenience and security when it comes to mobile banking. How do you balance these two demands? One of the best solutions on this front is to integrate biometric security — including fingerprints and face recognition — into your app.

**Quick account view** - Users should immediately see their account balance so they can get in, see the info they need, and get back to their day.

**External account aggregation** - When users aggregate all their accounts (including accounts with other financial institutions), they can see their full financial picture at a glance.

**Money management** - Once users have aggregated their accounts, they can see their total spending, budget their money, view net worth trends, and more. This helps users become financially strong, driving long-term loyalty. Critically, when Cornerstone Advisors asked consumers who opened an account with a digital-only bank, younger consumers said their number one reason was to get better money management tools. If you want to reach the next generation, this is how.

**Transactions** - Regardless of how much money a user has in their account, they want to be able to sign in and quickly see their most recent transactions.

**Relevant offers** - With aggregated account information, you have the information you need to make offers that empower the end user instead of annoy them. Can you offer them a credit card with a lower rate than the one they have? What about a mortgage? Or a car loan? Think of Amazon's "Recommended for You" feature — directly in the mobile banking app.

**Alerts and notifications** - Another benefit of clean, aggregated data is that you can offer dynamic notifications to end users, letting them know if they're about to exceed a budget or if they've been hit with possible fraudulent activity. This way you can give guidance right when they need it most.

**In-app tutorials and support** - Mobile banking might not always be intuitive for end users — particularly for those who haven't used a mobile banking app before. That's why it's best for users to be able to get the guidance they need when they need it, directly within the app.

**Remote deposit capture** - Even though checks are becoming less and less common, people still demand the ability to deposit their check remotely.

**Transfer money** - People are looking for simple, seamless money transfer — something intuitive that they can complete in just a few taps.

**Instant account verification** - Alongside external account aggregation, enrollment, and transfers, you want the ability to verify accounts instantly rather than wait for a prolonged ACH process. Your customers expect a seamless digital banking experience on every platform and device. Instant account verification allows you to do that.



**Change card settings** - Is a user about to go on a vacation? Did they misplace their card? Giving them the ability to sign into their app and notify you about an upcoming vacation or pause their card can take a tremendous load off of your call center while delighting the end user.

**Credit score information** - Your users want the ability to see their credit score easily, and nothing is easier than seeing it dynamically represented in a mobile banking app.

**Business and commercial features** - The gig economy is on the rise, and freelancers and small businesses are looking for ways to track expenses on the go. By offering mobile banking for this demographic, you start the process of gathering the data you need to give each of these users the right financial advice and loans they need to succeed.

**Exceed Your Competitors** - [S&P analyzed](#) mobile banking features at megabanks (assets > \$1 trillion), large nationals and regionals (\$50 billion to \$1 trillion), and mid-sized regionals (\$10 billion to \$50 billion). They found that megabanks offer 13 of 15 advanced mobile banking features, large nationals and regionals offer 8, and midsized regionals offer 5.

By offering all these features and more, you'll create a mobile experience that exceeds users' expectations — one they'll want to use on a daily basis. It's a sure-fire way to keep up with and even exceed the competition.

**“Micromarketing using digital channels and highly personalized content will be the norm, with results measurable by the hour as opposed to by the quarter.”**

**Jim Marous, Co-publisher of The Financial Brand**

## 8. Offer a **Personalized Experience to Differentiate Your Brand**

Of course, not everyone will want or use all the features you offer — and they won't want those features getting in the way of the features they do use. In addition, you need a way to differentiate yourself from other players in the market.

### **This is where personalization comes in.**

Users should have the ability to select which features they want to appear on their mobile app and the order they appear. Do they want to see their account balance when signing in, or would they rather see their most recent transactions? Which of all their aggregated accounts do they most want to see first? Do they want to see transactions from a particular account and not transactions from other accounts? Or would they rather put the money transfer feature front and center? All of this should be personalized as the user dictates.

In addition, the algorithms behind the mobile app should be robust enough to recognize what will matter most to each individual user. For instance, if a user has a bunch of student loans and low income, the app should recognize that showing net worth trends would be off-putting. It should automatically hide that particular feature, allowing the user to show it only if they wish.

The same is true of offering financial advice in the app. That is, algorithms coupled with clean data should guide each user in a way that's personally catered for them.

Finally, offering a personalized experience gives you the flexibility you need to break down silos. Perhaps you're experiencing a disconnect at your institution between various departments. Maybe the people in your loans division don't partner closely enough with the people in your cards department. By integrating each depart-

ment within a single mobile app, you can start to close that gap and differentiate your institution in the eyes of account holders.

Like so many things in mobile banking, it all hinges on data. As Chris Skinner, author of *Digital Human*, writes, "The silo divisions of banks mean that they ignore their greatest competitive advantage—data." You can unite and integrate your data in a single mobile experience, bringing a sense of unity to your institution that you may currently be lacking.

**“The silo divisions of banks mean that they ignore their greatest competitive advantage—data.”**

**Chris Skinner, author of *Digital Human***

## 9. Offer a **Full Range** of **Features**



Unless you're spearheading a mobile banking initiative at a megabank, it rarely makes sense to build your own solutions — especially when a partnership can produce better results. Take Washington Federal, for example. Brent Beardall, CEO at Washington Federal, recognizes that the role of his bank isn't to produce every piece of technology in house. "We're not going to be the ones out there inventing technology," he says. "We want to find people that have it, partner with [fintechs] and be implementers of it. That's where we want to be. And to do it fast and do it reliably."

It's a process that tech companies — even cutting-edge companies — embrace. For instance, Apple outsources certain components of their tech to third-party vendors. Likewise, your competitive advantage depends on how you combine certain components in a way that best delights end users.

Washington Federal sees opportunity in this partner-driven innovation. "This idea came about that we would be good integrators so that we could sort of plug and unplug whoever was coming up with the best solution, because there's a lot of disruption right now," says Cathy Cooper, executive vice president and retail banking group manager at Washington Federal.

In the past, Washington Federal had to build a new connection for every third-party application — a task that burdened their team and created an endlessly complicated set of possible iterations (visualized in a chart that Cooper called "the spaghetti chart"). Now, with a layer of middleware, Washington Federal only has to connect to that layer, which connects to all other applications. This empowers Washington Federal with the agility they need for whatever apps come next.

"We want to think of ourselves as a technology company that just happens to work in the banking industry, rather than a bank," says Cathy Cooper, executive vice president and retail banking group manager at Washington Federal.

More than anything, you want a partner — not just a vendor. This equates to extensive and positive collaboration at the business level. It means you're focused on working together throughout the relationship to succeed at hitting key business objectives. It also means you want dedicated support that doesn't stop after launch.

You want a partner who engages with you like they're part of your team, keeping their top-level goals and initiatives at the heart of what you're working towards, a partner you can lean on to help you shape your business objectives and strategy.

## 10. Build for the **Future** of Banking

Currently, the word “mobile” mostly refers to smartphone apps. This is understandable because it’s how most consumers approach mobile. However, the future of mobile is much bigger than phone apps. It includes voice-enabled devices, digital watches, smart fridges, thermometers, virtual reality, emotional trackers, and more — all of which will hinge on clean data.

The power and value here will increasingly stem from the data integration between financial institutions, mobile banking, and a range of device types. Banks could even offer a premiere experience (think Amazon Prime) that enables real-time suggestions based on a specific context, saving their users money in ways that are completely unheard of today.

**Voice-enabled devices** - Financial institutions that integrate a user’s mobile experience with Alexa or Google Assistant give their users the ability to easily ask their device how much they spent on a certain item last month or how much is left in their entertainment budget.

**Chat bots** - Chances are that you don’t have the ability to hire enough financial advisors for each user who wants one. But with the right data and algorithms you can establish an intelligent, guided ecosystem that moves each user to true financial strength.

**Digital watches** - Watches and other wearables give users a view of their account balance and budget in the moment they need to know the information. Is the user about to overspend in their shopping category? With an integrated watch, they’ll know immediately.

**Smart fridges** - The ideal smart fridge scans each item so it has data on what’s inside. This way users can see which foods need to be eaten first and which foods they’re running low on. By integrating with budgeting data at a financial institution, users will be able to see when a food order is getting close to going over budget directly from their mobile banking app.

**Smart thermometers** - It’s one thing to set a digital thermometer to a comfortable temperature and another thing entirely to know how much each change in degree will cost over the course of a month. By analyzing monthly utility data and tracking that to historical changes in weather and thermometer settings, a financial institution could show users the cost of each change in degree in real time.

**Virtual reality** - Say a user wants to tour six or seven homes before deciding which one to buy. If you offer the ability to tour these homes virtually before making the decision, you’ll establish your institution as top of mind for the user when they decide to get a mortgage.

**Emotional trackers** - Although they’re currently in a primitive state, emotional trackers could map shifting moods through the day. Mapped to spending data, these trackers could illustrate the context behind out of control spending. Does such spending happen when the user is irritable? Confident? Calm? By merging these data sets, users will get a sense for when they make poor financial decisions and receive an alert ahead of time. Since so many human decisions are driven by moods and desires, this might be the key to unlocking better behavior.

**Whatever else the future might bring** - Who knows what new devices human beings will create next? By building the right foundation now, you’ll be ready for it.

Many of these scenarios are at the cutting edge of what banking will mean in the future. The key is to note that mobile banking can’t strictly be limited to what’s possible on a phone. The future of banking will be embedded and integrated so seamlessly that users will be delighted to see your brand appear in so many contexts as they navigate their financial lives. They’ll come to see you as a trusted advisor and feel deepened loyalty for your brand.



# Conclusion: Offer the **Primary Banking Experience**

The majority of consumers (nearly 70%) currently say they have 1-3 finance or banking apps on their phone — including apps such as Venmo or PayPal. This means that most users will choose a single mobile banking app as their primary banking app.

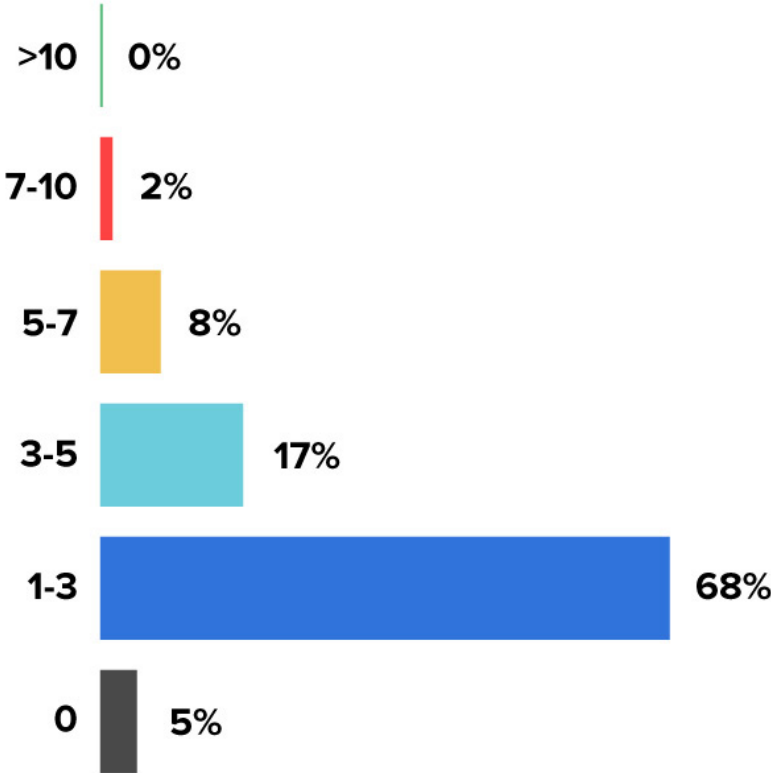
### Will you offer this primary mobile banking app, or will someone else?

If your app reviews get 2 or 3 stars, the likelihood of you owning this spot on the user's phone is next to nothing. They'll find another app to use, and you'll miss out on owning this opportunity. Given that 70% of consumers

say that mobile represents the future of banking (as shown above), this is a major loss. You'll miss out on this relationship and all the data that comes with it.

By contrast, if you own the digital relationship today, you'll gather the data you need to succeed tomorrow. You'll be ready for whatever the future brings and solidify yourself as the go-to brand for your users' primary banking experience. It's the perfect way to win the future of banking. You are in a position to get it right — to integrate the best of traditional banking and digital technology, all for the purpose of delighting end users and earning their lifetime loyalty.

## How many finance apps do you currently have on your phone?



Source: MX Research Survey of 1,000+ US Consumers



Want to see MX products in action?  
**Let's chat.**

[Request a Demo](#)

mx.com

MX TECHNOLOGIES, INC. © 2019

