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Mobile Account Opening (MAO)

Give online account opening a mobile makeover ASAP

Consumers are shopping for banking services with their smartphones and tablets and some are even buying that way. While it's not yet the *iTunes* experience, thanks to advanced features such as camera phone OCR, mobile account opening promises to eventually be far easier than the methods it replaces.

We are on the cusp of mobile account opening (MAO) becoming mainstream and as such, an expected bank capability. Already, financial institutions with MAO have seen 20% of new accounts opened from mobile devices. This is mainly due to the determination and persistence of mobile-first consumers rather than institutions developing a mobile-first account-opening process.

In late 2013, for the first time Americans spent more time online via mobile (apps and browser) than they did via desktop computer. And more than one in three digital banking interactions are now through mobile devices (source comScore).



For consumers using tablets to access banking websites, the experience now is consistent with that of a PC. Once FIs activate the camera and geo-location capabilities, it will be a superior experience. But most banks have not responded to this revolution in device usage. Consumers interacting with them find hard-to-read screens; they'll open but not fund accounts, or they'll quit when they have to revert to physical world steps to print signature cards and bring proof of identity to a branch.

In this report, we focus on the mobile account opening (MAO) experience for checking accounts, and the landscape of solutions and workflows that comprise the end-to-end account-opening process. We focus primarily on account applications from new customers. If you can get that right, it's even easier to extend to existing customers, with their lower authentication and risk-assessment hurdles.

It's a mobile world, and luckily for financial institutions, the smartphone is the perfect window to banking, spending and savings data. Now go out there and prove it to your customers!

*- Jim Bruene, Editor & Founder
jim@finovate.com*

Key research questions

- Do consumers want mobile account opening?
- What are the components of a good mobile account opening solution
- Who are the key providers of supporting technology?
- What kind of growth do we expect with mobile account opening?
- What advances do we expect in mobile account opening?
- What benefits can financial institutions expect from mobile account opening?

About this report

This report is an independent effort from **ONLINE BANKING REPORT (OBR)**. It was authored by Jeanne Capachin, founder of **CAPACHIN Research** and former analyst at IDC Financial Insights. The report was edited by OBR Founder Jim Bruene. The report is available at no extra charge to subscribers of **ONLINE BANKING REPORT** and can be purchased by others through our website. We have no affiliations with any of the companies mentioned, other than as subscribers to our publications and/or participants in our Finovate conferences.

About Online Banking Report and The Finovate Group

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- **FinovateFall** in NYC during third quarter
⇒ Sep 23 & 24, 2014 (*the week before SIBOS in Boston*)
- **FinDEVr San Francisco**: Our first event focused exclusively on developers and builders kicks off in Q4 in the Bay Area (*see FinDEVr.com*)
- **FinovateEurope** in London during first quarter 2015
⇒ Feb 10 & 11, 2015
- **FinovateSpring** in San Jose/San Francisco during second quarter
⇒ Just held on Apr 29 & 30, 2014 (*see back page*)

For more event info, visit Finovate.com; email info@finovate.com or call (800) 418-0980.



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Key Takeaways

- Consumers are already using mobile devices to open accounts regardless of whether banks have optimized for them.
- While you can postpone designing specific mobile solutions, MAO will soon become *table stakes*, an expected component of the mobile user experience.
- By the end of the decade (5.5 years out), as many as half of all accounts will be opened outside the branch via digital channels. And mobile, both native app and mobile web, is expected to represent a large portion of the digital volume (see forecast, pp. 8-9).
- Digital account opening abandonment rates are high. One interpretation is that consumers are being pushed away if the account opening experience is either too cumbersome or not accessible from their mobile device. If that's the case, you risk losing them to a competitor with a better process.

Mobile Account Opening Defined

Back in 2009, we produced a comprehensive report on online account opening (OAO) (see OBR 168/169). At that time, it was just moving into the early mass market and was more of a “nice to have” feature. Five years later, OAO is no longer a luxury. And it's no longer just an online feature.

Long term, mobile account opening is even more important than online desktop. As one banker told us: “Designing for mobile provides a better experience for everyone.”

Much of what is required for mobile account opening is the same as for online, but the varying device sizes and types must be considered. The exceptional abilities of mobile devices provide more opportunity to improve the experience.

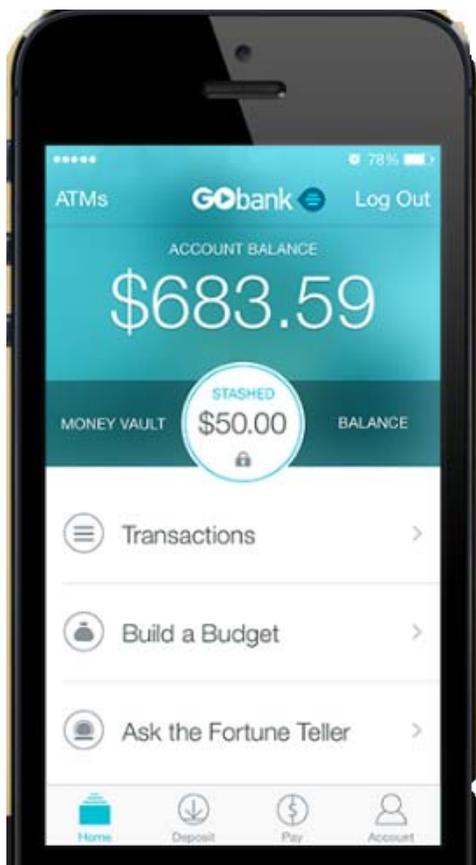
For now, mobile account opening (MAO) is defined as any account opened by a consumer using a mobile device. In many cases, MAO is being accomplished by accessing the institutions OAO through a mobile device. As we look at the future of MAO, we will see processes that take advantage of the mobile device capabilities, and OAO and MAO solutions will become more distinct from each other.

GoBank has an excellent mobile account opening experience which includes the ability to upload a custom background picture for your debit card.

Mobile share of digital banking¶



Source: Comscore Media Matrix 2012¶

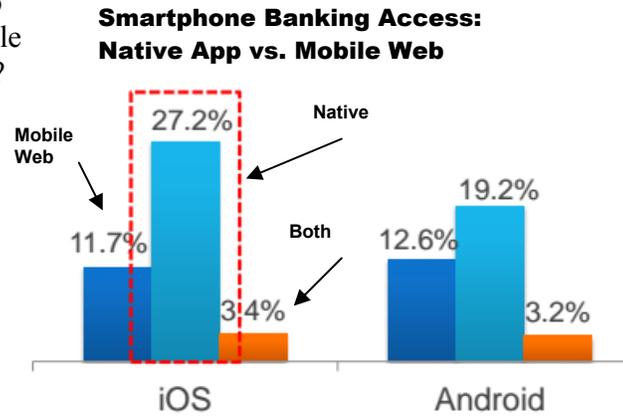


Native Mobile Application vs. Mobile Web

The jury is out, but for the long-term we expect banks will need to support MAO on both the mobile web and in their native app. MAO's goal is to meet consumers where they are, not to provide an extra hurdle.

For existing customers especially, native applications are great as they are more secure and provide a better user experience. When prioritizing MAO development, banks should consider the following:

- **Audience:** How will prospects be delivered to MAO? What options do you provide for mobile outreach, product comparison, and incentives?
- **Budget:** You can use Google Analytics or other tools to see the operating systems customers and prospects are using to access your digital content. This is a good starting point to decide which device types to support – and then decide what you can invest to reach the broadest audience.
- **Brand:** How do you want to represent your brand and user experience to new prospects? The MAO user experience will be their first interaction and will set their expectations.



Source: comScore MobiLens, Q4 2013, 3-month average

Following are some of the important differences between mobile app and mobile web to consider for account opening.

Table 1
Mobile Web vs. Native App Considerations

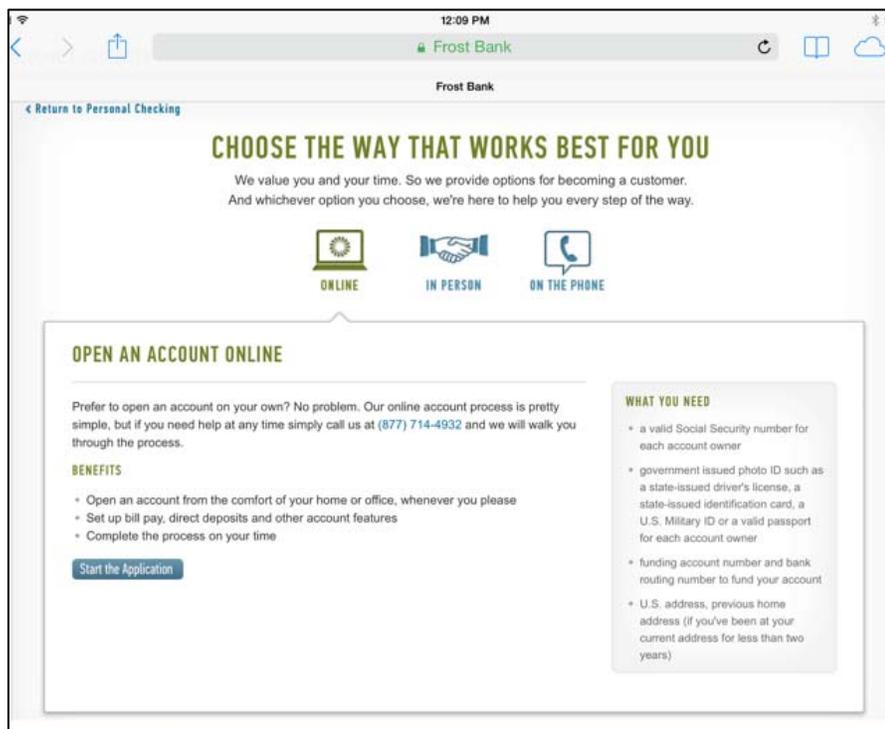
Criteria	Winner	Explanation
Marketing	Mobile web	Mobile websites are searchable, as opposed to mobile apps that exist in walled app stores. How do you plan to market to prospects and allow them to shop for your products?
Features	Native app	Developing apps for each device means that all device features can be supported easily. But, mobile HTML5 is expanding the list of features it supports for mobile web – including camera and some touch capabilities. The difference is narrowing between mobile apps and mobile web.
Performance	Native app	Native apps are typically faster to load since graphics are stored on the device
Cost	Mobile web	Responsive websites can be developed once, and accessed by multiple device types. They are a compromise though, supporting a limited set of device features.
Security	Native app	Apps can access more device features (geo-location, for example) and distribution can be controlled.
Customer experience	Native app	Apps offer a better experience, being able to take full advantage of each device's features, with faster processing, and on and off-line capability.
Immediacy	Mobile web	No download required.
Offline	Native app	Open an account anywhere (once it's been installed).
Personalization	Native app	Important for existing customers so they don't need to re-key data and they can be quickly authenticated.
Product comparison	Mobile web	Changing product catalogs require constant maintenance, so are better suited to mobile web with its change once, distribute everywhere capability.

Mobile Websites & Responsive Design



For consumers researching your bank on the mobile web, they need a solution that does not require an app download. Since you don't want to develop website versions for all the types and sizes of devices, responsive design is a good solution. Most advanced ecommerce sites have moved to responsive design to handle the wide variations in screen sizes. HTML5 allows designers to develop one flexible website that responds to the device's screen size, orientation and operating system.

The screenshots above illustrate responsive web design in action. **Frost Bank's** web design detects the device being used, and then resizes images and adjusts layout. In keeping with its advanced approach to digital design, Frost Bank has a clean initial OAO screen inviting consumers to interact "the way that works best for you." However, if the way that works best for you is to open an account through your mobile phone, that won't work with Frost Bank. Consumers can use a tablet or PC, but account opening through a mobile phone is not supported.



With responsive web design, institutions can take all comers, regardless of particular device, and provide a great user experience. However, even with responsive web design and the technical ability to provide the same experience across devices, there are business issues to address with MAO. Some banks have made a business decision to limit MAO to tablets, not because the technology isn't ready, but because of other concerns.

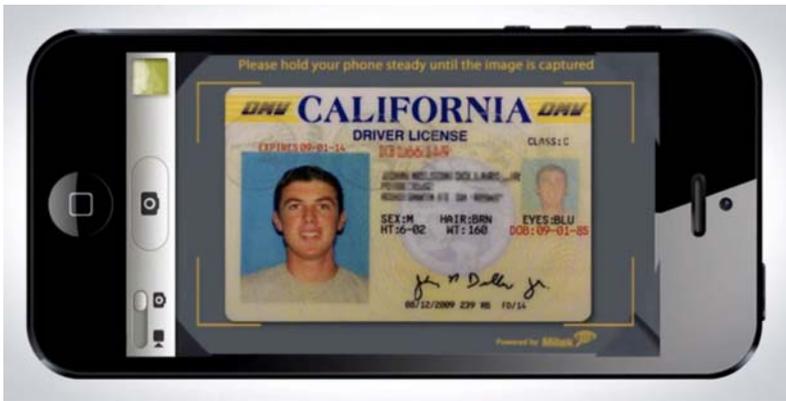
For example, it can be difficult to read the disclosures and agreements that are required to open accounts. Banks that do offer account opening on phones must present their full disclosures, which consumers can scroll through and accept or deny. For

FIs that support both phones and tablets, Andera's research shows that consumers use phones three times more than their tablets. We see this as a mandate for designing for smartphones. Consumers want it, and as we'll discuss, leveraging the device capabilities can make MAO superior to both OAO and in-person account opening.

Hybrid Apps

There is a middle approach that combines features of mobile apps and the mobile web. With hybrid apps, developers can develop device-specific code when it's required, but share code across mobile operating systems as well. This reduces the development and maintenance expense, but provides a presence in app stores and enables use of device features before they are supported by mobile HTML5.

The Future of Mobile Account Opening



Mobile account opening is used by major social networks, ecommerce players and subscription-based services. Financial institutions are adapting to this reality and by 2015 will begin to catch up with their non-financial peers. The top five banks are piloting solutions that are designed for mobile devices and that leverage the following native mobile capabilities.

Cameras

Mobile RDC has trained consumers to use smartphone cameras for banking. This same process can be used to capture documentation, such as a driver's license. Once captured, the info can be used for multiple purposes:

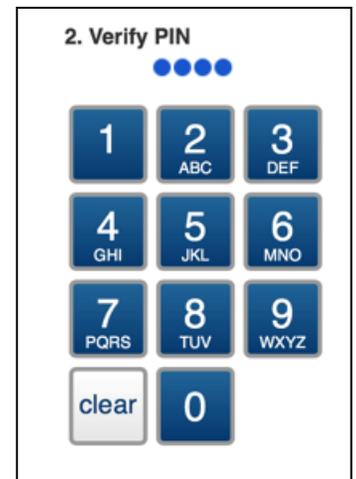
- Identity authentication – The information and picture on the credentials can be compared to government databases
- Pre-populate fields – Using character recognition, the data can be used to pre-fill fields in an account application, speeding up the process and reducing data-entry errors
- Signature specimen – The signature can be captured and used as a signature specimen

Touchscreens

Banks can use the touchscreen to capture a signature and PIN.

Device authentication

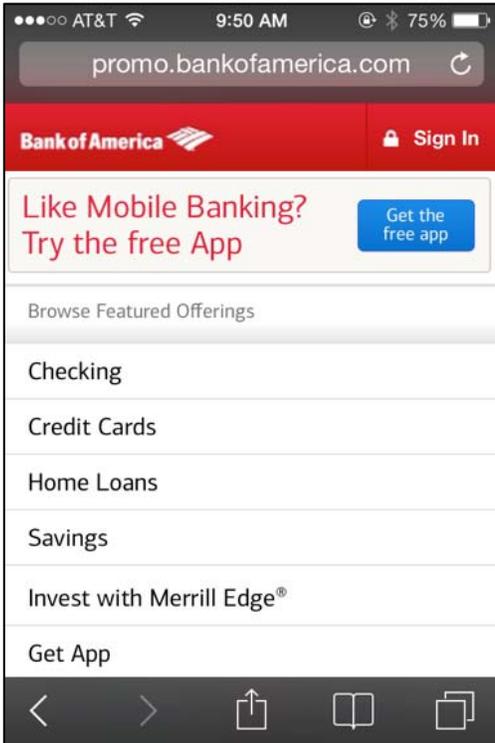
Mobile devices have unique identifiers that can improve the identity-verification process. For example, the phone number can be checked against various databases. Several banks are piloting an offering from Early Warning Systems and Payfone which will provide access to an even more secure mobile-authentication process based on SIM cards.



Location

Banks can use geo-location data to help prevent new account fraud.

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However, even smartphone pioneer **Bank of America**, the first bank to have an app for the iPhone (July 2008), does not currently support smartphone account opening.

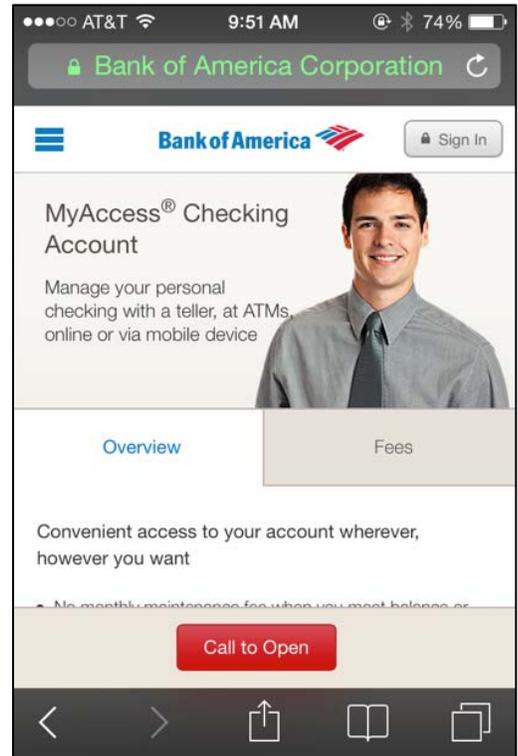
At Bank of America, the first step in online account opening is to determine the customer's state of residence, which drives the product menu. After choosing a product, they begin the opening process.

For desktop PC or tablet users, the same screen is presented with identical options. Whether using a tablet or a PC, the visual is appealing and the format is actionable, with a prominent "Open Now" button.

However, for those using a smartphone, the options change. The first option

is: "Try the free app." This is great for customers, but for non-customers, the app is a dead end if they want to open an account.

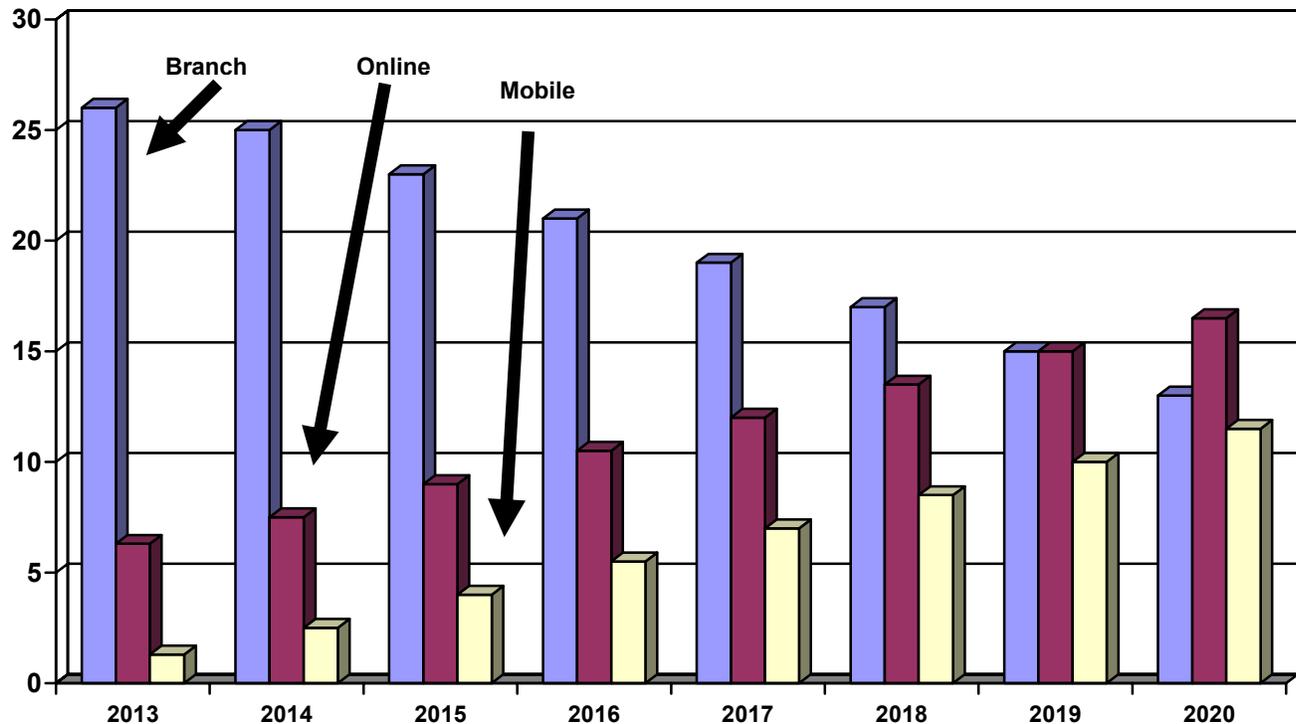
For example, selecting "Checking" leads to a product description and a button that says, "Call to Open."



Mobile Account Opening Forecast

Consumers are using their phones to shop for accounts, so FIs must respond. This means leveraging device capabilities and working with regulators to assure them that digital account opening is at least as good, if not better, than in-person. The forecast below is based on our assumptions that financial institutions embrace tablet AND smartphone MAO during the remainder of the decade.

Millions of Checking Accounts Opened (U.S.) *Expected/Aggressive Case*



Source: Online Banking Report, April 2014

Table 2

Expected Case: Checking accounts opened by method: 2013 through 2020 (U.S.) millions of U.S. households

Method used to initiate opening	Current	Forecast							
	2013	2014	2015	2016	2017	2018	2019	2020	CAGR
Digital total	7.6 mil	10 mil	13 mil	16 mil	19 mil	22 mil	25 mil	28 mil	20%
Online (desktop)	6.3 mil	7.5 mil	9.0 mil	10.5 mil	12 mil	13.5 mil	15 mil	16.5 mil	15%
Mobile total	1.3 mil	2.5 mil	4.0 mil	5.5 mil	7.0 mil	8.5 mil	10 mil	11.5 mil	37%
Tablet	400,000	700,000	1.2 mil	1.5 mil	1.8 mil	2.0 mil	2.2 mil	2.4 mil	29%
Smartphone	900,000	1.8 mil	2.8 mil	4.0 mil	5.2 mil	6.5 mil	7.8 mil	9.1 mil	39%
In-person (branch)	26 mil	25 mil	23 mil	21 mil	19 mil	17 mil	15 mil	13 mil	(9.4%)
Total	34 mil	35 mil	36 mil	37 mil	38 mil	39 mil	40 mil	41 mil	2.7%

Source: Online Banking Report, April 2014

Speculative forecast: +/- 33%

Includes checking accounts opened and funded successfully from new or existing customers.

The forecast also includes prepaid accounts positioned as checking accounts, such as those from Simple and Moven.

MOBILE ACCOUNT OPENING

Table 3

Conservative Case: Checking accounts opened by method: 2013 through 2020 (U.S.)
millions of U.S. households

Method used to initiate opening	Current	Forecast							
	2013	2014	2015	2016	2017	2018	2019	2020	CAGR
Digital total	7.6 mil	9.0 mil	11 mil	13 mil	15 mil	17 mil	19 mil	21 mil	16%
Online (desktop)	6.3 mil	7.0 mil	8.0 mil	9.0 mil	10 mil	11 mil	12 mil	13 mil	11%
Mobile total	1.3 mil	2.0 mil	3.0 mil	4.0 mil	5.0 mil	6.0 mil	7.0 mil	8.0 mil	30%
Tablet	400,000	600,000	800,000	1.0 mil	1.2 mil	1.4 mil	1.6 mil	1.8 mil	24%
Smartphone	900,000	1.4 mil	2.2 mil	3.0 mil	3.8 mil	4.6 mil	5.4 mil	7.2 mil	35%
In-person (branch)	26 mil	26 mil	25 mil	24 mil	23 mil	22 mil	21 mil	20 mil	(3.7%)
Total	34 mil	35 mil	36 mil	37 mil	38 mil	39 mil	40 mil	41 mil	2.7%

Source: Online Banking Report, April 2014

Speculative forecast: +/- 25%

Includes checking accounts opened and funded successfully from new or existing customers

The forecast also includes prepaid accounts positioned as checking accounts such as those from Simple and Moven.

Note: The forecast includes only checking accounts that have been opened and funded successfully in the United States. This includes existing customers opening new deposit accounts, as well as new bank customers.

Forecasting any new capability requires a number of assumptions. We expect smartphones to be the primary vehicle for mobile account opening with tablets remaining more of a niche device. Improving the user experience for phones – with pre-populated fields and leveraging the onboard camera – will be the catalyst for the strong growth we predict.

But the question remains, how strong will the growth be? We decided to represent two views of the future, our expected case in Table 1, which could also be characterized as “aggressive” and a more conservative version as shown in Table 2.

Following are the important differences between these two forecasts:

Expected/Aggressive forecast

In this forecast, online and mobile account opening exceed in-person account opening by 2017. This will happen if:

- Tier 1 financial institutions embrace MAO, introduce “designed for mobile” account opening, and market their capabilities.
- Photo ID capture will be live with at least one tier 1 institution by the end of 2014/early 2015 and the rest of the market will move quickly to adopt the technology.
- Authentication via mobile devices will be enhanced to provide real-time device and user authentication.
- MAO and OAO will be an important marketing tool used by banks and credit unions to both attract tech savvy consumers and to expand reach beyond their geographic footprint.

Conservative forecast

In this forecast, we expect that half of all consumers will still turn to the branch to open deposit accounts in 2020. This future will come to pass if:

- Financial institutions close branches at a slower rate than today
- Regulators and examiners disallow photo capture of identification cards and require physical presentation of an ID.

MOBILE ACCOUNT OPENING

- Technologies to support photo capture and database comparison of ID cards are not in place at the majority of banks and credit unions by the end of the forecast period.
- Real or perceived security breaches targeting mobile devices create an atmosphere of distrust.

National and super-regional banks must prepare for huge volumes whenever they introduce new capabilities and must screen carefully for fraudulent activities at scale. Today, we believe many top institutions are delaying introduction of full MAO so they can introduce new authentication capabilities at the same time. With stronger authentication, banks can increase the proportion of accounts that can be processed straight-through without exception processing. For this reason we expect 2015 to be the break-out year for MAO.

We see a bright future for mobile account opening. We estimate a compound annual growth rate from 2013 to 2020 of 30 to 35%. This growth will come from financial institutions rolling out or improving MAO and will be a response as well to more consumers acquiring and using their mobile devices to access digital content, including banking services.

In 2014, financial institutions will see 2 to 2.5 million checking accounts opened and funded through mobile devices (both smartphones and tablets). By 2020, that number will grow to five- to six-fold to 10 to 12 million. About 1 in 4 accounts are expected to be opened via mobile.

We also will see more institutions using MAO for in-person, but out-of-branch, account opening. Mobile devices will be deployed in the field for new customer events at universities, fairs, and other events. Below are some of the most important forecast assumptions.

Forecast assumptions	Confidence level
Household numbers based on census data and their projections of U.S. population growth of approximately 1 million net new households annually	High
No changes to percentages of banked vs. unbanked households.	High
A slight increase in new checking accounts opened, with growth estimated at about 1 million net new openings per year. About 1/3 of the increase is from new household formation and the rest is from a slight increase in churn. In total, about 30% of households successfully opening a new checking (or primary transaction) account annually.	Moderate
Ratio of online and mobile accounts opened is based on interviews with banks and solution providers.	Moderate
Strong growth in the number and size of institutions offering mobile account opening.	High
No significant change in regulatory treatment of online and mobile account opening.	High
Virtually all government jurisdictions issuing identity credentials will participate in data sharing.	High
Photo capture will be used to capture identity information.	High
Signature-specimen capture will be required by fewer institutions and will become fully digitized.	High
Banks and credit unions will accelerate branch closures, increasing reliance on digital channels.	High
By 2020, 80% of consumers will be able to open accounts at their chosen institution using a mobile device.	Moderate

Design and User Experience Trends

MAO will become mainstream, because consumers love their tablets and smartphones. Currently, two types of financial institutions are at the fore-front. First, those positioned for “mobile-first” consumers such as **GoBank**, **Moven**, and **Simple** (BBVA). Those three new U.S. entrants are much like the Internet-only banks of the late 1990s; their target customer has little need for traditional bank branches.

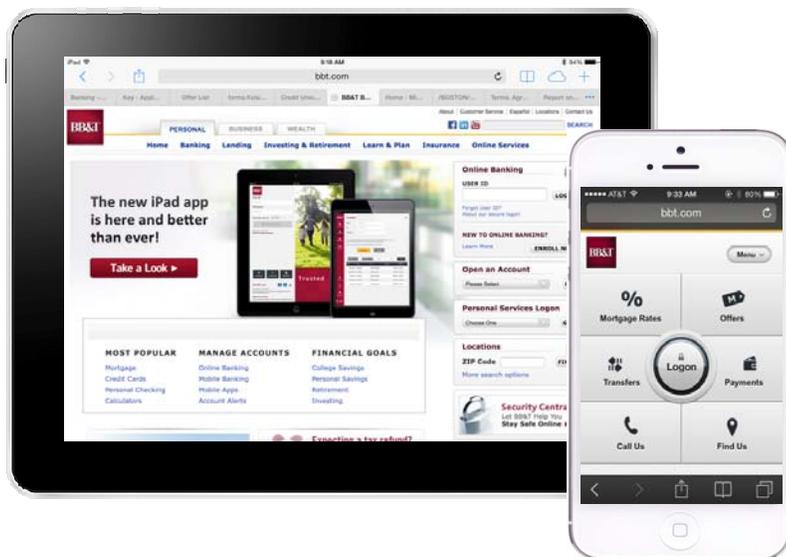
The second type includes outliers such as **Navy Federal Credit Union** and **USAA**. These two FIs serve a member base which is more global and more mobile than the mainstream consumer. They are full-service institutions with small branch networks, but they have embraced digital to efficiently serve their military and retired military member base.

But MAO is also beginning to be offered by traditional banks and credit unions. It’s a good way to appeal to heavy smartphone users, many of whom are young and wealthy.

Here are the key issues when building a state-of-the-art mobile account-opening experience:

1. Clear navigation

BB&T – early to OAO – has embraced both tablet and mobile-phone account opening. The company has likewise developed a MAO approach that embraces all devices. BB&T decided to develop a solution internally to control the user experience and product lifecycle. At this point, the bank has limited smartphone account opening, available only to existing customers.



Using responsive design, the presentation changes depending upon the type of mobile device. For smartphones, the screen is optimized for both customers and non-customers. Customers have a front-and-center Logon button, and non-customers are presented with the six most common options, plus a menu button for other activities, including mobile account opening.

Consumers using a tablet are presented with a completely different screen, similar to what PC users see, with the addition of a popup inviting them to download the mobile application. For both phone and tablet users, clicking through to *checking accounts* leads to similar navigation including mobile

account opening. This device-specific approach meets a few specific business goals:

- Responsive web design provides device-specific presentation without having to maintain multiple versions of code.
- Users are presented with the optimal UI, and interactions are quick and easy.
- The elegant design is good marketing. Mobile-first consumers aren’t put off by a clunky user interface and are able to transact right from the start through their preferred channel.

2. Prepared and motivated consumers

Abandoned applications remain high. There are many reasons consumers start and then stop an account-opening process. But one easy way to reduce drop-off is to make sure they are prepared for the process. **Worker's Credit Union (WCU)** in Fitchburg, Massachusetts communicates in two ways with its "Before You Apply" page.

First, the four items needed to complete the process are clearly defined. Second, the tabs provide the four steps to open a new account. The credit union started looking at online account opening in 2005 and chose uMonitor at that time, which was later acquired by D+H.

WCU has a strong member base within its branch footprint, but has reached the saturation point. It is using MAO and OAO to expand its reach across its entire state-wide field of membership.

The CU is using Google pay-per-click ads to market high-interest savings to non-members with a link to their website. These high-interest rates motivate consumers to complete the process and gain some high-rate deposits.

WCU still has high abandonment rates, but their completed applications and new deposits are more than meeting expectations. Accounts opened online, including mobile, are assigned to their online branch. This online branch opened in 2011 and is already the third largest branch by deposits, having opened more accounts than all their other branches combined.

1. Personal Information
2. Accounts & Services
3. Fund Account
4. Confirmation

Before You Apply

* = required field

Welcome to the Workers' Online Account Opening System. You can open a new account or become a member anytime, anywhere, at your convenience.

This application process takes approximately 10 minutes to complete and you must be 18 years old to use the online account processing. Before we get started, you will need the following items:

- Driver's license
- U. S. social security number
- U. S. citizenship or resident alien status
- Account information for accounts that you would like to close and transfer to Workers' Credit Union

If you are logging into Home Banking please refer back to www.wcu.com. The log in screen is in the top left hand side of the screen.

For your security, the system will log you off if there is no activity for several minutes.

Important Information About Procedures for Opening a New Account

Please note your application confirmation number when you first log in. The confirmation number can be used to log back into the system at a later date if you wish to continue completing your application or if you want to print your signature card.

Please note:
When you reach *Step 3: Fund Account*, you are given the option of funding by "Transfer from other financial institution" or "Check by Mail". If you are transferring funds from an existing Workers' Credit Union account, please select "Transfer from other financial institution" and continue by filling out the necessary information.

Workers Credit Union clearly lays out the necessary information prospective members will need to apply.

3. Followup and next steps

Getting a new deposit account is just the first step; making it the *primary* account is next. Capital One has a comprehensive multi-channel follow-up program, designed to quickly shift new customers' banking activities to the new account. In many ways, Capital One is a standout with its MAO process. There are two schools of thought with online and mobile account opening. One approach is to limit the initial stage to a few simple steps, then follow up to complete the process or set up additional services.

 Your 360 Checking is going through our initial account opening processing. This is usually completed within 2-4 business days of the day you signed up. We will send you an email when your 360 Checking is ready for further transactions.

 Your DIGITAL FEDERAL CREDIT UNION account link still needs to be confirmed. Until this is completed, you cannot transfer money to this account. Go to [External Accounts](#) to learn how.

1. Create PIN

● ● ● ●

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
clear	0	

Security Question

What is the street number of the house you grew up in? ▼



You've successfully opened your 360 Checking. Want a buffer? [Set up Overdraft Protection](#) to make sure you're protected if your balance dips below \$0.

Dear Jeanne,
Customer Number: XXXXXXX443



Welcome to 360 Checking

Your 360 Checking is ready to go. All verifications are complete - now it's time to start using it.

Make the Most of Your 360 Checking

- Set up Direct Deposit. Download a [Direct Deposit](#) form today.
- Pay your bills online for FREE with [Bill Pay](#). Just sign in and go to the 'Payments' tab to add your billers.
- Send money securely for free with [Person2Person Payments](#).
- Access cash at over 38,000 free Allpoint® ATMs nationwide. [Find one near you](#).
- [Order a checkbook](#) (50 checks for \$5.00).

Access Your Account

1. Go to capitalone360.com and enter your Customer Number.
2. Enter your Sign In PIN.
3. That's it.

Thanks.



Capital One 360's emails always show your first name and the last three digits of your Customer Number. If you don't see those two items at the top, don't respond, don't click. Just delete. And remember, don't email us with any personal info. Learn more at capitalone360.com/securityzone

The second approach is to capture as much information as possible in the first session. This is the approach Capital One has chosen. Within the MAO process, security questions are established, passwords are set for online banking, the device can be registered, and overdraft protection requested. Capital One's accessible language and simple, clean user interface are impressive. Because the process is simple and engaging, they can take consumers through a few extra steps. With vast experience in credit card marketing, its acquisition of ING Direct, and a focus on customer acquisition, it is obvious it is using that expertise to attract digital deposit customers.

In addition to its in-session data capture, Capital One follows up with email messages, a debit card, check book, and a welcome package, all within days of account opening. The email message is first a welcome message and also an actionable step with links to either sign up or get more information about additional services.

4. Keep the process digital

There are times when banks take their consumers into the physical world during the MAO process. A typical mobile account opening process ends with consumers left with two additional tasks: providing a photocopy of a government issued ID and a signature card.

Some banks include these steps within the application, as shown here. In this example, the consumer can take a photo of their ID or scan it and upload the file. Likewise, they can print the signature card, sign it, and then forward the scanned image or photo to the institution. Other FIs streamline the MAO process and request documents as part of the welcome process in a confirmation email.

This requirement for physical documents remains a stumbling block to a fully digital experience, but we see technology providers, banks, and regulators quickly advancing new approaches to meet the following requirements.

File Upload	
Supported formats	<i>pdf, jpe, jpeg, gif, jpg, png.</i>
Document Name	Details
ID Card	<input type="button" value="Choose File"/>  1 photo <input type="button" value="Upload File"/>
Signature Card	<input type="button" value="Choose File"/> no file selected <input type="button" value="Print"/>

Customer Identification Program Requirement: All banks and credit unions require a government-issued ID as part of their customer-identification program. More conservative institutions require consumers to forward a photocopy of a government issued ID before their account is opened. It is becoming common now to eliminate capture of the photo ID by using digital verification. Many issuing jurisdictions will provide verification services of driver licenses, military IDs, and other government-issued credentials. For identities issued by these jurisdictions, institutions can capture name, address, and identification number and compare it to the information on file.

• Based on your background, in what county is '162 North Street'?

- Barnstable
- Bristol
- Middlesex
- Norfolk
- Plymouth
- I have never been associated with this address

As a secondary verification, banks use out-of-wallet questions to verify that the applicant knows private information derived from credit-reporting agencies. Not all users are comfortable putting this personal info into their device. While unlikely, there is the possibility the info could be intercepted by fraudsters.

For now, this approach has been accepted by regulators, and is useful as part of a layered approach to identity verification. In this way, FIs can maintain the all-digital interaction. As we'll discuss later, though, there are new developments in testing that provide better verification using smartphone features.

Signature Specimen Requirement: The second instance where most banks require out-of-band action is capturing a signature specimen. Since wet signatures are still used to verify consumer identity when they write checks, most institutions capture a signature specimen as part of their fraud-detection process. Electronic signatures are acceptable as a legal substitute for wet signatures, but few banks and credit unions use them for signature specimen. Electronically captured signatures often don't match the penned signatures used on checks. There is a work-around to capture signatures that is well suited to online and mobile account opening but it has not been implemented by most institutions.

With image check processing, banks can capture signature specimens from the first check written. According to its deposit agreement, **SunTrust** is using this approach.

5. Pre-populate known information

Both online and mobile account opening is streamlined when the consumer is already known. The first question every bank must ask is: "Do I know you already?" Consumers with online banking relationships can sign in with their credentials,

To begin the account opening process, please tell us if you are:

(Select one)

New to BB&T

A current BB&T client

A current BB&T client who uses online banking

creating a secure connection to access profile information. In addition, when using document photo capture, you can capture information from the identification documents and use it to reduce keystrokes.

6. Don't be shy

Cross-selling does not have to be either offensive or intrusive. With MAO, banks have

BB&T Fundamentals comes with these [account features](#). Click **Remove** to delete any unwanted options.

<p>Debit Card</p> <p>Use your Debit card to make purchases from retailers and to get money from your account at any BB&T24 ATM or any ATM displaying the STAR?, PLUS? or Visa? symbols. Plus, you'll automatically be enrolled in our free BB&T Rewards program and earn cash back when you shop for everyday items at participating retailers.</p>	Remove
<p>Free Online Banking</p> <p>Manage your accounts at your convenience with BB&T OnLine®, our Internet banking service. It's quick and easy to view account balances, print check images, monitor transaction activity and pay bills.</p>	Remove
<p>Free Online Statements (requires online banking)</p> <p>View, print and save your account statements through BB&T OnLine. Choose our environment paperless option instead of mailed statements to reduce your risk of identity theft and fraud.</p>	Remove
<p>Free Mobile Banking (requires online banking)</p> <p>Take your banking wherever you go with BB&T OnLine. Manage your accounts, transfer money and receive account information on your mobile phone, Android™ or Apple® device.</p>	

We Also Recommend

Overdraft Protection

Link your checking account with a BB&T savings account, and we'll automatically transfer available funds from savings to make up the difference if you exceed your checking balance. You'll pay a transfer fee of \$12.50 (fee is waived for Elite Gold clients) only when you use this feature, helping you avoid costly overdraft fees and the hassle of returned items. [Learn More](#)

Yes, I would like to open a new BB&T eSavings to link to my BB&T Fundamentals account for overdraft protection.

[Return to top](#)

[Return to top](#)

access to data to identify consumers and to select appropriate financial products. Although some banks still see the branch as the best selling environment, we disagree. MAO and OAO provide a perfect opportunity to offer appropriate products while the consumer is attentive and interested.

At BB&T, consumers are presented with an opportunity to opt out of features. As this screen-shot illustrates,

account features are presented with a brief description. Customers are encouraged to choose options that increase usage and transaction fees (e.g., debit card) and reduce operating costs (e.g., online statements). The bank also offers to set up overdraft protection. Overdraft protection and savings accounts are the most common cross-sell products offered during account opening.

At some banks, consumers are asked to provide their income, source of deposit funds, or employment status as part of the account opening process. By capturing this information, the bank has more freedom to offer credit products while complying with fair lending requirements. However, most banks prefer to avoid questions that could increase abandonment rates. Once the initial account is opened, that info can be captured later.

7. Don't ignore quitters

Banks should encourage consumers who have started the application process to come back and complete it. In some cases it merely takes reminding the customer. But other consumers need additional help via chat or telephone support.

A surprising number of banks ignore potential customers who wash out during the account opening process. Most have dashboards to monitor drop outs, declines, and exceptions. You should use these diagnostic tools to follow up with high-potential applicants and improve the process overall.

The easiest win is to reach out with a simple reminder to come back and complete the process. KeyBank gives applicants a month to come back and complete the process. BB&T calls and emails prospects to entice them back.

Your request has been received. [View this email as a web page](#)

KeyBank  **Your application was Saved**
Unlock your possibilities

Jeanne,

Thank you for visiting key.com. Your application for the following product(s) will be saved until 04/24/2014 11:07 AM ET:

- Key Express Checking®

To finish your application, simply cut and paste the following link into your Web browser:
www.key.com/finish
When prompted, enter your UserID and Password.

We appreciate your business and look forward to serving you.

Note: Interest rates are subject to change. When you return to your application, remember to check our current interest rates before submitting.

 1-800-539-9055 |  [Email Us](#) |  [FAQ's](#)

personal banking | business banking | private banking | customer service

8. Provide advice

PNC, like Capital One, is a standout with its mobile experience, as long as you're on a tablet. Mobile phone users accessing PNC.com find the main site with its small text and poor navigation. PNC is not using responsive web or redirecting to a mobile optimized site (though, if you know the URL, you can access a smartphone-optimized login-page at m.pnc.com). With the tablet version the bank has steered its own course with apps and an excellent user experience. It uses Andera oFlows for account opening.

Answer these simple questions to find the checking account that is best for you.

These questions will help us determine the right edition of Virtual Wallet® for you.

Select appropriate amounts for the following:

Average monthly balance in your checking account

Total monthly direct deposits to your checking account

\$0 \$0 \$5,000+ \$0 \$0 \$5,000+

◀ Previous 2 of 2 Get Recommendation

The bank was a PFM pioneer with the launch of Virtual Wallet in 2008. While the account was originally targeted to younger customers, it's now available to all PNC customers.

What PNC does better than anyone is put their consumer in the driver's seat. The typical checking account shopping experience is a list of checking products with different attributes and nondescript names. In contrast, PNC asks several questions about expected usage, and then recommends pertinent options.

The tablet MAO process is fast and fully digital. After completing the application, onboarding is facilitated with links to *Quick Switch* and *Quick Start* guides.

Virtual Wallet® with Performance Spend

You get the full suite of innovative online tools that come with Virtual Wallet plus, earn higher rates as your savings grow and bonus rewards with your PNC Visa® Credit Card.

Features

- Based on your responses, your checking account balance or direct deposits will help you avoid the \$15 monthly service charge
- Get bonus rewards with your PNC Visa Credit Card
- Reimbursement of non-PNC ATM fees and other bank's surcharge fees. [See how much in your area.](#)
- Free transactions at over 7,200 PNC ATMs
- Account earns interest on balances of \$2,000 or more
- Get bonus rates on select CDs and IRA CDs
- Earn cash with PNC Purchase Payback®¹

Learn More Apply Now

At PNC, MAO/OAO are integral to its strategy of attracting digital consumers with a superior UX. What's missing is smartphone account opening, but we look forward to that soon.

9. Include branches in the online process

Elevations Credit Union uses the same software platform for account opening at any location, branch, university, phone or online. The in-branch experience takes place on a desktop as usual, but using a screen positioned so that the consumer can follow along. In its two newest branches, tablets can also be used for account opening.

This omni-channel experience includes the same foundation of software, processes, and validation. Also, when members open accounts independently, they are asked for their preferred branch.

PREFERRED BRANCH

Which branch is most convenient for you? *

In this way, the credit union offers modern technology that leverages its branch network while offering a welcoming experience to its members. We see tablets improving not only self-service account opening, but also in-person. For example, using a tablet camera to capture credentials and verify them lets you leverage the same CIP for MAO and in-person.

10. Push for electronic funding

An important last step is to transfer funds into the new account. To reduce unfunded new accounts, banks usually try to push funding with electronic payments. Most offer three choices: debit and/or credit card funding; checking/savings account electronic transfer (ACH); or mail-in/drop-off a check. A few also offer wire transfer as an additional option.

At BB&T, new customers opting for a paper-based initial deposit are encouraged to switch to electronic. As you can see in the inset, BB&T's pop-up box asks "Want to make this easier?"

then presents faster alternatives.

Choose your preferred deposit method:

- Electronically transfer funds from a BB&T account
- Electronically transfer funds from another bank account
- Debit Card
- Mail in a check
- Make a deposit at a BB&T branch

Want to make this easier?

Change your selection above to one of these faster deposit methods:

- Electronically transfer funds from another bank account
- Debit Card

Advantages of funding now:

- Access your account faster
- Get your debit or ATM card sooner
- Avoid a trip to the bank or post office



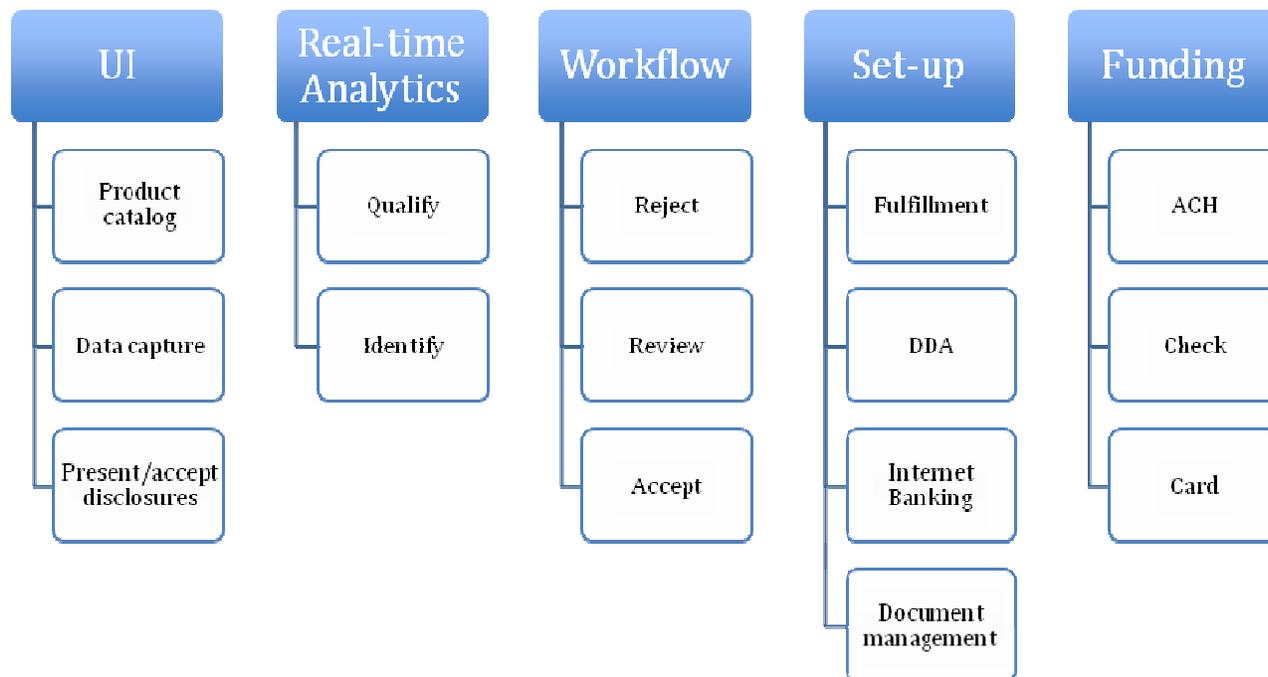
The Business Case for Mobile Account Opening

There is no arguing that the MAO business case is difficult to make. Since most mobile customers could be persuaded to open up a desktop browser to open an account, the sales lift from MAO is hard to quantify. But consumers expect MAO and it will quickly become an expected. The only question is whether you want to be early or later in introducing it. Following are the benefits of moving sooner rather than later.

Benefit	Description
Extend reach to new and desirable consumers	<p>A common expectation when banks roll out MAO is that they will attract a younger demographic. Instead, they find not so much a younger demographic, but applicants who are more comfortable with digital processes. It's not just young people who use their mobile devices. When we dig under the covers we see that tablets are often used to open accounts.</p> <p>It's no surprise that banks see a wealthier demographic using tablet MAO. After all, tablets are often luxury items attracting upscale users. But as tablets and smartphones become mainstream, the MAO demographics will approach the average. What will be long lasting with MAO is the ability to reach beyond the financial institution's geographic footprint, attracting mobile-first consumers who will be heavy users of online services but may never visit a branch.</p>
Respond to changes in consumer habits	<p>OAO in its first iteration was designed for PC-based consumers. Banks must now adapt their solutions to accommodate devices that weren't anticipated and to have capabilities that enhance account opening. MAO will very soon be as fraud-resistant as in-person account opening and easier than PC-based account opening.</p>
Cost savings & improved cross sales	<p>The cost-savings calculation is difficult since branches can't be closed and staff reduced just because account opening moves online. However, moving simple openings online can free branch staff to focus on different activities.</p> <p>Likewise, branch sales reps can use many MAO features to improve the branch opening experience as well. Consider a customer service representative capturing identity documents with a click of an iPad instead of a walk to the copier. If the 40-minute process of in-person account opening can be shortened to the 5 minutes of an MAO, you've got a much happier new customer. The banker can then spend the extra 35 minutes training a happy customer on their digital offerings or exploring their financial needs, rather than having an antsy new customer who had no idea it would take so long to open an account.</p>
Faster account activation	<p>We know that most consumers already shop for financial products online and most still go to a branch to open. The more time that elapses between the online research and the "stop at the branch" errand, the more likely you are to lose the sale.</p> <p>With MAO, consumers can shop and open in the same session. And with electronic funding, debit cards can be activated and mailed to consumers immediately. As long as underwriting processes are similar, fraud rates should remain constant.</p>

Solution Components

So far, we've focused on the user experience and provided the consumer point of view. But successful MAO is a lot more than a pretty face. The diagram below provides an overview of the major components of a mobile account opening solution.



User Interface (UI)

MAO in its current incarnation is online account opening presented on a mobile device. Most banks integrate an off-the-shelf OAO solution into their online banking experience. The solutions are often from different providers, although partnerships can make it easier to integrate the two software products.

OPEN NOW

Typically, shopping/ product comparison is embedded within the online banking solution. When the consumer clicks *Open Now*, they are redirected to the account-opening solution with the following capabilities:

- Captures consumer information
- Pre-populates information for existing customers using calls to customer information files
- Presents deposit agreements, fee schedules, and other required documents and captures acceptance in accord with electronic signature legal requirements
- Provides integration with analytics and data providers to qualify and identify consumers in real-time
- Funds accounts directly or via integration with payment providers
- Captures documents via upload for ID and/or signature capture
- Integrates with DDA, product catalog, CIF, internet banking, document management, and workflow solutions

Real-time Analytics

Financial institutions will leverage a mix of decisioning tools to identify and qualify consumers. For most, the starting point is the mix of tools used for in-person account opening supplemented with solutions designed for the digital environment.

Identify: Customer identification programs (CIP) must be deployed consistently across all channels, yet must also adapt to unique attributes in each channel being used. Banks must use documentary evidence, and they can optionally choose to use non-documentary methods of identifying consumers.

For documentary evidence, a government-issued ID is the most common. Through data brokers, issuing agencies can verify that a driver's license number, name, and address match those on file. FIs using this type of document validation will also use a secondary identity check, typically out of wallet questions provided from a credit bureau.

With these combined elements, institutions are moving away from requiring a photocopy of an ID and can keep the process digital. There are also other behind-the-scenes identity checks invisible to the consumer, for example:

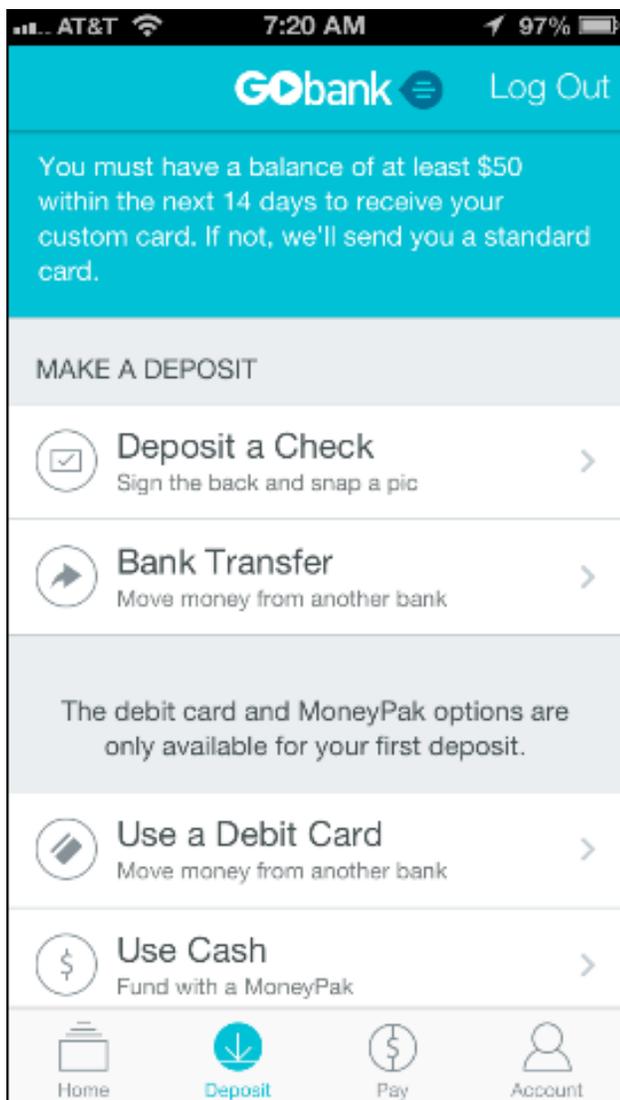
- Has fraudulent activity been associated with the consumer's address, phone number or device identity?
- Is the device really a mobile device, or is it a PC spoofing a mobile phone?
- Where is the device located?
- Is the phone number associated with the consumer?
- Does the consumer show up in typical Internet sites such as Facebook, LinkedIn and other social networks?

Qualify: Once a positive identification has been made, banks must decide whether to offer a deposit account. Inquiries to data providers will show if the consumer has had an account closed for bankruptcy, unpaid NSF items, or other derogatory information. This qualification process must be the same regardless of the channel in which the consumer is applying and must comply with anti-discriminatory regulations. Analytics solution providers include the credit reporting bureaus, Lexis Nexis, ID Analytics, FIS and others.

Workflow and Setup

Since we are so early in the adoption curve, many institutions have not yet incorporated workflow tools as part of their digital account opening processes. At some FIs, and not just small ones, account applications are processed manually on the back-end. Customer service representatives review documents, key data into DDA and CIF systems, mail welcome packets, and request debit cards and/or checks from providers. Ideally, though, FIs should use a workflow solution to ensure safe passage from the account opening solution to the back-end systems.

Typical components of a workflow solution are business rules, document management, messaging, monitoring, and integration. The workflow system will support multiple channels, and integrate with DDA, CIF, fulfillment, and enterprise document management systems. With a workflow system in place, financial institutions can expand the account opening process without worrying about input errors or complicated operational processes. Account opening can include establishing online banking credentials, ordering checks, and cross-selling additional products. Both Andera oFlows and D+H uMonitor include workflow as part of their solution. Zoot's zInitiate is a purpose-built account opening workflow solution.



Funding

Except for paper checks, new account funding requires access to payment systems. Banks typically offer ACH and/or card payments for funding. FIs can also use funding as a way to provide another identity-verification step. The bank initiates one or two small dollar ACH credits to source account. Before the full funding transaction is initiated, the consumer must verify details of those small deposits. Funding may be a component of a MAO solution, or it can be a stand-alone component. Solution providers include Yodlee, Fiserv OpenNow/FundNow, and FIS PayNow.

GoBank offers four options to fund new accounts:

- Paper check
- Electronic bank transfer (ACH)
- Debit card
- Cash (via MoneyPak purchased at major retailers)

MAO Solution Providers

Mobile account opening is evolving quickly, and there are literally hundreds of software solutions and data providers that can be deployed as a component of mobile account opening. In this section we provide brief descriptions of a handful of the solution providers who are specialists, or who are advancing MAO capabilities now.

MAO vendors are the same as for OAO, with Andera (recently acquired by Bottomline Technologies) and D+H the leading providers. Core banking and internet banking providers are also offering solutions, often partnering with specialist providers.

Andera (Bottomline Technologies) (Providence, RI)

Launched in 2004 and acquired by Bottomline Technologies in March 2014, Andera is the vendor most associated with online account opening (at least in the United States). It now has a customer base numbering 500 institutions. Andera has done tremendous work in making online account opening accessible to even the smallest financial institution.

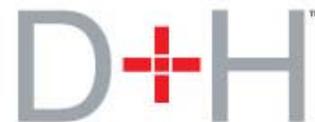


Andera's oFlows is a software-as-a-service solution, using customizable templates and responsive web design. oFlows won multiple Finovate *Best of Shows* for its account opening solutions. Check out its last demo before being acquired by Andera. finovate.com/fall11vid/oflows.html. The solution provides a user interface and workflow on the back-end. Institutions deploy the solution through their digital banking offerings, and they are using it as well for in-person account opening in branches and at events. The management console provides work queues for applications that require manual intervention, monitoring and tracking of completed and abandoned applications, and security features.

With new ownership, Andera should be able to accelerate new product development, and will have the deep enterprise-software experience of the Bottomline team to help them grow.

D+H (Lake Mary, FL)

In 2010, D+H dhltd.com acquired uMonitor and its uOpen online account opening solution. Like Andera, uMonitor was a startup with a strong online account opening solution and a suite of related solutions serving the community bank market. uOpen provides a customizable front-end and a responsive user interface with business rules. It supports pre-population of fields for existing customers, and appropriate navigation and display options for tablets and phones.



When combined with uSwitch, uOpen provides a pre-integrated funding solution. The solution can also be adapted for in-person account opening by providing consistent user experience and processes across channels. uOpen can be implemented as part of the suite of D+H solutions, or in a multi-vendor environment. The uOpen solution includes a front-end UI, workflow, funding, reporting, and decisioning. They also offer a "switch kit", aimed at helping institutions not only to open an account, but also to increase the odds of that account becoming the primary transaction account.

Early Warning Systems (Scottsdale, AZ)

Early Warning Systems
<earlywarning.com> is a bank-owned
(Bank of America, BB&T, Capital
One, JPMorgan Chase and Wells
Fargo) data aggregator. Originally started as a way for financial institutions to
safely share bad check data, it has evolved into a bank fraud protection platform.
Member banks employ Early Warning Systems, not to duplicate or improve upon
existing solutions, but to look at gaps and develop new approaches. It has a
mandate now to develop new approaches to securing mobile devices.



Particularly relevant to MAO is its *Identity Chek* product which provides access to government databases to verify credentials. There are 62 U.S. state and federal government jurisdictions that issue credentials. Currently, Early Warning Systems can verify the credentials of about 60% of U.S. consumers, and they are actively working with the remaining jurisdictions to increase that percentage. One of new frontiers that Early Warning Systems is making available to banks is mobile device prints. These device prints offer a more accurate method of identifying consumers and establishing trust in the mobile channel.

With Early Warning Systems' revenue sharing and its approach to data governance, it has been able to build a bridge between banks and mobile operators to share data. A partnership with Payfone provides the technology to authenticate mobile users using the same rails the mobile operators use. Mobile operators have developed strong user authentication capabilities to ensure they are billing consumers accurately and can identify spoofed or stolen devices quickly. This user authentication is in testing now with banks and will provide the assurance some large banks are looking for before they roll out MOA and other more advanced mobile banking capabilities.

Endeavour (Austin, TX)

Founded in 2008, Endeavour
<techendeavour.com> is a global fintech
company focused on the mobile channel. The
startup demoed its new *MobileAO* system at
FinovateSpring last week (April 29, 2014). It is partnering with Jumio (ID
validation) and Zoot (real-time decision engine) to bring state-of-the-art capabilities
to its solution. The company is backed by Singapore-based private equity firm, Basil
Partners. See its full demo at <finovate.com/spring14vid/endeavour.html>.



Fiserv (Brookfield, WI)

Fiserv strives to be a one-stop shop for its financial institution clients, and it has two important assets for clients looking for OAO and MAO solutions. With Aperio from Fiserv, institutions can choose a solution that will support account opening across all channels, including digital. With OpenNow/FundNow from Fiserv, institutions can choose a SaaS-based best of breed solution they can integrate with their existing digital banking solution.



Online Account Opening can be developed using the Aperio infrastructure, an omni-channel interaction solution, which can support both online and mobile account opening. Since the solution evolved from a robust in-person account opening and CRM solution, users benefit from consistent business processes and workflow tools across channels. OAO and MAO are deployed as part of the Aperio Operational CRM Platform. The Aperio solution is core-agnostic – it can be integrated with any back-end system from Fiserv or other providers.

Fiserv's other offering is OpenNow/FundNow, which it picked up in its acquisition of CashEdge. With SaaS-based OpenNow/FundNow, components include a customizable UI, workflow and automated approval processes, integration with multiple data sources for identity verification, full reporting and analytics, and a range of funding options. The solution supports verification of bank account as a funding source using instant verification, real-time verification, and trial deposits through the ACH. Both the OpenNow and FundNow solutions are available separately, and can be easily integrated into an institutions existing infrastructure.

Jumio (Palo Alto, CA)

Jumio has specialized in developing SaaS solutions by leveraging smartphone cameras to initiate payments and authenticate consumers.



The company has solutions focused on card initiation, identity authentication, and data capture. Jumio is a newer company, founded just four years ago in 2010. It has grown very quickly, focusing on internet retailers rather than financial institutions - a much better bet than counting on financial institutions to embrace a new entrant.

That said, its technology offers is a nice fit for mobile account opening. Jumio's Fastfill solution is being used by financial institutions (primarily card issuers) to capture personal information from identity credentials and using that data to pre-fill applications. Institutions also use Netverify identity service to provide real-time identity verification. In contrast to Early Warning Systems, which has been expanding its database to blanket U.S. government authorities, Jumio can authenticate passports, driver's licenses, and other documents from more than 100 countries. Jumio's 3rd solution, Netswipe, can complete the circle for MAO, with card funding from the same photo used to verify identity and pre-populate data. Jumio's solution is a great example of leveraging the mobile device to create a great user experience without sacrificing security.

See Jumio's demo last week at FinovateSpring < finovate.com/spring14vid/jumio.html>.

Mitek Systems (San Diego, CA)

Mitek's mission is to drive out poor customer experiences, which they have achieved as the core technology behind mobile deposit capture. Mitek counts 2,000 financial institutions as clients of their Mobile Deposit solution. Mitek is a long-time provider of technology to financial institutions, starting in 1983 with character recognition solutions for check processing. Mitek introduced its mobile photo account opening product and it has just recently become commercially available. Consumers capture a photo of the front and back of their ID, and the information on the front, combined with the bar code on the back, provide data that can be compared with information from government issuers. Mobile Photo Account Opening can enable both account opening and funding using a photo of a consumer ID and credit or debit card.



With this technology, institutions can really start to attack abandonment rates. Pre-populating data reduces the need for key entry, and funding can be achieved with a photo of a credit, debit card or check. U.S. Bank is using the funding component of the solution now to initiate credit card balance transfers. We know that large institutions are piloting the solution now as a component of their MAO and in-person solutions, and are eager to see how abandonment rates change when they roll out this capability.

Mitek won *Best of Show* at FinovateFall for its *Mobile Photo Account Opening* solution. Check out the demo here <finovate.com/fall13vid/mittek.html>.

Yodlee (Redwood Shores, CA)

A three-time Finovate *Best of Show* winner, Yodlee's account aggregation capability continues to power online and mobile banking solutions. With its storehouse of consumer financial data and access, Yodlee offers account verification and funds transfer solutions. The Yodlee Platform has access to more than 12,000 data sources, including both United States' and global financial institutions. A new initiative for Yodlee is its Active Commerce Exchange (ACE) ecosystem. The ecosystem is a collection of financial providers, mostly startups, offering tools to financial institutions using Yodlee's cloud platform. In this way, Yodlee is ensuring that its platform remains relevant and an integral component of new financial technology providers.



Zoot (Bozeman, MT)

Zoot <zootweb.com> has an omni-channel account opening platform, and it also has a stand-alone zLink platform which provides connectivity to 70+ data providers. Its decisioning engine, zInitiate provides real-time analysis to identify and qualify consumers. In a MAO implementation, it has a component behind the user interface, providing instant decisioning and pre-integrated access to data providers. This platform approach provides FIs with the flexibility to add or switch providers more quickly, to order data extracts based on pricing and to choose providers for specific channels.



With zInitiate, banks and credit unions can deploy a workflow solution that can support account opening across all channels, and across multiple products. We expect that omni-channel approaches such as zInitiate will be the future of MAO. With zInitiate, institutions have the same platform across the institution with the same back-end and underwriting processes.

One of the issues with building a solution now for MAO is the evolving set of data types and providers that are available to improve decision-making. For institutions with a decisioning platform in place, they can deploy zLink as a single integration point for multiple data providers. This is an approach appropriate for large institutions that deploy different solutions across regions and/or channels. With zLink, they can move into production quickly with new data sources and make changes based on business needs without having to rely upon internal technology resources to implement the change.

The company is partnering with Endeavour on mobile account opening and appeared with them on stage at FinovateSpring 2014 <finovate.com/spring14vid/endeavour.html>.

A screenshot of the Frost Bank website's 'PERSONAL CHECKING' landing page. The page features a navigation bar with 'PERSONAL', 'BUSINESS', 'ABOUT FROST', and 'HELP & SUPPORT' tabs. Below the navigation is a search bar and a 'LOG IN TO MY FROST' button. The main content area has a background image of a hand holding a smartphone displaying the Frost mobile app. The text on the page reads: 'Introducing the Frost Personal Account', 'A NEW STANDARD FOR WHAT CHECKING SHOULD BE', 'Top-Rated Apps + Lower Fees + Award-Winning Service'. At the bottom, there are three buttons: 'EASY ACCESS TO YOUR MONEY', 'PAY \$5 OR NOTHING AT ALL', and 'SERVICE THAT'S UNIQUELY FROST'. A large blue button at the bottom right says 'OPEN AN ACCOUNT'. Three red arrows point to the smartphone, the 'OPEN AN ACCOUNT' button, and the 'SERVICE THAT'S UNIQUELY FROST' button.

Mobile banking has become a leading feature on banking websites. Frost Bank uses a smartphone on the landing page of for its personal checking accounts <frostbank.com/Pages/Personal-Checking-Account.aspx>.

Best of Show from FinovateSpring 2014



It was the biggest Finovate of all time, with nearly 1,300 packing the City National Civic Center in San Jose, CA on April 29 & 30.

After watching 68 demoing companies over two days, the audience voted for their 3 favorite demos at the end of each day. The eight companies with the highest number of votes were crowned winners (see our May 1 blog post for methodology). Videos of each demo will be available on Finovate.com this month. The winners in alphabetical order:

EyeVerify *Eyeprint Verification* technology that enables mobile biometric authentication



Ondot Systems

CardControl that allows users to remotely control their credit and debit cards via their smartphone



Loop smart mobile wallet system accepted at virtually every POS terminal today.



PrivatBank contactless smartphone-enabled Android ATMs



Interactions voice-activated self-service solution for mobile and telephone interactions



SaveUp solution that combines gamification with personal finance



Motif Investing *Advisor Platform* that streamlines the way advisors build, monitor, and rebalance investment portfolios



Stockpile “give the gift of stock” solution that helps people invest in the brands they love



Online Banking **REPORT**
Strategies for the Internet

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Upcoming Topics

Advanced Mobile Features: Most financial institutions have put in place basic mobile account access. That covers 80% or more of what customers want to do. But as we move into phase two of mobile banking, the “feature bar” continues to go higher. What new features are must have and which ones can you hold off on for a few years?

Digital Lending: As lending volumes begin to inch up, banks are finding a new crop of competitors that fully embrace digital distribution. The last time banks were really looking to expand credit (2006); the iPhone didn’t even exist outside the labs in Cupertino. This report looks at the impact new underwriting variables (e.g., Facebook friends), new crowdfunding competitors and most importantly the mobile-first financial world we are rapidly approaching.

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