

# BankDirector®

GUIDED BY ONE PRINCIPLE: STRONG BOARDS BUILD STRONG BANKS

# THE TECH ISSUE

**THE FIVE  
MINUTE LOAN**

GETTING THE  
MOST OUT OF  
MOBILE

BANKS SAIL  
STRAIGHT INTO  
THE CLOUD

FASTER  
PAYMENTS ARE  
HERE TO STAY

## HOW TO USE THE BANK DIRECTOR DIGITAL APP

Look for these icons throughout the issue to indicate interactivity.



### Hotspots

Tap these icons to access interactive elements inside articles.



### Play Video

Look for this icon to indicate a video. Tap to view the video inside the app.



### Directional Swipe

Various icons instruct you to use a directional swipe to access additional information.



### Way Finding

Look for this arrow icon to help you navigate through the issue's articles.



### Internet Access

This icon indicates internet access is required for interactive elements.

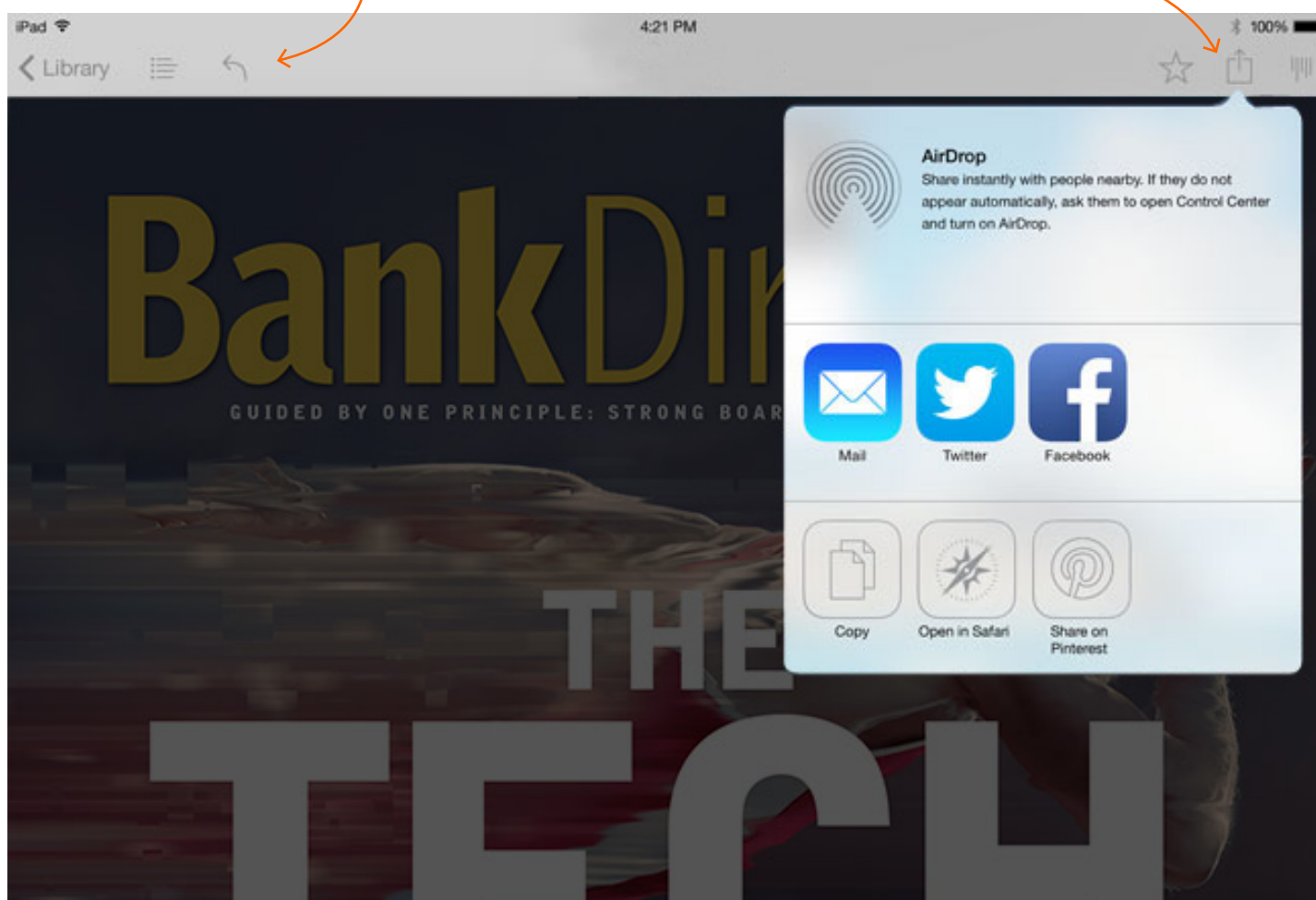
### How to use the in-app toolbar.

#### Menu Bar

Tap the screen to quickly access the library of archived issues, back button and table of contents.

#### Social Sharing

When indicated, share an article by tapping a sharing button to access the toolbar. The sharing icon located in the top right gives you various social media platforms to share the article.





# In-Print. In-Person. Online.

GUIDED BY ONE PRINCIPLE: STRONG BOARDS BUILD STRONG BANKS

DIGITAL MAGAZINE

## THE TECH ISSUE CONTENTS







### THE FIVE MINUTE LOAN

Entrepreneurial banks are speeding up the commercial loan process. Here's how.

 *How Eastern Bank Approves a \$100,000 Small-Business Loan in Less Than Five Minutes*



-  LETTER FROM THE EDITOR  
Are boards ready for technological transformation?
-  BRIEFLY NOTED
-  A BOARDROOM CONVERSATION  
Ryan Gilbert is a rare breed: a venture capitalist who serves on a bank board.
-  VIDEO  
Bob DiCosola of Old Second Bancorp talks about hiring a chief technology officer.

#### Stay Connected



Like us on  
Facebook



Follow  
Bank Director  
on LinkedIn



Follow  
@BankDirector  
on Twitter



Watch educational  
videos on  
Bank Director's  
YouTube Channel

BANKDIRECTOR.COM

## ADDRESSING TECHNOLOGY ON THE BOARD

**A**re bank boards ready for technological transformation? Many small banks are struggling to keep up with bigger banks, offer the right products and services to their customers and justify the expense needed to attract tech-savvy talent and implement cybersecurity controls. Younger generations are less likely to think they even need a bank to help with their financial lives, and older generations are adapting to smartphones at a rapid pace. Plus, technology promises to make back-office operations more efficient.

Can boards provide the right oversight and ask the right questions to make sure their technology isn't so outdated, it becomes difficult to attract new business or compete with other financial institutions? While boards are definitely talking about technology, are they having important, meaningful conversations?

Bank boards tend to have the usual committees. There's the audit committee, the nominating or governance committee and the compensation committee. But as Michael Diamond, general manager of payments at mobile picture pay vendor Mitek, pointed out to me recently, few boards have a technology committee. So maybe your bank should start a board-level technology committee, staffed with directors who have the right background and mental makeup to ask the big-picture strategy questions to



**Naomi Snyder**  
is editor for  
*Bank Director*.



*Tap **below** to tell us what you think of the digital magazine.*

✉ **Naomi Snyder** | [nsnyder@bankdirector.com](mailto:nsnyder@bankdirector.com)

## ADDRESSING TECHNOLOGY ON THE BOARD

committee, staffed with directors who have the right background and mental makeup to ask the big-picture strategy questions to propel the bank forward. Perhaps directors could also benefit from a technology literacy program. Or banks could start recruiting talent to their boards, such as a strategy person from a technology company. Maybe they could ask the bank's chief information or technology officer to make board presentations on a more regular basis?

The end result could be a more informed and better prepared board to deal with the substantial challenges ahead.



**Naomi Snyder**  
is editor for  
*Bank Director*.



*Tap **below** to tell us what you think of the digital magazine.*

✉ **Naomi Snyder** | [nsnyder@bankdirector.com](mailto:nsnyder@bankdirector.com)





# Mortgage Applications on any Mobile Device

Consumer expectations are clear: anything that can be done in the branch, over the phone or online should be able to be done from a mobile device. Is your financial institution ready for this new breed of borrower?

**MortgagebotMobile** – part of the Mortgagebot® end-to-end lending platform – gives borrowers the convenience of anytime/anywhere mortgage applications, and positions your financial institution for continued growth in a tech-focused market:

- Cutting-edge user experience and design
- Intuitive, responsive application flow
- Optimal readability on any device

Find out more at [dh.com/mbotmobile](https://dh.com/mbotmobile)



**B**ank boards are increasingly discussing technology during meetings, although perhaps not enough given rapid change in the industry. Fewer than half of directors and senior management say the board discusses technology at every board meeting. To cram for an upcoming technology discussion, Bank Director has compiled the following items for bank boards.

**Naomi Snyder**  
is editor for  
*Bank Director*.

Tap the numbered icons to cycle through topics

1

2

3

4

## AN INNOVATIVE CHARTER

Amid a movement to create a single federal charter for fintech companies, a few regulators have created pilot programs or innovation centers for fintech companies. The Office of the Comptroller of the Currency announced plans to create a federal fintech charter. Today, fintech companies without a bank charter have no single regulator but are subject to the various laws that pertain to their activities and may be regulated by a variety of state and federal agencies.

# Five Tips to Improve Your Commercial Loan Origination



## Reduce "Time to Yes"

Cut decision time by up to 40% to improve client service.

## Keep a Digital Record

Improve transparency to expedite audits.

## Improve Your Risk Data

Go beyond compliance with a modern infrastructure.

## Minimize Human Error

Use a single integrated system for better lending decisions.

## Optimize with New Technology

Reduce response times for higher win rates.

GET STARTED TODAY





THE TECH ISSUE

Entrepreneurial  
banks are speeding  
up the commercial  
loan process.  
Here's how.

# *THE FIVE MINUTE LOAN*

BY JOHN ENGEN



**D**an O'Malley became a believer in the power and speed of automated loan approvals a decade ago, while working as a senior director for Capital One Financial Corp., the big credit-card issuer. "We had a model for every single person in the United States, so that if you came onto the website, we could instant-decision you for a credit card," he recalls.

As chief digital officer at \$9.9 billion asset Eastern Bank since 2014, O'Malley has brought the same taste for technology-driven speed to small-business lending. O'Malley, also head of Eastern Labs, the Boston-based bank's innovation unit, says he can approve and close a loan of up to \$100,000—from application through funding—in as little as three minutes.

How? Every night, Eastern's software assesses the loan eligibility of virtually every business in Massachusetts, using information from public databases, court records and media reports, among other sources, to give a preliminary thumbs-up or down. It then makes conditional offers, via email and digital channels.

When an existing customer enters Eastern's website, the business owner is prompted to answer three questions—how much they want to borrow, where the money should be deposited and a Social Security number. The rest of the application—names, addresses, business revenues—prefills with data the bank already has. The process for noncustomers takes about 10 minutes, a bit more time.

After a quick check of the prospective borrower's FICO score, cash flows and other loan commitments, the customer digitally signs the loan documents and the money is deposited, almost instantly, into the borrower's account. "It takes as much time as it takes to draw down a line of credit," O'Malley says. "People are

shocked by how fast it is.”

Until recently, banks shied away from rushing through the lending process and giving software such a big role in small-business lending decisions. Personal interaction and analysis has always been considered fundamental to good credit underwriting. But times are changing.

Marketplace lenders such as Kabbage, Lending Club and Prosper have stolen some market share and changed borrower expectations with intuitive online applications and the use of data algorithms that can assess creditworthiness and underwrite loans in minutes instead of weeks. If banks can't provide the same speed and experience, the thinking goes, they risk losing a significant chunk of business that otherwise might come their way.

“The marketplace is demanding quicker decisions through technology,” says Pierre Naude, CEO of nCino, a maker of bank operating systems. Bank customers, he says, are clamoring for special products and specialized coding that enable greater automation of the small-business lending process. “Bankers are waking up to the fact that speed and convenience will trump price. You can lose a customer to an alternative lender if you don't have it.”



*“PEOPLE ARE SHOCKED  
BY HOW FAST IT IS.”*

— Dan O'Malley, Eastern Bank





# THE SECRET IS OUT!

Today's banks are searching everywhere for a technology partner that does business **the same way they do—a commitment to innovation and a focus on service.** Well, look no further than CSI. Our innovative solutions and customer-centric approach are the secret combination you've been waiting for.



[csiweb.com/Secret](http://csiweb.com/Secret)

Core Processing • Managed Services • Regulatory Compliance • Digital Banking • Electronic & Print • Payments Processing • Treasury Management

Automating the small-business lending process requires some deep thinking from boards and management about how much faith they're willing to place in technology, and their ability to embrace the cultural change implicit in basing lending decisions more on data than judgment.

The concept remains new enough that credit quality of loans underwritten by software programs has yet to be tested by a recession. (Lending Club made news in October with warnings about rising charge-offs.) Regulators like the audit trails that automated processes generate, but don't like cookie-cutter loans devoid of human input, bankers say.

"The big question we get [from the board] is, 'Can you be fast and accurate at the same time?'" says Hugh Connelly, president of small-business lending at \$2.9 billion asset Univest Bank & Trust Co. in Souderton, Pennsylvania, which has special credit-decision programming built into its nCino operating system. "We don't want to find out a year from now that in our quest for speed we made several hundred imperfect loans."

The benefits can be significant. David O'Connell, a senior analyst with Aite Group, a research and advisory firm, says banks that use automation right can grow their small-business loan books faster and cut costs. Significantly, it also can provide a better handle on credit metrics, while leaving a more-complete audit trail for the compliance staff and regulators to review.

"Automation is a way for banks to achieve the scale that's been elusive to them," largely because the traditional lending process is too slow and cumbersome, O'Connell says. Streamlining the process by automating at least the drafting of documents "can take days or weeks off the loan cycle," and make loan officers more efficient.



*"Bankers are waking up to the fact that*  
***SPEED AND CONVENIENCE***  
***WILL TRUMP PRICE."***

— **Pierre Naude**, nCino

"It's beneficial to everyone in the same way CRM was beneficial," O'Connell adds. "People spend less time on the clutter of underwriting—manually comparing a company to peers or looking at guarantor financial statements—and more time assessing risks and structuring deals."

Outside of time, the best way to gain comfort with automation is to understand how it is used. Many banks employ automation primarily to simplify the collection of data and provide an initial screen on applications.

At Wilmington, North Carolina-based Live Oak Bank, a \$1.4 billion asset, Small Business Administration lender, prospective borrowers enter their basic information in a web portal, where the bank's proprietary lending screen, dubbed "the gauntlet," pulls data from 19 different services to assess credit, fraud, identity and other borrower characteristics. It also looks at factors like location or social-media usage before generating an initial score.

"We know within seconds that there's a strong likelihood we're going to approve the loan," says Steve Smits, Live Oak's chief credit officer. If it clears, the application gets passed on to a loan officer who analyzes cash-flows, examines the project and interviews the potential borrower via phone or Skype. (Live Oak, which spun-off nCino and continues to use its technology, is a branchless bank with a national client roster in niches such as small-town pharma-



cies and veterinary clinics.)

The process, which accommodates loans of up to \$350,000, takes longer than some—about 10 days to close—but still far less than the 60 days to 90 days it used to take. Machines are not making the decisions, Smits says. “But if it’s already passed the gauntlet,” he says, “then we’re in the mindset that it’s a good opportunity. We just want to make sure they can afford the debt.”

Univest takes things a step or two further by automating credit decisions and the order fulfillment process. Customers seeking a secured loan of up to \$200,000 can come into a branch for a quick interview with a loan officer, but various sections of applications prefill with data, and a decision is made in as little as seven hours.

The bank’s proprietary software pulls credit reports, information from data providers Dun & Bradstreet and PayNet, and it collects and downloads personal guarantor information, tax returns, financial statements and other important data. It then performs an analysis of collateral and debt-payment projections, and generates a credit memo that is electronically signed. Usually, such analysis doesn’t require independent appraisals of property value, and the bank uses a first blanket lien on all business collateral.

Credit decisions are rooted in the same underwriting standards that helped Univest survive the financial crisis, and “we still have people with intuition and judgment involved,” says Connelly.

“In banking, speed has traditionally meant errors, omissions and other mistakes,” he adds. “But today’s technology is so robust, speed goes hand-in-hand with accuracy and precision. They’re not mutually exclusive concepts.” **|BD|**

---

**John R. Engen**  
is a writer and  
contributor to  
*Bank Director*.

---

## Share this article



Sharing options are located in the right corner of the top navigation bar.

# *How Eastern Bank Approves A \$100,000 Small-Business Loan In Less Than Five Minutes:*




# ARE YOU MEETING YOUR CUSTOMERS' DIGITAL DEMANDS?

Click below to watch how West Monroe and Barclaycard partnered to redefine the customer experience and go digital by default.







If you're on a bank board, it pays to ask some questions about mobile.

BY NAOMI SNYDER

## GETTING THE MOST OUT OF MOBILE

**When San Francisco-based Bank of the West**, an \$80.7 billion asset subsidiary of BNP Paribas Group, analyzed last year the bottom line impact of customers who are engaged in online banking and mobile banking, it found some surprising results. Digital customers, or those who were active online or on their mobile phones during the previous 90 days, had lower attrition rates than nondigital customers, and they

contributed higher levels of revenue and products sold, says Jamie Armistead, head of digital channels at Bank of the West. Core technology provider Fiserv, which offers its bank customers a mobile banking app, found similar results in a recent survey of eight credit unions and nine banks.

Enrollment in mobile banking remains low, but is increasing rapidly. Armistead says mobile banking use at his bank is growing at two to three times the rate of all other channels, including online banking. This is true at smaller banks, too. Active mobile banking users as a percentage of checking accounts increased 170 percent over the last two years to a median of 16 percent this year, according to Cornerstone Advisors, which surveyed 55 midsize banks. The median asset level was \$2.5 billion. As mobile use grows rapidly, banks are beginning to ask questions not just about whether they are keeping up with their competitors in terms of the attractiveness and convenience of their mobile offering, but also whether mobile is fitting in with the bank's overall strategy and making it money.

Here are some key questions you can ask about mobile:

How do we stack up against our competitors and what our customers want?

**Customer surveys are one way to find** out what your customers think of your mobile app and whether or not you are meeting their needs. Another is to check reviews from customers in the Apple app store and in Google Play, the app store for Android phones. How do those reviews compare to your competitors' reviews? Ask questions about the entire mobile experience, including what happens when your customers have a question or something goes

"In the past, it worked to say we have better service and quality of relationships.... The table stakes have increasingly become, 'Is it easy?'"

— Gerard du Toit  
Bain & Co.

wrong with the app. What is the experience like at the call center? Can the branch staff solve a technical problem?

Make sure your staff is keeping track of developments at least quarterly in the mobile space. According to Michael Diamond, general manager of payments at mobile deposit provider Mitek, board members might ask management: “What market studies have we done or what analyst reports are we relying on to make decisions about the future?” “What are the key insights you get from those reports?” Most community banks rely on vendors to tell them what is going on, and that is fine, as long the vendors are good. “Finicky customers are changing the way they want to buy and use financial services,” says Bob Meara, a senior analyst at research and consulting firm Celent. Assuming that nothing has changed in the last year is probably a bad strategy.

How does mobile fit into our bank's strategy?

**In an age of limited resources**, it makes sense to focus your mobile offerings on your specific business plan and goals. If you're a commercially focused bank, do you need a best-in-class retail mobile banking app for consumers? Probably not, says Tim Daley, senior director at Cornerstone Advisors in Scottsdale, Arizona. Would a commercial mobile app make sense? Maybe. Large businesses have staff that handle payments from a desktop or laptop, most likely, but small business owners are often on the go, and might especially appreciate an app that allows them to sign off on payments or payroll with the convenience of their phone. Geoff Knapp, vice president in digital channels at Fiserv, cautions against adding features to your app willy-nilly.





You have goals.  
We have **solutions**.  
Let's talk.



**BMO Harris Bank**  
**BMO Capital Markets**

BMO offers a wide selection of focused and specialized solutions, including interest rate and treasury management. As one of North America's largest financial institutions, we have the capabilities and experience to deliver exceptional service to our correspondent bank clients.

[bmoharris.com/correspondent](http://bmoharris.com/correspondent) | [bmocm.com](http://bmocm.com)

Banking products and services are provided by BMO Harris Bank N.A. Member FDIC. BMO Capital Markets is a trade name used by BMO Financial Group for the wholesale banking businesses of Bank of Montreal, BMO Harris Bank N.A. (member FDIC), Bank of Montreal Ireland p.l.c., and Bank of Montreal (China) Co. Ltd and the institutional broker dealer businesses of BMO Capital Markets Corp. (Member SIPC) in the U.S., BMO Nesbitt Burns Inc. (Member Canadian Investor Protection Fund) in Canada and Asia and BMO Capital Markets Limited (authorised and regulated by the Financial Conduct Authority) in Europe and Australia. "BMO Capital Markets" is a trademark of Bank of Montreal, used under license. "BMO (M-Bar roundel symbol)" is a registered trademark of Bank of Montreal, used under license. ® Registered trademark of Bank of Montreal in the United States, Canada and elsewhere.

If you have a three-year strategic plan for making more money, and for getting more loans, how is your mobile strategy contributing to that? Instead of simply following what your competitors are doing, start asking questions about how your mobile strategy fits your bank's strategy.

## DOES YOUR BANK'S MOBILE STRATEGY FIT YOUR OVERALL STRATEGIC PLAN?

What are we doing to generate sales on a mobile device?

**While many banks have approached** mobile banking as an expense, rather than a generator of new accounts and loans, some are beginning to add features that will pay for themselves, including marketing and promotional features to sell credit cards, and for a handful of institutions, even generate new account openings or credit card applications through a mobile device. Some apps let you schedule an appointment with a banker. Mobile is now the dominant channel for shopping, as consumers use their smartphones more than any other channel, says Gerard du Toit, partner in Boston and head of the Americas banking practice for consulting firm Bain & Co. What is your bank doing to make its credit card, mortgages or other products easy to find on a mobile device? What about your bank's web site? If your customers reach it through a mobile device, has it been optimized for mobile?

What are you doing to educate your customers on how to use mobile? Too often, banks roll out new functionality and expect their customers to figure it out on their own, du Toit says. Email marketing is often ignored, so what about teaching customers how to use the app inside the branches? Anyone can walk into an Apple

store and get help using an Apple product at the Genius Bar. But do your tellers know how to use the app and promote it? Do your bankers in the field know how to use the app? Unfortunately, many banks don't do this kind of staff training and it may be a cause of low mobile adoption rates. When customers use mobile instead of going to a branch to do basic transactions, it costs the bank about 1/10 the cost of handling the transaction inside a branch, says du Toit.

Are our vendors the right partners to take us where we need to go?

**Luckily, these days there are plenty** of vendors offering a wide variety of mobile products, says Daley. "If you're going to look for a vendor, now is a good time," he adds. Many banks, however, are using their core providers to offer a mobile banking product. The top three mobile banking providers are all core processors, Fiserv, FIS and Jack Henry, and they control 70 percent of all banks, according to Celent.

#### TOP 5 MOBILE BANKING VENDORS BY MARKET SHARE

RANK	VENDOR NAME	MARKET COUNT	% OF TOTAL TOTAL MARKET
1	Fiserv	1,228	31.0%
2	FIS	840	21.2%
3	Jack Henry	729	18.4%
4	NCR Corporation	315	8.0%
5	Malauzai	215	5.4%

*Source: Celent analysis of FI Navigator data, March 31, 2016. Market count means number of bank clients.*



What are the digital skills our bank is going to need in the next three years?

**Unfortunately, some of the best technological** talent isn't dreaming about working for a bank, says Diamond. Many bank boards will need to think about a combination of recruitment and outsourcing the talent they need. Some community banks are hiring new chief technology officers that can think strategically. How innovative is your existing staff and vendors? You might ask how many times in the last year or two your bank has had new releases, or updates, on the app, and how many of those releases were for compliance or regulatory reasons. If you're not updating your app regularly for the sake of your customers, you may not be doing much for them.

Customer demands are changing rapidly, and it makes sense for bank boards to drop in more than annually into a discussion of the bank's mobile strategy. Armistead says Bank of the West is making adjustments more or less quarterly. Five years ago, people answering customer satisfaction surveys talked more about service and convenience, including whether there was a branch near them, says du Toit. That was before Uber made it easy to type in a request for transportation in most major cities using your smartphone. "Now, it has completely flipped," he says. When you ask people today about what made a great banking experience, they use the word "easy" five to 10 times more than service or convenience, he says. "In the past, it worked to say we have better service and quality of relationships," du Toit says. "I'm not saying that's dead. But that's no longer the basis of differentiation. The table stakes have increasingly become, 'Is it easy?'" **|BD|**

**Naomi Snyder**  
is editor for  
*Bank Director*.

### Share this article



Sharing options are located in the right corner of the top navigation bar.

Studies show mobile customers are more profitable and stick around longer than nonmobile customers.

**Fiserv study:**

Product holdings per customer average:

2.3

Mobile banking

1.3

Branch-only

Interchange income annual average:

\$209

Mobile bank users

\$59

Branch-only

*Source: Fiserv study of nine banks using Fiserv mobile banking based on 12-month period between 2014 and 2015.*



# Uncertain times call for GUARANTEED solutions.

## How Will You Cope?



Uncertainty in tax rates, the risk of low investment returns, and the trend of longer life expectancy; where can you find certainty and ensure a secure retirement?

To address these serious issues, a guaranteed lifetime benefit in nonqualified retirement benefit structures has been developed. LINQS+ extends benefits, puts more money in the executive's pockets and reduces costs for your bank.

Meyer-Chatfield Group's Compensation Advisors continue to develop innovative new products like LINQS+. Intimately familiar with core issues plaguing the financial industry, we deliver clear, insightful solutions that produce results.

*Finding Solutions Others Miss*



JR Llewellyn

[JR.Llewellyn@CompensationAdvisors.com](mailto:JR.Llewellyn@CompensationAdvisors.com)

850-308-1468

James J. Calla

[James.Call@MeyerChatfield.com](mailto:James.Call@MeyerChatfield.com)

267-212-4384





BY JOHN J. MAXFIELD

# BANKS SAIL STRAIGHT INTO THE CLOUD

Banks are realizing that the benefits of cloud computing outweigh the added security risks.

---

THE TECH ISSUE

**I**t's tempting to think that cloud computing is a newfangled technology that only the biggest and most technologically savvy banks can use to their advantage. But the reality is that thousands of banks of all sizes are already accessing the cloud to reduce costs and accelerate innovation.

The question that bankers and bank directors face now is thus less about using the cloud in the first place, and more about whether the benefits of shifting even more technological infrastructure onto it outweighs the added security risks of doing so. Conversations with a wide range of experts suggests that it does.

At the end of last year, a wave of headlines announced what seemed to be big news—that Capital One Financial Corp. had begun shifting some of its most critical workloads onto Amazon.com’s cloud computing platform, Amazon Web Services, or AWS.

“This is a game changer for Capital One,” said the bank’s Chief Information Officer Rob Alexander at Amazon’s annual cloud computing conference last year. “We want to be in the business of building great applications for our customers, not in investing to build costly and complex infrastructure.”

By shifting databases and core operating systems to AWS, Capital One believes it will be able to reduce the number of data centers it operates from an original count of eight in 2014 down to three by the end of 2018. It will also enable Capital One to attract top engineering talent, as the cloud makes it easier for developers, regardless of their location, to build software collaboratively, said Alexander.

But even though Capital One has long been a technology trailblazer, it’s hardly the first and only bank to embrace the cloud. “Basically every bank has data in the cloud nowadays,” says Rani Khan, director of marketing for DefenseStorm, which provides network security services to banks.

Of the 1,200 banks that Jack Henry & Associates calls customers, just over half outsource core banking functions to Jack Henry’s cloud service. And that number is growing.

“A year ago, all of our sales were to customers who wanted to

outsource core banking functions to our cloud,” says Stacey Zengel, president of Jack Henry Banking. “This year, all but two of them were outsourced.”

It’s not just big banks that are taking advantage of the cloud. Jack Henry’s biggest cloud-computing client is a \$10 billion asset bank, but its sweet spot is banks with \$500 million in assets and up.

Scott Hess, vice president of user experience, consulting and innovation at Fiserv, echoed this point. “The benefits of cloud computing,” says Hess, “apply to institutions of all sizes.”

What’s different now is that banks are beginning to access the public cloud, which is distinct from the private cloud. This is why Capital One’s announcement last year attracted so much attention.

The private cloud has been around for a long time. It provides dedicated access to a bank’s servers, networks and applications, regardless of whether those are held on or off the bank’s premises. This includes servers at third-party cloud providers such as Fiserv and Jack Henry, but only so long as the servers aren’t shared among multiple customers.

The public cloud, by contrast, is what Amazon, IBM and Microsoft have constructed more recently. It’s backed by sprawling data centers that allow customers to tap into rows upon rows of servers that are owned by the technology companies and deployed to meet the shared demands of their customers.

Given this distinction, one question banks face right now centers on choosing the ideal mix of public and private cloud services.

**“THE BENEFITS OF CLOUD  
COMPUTING APPLY TO  
INSTITUTIONS OF ALL SIZES.”**

— **Scott Hess**, Fiserv



IBM addressed this issue for the investment management subsidiary of a major U.S. bank. The result was to shift 10 percent of the unit's workloads to the public cloud, 25 percent to an off-premise private cloud, and to keep 50 percent in an on-premise private cloud. The remaining workloads "didn't make sense putting onto any kind of cloud," explains Likhit Wagle, the head of global banking and financial markets at IBM.

A hybrid approach like this allows a bank to have its cake and eat it too. Core banking systems, confidential customer information, and risk-related information can be kept on private clouds, helping to reduce regulatory concerns about oversight of third-party vendors. All other applications can go onto the public cloud, Wagle says.

The benefits from doing so can be substantial. Recent business cases at IBM suggest that an effective cloud strategy can decrease a bank's IT infrastructure and software application costs by as much as 40 percent, says Wagle. Approximately 15 percent of that comes from lower capital expenditures on infrastructure, with the remaining 25 percent from culling redundant applications.

By shifting applications into the cloud, moreover, and thus paying for them as a service, a bank in many cases can transform capital expenditures on technology infrastructure into operational expenses, thereby qualifying for more preferential tax treatment.

All of this obviously assumes that using the cloud doesn't present a security risk that outweighs the benefits. The regulators, and the Federal Financial Institutions Examination Council in particular, have laid out

## MIX & MATCH

An example of a U.S. bank investment management subsidiary's use of the cloud.



Effective cloud strategy can decrease a bank's IT infrastructure and software application costs by as much as

**40%↓**  
— IBM

guidelines covering a bank's obligation to oversee third-party cloud providers. The overarching theme is that cloud computing carries the same basic risk characteristics and risk management requirements as traditional forms of outsourcing.

What's important to appreciate, however, is that cloud computing itself, and Amazon and Microsoft's public cloud services specifically, don't actually make a bank more or less vulnerable from a security perspective. "AWS is the most secure place in the world to store your data," says DefenseStorm's Khan. "But what a lot of people don't appreciate is that AWS provides security of the cloud, while its clients have to provide the security within the cloud."

Khan's point is that the vulnerability lies within a bank's own network, which holds true regardless of whether the bank uses the cloud or not. If someone can hack into a bank's network, that person can access the bank's sensitive data and applications irrespective of where it's stored.

This explains why Troy Wunderlich, operational risk manager at Washington Trust Bank, a \$5.1 billion asset bank based in Spokane, Washington, projects the same heightened security standards that his bank follows onto cloud vendors. "We look at the cloud as an extension of our own network, and apply the same due diligence framework to it as we do to our own networking infrastructure."

In short, while responsible and sophisticated cloud service providers offer considerable advantages to a bank, the incremental security risk that the cloud exposes a bank to is negligible so long as the bank's own networks are secure. It thus makes sense why banks are embracing it as an effective way to reduce expenses and promote innovation. **[BD]**

---

**John J. Maxfield**

is a writer and contributor to *Bank Director*.

---

## Share this article



Sharing options are located in the right corner of the top navigation bar.

# Big Banks Launch Zelle to Compete with P2P Payments App Venmo

By **Sicily Axton**

For the 1 million users sending and receiving money with the peer-to-peer (P2P) payments app Venmo, the phrase “Venmo me” will be hard to take out of their vocabulary. A total of 19 banks are giving it a shot, though, with the launch of Zelle next year, created by the financial risk management company Early Warning, a joint venture of the industry’s largest banks. Zelle will replace the big banks’ existing network ClearXchange. Some of the banks currently set to launch Zelle include Wells Fargo & Co., Bank of America Corp., Citigroup, Capital One Financial Corp. and JPMorgan Chase & Co.

Nonbanks are now processing 20 percent of P2P payments volume. Venmo is a clear leader, with widespread adoption among millennials, thanks to a platform that reduces friction of payments and allows users to integrate their social networks. It also works with iPhone’s latest technology, including Siri and iOS 10 iMessage integration.

Venmo is growing fast. In the first three months of 2016, Venmo had \$3.2 billion in transactions among users, a 153 percent increase from the same quarter last year. Venmo is free to use when the money is coming from a checking account (there’s a 3 percent fee for credit card use), and the company is making plans for other ways to monetize the service.

## How Big Banks Are Responding

According to the Federal Reserve’s Consumers and Mobile Financial Services 2016 report, 25 percent of mobile payments users sent money to friends or relatives within the U.S. in the previous 12 months.

With P2P poised to hit the mainstream, the big banks are making their moves, with some fortunate starting advantages. The 19 banks launching Zelle make up 76 million mobile banking users, so on day one they already have a massive audience of





# Big Banks Launch Zelle to Compete with P2P Payments App Venmo

By **Sicily Axton**

some fortunate starting advantages. The 19 banks launching Zelle make up 76 million mobile banking users, so on day one, they already have a massive audience of potential users.

Users' accounts are easily linked, and there is an instant exchange of money between users. On Venmo, however, it usually takes one to two days for the funds to transfer. That's one reason the name Zelle is short for gazelle, which Early Warning CEO Paul Finch says "conveys speed and agility."

While some people might be nervous to allow an outside app like Venmo to access their checking account, with Zelle, it is their checking account. So there will be fewer security fears thanks to facilitating payments from the user's existing account. It's a definite advantage, as the Federal Reserve reports 67 percent of people studied do not use any type of mobile payments because of security concerns.

Like Venmo, Zelle will allow people to request payments. Still, some questions remain about the release and how it will compare to Venmo's best and newest features, including whether or not users will be able to instantly connect with social contacts and if Zelle will also take advantage of iPhone integrations.

## Zelle Will Scale to Community Banks

According to [TechCrunch](#), "Zelle is built to be scalable to include financial institutions of any size anywhere in the country." The more people who use it, the better it becomes, so it's created as an open network. "This is about creating a wide, and inclusive, alternative to cash and checks for everyone," Finch said at the recent Money 20/20 payments conference.

The success of Zelle will be closely monitored by community banks who aren't



# Big Banks Launch Zelle to Compete with P2P Payments App Venmo

By **Sicily Axton**

20/20 payments conference.

The success of Zelle will be closely monitored by community banks, who aren't likely to be able to build their own standard or compete with other major P2P services. As community banks are on the sidelines observing the launch of Zelle, the entire financial industry as well as other players in the battle for P2P payments, like Facebook Messenger, Square Cash, Apple Pay and Google's Alphabet, will also be watching closely to see if Zelle grows in popularity as fast as its biggest rivals and can in turn become a part of the millennial lexicon.



**Sicily Axton** is the communications manager at StrategyCorps, a Nashville-based company that works with financial institutions nationwide to deliver mobile and online consumer checking solutions that enhance customer engagement and increase fee income. Connect on LinkedIn.

---

THE TECH ISSUE



# *FASTER PAYMENTS ARE HERE TO STAY*

**BANKS GRAPPLE WITH SAME-DAY ACH.**

BY CRAIG GUILLOT



**T**he automated clearing house (ACH) network is one of the largest, and oldest, electronic payment systems in the world, but it hasn't had a reputation for being the fastest. As of September, the network is now requiring banks that receive same-day payment requests to process them on the same day, whereas conventional practice was to process the next day.

Banking experts say the shift to same-day ACH is just the first step in a movement towards more real-time payments in the U.S. financial system. Same-day ACH will be implemented in phases over the next two years as banks contend with increasing competition for faster payments from bank and nonbank competitors, such as PayPal's Venmo. Major banks are already working on their own processing system to offer real-time, person-to-person payments through an app to launch in the first half of 2017 called Zelle.

Experts say instant payments may be here sooner than the industry realizes and that banks must quickly adapt. Financial institutions will have to prepare people and processes, and it's essential that boards assess risk, compliance and competitive forces in an age where payments may soon be instantaneous.

## ***FASTER, SAME-DAY PROCESSING***

While many countries around the globe already offer same-day settlement of ACH payments, most ACH payments in the U.S. still are processed on the following day. Due to growing e-commerce and the demand for faster processing, the National Automated Clearing House Association (NACHA), which gave ACH its name, recently started implementing a rule made in 2014 to provide for same-day settlement of most ACH payments.

ACH is a batch processing system often used for direct deposits and direct payments and it's being used more frequently. NACHA reports a total of more than \$41 trillion was transferred over the network last year, a 4 percent increase compared to 2014. Business-to-business transactions also increased by more than 7.2 percent.

NACHA says some of the biggest uses of same-day ACH will be for payrolls, business-to-business payments, expedited bill payments, and account-to-account transfers. The organization estimates that within the next decade, more than half of all ACH payments will be the same day, totaling more than 1.4 billion same-day transactions per year.

Same-day ACH is being implemented in three stages, the first of which started in September and allows businesses to initiate credit transactions of \$25,000 or less with funds available by end of day. The next phase makes debit transactions available for same-day processing in September 2017, allowing same-day processing of things like mortgage and loan payments. The final phase, which goes into effect in March 2018, will require receiving institutions make funds available on same-day ACH credit and debit transactions by 5 p.m. local time. There will also be an additional settlement time of noon Eastern Time.

Cary Whaley, vice president of payments and technology policy at the Independent Community Bankers of America, says same-day ACH will offer tremendous functionality for both consumer and business customers as a cost-effective means to settle transactions in one day.

To start, banks won't be required to initiate same-day ACH, but they are required to receive a same-day ACH and process



***WAS TRANSFERRED  
OVER THE  
ACH NETWORK  
LAST YEAR.***

immediately. Still, Whaley says banks will face market pressures to initiate same-day ACH as customers demand faster settlement. Same-day ACH for businesses can help streamline payments, expand working capital, and reduce paper-based processing. While consumers still will rely on a credit card processing network for credit and debit transactions, they'll now receive proceeds from direct deposit paychecks on the same day they are issued. But Whaley says same-day ACH could open the door to big opportunities in person-to-person processing.

"I think you're really going to see banks across the board immediately look at the person-to-person business case. It opens up a lot of value for making same-day payments now and doesn't require an additional payment system," says Whaley.

Dave Godsman, senior vice president of emerging payments and commerce at Bank of America Corp., says same-day ACH is the first step in the journey of moving closer to real-time payments, which fund instantaneously. "You can argue that ACH is on a path to become real-time here in the not-too-distant future. They're also trying to solve the business-to-business side of the ACH settlement and convert that to real-time," says Godsman.

While large business transactions over \$25,000 and international transactions likely still will be sent by wire to protect against the bank's risk, same-day ACH could reduce costs and increase convenience for business customers. Whaley says while payroll providers are unlikely to move everything to same-day ACH, it will be used for emergency payroll. "I think there are some sweet spots right out of the gate for financial institutions to use same-day ACH [origination] and it could present some opportunities," says Whaley.



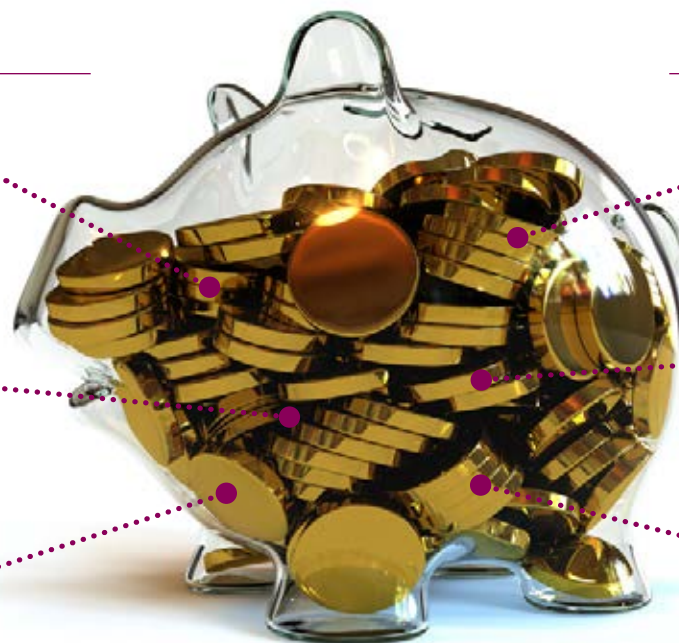
# SAME-DAY ACH OFFERS THE FOLLOWING RISKS AND REWARDS

## REWARDS

Streamlined payments

Reduced paper-based processing

A way for small and midsized banks to better compete



## RISKS

Reduced time to vet fraudulent transactions

More pressure on bank processes and people

Lost market share to competitors who adapt more quickly

## COMPETITIVE ADVANTAGES AND RISKS

While same-day ACH carries many benefits for banks and customers, some in the industry say it also comes with additional risks. Tom Fraser, president and CEO of First Federal Lakewood in Cleveland, Ohio, which holds \$1.6 billion in assets, says fraudsters will inevitably try to exploit changes in how banks settle. Financial institutions need to recalibrate some processes and their fraud detection systems.

Wayne Gniewkowski, risk consulting principal in Columbus, Ohio, at public accounting and consulting firm Crowe Horwath LLP, says faster processing will put management “up against the

clock” to vet last-minute transactions that are flagged for fraud. While banks already do this with next-day capabilities, same-day ACH could cut that window down to hours. Many businesses may leverage the system as a cost-effective way to expedite last minute payments, putting more pressure on bank processes and people.

“There is going to be more urgency from the clients to get their payroll processed or invoice paid on the same day because it impacts their employees or business operations,” says Gniewkowski.

Bank boards should already be discussing same-day ACH and incorporating it into their strategic initiatives. Deborah Peace, CEO of fraud protection service ACH Alert, says as more large financial institutions conduct transactions among themselves with proprietary solutions, same-day ACH can offer smaller banks a way to better compete with more rapid processing.

Fraser says bank boards will analyze operational, compliance and fraud risks, along with the risks of not adopting quickly enough and losing market share to competitors. He says same-day ACH has not yet emerged as a front and center concern or strategic imperative for most small or midsize banks. “Boards clearly need to be alerted to it because it is right at the intersection of strategic and operational risk and it’s something that we as an industry need to get in front of quickly,” says Fraser.

## ***A LONG-TERM TREND TO FASTER SETTLEMENT***

While same-day ACH is not an actual real-time processing system, it’s a major step in moving the U.S. financial system in that direction. Whaley says it’s a shift that will encourage more small and midsize banks to take the driver’s seat in innovation and technology. He says third parties such as PayPal and Square are already sending instantaneous debits and credits while managing the risk



***“A LOT IS  
BEING DRIVEN  
BY CUSTOMER  
DEMAND AND THE  
WORLD WE LIVE  
IN TODAY.”***

.....  
**Dave Godsmann,**  
senior vice president  
of emerging payments  
and commerce at  
Bank of America Corp.

that comes with it.

Cathy Housaman, senior vice president and director of banking support services at Johnson Bank in Racine, Wisconsin, which holds \$4.1 billion in assets, says the bank thought it was important to offer same-day ACH origination. She says Johnson Bank has been analyzing its operational procedures to ensure its clients would have a seamless experience on rollout. While only 10 percent of Johnson's commercial clients use ACH services, she says it's essential to ensure payment offerings are current. "There is increasing pressure on financial institutions to participate in this space and offer real-time payment solutions," says Housaman.

Like most major financial institutions, Godsman says Bank of America is already "well positioned" to implement same-day ACH based on the nature and size of the organization. Most larger banks are already working on their own systems to move money at a faster pace. In 2015, several major banks, including Wells Fargo & Co., Bank of America, and J.P. Morgan & Chase, came together and merged Early Warning and clearXchange to form a real-time payments network. In March, Bank of America announced it was processing real-time, person-to-person transactions through the network with a reach of 22 million mobile banking customers in the United States.

"A lot is being driven by customer demand and the world we live in today...the macro-level trend is moving from batch cycle settlements to real-time settlements. This is the first step on that journey," says Godsman. **[BD]**

---

**Craig Guillot**

is a writer in New Orleans, Louisiana, and a contributor to *Bank Director*.

---

**Share this article**

Sharing options are located in the right corner of the top navigation bar.



## HIRING A CHIEF TECHNOLOGY OFFICER

**B**ob DiCosola, the executive vice president of human resources at Old Second Bancorp, a \$2.2 billion asset bank holding company in Aurora, Illinois, talks about hiring a chief technology officer with a business background and what the bank will need going forward.



## A BOARDROOM CONVERSATION

### *Could Watson Have Saved Wells Fargo?*

**R**yan Gilbert is one of a rare breed in the realm of bank directors. He's a venture capitalist and technologist who founded a company called PropertyBridge that was acquired by MoneyGram in 2007. Since then, he has joined the board of Sacramento-based River City Bank, which has about \$1.6 billion in assets. He also is a partner at San Francisco-based Propel Venture Partners, a venture capital firm backed by Spanish bank BBVA Group. He spoke recently with *Bank Director* digital magazine about the technology he thinks will transform banking, as well as how the industry could move forward in terms of innovation.



**Ryan Gilbert**

is a venture capitalist, technologist and board member of River City Bank.

### **What is happening on the technology front that excites you?**

We have been talking a lot at Propel Ventures about the invisible bank. Digital bank means online access or mobile apps, but an invisible bank is the next stage. What happens if you don't need an app to find out what's happening in your bank account? What if you can speak to [Apple's artificial intelligence assistant] Siri or go into Facebook Messenger and ask: What's my balance? What did I spend at Safeway? I'm super-excited about the concept of invisible banking. We are looking at companies doing natural language processing. You want to speak to a system the same way you would speak to a human being. We are looking at artificial intelligence and what machine learning could mean for small business and consumer banking, so the systems could push out answers the consumers want



## A BOARDROOM CONVERSATION

### *Could Watson Have Saved Wells Fargo?*

small business and consumer banking, so the systems could push out answers the consumers want.

A good example is IBM's acquisition of Promontory. Think of the power of taking the knowledge of Promontory and ingesting it into the Watson artificial intelligence system and being able to roll out a "Watson for banking" solution so a consumer's questions could be answered by Watson. You have tremendous opportunity to give more appropriate and thoughtful responses and cut out bad acts. I'm pretty sure Watson wouldn't allow cross selling as it happened [at Wells Fargo] if Watson understood it would be illegal.

I don't think banks are going to be disrupted. Banks serve a very important purpose. Regulation is in place and compliance with state and federal laws is absolutely critical. But you can change the industry and the way business is done. We talk about the concept of money, for example. Money doesn't come with instructions. Everything else comes with instructions from computers to cars. Even medicine, it comes with instructions when you go to the pharmacy. If you can come up with systems to help consumers better save and earn and invest their money, there is a huge upside.

### **Does the federal government need to have a charter for fintech companies?**

State and federal governments need to realize change and innovation won't happen within the existing system driven by exist-



**Ryan Gilbert**

is a venture capitalist, technologist and board member of River City Bank.





## A BOARDROOM CONVERSATION

### *Could Watson Have Saved Wells Fargo?*

novation won't happen within the existing system driven by existing charter holders. If they are serious about driving innovation, something needs to be developed. The U.K.'s Financial Conduct Authority has done great work creating "sandboxes" for financial innovation. One of the challenges we have in the United States is something like 61 different state and federal agencies touch the activities of financial services. I think all those folks need to get together and come to terms as to who will be a primary regulator for financial innovation. [After this interview, the Office of the Comptroller of the Currency announced it would create a federal fintech charter.]

### **Is compliance holding banks back?**

I think in the U.S., compliance is holding banks back relative to other companies, nonbank institutions, and for very, very good reason. The level of reporting and accountability that a bank IT leadership team has is significantly more complex and burdensome than any other [type of] company. I would really hate to be a recruiter for bank technology teams right now. You have to find people who take seriously their fiduciary duty to protect the money of their depositors. It certainly puts banks at a competitive disadvantage. If I was a hiring manager, I would focus on the positives of working for a good bank. One is compensation, which could be good, and quality of life standards. Not everyone wants to be in a big bustling city where a one-bedroom apartment rents



**Ryan Gilbert**

is a venture capitalist, technologist and board member of River City Bank.



## A BOARDROOM CONVERSATION

### *Could Watson Have Saved Wells Fargo?*

could be good, and quality of life standards. Not everyone wants to be in a big bustling city where a one-bedroom apartment rents at \$3,200 per month.



**Ryan Gilbert**

is a venture capitalist, technologist and board member of River City Bank.



BankDirector. Strong Board. Strong Bank.

# SAVE THE DATE

## UPCOMING EVENT

April 24-27, 2017

New York

## FINTECH WEEK NYC

### Event Highlights Include:

- + FinXTech Annual Summit
- + Financial Services Leadership Exchange
- + Empire Startups Fintech Conference

### Now Accepting 2017 Submissions for the Best of FinXTech Awards!

Recognizing stand out performance  
based on:

- Innovation
- Growth by Revenue, Customers or Reputation
- Strength of Integration

**+ TAP TO SUBMIT**

*Submit Your Nomination Today!*

# Register Now



Tap to  
**Register Now!**





BankDirector. Strong Board. Strong Bank.

# SAVE THE DATE



## SAVE THE DATE

January 29-31, 2017

**Phoenix** | *JW Marriott Phoenix  
Desert Ridge Resort & Spa*

# ACQUIRE<sup>OR BE</sup> ACQUIRED

The Financial Industry's Premier  
**BANK M&A+  
GROWTH EVENT**

### 23rd Annual Event Highlights Include:

- + The Most Timely + Relevant Presentations
- + Interactive Discussion Groups
- + Unparalleled Insight from Leading Advisors
- + An Audience of Your True Peers
- + New Topic Breakout Sessions

# Register Now




Tap to  
**Register Now!**




**Bank**Director. Strong Board. Strong Bank.

# EXPLORE + SHARE

 Scroll through  
BankDirector.com  
and tap an article  
to read the full  
version.

SWIPE UP



**Bank**Director.com  
An Online Information Resource  
On All Things Bank Board-Related

---

View these articles and more at **BankDirector.com**

# BankDirector®

## Digital Magazine

THE TECH ISSUE

---

### CEO

Al Dominick

### Chief Operating Officer

Mika Moser

### Editor

Naomi Snyder

### Director of Client Relations

Laura Proffitt

### Art Direction and Design

Robertson Design

### Marketing Manager

Robert Phelps

### Circulation Associate

Claire Kennedy

### Controller

Ryan McDonald

---

### Bank Director Senior Leadership Team

---

#### Board of Directors:

*Chairman* Joan Susie, Al Dominick,  
Mika Moser, Kelsey Weaver  
*and Founder and Chairman of  
the Executive Committee*  
Bill King

#### Editor in Chief

Jack Milligan

#### Vice President, Conferences and Chief Project Officer

Laura Schield

#### Chief Brand Officer

Michelle King

---

*Bank Director* is published eight times per year digitally and four times per year in print by DirectorCorps Inc., 201 Summit View Dr., Suite 250, Brentwood, TN 37027. The entire contents of *Bank Director* are copyright ©2016 and may not be reproduced in any manner without written permission. All rights are reserved.

### Contact us

To get on the mailing list to be notified about new digital issues or subscribe to the print magazine, contact:

✉ **Circulation** | [circulation@bankdirector.com](mailto:circulation@bankdirector.com)

For editorial inquiries, contact:

✉ **Naomi Snyder** | [nsnyder@bankdirector.com](mailto:nsnyder@bankdirector.com)

For advertising opportunities, contact:

✉ **Laura Proffitt** | [lproffitt@bankdirector.com](mailto:lproffitt@bankdirector.com)



Like us on  
Facebook



Follow  
Bank Director  
on LinkedIn



Follow  
@BankDirector  
on Twitter



Watch educational  
videos on  
Bank Director's  
YouTube Channel