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**IN THE
AFTER-
MATH
OF A
MOST
EVENTFUL
YEAR —
A GUIDE
TO THE
ISSUES AND
IDEAS THAT
WILL DRIVE
FINANCIAL
INSTITUTIONS'
STRATEGIC
THINKING
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FORWARD**

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JANUARY 2017 / VOLUME 127 / NO 1



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Customer data. Performance metrics. Artificial intelligence. Mobile peer-to-peer payments. Digital mortgages. Voice assistants. Patent trolls. Joint bank accounts. M&A. We offer some fresh perspectives on these topics and more to help with your strategic thinking on how to tackle the opportunities and challenges in the year ahead.

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MOST READ

Trump's Surprise Victory Changes the Game

World markets were rattled in the immediate aftermath of Donald Trump's election victory. But once they adjust, financial institutions are likely to embrace his deregulatory agenda.



MOST SHARED

CFPB's Precarious Future Under Trump

Weakening the Consumer Financial Protection Bureau's powers and attempting to remove Richard Cordray from his post as director are among the new president's possible moves.



MOST COMMENTED

Fury Over CFPB Ignores Its Modest Mission

Though the threat to the watchdog agency's future became more real with Trump's win, all the outrage about its policies is overblown, Gregory D. Squires said in a BankThink post.



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Editor's Note

BY BONNIE McGEER

Humanizing Data, Not Just Parsing It

Our financial data conveys a lot of personal information about us – how much we make, how much we spend, how much we save, how much we invest – but is by itself just a lot of impersonal numbers. And as convenient as online and mobile options are for dealing with financial services providers, these interactions are impersonal too, notwithstanding the welcome message on screen addressing us by name and the targeted ads.

Even in a digital era, human connections still matter. That is one big disadvantage for all those fintech startups that operate only online, and increasingly for banks as customers stop making regular visits to their favorite teller (or, perhaps more common now, ever speaking to a teller at all).

So it is instructive to hear what kind of creative thinking is going on about this challenge at some of the feisty competitors that aim to make banks irrelevant.

Take SoFi, for example.

Would you attend a singles mixer set up by a bank? How about use a dating app from a financial services provider? The San Francisco-based online lender Social Finance, better known as SoFi, is making both of these tactics part of its strategy to attract and retain millennial customers.

“We throw happy hours every week in New York and all across the country,” said Shaunda Brown, senior director of business development for SoFi. “We’ve taken people singles skydiving over Valentine’s Day.”

The company has organized 400 events in the past year. At least three couples have met at the events, and one is now engaged. SoFi intends to pay for the wedding.

Brown was part of a fintech panel discussion on the topic of “humanizing data” that the Alliance for Downtown New York hosted in November. She talked about the importance of finding new ways to understand the people behind the data, to create a meaningful connection and ultimately to provide better products and services.

SoFi started out with a focus on refinancing student loan debt – “a \$1.3 trillion crisis in this country,” she said – but now has expanded into mortgages, personal loans, wealth advisory services and insurance products. Brown refers to SoFi’s millennial targets as “early career professionals.” They are a highly desirable group the industry often calls “high earners, not rich yet,” or HENRYs for short.

Though a lender with a dating app and singles mixers might be radical, SoFi is essentially creating a community with a common bond – they are all college graduates at the same life stage. “You come to these events and you’re like-minded individuals, you’re highly educated, you have careers, and you’re meeting other people who are interested in similar things, and you’re connecting naturally,” Brown said.

SoFi’s attitude on FICO scores is just as radical. The data points that most lenders rely on to make their decisions have remained the same for decades and are no longer relevant, Brown said. “We’ve eliminated FICO from our underwriting criteria, which is different than any other lender,” she said. “That’s a backward look at what you were doing in the past. It doesn’t impact what you are going to be doing in the future.”

SoFi believes a better gauge for loan prospects is their cash flow and future earning

potential. “If you have a degree, you’ve worked hard, you’ve graduated, now you’re making income, you’re much less of a credit risk than when you were 18 years old and perhaps took out a student loan, for example. And so you’ll be much less likely to default,” Brown said.

That thinking is borne out by the results. Of the 200,000 loans SoFi has issued so far, only 15 have reached default – half of those due to untimely death.

Part of SoFi’s “humanistic approach” also involves career services. “The No. 1 reason someone wouldn’t be able to pay back their loan is because they lost their job,” Brown said. “So what SoFi is able to do is pause their loan and help them find a new job through our networks.”

SoFi is seeking to make student loan contributions part of employee benefits as well. It has a SoFi at Work program to target employers, and Brown said it has worked on a bill in Congress that would make a company’s contributions toward repaying employees’ student loans tax exempt, much like 401(k) contributions.

In Brown’s view, banking needs a lot more radical thinking like the kind that goes on at SoFi and other fintech challengers. “Banking issues can’t be solved by traditional bankers. It needs a fresh view and it’s not just tech. You actually need new strategies, you need new ways of engaging, new customer experiences,” she said.

“I would love to see a new generation of people that can come in and think differently about the customer experience and a product set that is much more in line with a long-term view of financial health, versus a short-term view of, ‘I’m going to get paid my fee today.’ ” □

Briefings

COMMUNITY BANKING | CONSUMER FINANCE | LAW & REGULATION



BSA Staff Goes from 3 to 22 at One Community Bank

Small banks are feeling the sting of much tougher Bank Secrecy Act enforcement

By John Reosti

WHAT A DIFFERENCE A YEAR MAKES.

Carter Bank & Trust in Martinsville, Va., finished 2015 on a high note that culminated in record earnings at the \$4.7 billion-asset institution. The notoriously frugal bank had gained momentum bringing in revenue to go along with its tight cost control.

Much of that changed when the bank felt a chilling effect from a sudden increase in its regulatory burden.

A consent order this fall required

Carter Bank to improve compliance tied to the Bank Secrecy Act. The bank said in a letter to shareholders that regulators told it to increase the number of people in its BSA department from three full-time employees to “a minimum of 22.”

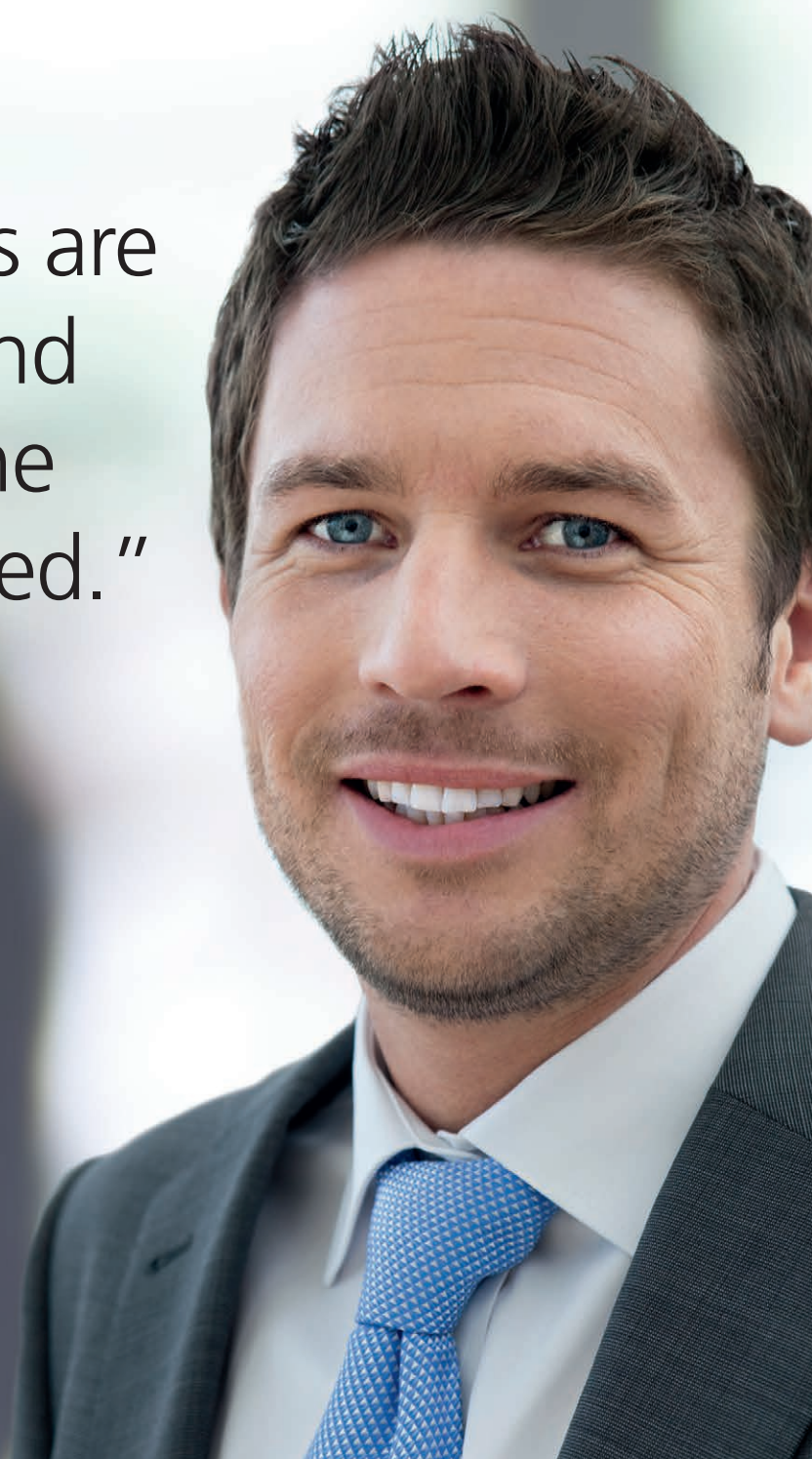
“We have no choice to but to comply,” Worth Harris Carter, the bank’s chairman and chief executive, wrote in the letter, which did not cite any specific reason for regulators to impose the mandate. “As of this date, the total cost is not known.”

Carter Bank’s quandary is further proof that regulators are stepping up BSA and anti-money-laundering enforcement at smaller institutions, industry experts said.

Andy Fernandez, a lawyer at Holland

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Giesecke & Devrient

Creating Confidence.

& Knight in Miami who specializes in BSA and AML issues, said he has worked with community banks in South Florida that employ twice as many compliance people as Carter Bank is expected to have. “All financial institutions are being held to a higher standard,” Fernandez said.

Among the small banks that have been dealing with regulatory pressure to improve BSA oversight are Carver Bancorp in New York, Investors Bancorp in Short Hills, N.J., and CU Bancorp in Los Angeles.

“We’re definitely seeing increased activism on the part of regulatory authorities,” said Sharon Brown-Hruska, an economist who recently authored a study of BSA regulatory activity. “Has there been more crime or more money laundering? I’m not necessarily seeing a correlation.”

The Government Accountability Office noted in a March report that regulators assessed \$5.2 billion in BSA-related fines from 2009 to 2016, though the lion’s share was linked to several large, high-profile penalties levied against giants such as JPMorgan Chase, HSBC, ABN Amro and Citigroup’s Banamex unit.

Carter Bank, for its part, did not admit any wrongdoing and was not assessed a financial penalty. Still, the order’s requirements could cause considerable pain for an institution that takes great pride in pinching pennies. The bank’s efficiency ratio last year was just 55.7%, compared with 63% at similarly sized banks.

Besides the additional hiring, the bank must step up board oversight of BSA compliance, overhaul and upgrade its training and retain an outside firm to conduct a review. “Infrastructure changes, additional resources to assist with regulatory compliance, additional investments in new technology and additional personnel are all requirements,” Carter said in his letter.

Compliance “does not produce any revenue for the bank, rather it is a significant expense,” Carter lamented, noting that examiners had found no BSA defi-



“We’re definitely seeing increased activism on the part of regulatory authorities,” says Sharon Brown-Hruska.

ciencies at his institution before this year.

Carter Bank’s shareholders also will take a hit. The bank’s board opted to forgo a fourth-quarter dividend, ending a streak of at least 37 straight quarters – predating the financial crisis – where the institution made such a payment.

Officials at Carter Bank, along with the regulators behind its consent order – the Federal Deposit Insurance Corp. and Virginia’s Department of Financial Institutions – did not respond to requests for comment.

But if CU Bancorp’s experience is any guide, Carter Bank might end up spending millions to bring its systems up to regulators’ expectations.

The \$2.7 billion-asset CU Bancorp agreed to a consent order related to BSA compliance in September, noting that it expected annual expenses to rise by \$1.1 million due to increased staffing.

CU Bancorp also said that it expects to pay \$2 million to consultants.

In addition to the banks that have disclosed their orders, there are also informal BSA agreements that have been issued, Fernandez said. “Every big bank in the United States has been affected in one way or another over the past five years,” he said.

Brown-Hruska said she could understand the frustration of community bankers. Though in the long run better compliance protects a bank from potential missteps, “I think we should be somewhat concerned that it has become such a significant cost,” she said.

‘We Have No Appraisers in My County’

Lawmakers say regulation is to blame for shortage of appraisers in rural areas

A SHORTAGE OF APPRAISERS IN rural areas is sparking concern among key lawmakers that might lead to legislative changes to the Dodd-Frank Act in the coming year.

“We have no appraisers in my county,” Rep. Blaine Luetkemeyer, R-Mo., complained at a House subcommittee hearing on the topic in late November. “We have a county of 20,000 to 30,000 people and no appraisers.”

Conducting appraisals in rural areas can be more complex than in suburban and urban areas because there are fewer sales and comparable properties.

Yet these appraisers have to comply with the same regulations, and many feel the pay does not justify the work involved.

“We increased the requirements for appraisals,” Joan Trice, chief executive and founder of Clearbox, which provides services to appraisers, real estate agents and lenders, said during the housing subcommittee hearing. “But they make about half what they use to make. So no one wants to enter the profession with that kind of economic environment.”

Critics blame the Dodd-Frank Act for exacerbating the challenge because it emphasized appraiser independence and the importance of keeping distance between appraisers and lenders. Under the law, almost any effort to influence an appraiser’s judgment can be considered a violation of Dodd-Frank.

Even so, any person with an interest in a real estate transaction can ask the appraiser to consider additional comparable properties. They can also ask to correct errors in the appraisal report.

Some observers say the new regulations have created a “stone wall” that makes it difficult for appraisals to happen. “Appraisal independence is a great thing,” said David Bunton, president of the Appraisal Foundation. “Unfortunately, it has caused appraisers to be radio-active. The real estate agents don’t want to talk with them because they are afraid they will get into trouble and lenders won’t talk to them.”

Critical information is not being shared between the parties, he said.

“Talking to an appraiser is not coercion,” Bunton said. “It is communication,” to convey information.

Rep. Al Green, D-Texas, stressed that he wants to work on developing an appeals process to resolve disagreements between sellers and appraisers on the value of a house.

“We are concluding we need a balance and there seems to be a pervasive belief that a balance has not been achieved,” Green said.

The average age of an appraiser is 55 and there are some challenging barriers to entry into the profession, according to Rep. Lacy Clay, D-Mo.

An appraiser trainee must work under a certified appraiser for 2,000 hours to become certified and conduct single-family appraisals. That makes it hard for a trainee to make any money.

“We have set the bar too high,” Clearbox’s Trice said at the hearing. “You can become an airline pilot with less experience.”

Industry representatives said that issue has to be addressed. “The core of the problem is it takes a lot of time and a lot of money to become a certified appraiser. At the end of that process, you don’t get paid very much,” Joseph Pigg, executive vice president of the American Bankers Association, said in an interview.

What Congress will do is unclear. A spokeswoman for Luetkemeyer said he would hold more hearings and work toward ways to modernize appraisals.

The housing crisis exposed problems

in the appraisal industry, Luetkemeyer said at the hearing, and Dodd-Frank attempted to fix it.

“I am sure there are tweaks that need to be done,” he said. “At the end of the day, appraisers need to maintain their independence, but they need some flexibility.”

— Brian Collins

No Pot Luck

Will Trump’s AG pick just say no to pot banking?

THE FRAGILE DÉTENTE BETWEEN the federal government, the pot industry and the banking sector is suddenly in jeopardy.

President-elect Donald Trump’s nomination of Sen. Jeff Sessions for attorney general means that one of pot’s fiercest opponents is poised to become the nation’s top law enforcement official.

Sessions, an Alabama Republican, made headlines in April when he said, “Good people don’t smoke marijuana.” He also has spoken admiringly about Nancy Reagan’s ’80s-era “Just Say No” campaign.

The pot industry views the possibility of a Sessions appointment as a setback, after the passage of legalization ballot measures in eight states. Voters in California ratified the drug’s recreational use, while medical marijuana won approval in Florida.

“Jeff Sessions is a drug-war dinosaur, which is the last thing the nation needs now,” said Ethan Nadelmann, executive director of the Drug Policy Alliance.

Trump himself has taken a softer line on the issue than his pick for attorney general has. He has called state-level legalization of recreational pot a “bad” experiment, but also has expressed support for providing medical marijuana to very sick patients.

The banking industry is generally agnostic on the question of whether marijuana should be legalized.

Throughout the Obama years, banking groups have consistently taken the position that it is dangerous for banks to do business with the fast-growing pot industry, since the laws of states that have legalized the drug are still in conflict with the federal ban. That cautious view earned some vindication with the Sessions announcement.

In comments from 2014 that now look prescient, Jenifer Waller, senior vice president at the Colorado Bankers Association, described pot as a “serve-at-your-risk industry.”

“Because anytime there’s a change in administrations, anytime there’s a change in the law, you could be prosecuted,” Waller said.

Most U.S. banks have heeded that warning. Fewer than 3% of all banks and credit unions attest that they serve the pot industry, according to government data from earlier this year.

Bankers’ wariness has forced many marijuana businesses to deal entirely in cash, which they say is not only inconvenient, but also leaves them vulnerable to robberies.

Over the last few years, the Obama administration has been trying to ratchet down the conflict between federal and state laws. A 2013 Justice Department memo laid out precautions that the state-sanctioned pot industry could take to reduce the chances of a federal raid. The following year, the Financial Crimes Enforcement Network used that memo as the basis for guidance on how banks could reduce the risks involved with serving these businesses.

But memos and guidance from the executive branch do not carry the force of law. They can easily be discarded by the incoming administration.

On the other hand, it is also possible that any crackdown by the federal government would spur a backlash on Capitol Hill. Members of Congress representing more than 60% of the U.S. population hail from states that have legalized pot.

— Kevin Wack

BankTechnology



OCC Grants Fintech Wish To Join the Banking System

Bankers worry about a new federal charter for fintech competitors, even if it does come with strings attached
By Lalita Clozel

THE OFFICE OF THE COMPTROLLER of the Currency plans to start granting limited-purpose bank charters to fintech companies.

The move is a significant victory for fintechs, which had sought a federal charter to avoid registering in multiple states and facing different laws in each. The federal charter would allow them to comply with a single set of national standards for the most part. It also gives them a single agency to apply to when seeking

a license.

The OCC decision is likely to set off a battle with state regulators, who have warned that a federal charter is both dangerous and unnecessary. Some in the banking industry also fear fintechs will gain the advantages of a bank without similar regulatory obligations.

But Comptroller of the Currency Thomas Curry said that the agency would subject fintechs to appropriate standards that do not give them an edge over the competition.

“It will be much better for the health of the federal banking system and everyone who relies on these institutions, if these companies enter the system through a clearly marked front gate, rather than in some back door, where risks

THEM

A spherical orb of eight equal panels divided by recessed ribs and measuring 9.5 to 9.85 inches (24.1 to 25.0 cm) in diameter consisting of an inflatable inner rubber core typically inflated with oxygen (O), then generally wrapped in layers of fiber and covered with a surface made from the dried and processed hide of domesticated ungulates of the subfamily Bovinae (traditional), rubber consisting of polymers of the organic compound isoprene, or a synthetic composite.

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may not be as thoughtfully assessed and managed,” he said.

The OCC asked for public comments – due Jan. 15 – to determine exactly how the fintech charter should be granted.

Though the details are still being worked out, companies that obtain the charter would be granted the same pre-emption over state laws that national banks possess.

They also would have to comply with regulatory requirements such as the Bank Secrecy Act and other anti-money-laundering provisions, as well as relevant consumer protection laws.

“The reality today is that the 4,000 fintech companies out there are already competing with national and state banks, without regard to any of the national bank responsibilities and under a patchwork of supervision,” Curry said.

In order to apply for a special-purpose charter, a company must engage in fiduciary activities, or either one of the three core banking functions: lending money, paying checks or receiving deposits.

As the OCC hinted at in a proposal issued in September, the agency expects fintech applicants to apply as nondepository institutions, which would mean they could avoid certain requirements that come with being supervised and insured by the Federal Deposit Insurance Corp. Still, the OCC said it could include some of those requirements as part of the chartering process, such as mandating that fintechs comply with the Community Reinvestment Act.

Curry said that applicants will have to explain how they plan to address financial inclusion as part of a detailed three-year business plan that includes economic forecasting and risk assessments.

The OCC also has suggested it would enforce higher capital requirements on fintechs than on banks, because of “off balance sheet” business activities they might be involved in.

“The OCC would consider adapting capital requirements applicable to a fintech applicant for a special purpose

national bank charter as necessary to adequately reflect its risks and to the extent consistent with applicable law,” the OCC wrote in a paper it issued on the topic.

Like banks, fintechs also will be required to develop a formal plan for failure and to have a hands-on board of directors.

Curry called for the development of “a formal agency policy” that will determine whether the OCC grants a fintech’s application for a charter.

He also talked up the potential benefits of allowing fintechs into the banking system. “Fintech companies hold great potential to expand financial inclusion, empower consumers, and help families and businesses take more control of their financial matters,” he said. “Fintechs, while not without some risks, also can potentially deliver these products and services in a safer and more efficient manner.”

As national banks, special purpose or not, they must still comply with some state laws, including anti-discrimination, fair lending and debt collection laws, the OCC said.

Since last year, the OCC has made efforts to position itself as a leading player in fintech among federal regulators. In March, the agency issued a white paper on so-called responsible innovation, calling for public comment on how it could better tackle the growing industry. And in October, the OCC announced it would create an Office of Innovation to coordinate outreach to fintechs and internal research on the topic.

Gen X Marks The Spot

Pact with robo-adviser is step toward a bigger goal for Citizens

COUNT CITIZENS FINANCIAL GROUP among those set to pursue Gen X online with a new offering – in this case by de-

veloping a robo-adviser with SigFig.

“Life stage is really important,” said John Bahnken, president of wealth management for the \$147 billion-asset Citizens. “People 40 to 45 years old who are building for their retirement are likely to be the people who will initially put money in these accounts. It lets them build and manage their portfolio in a goal-based manner.”

Older clients are less likely to use a robo because they are in the “deaccumulation” phase of their lives, Bahnken said. They’ve already built their nest eggs.

Robo-advisers use automation to make investment services less expensive. Robos can ask questions to determine an investor’s risk tolerance and goals, assess their current investments (through screen scraping) and recommend a basket of exchange-traded funds.

Though fintech startups in this space often target millennials, investors of all ages find the affordability attractive.

“Millennials are just starting out in their savings,” said Eli Broverman, co-founder and president of Betterment, which is the largest robo-adviser, with 200,000 users and more than \$5 billion in assets under management.

Betterment’s ideal target has less to do with age than with lifestyle and personality, he said. The average age of its users is 51.

“Our customer is the tech-loving investor,” Broverman said. Betterment’s biggest sources of customers and competition are the giant investment providers Vanguard, Fidelity and Schwab.

In teaming up with a robo-adviser, Citizens is following in the footsteps of banks like BBVA, which partnered with FutureAdvisor last January; Wells Fargo, which announced its own partnership with SigFig in mid-November; and Bank of America, which is building its own robo, guided by Merrill Lynch’s chief investment office.

“A bank like Citizens or Wells has a much higher concentration of mass affluent and retail customers, and up until

Robo Ready

Over the past year several banks have partnered with robo-advisor companies or launched their own robo offerings

January 12 BBVA + FutureAdvisor

May 16 UBS + SigFig

June 17 Capital One launched its own robo

August 24 U.S. Bank + FutureAdvisor

October 3 Bank of America announced it will build its own robo

November 15 Wells Fargo + SigFig

December 1 Citizens Bank + SigFig

now, the offerings they have had for retail customers have been slim to none,” said Michael Sha, founder and chief executive of SigFig. “The problem is, if you’ve got \$200,000, you’re not an interesting client, you’re underserved.”

The first decision Citizens had to make, after deciding to offer robo-advice, was whether to build its offering in-house or partner with a white-label robo provider like SigFig or FutureAdvisor.

“We made an early decision that partnering with a fintech made the most sense from a technological standpoint,” Bahnken said. “That would allow us to focus more on how we would integrate this capability into our overall offering, and how we would construct the portfolios – things where we thought we could add value and benefit from the fintech’s sophisticated use of technology.”

When the service rolls out in 2017, it will be based on SigFig’s basic ETF-centric robo, with SigFig subadvising some portfolios in the early stages. But gradually, the bank plans to shift to its in-house expertise, possibly as soon as midyear. So over time, this will be less of a robo offering and more of a digital channel for Citizens’ investment advisory business.

“This new technology provides a different interface into those decisions,” Bahnken said. “The client would go through a series of questions to establish their risk tolerance and what their goals are. Then there’s that diagnostic of their existing portfolios, if they have them. And then we’ll make recommendations if

the client wishes to have their portfolios managed by Citizens.”

The robo will be part of Citizens’ online and mobile banking platform, offering customers convenience, including a single sign-on and the ability to move money between accounts, Bahnken said.

“We also view this as being complementary to our financial consultants,” he said. “There’s a significant portion of the investor population that’s interested in digital solutions, but they also talk to someone.”

Citizens customers will be able to choose whether to invest on their own or get the input of a financial consultant, Bahnken said.

There will be a live chat feature that customers can use midstream from the robo. An investment call center also will be linked to these accounts, so a customer could pick up the phone while they’re going through the process and talk to a financial consultant.

Fees and commissions will be “competitive,” Bahnken said. “A lot of firms have gravitated to the 40- to 75-basis-points range,” he said. “We’ll be in that range, perhaps on the lower end.”

How the new robo will be branded hasn’t been decided. Citizens might use just its own name and brand, or it might use a line like, “Powered by SigFig.” – Penny Crosman and Kristin Broughton

Turn Vacation Fantasies Into Reality

An online lending startup offers loans to travelers

UPLIFT IS THE LATEST SILICON VALLEY startup hoping to grab some of the \$1 trillion credit card market.

It’s partnering with large travel companies to offer 12-month loans to consumers who are booking vacations online.

UpLift announced this fall that it has deals with Golden Nugget, which operates hotels and casinos in four states, as well as the company that offers travel packages for Southwest Airlines and United Airlines. Visitors to travel websites operated by those companies will have the option to pay for a trip with an UpLift loan, instead of a credit or debit card.

The thinking is that for vacation packages that cost several thousand dollars, some consumers would rather take out an installment loan than pay what might be a higher interest rate on their credit card. Other consumers might be too close to their credit limit to book a trip using plastic.

Brian Barth, UpLift’s CEO, is pitching travel companies on the notion that offering its loans, in addition to the option of paying with a debit or credit card, will lead more online shoppers to buy.

“You see tons of searches for Hawaii,” he said. “And then they see it’s three grand, and they close the browser.”

The travel companies will get a share of the profits from the loans.

UpLift plans to compete for borrowers by paying its customers the points they would have received if they’d made the purchase on their airline-branded credit card.

UpLift, which will sell its loans to investors, plans to charge interest rates similar to companies like Lending Club, with borrowers being graded based on measures of their creditworthiness.

The Sunnyvale, Calif., startup has one important advantage over much of the existing crop of online lenders: It will not have to pay to acquire customers, which is often a substantial expense, because its customers will already be poised to make purchases.

“We believe we’re actually going to be able to capture about 10% of the volume for most of these sites,” Barth said.

Barth and Stu Kelly, the co-founders of UpLift, know the travel industry well. The travel search site Kayak bought their first startup in 2007. – Kevin Wack



Agenda

2017

As you plan for the coming year — and beyond — here are some challenges and opportunities worth thinking about.

Beware the ‘Cargo Cult’ of Performance Metrics

(Or, Don’t Let Metrics Manage You)

On April 18, 2014, the day Umpqua Holdings closed a \$2 billion deal to acquire Sterling Financial in Spokane, Washington, Ray Davis, Umpqua’s long-time chief executive, called a meeting for all Sterling employees. He announced that the sales quotas on which the newly acquired company had prided itself would be ending, effective immediately.

A collective sigh went up from the assembled staff, Davis recalled.

Throughout his 22 years as Umpqua’s CEO, Davis has forbidden sales quotas. “I’m more interested in how the customer feels,” he said. “If they feel really good about us, they’re going to tell everybody. If they don’t feel good about us, then we need to figure out what the hell we’re doing wrong.”

His approach has special resonance at a time when the industry is questioning its use of performance metrics.

In September, Wells Fargo had to pay \$185 million in fines for setting up a few million unauthorized customer accounts – actions taken by 5,300 salespeople to meet or exceed sales quotas and earn bonuses. Under fire from Congress and with Wells’ stock price suffering, its then-chairman and CEO, John Stumpf, resigned a month later.

At the same time, leaders inside and outside the financial industry have expressed concern over what they see as a plague of short-term thinking in C-suites, driven largely by the eternal need to meet quarterly earnings projections.

In July, a group of CEOs that included JPMorgan Chase’s Jamie Dimon and Berkshire Hathaway’s Warren Buffett put out a proposed list of corporate governance principles, one of which called for an end to earnings guidance.

Buffett argues that guidance can lead to corporate malpractice. “If the CEO goes out and says, ‘We’re going to earn \$1.06 next quarter,’ I think that if they’re going to come in at \$1.04, there’s a lot of attempts to find a couple extra pennies some places,” he told CNBC this past summer.

Just as quotas pressure employees to produce numbers that



look good – even to the detriment of customer satisfaction – so all kinds of metrics can have unintended consequences.

Then the numbers stop being meaningful and instead just warp reality. Relying on them can turn a once-healthy company into a “cargo cult,” a term originating in anthropology that refers to mimicking something’s outward form while having none of its function.

“If you pay someone to produce numbers, then they will produce those numbers,” said Peter Conti-Brown, a professor of legal studies and business ethics at the University of Pennsylvania’s Wharton School. “And they may produce those numbers in a way that is fraudulent or in a way you don’t like.”

With metrics, a healthy dose of skepticism is required.

“Never forget that the metrics are proxies,” Conti-Brown said. “They are not the underlying reality. The underlying economic reality is very slippery.”

Banks need “the belt and the suspenders,” as Conti-Brown puts it. When drilling down on a single metric, they should use as many different means to evaluate it as possible.

At Umpqua, Davis doesn’t eschew metrics altogether. Since the mid-’90s, the bank has been running a program designed to measure the performance of its branches – called “stores”

– using several weighted criteria, including the results of customer surveys and churn ratios.

“What I want to measure is how well we do in delivering a customer experience they can’t get anywhere else,” said Davis, who is stepping down as Umpqua’s CEO effective Jan. 1 to serve as executive chairman of its board of directors. In his new role, Davis will focus more on overseeing Umpqua’s innovation unit, Pivotal Ventures.

Jason Goldberg, an analyst at Barclays, recommends employing outside consultants as “mystery shoppers” who can report back about their experience in the branches. Another good idea, he said, is to set up an independent quality-assurance department that follows up with customers to make sure they are having their needs met.

“You can’t become over-reliant on numbers,” Goldberg said. “You have to look not only at the performance metrics but at how they’re achieved.”

He quotes an old saying: “You get what you inspect, not what you expect.”

Davis, for his part, has found mystery shoppers insufficient. “Hiring someone from the outside is hard,” he said,

“What I want to measure is how well we do in delivering a customer experience they can’t get anywhere else,” says Ray Davis, Umpqua’s longtime CEO.

“because your people are damn smart. They figure it out real fast.”

So he came up with a creative – and some might say crazy – way to keep his finger directly on the pulse of customer sentiment. “This sounds really corny, but it works,” he said. “In all of our locations – 300-plus – we have a phone in the lobby that’s available to our customers, and if they pick up that phone and hit the number 8, that phone rings on my desk. And I pick it up. I take those calls.”

Davis said he receives two or three such calls a day. Half of the callers hang up; they just want to see whether he will really answer. The other half are useful calls – either thank-you’s for good service or complaints.

“Sometimes there’s a problem,” Davis admits. “And I like to hear about it.”

– Brian Patrick Eha

Rethink the Joint Bank Account

For all the improvements banks have made to our personal accounts, it seems they have done little to modernize our joint accounts.

Think about it. We receive email alerts if balances fall below a certain amount and we have tools on our mobile device that can track spending and saving in real time.

Yet joint accounts are still stuck in another era. To the extent they are marketed at all, these accounts are largely geared to married couples, even though adults are marrying later in life than they did a generation ago. They generally lack some simple modern conveniences, like alerts that let one accountholder know what the other is spending, and they are not set up to let both accountholders view account activity simultaneously.

The folks at Simple, a digital-only bank owned by BBVA Compass, have been thinking about these shortcomings with joint accounts and may have hit upon a solution – or at least a partial one.

Its account is called Simple Shared, and the key feature is a real-time alert that lets both accountholders instantly know when money is moving in and out. Krista Berlincourt, a Simple spokeswoman, said a big reason why some people are reluctant to open joint accounts with a partner is because they feel in the dark about what others are spending. Real-time alerts solve that problem, she said. (They could also lead to disputes – “you spent *what* on tickets to the hockey game?” – but that’s a separate issue.)

Another difference is in the way the product is marketed. Simple Shared is still in the beta phase right now, but when it is rolled out sometime in 2017, the bank intends to market it as a product to any two people in some sort of financial partnership, such as roommates, friends, siblings or parents and their children.

It’s a start, but Simple Shared doesn’t resolve what some see as the biggest problem with joint accounts: They aren’t built to allow both accountholders to view activity at the same time.

Let’s say a spouse is thinking of buying a new car. One partner is at the dealership contemplating the purchase and wants to talk it over with the other partner. They both want a clearer



view of their finances before making the purchase, but the way joint accounts are set up, only one of them can log on to the account at a time.

“They should both be able to log in with their own passwords, from two different devices, and see this data in real time,” Bradley Leimer, head of fintech strategy at Santander U.S., said about the limitations of joint accounts during a conversation at a fall conference.

The point is that if they are both looking at the same information, at the same time, they can make important financial decisions easier and faster. The same goes for joint accountholders with other relationships – say, parents and their college-age children or elderly adults and their grown children.

A case could also be made to allow shared, real-time access on individual accounts. Think of how much easier it would be for trusted tax attorneys or financial advisers to understand your financial situation if they could use a temporary login to see exactly what you are seeing on screen or perhaps a modified version tailored for a third party. It would save time and effort – speaking as someone who has had to print out a lot of documents just for this purpose.

“It’s really not that much of a leap,” Leimer said, adding that business accounts offer shared access and controls. “It’s just a new way to think about designing your consumer application with multiple points of entry.”

—Alan Kline

Refresh Your Board

Serving on a bank board isn’t what it used to be. Directors today are expected to interact regularly with regulators and shareholders, monitor cybersecurity efforts, plot online and mobile strategies, ensure the right culture by setting the tone at the top, and a whole lot of other things that, even a decade ago, weren’t part of the job.

Yet the composition of many bank boards hasn’t changed all that much. Overall, the industry has a reputation for boards that are “stale, pale and male” – clubby cliques of longtime members who lack the independence, skills and diversity to help a bank compete in the modern world. It’s not always a fair characterization, but if your board fits the profile, it might be time for a refresh.

“If you want a high-performing company, you need a high-performing board,” said Alan Kaplan, chief executive of Kaplan Partners, a Philadelphia-based executive recruiting firm that works with banks. “That means the board must be willing to refresh itself and ensure that it has the most current set of skills and experiences to help the bank succeed.”

There are no reliable stats specifically for bank boards, but corporate directors in general are longer-tenured and older than they’ve ever been. According to Spencer Stuart, another executive recruiter, the average age of an S&P 500 independent director was 63.1 in 2015, up from 62.1 five years earlier. Average tenures held roughly stable, at 8.5 years, but 21% of companies boasted averages of at least 11 years.

Experience and institutional memory aren’t bad traits for a director, and having veterans of the financial crisis would seem a definite plus for a bank board. “You wouldn’t change Tom Brady as quarterback just to refresh things,” said Joseph DePaolo, who is the CEO and also a director at the \$38 billion-asset Signature Bank in New York. “If you have directors who are energized, understand the issues and are productive in committee meetings, things don’t need to be refreshed.”

Even so, academic research suggests that regular changes are good for boards. A 2013 study led by Sterling Huang, a researcher at Singapore Management University, found that director effectiveness peaks at nine years. After that, providing independent oversight and strategic direction gets tougher, leading to poor performance and other problems.

“Directors are expected to challenge and innovate,” said

Charles Elson, director of the University of Delaware's corporate governance center. He pegs the ideal limit for board service at 15 years. "The longer you're there, the more comfortable you get with the status quo."

Shareholders also are more likely to push for board changes, especially if performance lags. "Long-term investors are becoming more vocal in demanding that boards have processes in place to review and evolve board composition in light of emerging needs," said Julie Daum, head of the North American board practice for Spencer Stuart.

Many boards today are pieced together like jigsaw puzzles, with specific skills sought that reflect the complexity of strategy and oversight. According to the consulting firm PwC, financial, risk management and industry expertise are in highest demand among financial services boards. Cybersecurity, IT and human resources skills aren't far behind.

Adding board members is easy; the hard part is cutting the dead weight. According to PwC, 42% of financial services directors in a 2016 survey said someone on their board should

"Directors are expected to challenge and innovate. The longer you're there, the more comfortable you get with the status quo," Charles Elson says.

be replaced, up from 34% in 2014. Yet few are willing to speak up publicly, for fear of damaging relationships.

"It's really hard for board members to ask someone to leave if they're underperforming or their skills are no longer current," Kaplan said.

Age and term limits are one solution. Among S&P 500 companies in 2015, 73% had a mandatory retirement age for board members, according to Spencer Stuart. But oftentimes change is mandated less by age or tenure than skills.

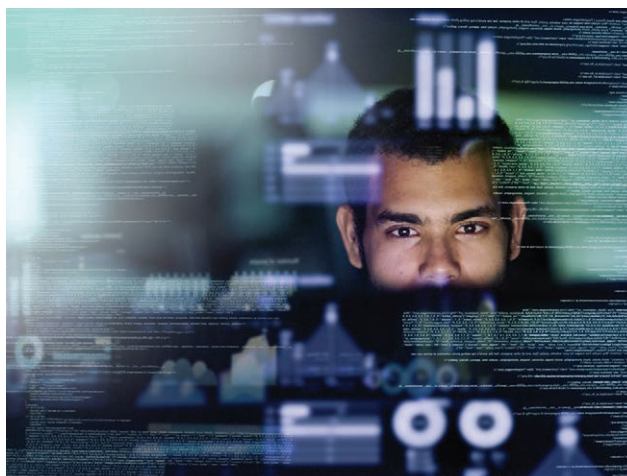
Kaplan suggests boards perform a confidential peer evaluation, run by a trusted outsider.

Fellow directors will open up about colleagues' shortcomings if they know it won't come back to them. If the group collectively identifies a weak link, then it's time to gently ask them not to stand for re-election.

"Sometimes you need to have the tough conversation: 'Thank you for your service; you're now an emeritus director,'" Kaplan said.

— John Engen

Redefine a Bank's Worth in the Digital Age



Digital banking is reshaping relationships between banks and customers, and at some point it is going to reshape bank acquisitions too.

After all, deals are about customer relationships.

"If technology is impacting the way customers and potential customers seek to interact with their bank, then you as the acquirer have to start taking that into consideration," said Brian Sterling, a principal and co-head of investment banking at Sandler O'Neill.

Today, when banks acquire, the slide deck that shows off the highlights of the deal often has a map of the branches of the two banks. The closer the dots are to each other, the more opportunity there is to strip out costs. The farther they are from each other, the more opportunity for mining a new market.

Though the emphasis on branches is likely to continue in M&A for the immediate future, this is poised to change.

"The question in my mind is when, and how do we get there, and how does that express itself," Sterling said.

Customers are increasingly relying on online and mobile channels to interact with their banks — a factor that does not get much play in deal pricing or even rate a bullet point on the list of deal highlights.

But industry insiders envision a future deal metric that takes into account increasingly precious customer data.

Many bankers say that the true value for banks going forward will be in the data. They are building loyalty digitally through additional services, rather than treating mobile banking as just another delivery channel for the same products available at the branch and online. Essentially, they want their customers to love their mobile app, not just see it as a utility.

So, as digital banking evolves, the way banks and their advisers view franchise value is likely to change. Banks will be valued less on their branch networks and more on their ability to generate revenue through online and mobile banking.

Banks are spending more to acquire data in order to identify new customers, said Jefferson Harralson, an analyst at Keefe, Bruyette & Woods, in a November research note.

“As customer acquisition via data grows, the value of branch networks and the concept of franchise value changes – as acquirers begin to care more about customer lists than branch footprints,” Harralson wrote.

Of course, the ones that excel at getting new customers via data may not need to do acquisitions at all, but investment bankers say that scenario is not fundamentally different than with, say, a bank that has the highest market share in its country. It is not typically a buyer because it is already effective at getting customers and the people that it doesn’t bank likely have a reason for not being customers.

Several deal advisers say this issue is something the industry is going to have to address eventually.

“We are early in the curve, but customers’ behaviors are changing and banks are increasingly dependent on their ability to differentiate themselves to attract and retain customers through channels that are not branch-based,” Sterling said. “As that continues, the industry is going to have to look for ways to value that form of franchise creation.”

For now, digital banking is not a real consideration as bankers and their advisers size up targets. They cite several reasons for this.

First, branches still matter enough that many consider digital banking to be a secondary channel, not the primary one.

“Everyone realizes that, at some point, digital banking is the future and that they’ll need to downsize unprofitable branches, but I still think there is a major need for them,” said Stephen Klein, an attorney at Miller Nash Graham & Dunn.

Also, acquirers tend to be larger and typically have better technology than their targets. So the thinking is that they’ll just fold the acquired institution into their shiny rocket of a platform. KeyCorp and First Interstate BancSystem are among

those that have talked up their ability to better leverage acquisitions via new banking platforms.

Others say there is a worry about banking becoming a commodity via digital channels. Valuing a commodity is, frankly, not very sexy.

Chris Donat, an analyst at Sandler O’Neill, said that the lack of value attributed to digital banking is vexing. For instance, he covers Ally Financial, which has a digital bank that managed to add \$11.7 billion in deposits over the last year.

“They are pretty effective in growing deposits with a branchless model, but I don’t think the market gives them much credit for it,” Donat said. “They have a complicated story, but it is impressive and is not something that can be built in a day.”

Digital banks use their lower overhead to pay up for deposits, which bolsters the perception that they have fickle customers hunting for yield.

But Donat said this discounting of digital banking is bound to change. He points to Capital One, which has an extensive

“As customer acquisition via data grows, the value of branch networks and the concept of franchise value changes,” says KBW analyst Jefferson Harralson.

branch network but is investing heavily in bolstering its digital banking capabilities. Among other things, it has bought a digital design firm, along with an online price adjuster.

“I don’t think they would be investing there if they didn’t think that was where the future was headed,” Donat said.

One of the struggles will be in figuring out what digital banking is worth. In the physical world, banks can lean on things like deposits per branch or market share in various metropolitan statistical areas. Such measures may seem irrelevant when one of the benefits of digital banking is not having to go to a branch. Notably, Citigroup reported in January last year that its investments in digital channels have helped it retain more than half of its deposit customers in markets it exited, like Philadelphia and Dallas.

Klein argues that commerce trends will help drive a shift in value. As spending becomes more digital, so will banking.

“It all really comes down to how commerce will be conducted,” Klein said.

— Robert Barba

Embrace the Digital Mortgage as a Competitive Advantage

The digital mortgage is more of an ideal than it is a concrete product.

While precise definitions vary, the term generally describes a smooth customer experience that may not even require a phone call or branch visit. It could be an intuitive process for applying for a loan online, perhaps with prepopulated data to save on typing. Borrowers upload financial documents and electronically sign disclosures. It can go as far as a fully paperless experience where all documents are executed electronically.

Embracing the concept can provide a competitive advantage in the mortgage market at a time when nonbanks are gobbling up banks' share of originations.

Digital mortgages are different than e-mortgages, which have been around for more than a decade. The latter term refers specifically to a loan that is backed by an electronic promissory note with an electronic signature. Digital mortgages may sometimes meet that definition, and they may have electronic closings. What makes them distinctive, though, is not the technological gizmos involved but the end result for the borrower.

"I would describe that as the capability to provide a mortgage experience for a borrower from application all the way to funding without human intervention on the lender's side," said John Harrell, vice president of mortgage product management at USAA Bank. "I don't know if that will ever be widespread, but if that's the goal then we'll end up having a ton of automation where the consumer is basically self-serving."

Self-service is the idea behind Quicken Loans' Rocket Mortgage, introduced in November 2015. Consumers enter personal information – such as their income and the banks where they have accounts – into a website or mobile app. Rocket Mortgage combines that with information collected by the company, retrieving bank statements, pay stubs and other documentation. This reduces the turnaround time for a loan by what it says is an average of eight days.

"Forever the burden of proof was on a consumer – you



could tell a mortgage banker about your finances and then you had to prove it by producing all these documents you never use," said Regis Hadiaris, the Rocket Mortgage product lead at Quicken. "We're focused on our clients and delivering an experience that makes sense for them."

In the first nine months of 2016, Rocket Mortgage funded more than \$5 billion in loan volume, according to Quicken. If it were a stand-alone company, Rocket Mortgage would rank as a top-30 lender.

E-closings are another way to fulfill the goal of the broader digital mortgage project. A study released in August 2015 by the Consumer Financial Protection Bureau found that, compared with consumers who closed a mortgage using paper documents, e-closing borrowers felt more in control, thought they understood better what was going on and found the process more efficient.

The industry has been slow to adopt e-closings due to a host of factors, including regulations that vary from state to state and some investors' distaste for the loans because of the perceived risk. But court decisions in 2016 affirmed that lenders can enforce a paperless mortgage as they would a traditional one in foreclosure proceedings – boding well for growth.

Residential Mortgage Corp., a midsize lender based in Fayetteville, N.C., recently completed its first e-closing. It took 15 minutes of the borrower's time, rather than the usual hour and a half, according to Mary Bright, vice president of operations at the company. "Customer service is the key for a midsize lender when you're competing with a bank," Bright said. "In order for us to compete with that, the only thing we can offer is customer service, such as quicker closings."



Notice that neither Quicken Loans nor Residential Mortgage is a depository. “The pace at which nonbanks can innovate is far greater than that of the banks,” said Josh Smallwood, vice president of software development at the residential mortgage lender Guaranteed Rate. “Nonbanks can actually move, change and pivot much quicker than the banks can.”

One disadvantage for banks is that their mortgage divisions have to compete with other business lines for funding and resources. “The mortgage business inside a bank tends to be one of the less understood businesses,” Harrell said. “They just want the mortgage business to print income for them. They don’t see it as an investment.”

Quicken Loans, by contrast, devoted 500 information technology employees exclusively to its Rocket Mortgage for three years.

Large banks’ share of origination volume dropped by about half, to 24%, between 2008 and 2015, according to Home Mortgage Disclosure Act data compiled by the Mortgage Bankers Association. Over the same period, the share written by nondepositories has doubled to 48%. (Community banks’ percentage of the market hovered in the low 20s during this period.)

In addition to making the process more attractive to consumers, technology can make mortgages cheaper for banks to originate, further helping them to compete. “This process is much less expensive,” said Jeff Bode, owner and chief executive of Mid America Mortgage, an independent lender based in Addison, Texas. “If your IT department can’t do this significantly cheaper than what you’re doing with paper, there’s something wrong.” — *Jacob Passy*

Try to Catch Venmo in P2P

Banks are bigger in P2P overall, but Venmo is better at functionality and branding.

Among millennials, Venmo is hot. In the third quarter, PayPal’s mobile person-to-person payments app processed \$4.9 billion in transactions, up 131% from a year earlier. The app is used for splitting bills – checks, rent, grocery bills, travel expenses – and allows for sending messages with the payments.

In perhaps the ultimate sign of its staying power, Venmo, like Google, has become a verb. On college campuses, the phrase “Venmo me” is synonymous with “send me cash.”

Should banks bother trying to catch up? Should they even want to? And if so, can they?

The answer to the first two questions is yes, and look for a major effort on that front in the coming year. Big banks aren’t newcomers to the mobile P2P space. JPMorgan Chase and Bank of America each processed about \$21 billion of P2P payments in 2015 through their own mobile apps, according to estimates from S&P Global Market Intelligence. But the P2P functionality in the apps can be cumbersome for users. And the apps don’t always play nice with other banks.

In contrast, Venmo makes paying acquaintances easy: Simply enter the recipient’s phone number or email address. Or, if you prefer, allow Venmo to pull in your phone and Facebook contacts and just search by name.

Millennials also appreciate the social component: Optional feeds make it easy for users to tell friends who also use Venmo, or even the entire Venmo universe, about who’s spending on what, and with whom.

Money moves instantaneously between PayPal accounts, but takes several days to make it to linked bank accounts.

The big banks, which have been working on their answer to Venmo through their clearXchange joint venture since 2011, get criticized for moving too slowly while a deluge of other fintech and social-media competitors piled in with offerings of their own.

In 2016, the banks merged clearXchange with the bank-owned Early Warning Services and then rebranded it as Zelle, short for gazelle. The Zelle app goes live in 2017, with 19 most-

ly large banks signed on. It will be available to many others through their vendors, as the industry's unified P2P play.

"We've made far more progress than we're given credit for," said Gareth Gaston, executive vice president for omnichannel at U.S. Bancorp, one of Zelle's owners. "The goal is to make this a ubiquitous product in the industry."

Mobile P2P payments might generate more expense than revenue for banks. PayPal has struggled to make money off Venmo despite its growth. While some have tried, no one has found a palatable way to charge for the service. Those who control the space could eventually win other e-commerce and other payments business, but that remains a work in progress.

Even so, as keepers of the accounts, banks have some inherent advantages when it comes to payments – and some clear reasons for wanting to control that business. "As a bank, you don't want to give your customers a reason to go somewhere else," said Zil Bareisis, a senior analyst with Celent.

As the moniker suggests, speed is Zelle's biggest selling point. With Early Warning, banks' fraud- and risk-management effort, playing the role of traffic cop, the app can create the appearance that payments are being processed in real-time (even though they're actually run on banks' Automated Clearing House system). "If you have two banks with a relationship as part of Zelle, an account can be credited immediately," even if it takes a day to officially clear, Bareisis said.

Bank-grade security and reliability are other potential pluses. Banks are viewed as more trustworthy than tech companies, and some social media-based P2P apps, such as one offered by Snapchat, have been prone to slowdowns and delays.

PayPal has responded to Zelle's arrival by strengthening its ties with Visa, which also has designs on expanding into mobile payments and the network to pull it off, but Gaston said the business is ultimately banks' to lose. "The incumbent competitors are a little bit of a sideshow," he said. "We can provide customers with something nobody else can – a very integrated experience with a genuine real-time transaction."

It will be difficult for Zelle to overcome Venmo's head start among millennials, Bareisis said, but there's room for more than one winner in P2P. Javelin Strategy & Research predicts that 126 million Americans will use mobile P2P payment apps by 2020, up 50% from today.

"Zelle won't kill off Venmo, but there will be customer segments that appreciate Zelle's affiliation with banks," Bareisis said. "The market is big enough that they can coexist."

– John Engen

Realize that Customer Data Is a Liability



The most significant data breach of 2016 was arguably the one that didn't matter at all.

What makes it so significant is not what the hackers took, but the takeaway for the rest of us. The hackers were unable to get any customer data, because there was none to steal.

ShapeShift, a digital currency exchange, lost about \$230,000 in a series of thefts discovered in March and April. But no customers' funds were taken, nor any of their personal information. Unlike most exchanges, the company holds neither. It simply arranges transfers from one cryptocurrency to another (bitcoin to ether, Dash to Dogecoin, Monero to Zcash, etc.). All users provide is an address to deposit their new coins.

"The only thing we need to know is their wallet address, where to send their asset and which asset they want," said Erik Voorhees, founder and CEO of ShapeShift, based in Denver. "That's basically it." As a result, all the hackers could steal was money from the company stash.

ShapeShift's no-questions-asked model is an extreme example (and a compliance risk). But the fact that its users were unharmed by a data breach underscores a harsh reality that mainstream financial institutions should recognize: Customer data might be a valuable asset, but it is also a huge liability.

ILLUSTRATION BY GETTY IMAGES/DAVE_MARK

You could even call it radioactive.

Banks know so much about their customers – not just how much money they have but where and how often they spend it – so they are uniquely positioned to craft targeted offers and advice, the thinking goes. But it is painfully clear that the more information a company has about its customers, the bigger the prize for hackers.

The year 2016 set a record for data breaches. There were more than 900 nationwide as of late November, according to the Identity Theft Resource Center, up from the previous peak of 783 in 2014. The financial services sector had the smallest share of breaches, 4.5%, compared with 7% for government and military, 8.5% for educational institutions, 36.2% for medical and health care and 43.9% for all other businesses.

The toll for businesses goes well beyond paying for a year of credit monitoring. A company can get fined by regulators and sued when customer information is compromised, and a 2015 federal appeal court ruling made it easier for consumers to bring class actions. Estimates of the average cost of getting breached range from \$200,000 to \$4 million, and that's to say nothing of the blow to a company's reputation.

"I don't think people have seen yet what the implications can be for a bank of a massive data theft," said Andrew Waxman, an associate partner in the financial markets risk and compliance practice at IBM's global business services unit. "People have been lucky so far."

While there have been a lot of small incidents and some significant ones, he said, "I don't think the cost is transparent to people, to the bank or to the economy."

Even if a bank successfully wards off attackers, there's the risk of insiders abusing the precious information they hold. The thousands of Wells Fargo salespeople who created unsolicited accounts for customers, which in some cases entailed accessing the bank's systems to obtain their personally identifiable information, are an example.

Of course, banks have important reasons to collect and hold much of this information. If you're lending money, for instance, you need to know the borrower's income, assets and credit history, and where to find the collateral. On the deposit side, customer information such as a Social Security number, mobile number or IP address helps authenticate the person accessing the account, thus guarding against fraud. Not least of all, financial institutions are required under anti-money-laundering laws to conduct due diligence on applicants before opening accounts.

While ShapeShift may not be gathering information on its customers to the extent that a bank or even a money transmitter does, Voorhees points out that it publishes every transaction, which the authorities can use to trace funds through the blockchains of various currencies. "We don't pull in data we don't need," he said. But "we don't hide anything, we don't obscure. We've tried to meet the noble goals of regulation but in a way that's appropriate for a digital economy, versus how banks worked in the 1950s."

Apart from tightening up cybersecurity – which regulators are also demanding – this environment calls for a new mindset. A simple option would be to collect only what you absolutely have to in order to run the business and be compliant, and dispose of it as soon as you can. And for heaven's sake, encrypt it all, no matter how strong your vendors tell you their security software is.

Waxman suggests that companies think about their strengths and weaknesses in managing various types of data (not only customer information), just as they would look at their financial assets and liabilities. A liability on a "data balance sheet" could be a poorly maintained list of who can access back-office systems, or a manual process involving spreadsheets (easily doctored by rogue traders). These vulnerabilities would be netted against data assets, such as well-guarded and well-leveraged trade secrets, and companies should aim to come out ahead.

If the results were reported to investors, regulators and consumers, such an exercise would create a stronger motivation for banks to make investments in data quality and protection, Waxman argues.

What if companies took the idea even further – by recognizing customer data, with all its risks and rewards, on both sides of the actual balance sheet? Court rulings since the 1970s have treated bank records as the bank's property under the "third-party doctrine" that justifies U.S. government snooping. But as Europe's regulators push banks to make data portability easier, and the Consumer Financial Protection Bureau makes similar rumblings here, it's plausible to imagine data as something owed to the customer – like money in a CD.

"It would freak banks out to realize that some of that data they're about to monetize is not purely their own," said Pascal Bouvier, a partner at Santander InnoVentures, the Spanish banking giant's venture capital arm.

Perhaps, but that's how many customers already feel.

– Marc Hochstein

Prepare for the Real Voice of the Customer

Three years ago, U.S. Bank tested a virtual assistant within its mobile app. Customers could search their transactions and pay bills using their voice. The bank decided to forgo any rollout after the test because of reliability issues – the system sometimes returned false or irrelevant information when it failed to understand a request, said Dominic Venturo, U.S. Bank’s chief innovation officer.

Today, reliability is much better with voice recognition technology, as Apple, Google, Amazon and Microsoft are all investing heavily in their Siri, Google Assistant, Alexa and Cortana voice-based assistants. Banks are grappling with new challenges in trying to work with these voice assistants and securing transactions conducted through them. Some are debating whether to work with them at all.

“We still must be thoughtful about what data will be passed into these third-party systems,” Venturo said. “Right now we have to evaluate these one by one.”

Such challenges mean that 2017 won’t be the year that voice banking takes off. Significant customer adoption of voice banking is three to five years away, said Emmet Higdon, director of mobile for Javelin Strategy & Research.

Still, banks can’t afford to stall their efforts around voice, given growing consumer use of the technology in everyday situations. Consumers will be using voice assistants across an increasingly varied array of devices: on smartphones, in connected cars, on wearable devices and on smart home devices like Amazon’s Echo, the new Google Home or Apple’s rumored Echo competitor. A recent Citigroup survey of general consumers with bank accounts found that 74% of the respondents were already using voice functionality to check weather, send messages and get directions.

Growing adoption of voice assistants with these new types of devices will drive banks to explore new customer experiences that leverage touch, voice and other interfaces.

Most major banks have rolled out some voice capabilities in their mobile apps, such as allowing customers to log in via a spoken phrase or password. The next important step for voice banking will be bringing voice assistants to mobile banking apps, Higdon said.



In a Javelin survey this summer, half of the respondents – in this case, consumers who have used mobile banking – said they would be interested in using voice control within their mobile banking apps.

“The problem is on the supply side – banks are not wading in,” Higdon said.

However, more banks will be experimenting in the coming year with developing their own voice assistants, he said.

Bank of America announced in October that it planned to roll out Erica in 2017. The virtual assistant will be available within its mobile app and, when activated by a customer, will use artificial intelligence to offer basic financial advice via voice or text message. The bank has said that it wants to use Erica to bring some of the one-on-one personal service and advice normally reserved for its premier clients to the rest of its customers.

Other banks will follow suit, with most likely to partner with companies like Nuance, Kasisto and Personetics that specialize in providing voice assistants, Higdon said. Such technology is a lot more mature than when U.S. Bank tested it a few years ago.

But U.S. Bank isn’t saying whether it has plans to reconsider voice anytime soon.

As for the step beyond that – letting customers use voice assistants from the tech giants to do banking tasks – banks have been even more hesitant. So far, Capital One is the only major bank that allows customers to check balances and pay bills through Amazon’s Echo.



Making payments, checking balances and transferring funds with these systems requires sharing account information through them. The technology underpinning virtual assistants like Alexa is all exclusively owned and tightly controlled by the tech companies that created them. So banks have to resolve the complex challenge of integrating their own applications with each one of these systems individually, Venturo said.

And though Amazon, for one, encrypts all the data passing through Alexa, bankers like Venturo say an industry standard around tokenizing or encrypting data that passes through such systems would be helpful.

Despite the challenges banks have in working with third-party assistants like Alexa, Carey Kolaja, global chief product officer for the Citi FinTech unit, expects such assistants will play a big role in helping customers make payments and online purchases going forward.

“Not every transaction will be optimal on every device, and an experience that’s optimal for one customer might not be optimal for another,” she acknowledged.

As an example, Kolaja recounted overhearing a woman at a Starbucks pulling out an iPhone and telling Siri to set a reminder to pay her phone bill. “I do not believe that woman would have been comfortable in a public forum asking Siri to move \$1,000 from her account to another person’s,” she said.

“So we need to build our products and services on a flexible open architecture that allows us to be responsive [to customer preferences],” Kolaja said.

This adoption of voice commands means that customers will intuitively understand the value proposition behind voice banking – it will make routine banking tasks far easier. For example, banks have struggled for years with making their various products and services easy to discover on mobile devices through menu bars and other tools. With voice recognition technology, a simple spoken query could bring up the bank’s relevant products and services, said Patrick Kelly, assistant vice president of emerging technologies at USAA. This would eliminate the need for the clunky menu option – classically represented by stacked lines that are often referred to as a “hamburger” – in banking apps altogether.

Voice also could create entirely new customer experiences, Kelly added. For example, customers could conduct banking and shopping transactions using multiple devices simultaneously. A customer could ask their Echo to pull up their investment portfolio on their smart TV, prompt the Echo to make some transactions, and see the impact on their portfolio’s balance displayed on the TV screen.

This would be much faster than tapping or swiping on a touchscreen or TV remote to individually find each asset that the customer wants to buy or sell, allowing the customer to get back to their Netflix binge more quickly.

“This is something that we’ve been thinking about as omnichannel 2.0,” Kelly said. “We can already allow a customer to start a transaction in one channel and then finish it in another. That was the first stage. But doing it across multiple devices simultaneously, that’s the next step.”

USAA happens to be ahead of most of the industry when it comes to voice. Besides allowing customers to log into its app via voice, it also uses Nina, the virtual assistant from Nuance.

As virtual assistants become “smarter” and more context-aware, their conversational capabilities will present new opportunities for delivering financial advice and education. The Swiss bank UBS recently announced a customer pilot using the Echo to answer customers’ questions about investments and the economy.

However, banks’ initial efforts with voice assistants need to stay grounded in simple, repetitive tasks like checking balances or searching for a transaction, Javelin’s Higdon said. This will help acclimate customers to routinely using voice, so they will eventually feel more comfortable doing so for more complex transactions. “It’s important to keep it simple and straightforward,” Higdon said. “You don’t want to throw too much at the consumer too quickly.”

— Jonathan Camhi

Bring on the Bots

Artificial intelligence is moving from science fiction to practical reality fast.

AI – technology that teaches machines to learn so they can perform cognitive tasks and interact with people – is suddenly accessible to many companies. Costs associated with the advanced computing and data-storage hardware behind AI are plummeting. A growing number of vendors also offer AI tools such as robotic process automation that can be configured without the help of a rocket scientist.

This is an area more banks will need to pay attention to going forward.

Already some AI pioneers have emerged in the financial industry just over the past year: Bank of New York Mellon with its use of robotic process automation in trade-settlement and other back-office operations; Nasdaq's use of AI to find signs of market tampering; UBS' initiative to answer basic customer-service questions through Amazon's virtual assistant, Alexa; and USAA's development of its own virtual assistant.

Most large banks are considering using AI wherever mundane or repetitive tasks could be offloaded to a computer fairly easily.

What It Can Do

Here are some examples of where AI could make the biggest difference.

- *Customer conversations.* Chatbots, natural language processing and speech processing could all be used to improve social interactions. In addition to USAA, Bank of America, Capital One Financial, Barclays and BBVA are experimenting with AI-powered virtual assistants.

"The vision that excites me is the one where we have seamless interactions, where I'm interacting with people, with the bank, with systems in the bank, and at the end of the day what the bank is giving me is exactly what I want," said Marco Bressan, chief data scientist at BBVA. "We shouldn't have a fixed idea of what the customer wants. There are some customers that the less they see their banks the better, as long as their money is well taken care of. Other customers want to see their bank every day. We have to serve both. And communicating with each of those from an AI perspective is very different.



One has to do with full automation, and the other has to do with a smart interface."

- *Automated investment advice.* AI is used to help investment advisers and robo-advisers make better recommendations to customers. Australia's ANZ Group has been using IBM's Watson in its wealth management division for three years. Watson can read and understand unstructured data found in contracts and other documents, comb through millions of data points in seconds, and learn how to draw conclusions from the data. It can assess a new customer's financial situation more quickly and comprehensively than a human being, and it never forgets anything.

BlackRock uses AI to improve investment decision-making. The startup Kensho combines big data and machine-learning techniques to analyze how real-world events affect markets.

- *Faster, better underwriting.* BBVA uses artificial intelligence to improve its risk scoring of small and midsize businesses. "We realized we could update data in real time and integrate it with what the risk analysts were doing to have a much deeper understanding of their own portfolio," Bressan said.

Some online lenders use AI to speed up their process. The software can look at hundreds or thousands of attributes, such as personal financial data and transaction data, to determine creditworthiness in a split second. The system learns as it goes – when a lender gets payment information on loans,

that information gets fed back into the system, so its knowledge evolves.

However, some people question whether AI programs can be trusted to make sound, unbiased lending decisions.

- *Streamlined operations.* BNY Mellon, Deutsche Bank and others are using bots in their back offices to automate repetitive tasks like data lookups.

- *Assisted account opening.* Account origination can be a slow, cumbersome process. Some banks are experimenting with robotically automating some elements, such as data verifications.

- *Fraud detection.* Card issuers and payment processors like PayPal use AI to compare current card transactions to the user's past behavior as well as to general profiles of fraud behavior. Human analysts teach the model to discern the difference between legal and fraudulent transactions.

- *General efficiency.* "The financial industry is an enormous percentage of the GDP," said Robin Hanson, an associate professor at George Mason University. "A lot of it is due to various regulations and rules about who has to do what and how. It's entrenched in regulatory practices, and it's really hard to innovate in finance because you run into some of these obstacles." Hanson wanted to sell some books at a convention. To do so, he had to apply for a tax ID, pay a fee and cover \$25 in sales taxes. That required him to go to his bank to get a cashier's check, for which he had to pay a \$5 transaction fee and postage. "That's an enormously expensive, awkward process," he said. "If we had an efficient financial system, that would cost pennies."

Unintended Consequences

As AI is used to improve the speed and efficiency of tasks now performed by humans, there are potential unintended consequences. For one, people in lower-paying jobs in operations, branches, compliance and customer service are likely to lose those jobs.

"Bank executives say they're going to take those people and put them into high-tech, high-pay jobs to help us code, help us do this, help us do that. It's just not going to happen," said Christine Duhaime, a lawyer in Canada with a practice in anti-money-laundering, counterterrorist financing and foreign asset recovery and the founder of the Digital Finance Institute. However, "the bank may end up with the same number of employees," as it sheds customer-facing jobs and hires trained software developers to code.

There are also privacy concerns around the use of AI in financial services. "From a consumer protection point of view, there are concerns people need to take into account when it comes to AI, machine learning and algorithmic decision-making," said Steve Ehrlich, an associate at Spitzberg Partners, a boutique corporate advisory and investment firm in New York. "Say a company wants to look at your social media or your search engine history to determine your creditworthiness. They go into Facebook and find a picture of you that you didn't upload. It's a picture of you at a bachelor party or gambling at a casino. That data gets fed into the algorithm. For one, they should tell you they were going to be taking that information."

There is also the chance that bots and AI engines could run amok and make poor lending decisions, or commit an operations error that a human with common sense could have averted.

What Banks Can Do

These caveats aside, banks' wisest course is to prepare to be part of the revolution.

One thing they can do is create an internal center of excellence where a group of people become experts and help bring AI to other parts of the company. They could test technology and use cases and guide the business units in their adoption of bots and AI. Citigroup and BBVA are among the banks doing this. BNY Mellon has a robotics process automation team that partners with businesses and has come up with eight pilots, including settlement and data reconciliation.

Banks also can try to encourage people to embrace AI – even if their jobs are at risk. It helps to communicate that there could be some benefit to them. "People in operations and data analysts don't want to be doing this work anyway – swivel-chair work, mindless copying and pasting and keying in data," said Adam Devine, head of marketing at WorkFusion, a robotics process automation software provider that competes with Blue Prism and Automation Anywhere.

David Weiss, senior analyst at Aite Group, also sees the trend as an eventual positive for employees. "I personally argue for human augmentation – go after the peak human problems first," he said. "There, you're not going to cut jobs, you're just going to make people more functional, and leverage their inorganic intelligence more."

But there's no question the workplace will change and people will have to adapt.

– Penny Crozman

Get Protection from The Patent Trolls

In the old fairy tale, there is a troll who lives under a bridge and eats everybody who tries to get across. In the real world today, there are trolls that lurk in the underbelly of the innovation economy and exact a pound of flesh from banks, fintech startups and other companies.

Their weapon of choice is intellectual property, in the form of patents, and they have long preyed on technology giants such as Google and Apple, costing them billions of dollars.

But now that banks are becoming technology companies in their own right, they are newly vulnerable to the depredations of these corporate bullies, popularly known as patent trolls.

That means they need new protections.

A tactic some banks are finding effective involves joining groups whose members agree to immunize one another from being sued on the basis of their patents, should they be sold off and end up in the hands of a troll.

One such group is the LOT Network. It has nearly 100 members, including JPMorgan Chase, Wells Fargo and TD Bank, and protects them from about 600,000 patents.

The nonprofit Patent Quality Initiative – which is under the umbrella of The Clearing House, a payments utility owned by 24 of the world's largest banks – is preparing to launch a similar group in 2017.

Josh Death, the associate vice president of legal for the \$900 billion-asset TD, said it joined the LOT Network because patent trolls are a growing threat.

He said the Toronto-based company has made such a huge commitment to digital banking that it now has the largest finance-focused patent portfolio in all of Canada.

“Just as the automobile industry is effectively turning the car into a smartphone on wheels,” Death said, “banks are incorporating tons of technology from outside their industry. And when you do that, you’re basically chumming the waters for patent trolls.”

Know Thy Enemy

The official term for patent trolls is “nonpracticing entities,” so called because they don’t create anything, don’t provide any product or service, but instead make money entirely



from lawsuits.

Another term is “patent-assertion entities,” reflecting the fact that they don’t use their portfolios of patents for commercial purposes, the way banks and software firms do. They merely assert them against other companies, even when their claim of infringement is shaky at best.

The goal of such litigation is always the same – to get a payday.

Beginning in 2006, “there was a tremendous explosion in patent suits,” said Eric Schulman, who drafted the original LOT agreement as a legal director at Google and now serves on the nonprofit consortium’s advisory board. Today, 70% of all patent litigation is brought by patent trolls.

Big banks are among those in the crosshairs. In the past eight years, JPMorgan has been hit with lawsuits involving 104 different patents, according to Ken Seddon, the LOT Network’s chief executive.

For most banks, this is a new phenomenon. Before mobile apps and remote account opening, banks were mostly brick-and-mortar operations – and unappetizing to patent trolls.

But the more innovation labs banks open, the more fintech partnerships they forge, the plumper and juicier they look to trolls.

Last year, 3,608 patent-troll lawsuits were filed in the United States. The average lawsuit, if it goes to trial, costs the defending company about \$3 million in legal fees alone.

A study by James Bessen and Michael Meurer of Boston University School of Law found that in 2011, American companies spent \$29 billion in litigation and settlement costs as a result of patent-troll litigation.

That expenditure amounts to an enormous tax on innovation, experts say.

“Our view is, every nickel that a bank is spending defending itself from a patent troll is a nickel that wasn’t spent on R&D,” Seddon said. “That’s a nickel that wasn’t spent on making a better product or returning profit to its shareholders. So these patent trolls are doing real harm.”

Because of the expense involved in litigating a patent suit, operating companies don’t readily sue one another. But for a troll, owning a piece of intellectual property is all about suing.

How It Works

When the LOT Network studied last year’s patent-troll cases, it found that more than 80% of the patents had originally been held by operating companies before winding up in the portfolios of trolls.

Stopping the flow of IP to patent trolls is almost impossible. Companies in financial distress might sell off their patents for quick cash. Bankruptcy proceedings can result in patents being dumped on the open market, where trolls happily snap them up. More than three-fourths of the patents used against banks come from outside the world of finance.

But while the flow of IP can’t be stopped, the IP itself can be neutralized.

LOT stands for “License on Transfer” – it means that if a patent belonging to one of the network’s members ends up in another entity’s hands, that entity can’t use it to sue any of the members.

The 10-page agreement each LOT member signs has just one purpose: to protect companies from frivolous lawsuits.

Daryl Wooldridge, the global head of IP management for JPMorgan, said his company has already benefited a great deal from its LOT membership. “It provides real risk reduction that gives us a competitive advantage versus companies not in LOT.”

What the agreement does not do is prevent members from suing one another – or anyone else – for patent infringement. Nor does it prevent them from licensing their IP normally. As

long as a member company holds onto its patents, it can use them and assert them as it chooses. The agreement is triggered only if one of those patents changes hands.

As of November, the LOT Network’s membership had swelled to 95 companies, from 13 a year earlier. Amazon, Netflix, Fidelity, JCPenney and Slack are among the newbies.

Two-thirds of the members are startups. The banks and other large companies each pay a \$20,000-a-year fee so that membership will be free for smaller companies.

Patent trolls have recently shifted from targeting huge tech firms to bullying startups, which lack the resources to fight

“Our view is, every nickel that a bank is spending defending itself from a patent troll is a nickel that wasn’t spent on R&D,” says Ken Seddon of the LOT Network.

back. About half of the companies sued by patent trolls in 2015 made less than \$10 million in annual revenue.

“It is catastrophic for some of these small companies to get even one patent suit brought against them,” said Sean Reilly, associate general counsel of The Clearing House.

But the motive for protecting them isn’t altruism. In an age when megabanks are relying on small fintech companies for everything from cybersecurity to blockchain experiments, patent suits from trolls can cause a lot of collateral damage.

Companies in the LOT Network sometimes do sell their IP. So far, a total of 42,000 patents have been sold by LOT members to companies outside the network. Thirty-five of them have fallen into the hands of patent trolls.

As part of The Clearing House’s effort to stop patent trolls, the Patent Quality Initiative is readying its own cross-licensing compact, the Freedom Agreement. JPMorgan and Citigroup have already signed on.

Whereas the LOT agreement is designed to be permanent, the Freedom Agreement is only a three-year commitment – an easier sell to companies’ executives and boards of directors.

By 2018, if its current growth rate continues, the LOT Network will contain 1,500 members and more than 2 million patents. Seddon compares its burgeoning membership to a population gaining herd immunity and slowly vanquishing a once-deadly disease.

– Brian Patrick Eha

MEET & GREET^{PEOPLE}

BANKERS TO WATCH 2017

RALPH BABB

What a wild ride Comerica had in 2016. Its first quarter was dismal, as falling oil and gas prices led to a huge boost in loan reserves. On its first-quarter earnings call, CEO Ralph Babb said he'd consider all options for improving returns, including exiting markets or business lines or even selling the bank outright. How things have changed since then. Energy prices have stabilized and Comerica's profits are once again rising, buoyed by aggressive cost-cutting. The rebound has made it the best-performing regional bank stock this year, according to Sandler O'Neill. Can Babb keep up the momentum?



TIM SLOAN, MARY MACK

Is any banker more on the hot seat than Wells Fargo President and CEO Tim Sloan? When John Stumpf stepped down as CEO in October in

the wake of the phony-accounts scandal, many believed Wells needed to bring in an outsider to fix the damage. Instead, the board handed the job to Sloan, a 29-year Wells veteran who had been Stumpf's heir apparent. Sloan can prove the naysayers wrong if he can quickly restore trust with customers and regulators, while proving to investors that Wells can still



generate industry-leading profits even as it shifts away from its sales-oriented culture. One of Sloan's direct reports, Mary Mack, is the new head of the embattled community banking unit. Apart from dealing with all the typical retail-banking challenges – like declining foot traffic in branches – she has the added burden of devising a new compensation structure now that Wells has eliminated sales goals and trying to reverse the steep decline in new consumer checking and credit card accounts since the scandal broke. Boosting employee morale is also a top priority.



BLAKE WILSON, KATHIE ANDRADE

TIAA's deal for EverBank will not close until early 2017, but it could be a game-changer. Though best known for providing insurance, retirement and investment services, TIAA had been quietly building an online bank in recent years, and a spokesman said its deal for the \$27.4 billion-asset EverBank "leapfrogs" its growth plans by about a decade. Blake Wilson, EverBank's president, is to become president and CEO of the combined (and still unnamed) banking operation, and Kathie Andrade will oversee it in her role as TIAA's CEO of retail financial services. They'll have to figure out how to market banking products – particularly mortgages – to TIAA's 5 million retail customers and how to provide additional services to its 16,000 institutional clients.





Rajinder Singh

BankUnited's John Kanas is another highly respected CEO who is stepping down. Taking over is Rajinder Singh, BankUnited's chief operating officer since 2010. The move was a bit surprising because many observers assumed that Kanas' exit strategy would be a sale of the bank. That could still happen; Singh has a private-equity background and he recently said that his interests are very much aligned with those of shareholders. But for now his focus is on expansion. BankUnited bought a bank in New York in 2013 and last year acquired a small-business lending operation.



NANDITA BAKHSHI

Bank of the West is a fast-growing small-business lender and has a strong reputation for service. But it has lagged its peers of late in key metrics like returns on assets and equity, and its parent company, BNP Paribas, is counting on Nandita Bakhshi to reverse that trend. Bakhshi, a former head of digital channels at TD Bank, joined Bank of the West as a CEO-in-training in April and took the helm officially on June 1. Bakhshi said she is willing to take some risks – perhaps moving into new markets and adding new fee-based businesses – to expand the customer base. But anything too drastic is not her style. “When I say I’m a risk-taker, I’m a smart risk-taker,” she said.



Cort O'Haver

Talk about a tough act to follow. Few CEOs have been as visible — and visionary — as Umpqua's Ray Davis. He not only transformed a five-branch bank into a regional powerhouse, he helped redefine how banks serve their customers. Now Davis is moving to a new role as head of Umpqua's innovation lab, and taking his place is Cort O'Haver, the bank's president and former head of commercial banking. Umpqua is best known for its retail-banking prowess, but O'Haver has been instrumental in building its commercial operation and, as CEO, aims to build on that progress. Investors also want O'Haver to boost Umpqua's returns, which have lagged peers in recent years due in part to acquisition costs.

HARIT TALWAR

Goldman Sachs' move into online consumer lending has been one of the more intriguing developments in banking this past year and competitors will be watching closely to see if a Wall Street investment banking giant is able to make inroads with the masses. Leading the venture, dubbed “Marcus” in honor of the company's co-founder Marcus Goldman, is Harit Talwar, a former executive at Discover who came on board last year as head of digital finance. Among his challenges are overcoming the perception that Goldman is a bank for the 1% and getting some name recognition for its new online brand.



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BackPorch



LESLIE CALDWELL

"The so-called Sons and Daughters Program was nothing more than bribery by another name."

Justice Department's criminal division head, on JPMorgan Chase's \$264 million fine for hiring relatives of Chinese officials in order to win business

JOHN GERSPACH

"I think the market's view of Mexico perhaps is not quite as constructive right now as our view of Mexico is."

Citigroup's chief financial officer, on plans to invest \$1 billion in Mexico despite the president-elect's talk of building a wall and tightening trade

RUSTY CLOUTIER

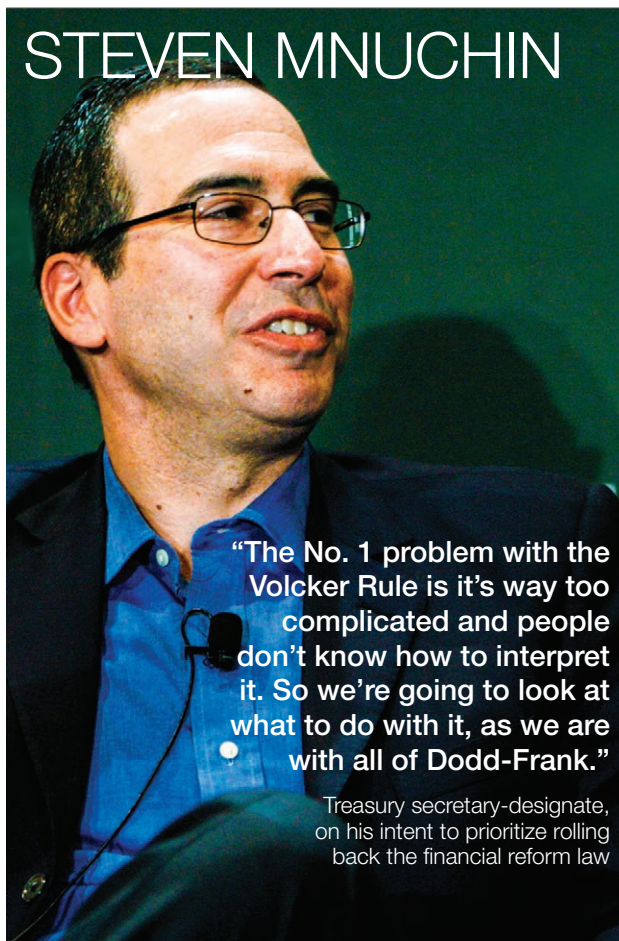
"Tell your editors that they need to run a headline that says 'Main Street Won.'"

President and CEO of MidSouth Bank in Lafayette, La., to a New York Times reporter about Donald Trump's election win

SIMON JOHNSON

"The reality of financial regulation is going to be nothing. This is deregulation. Complete and utter deregulation. It's all over but the shouting."

Professor at the Massachusetts Institute of Technology and noted critic of big banks, on Trump's agenda for the financial services sector



"The No. 1 problem with the Volcker Rule is it's way too complicated and people don't know how to interpret it. So we're going to look at what to do with it, as we are with all of Dodd-Frank."

Treasury secretary-designate, on his intent to prioritize rolling back the financial reform law

CECILIA SKINGSLEY

"This is as revolutionary as the paper note 300 years ago."

Deputy governor at Sweden's Riksbank, on its debate about whether to become the world's first major central bank to issue a digital currency

WARREN BUFFETT

"It was a dumb incentive system, which when they found out it was dumb, they didn't do anything about it."

Chairman and CEO of Berkshire Hathaway, Wells Fargo's largest investor, breaking his silence on the phony-accounts scandal

MARY MACK

"It takes time to rebuild trust."

Wells Fargo's community banking head, saying a recent sharp drop in new account openings is a trend likely to continue in the near term

REP. MAXINE WATERS

"It is clear that this is just the first act in a long, dangerous play that will continue well into next year."

California Democrat, after the House passed a bill to scrap the threshold of \$50 billion or more in assets as the determining factor for designating a systematically important financial institution



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