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A collection of research, observations and articles regarding technology solutions and services that U.S. bankers will buy in 2015 & the changing financial industry landscape.

BANKERS AS BUYERS

Prepared by:

WILLIAM MILLS AGENCY

Letter from Editor

From all appearances, more investment is flowing into financial and payment technology companies than I've ever seen in my career. Once considered too esoteric for many local and general business media, the FinTech industry has become more mainstream. Without trying to sound too enamored with it, it is possible we will look back to this time as a golden age of innovation and the beginning of enormous operational change.

This report relies largely on the opinions of analysts and consultants who serve our industry and is focused on technology and services that are expected to grow in adoption in 2015 and those trends impacting the industry. It is not a collection of "bleeding edge" concepts.

On that note, while a small percentage of people in our industry are investing in wearables and studying how to incorporate Bitcoin's blockchain technology, they are helping the rest of us test and learn at their expense. They are doing our industry a great service. Watch closely, develop strategies and move when you are ready.

What can we expect in 2015? More:

- Interest in user and customer experience,
- Security breaches,
- Mobile, mobile, mobile,
- Regulatory compliance demands/expense,
- Handwringing about the branch network/transformation, and
- Adoption of big data projects with expected ROI.

In this rapidly changing banking environment, I'd advise you to choose your educational resources wisely: what publications you read; conferences you attend; analysts you engage; associations you join; and industry relationships you invest in (LinkedIn connections do not count).

This report is enhanced greatly by the contributions of:
Aite Group
Alkami Technology, Inc. – Stephen Bohanon
CCG Catalyst – Paul Schaus
Capgemini
Celent – Stephen Greer, James O'Neill, Zilvinas Bareisis
Computer Based Solutions, Inc. – Art Gills
CSI
Crone Consulting, LLC – Richard Crone, Heidi Liebenguth
Cornerstone Advisors – Sam Kilmer, Terence Roche
Credit Union National Association (CUNA)
D3 Banking – Mark Vipond
EFTA (Electronic Funds Transfer Association) – Kurt Helwig
FDIC

Federal Reserve Bank of Chicago – Gordon Werkema
Forrester Research, Inc.
G2 Ventures – George Garrick
Gartner – Robert Cozza
ICT Enterprises
IDC Financial Insights – Marc DeCastro
Javelin Strategy & Research
Lodestone Banking Consultancy, Inc. – Mark Clark, Shahin Clark
Malauzai Software – Robb Gaynor
Mercator Advisory Group
McKinsey & Company – Somesh Khanna
Mobile Strategy Partners – David Eads
Mortgage Bankers Association (MBA) – Mike Fratantoni
NACHA – The Automated Clearinghouse
Ovum
ProfitStars – Lee Wetherington
Sawyers & Jacobs, LLC – Jimmy Sawyers
Wincor Nixdorf AG
Yantra Financial Technologies/CBW Bank – Suresh Ramamurthi

Bankers As Buyers™ is provided as a service to the financial industry, I hope you find some value and potential resources.

Best regards,

Scott Mills

Scott Mills, APR
President
William Mills Agency

Some customers of William Mills Agency appear in this report.

TABLE OF CONTENTS

I. Year in Review – Economic Snapshot

The economic recovery from the Great Recession continued. Unemployment dropped below 6 percent during the year, with the last two months of 2014 at a 5.8 percent rate. Even though the unemployment rate fell, most new jobs were still in the lower-paying service sector. Another benefit for consumers the last half of the year was the fast-falling price of oil and natural gas, leaving people with more discretionary income.

Despite long-time predictions that the Federal Reserve would start hiking interest rates "soon," the Fed stayed with the same rates in place since 2008 throughout the year. Federal Reserve Chair Janet Yellen said in December that the Federal Open Market Committee felt it could be "patient" in raising interest rates, with no action likely until the second half of 2015, spurring a 450-point rally in the Dow Jones Industrial Average the next day.

Janet Yellen took over the leadership of the Federal Reserve, succeeding Ben Bernake, and unwound the Fed's quantitative easing program, which some financial experts had worried about. But the economy, jobs, etc., continued to grow throughout the process. Consumers and businesses (except oil and related companies) benefited from the sharp decline in oil and gasoline prices that continued into early 2015. Even though most economists predicted interest rate increases in 2015, in the first few weeks of the year, U.S. Treasury yields were continuing to fall.

The improving economy had a positive effect on consumer debt. The delinquency rate for mortgage loans on one-to-four-unit residential properties decreased to a seasonally adjusted rate of 5.85 percent of all loans outstanding at the end of the third quarter of 2014, according to the Mortgage Bankers Association (MBA). The delinquency rate decreased for the sixth consecutive quarter and reached its lowest level since the fourth quarter of 2007.

"The loans that are seriously delinquent, either 90-plus days late or in the foreclosure process, are primarily loans that were made prior to the downturn: 74 percent of them were originated in 2007 or earlier," said MBA chief economist Mike Fratantoni. "Loans made in recent years continue to perform extremely well due to the improving market and tight credit conditions; loans originated in 2012 and later accounted for only 4 percent of all seriously delinquent loans."

Mortgage interest rates trickled down below 4 percent during the latter part of the year, but that wasn't enough to boost borrowing volumes to 2014 or 2013 levels. High credit standards continued to dampen the market as well, so 2014 originations were expected to be far below those of 2013, largely due to a 65 percent decline in refinance activity.

Aversion to risk is also a big contributor. Borrowers with credit scores of 620 to 720 (generally considered low- to mid-range) made up about 20 percent of government sponsored enterprise (GSE) purchase loans over the last year and a half – compared with 40 percent before the crisis.

One potential burden in the economy that received plenty of attention as college students returned to class in the fall was the estimated $1 trillion in student loan debt, which could become more of a concern in the future as these students graduate and start looking for their first homes. The debt and the increasingly transient nature of jobs means that millennials do not see owning their own home with the same enthusiasm as the previous generation did.

MBA Chairman Bill Cosgrove cited the student debt as a concern at the group's annual convention. He added: "First-time homebuyers represented 29 percent of the market, when traditionally this has been closer to 40 percent. The real estate market will not be healthy until first time buyer numbers start to substantially recover."

Many other signs pointed to an economic upswing that most experts expected to continue into 2015. The continuing declining unemployment rate – meaning a lower supply of workers -- and calls for higher minimum wages (and enactment of a $15 per hour minimum in Seattle), showed that wages could be trending up in 2015 as employers look to fill staffing needs.

The U.S. economy itself, after shrinking in the first quarter of the year, grew by 4.6 percent and 5 percent, respectively, the next two quarters. The fourth quarter figures, which had yet to be released, were expected to be 2.5 to 3 percent. Stocks in many sectors grew throughout the year, with Real Estate Investment Trusts one of the best performing sectors.

II. Size of Market

The decreasing number of financial institutions continues the consolidation trend, which could pick up speed with the solid economy. Unlike a few years ago, the government isn't driving consolidation through takeovers and loss-share agreements; consolidation is occurring with smaller financial institutions, in part, because of the cost of compliance – even though they are exempted from some of the rules of the largest financial institutions.

According to figures from the FDIC and the Credit Union National Association (CUNA) September 2013 data, the depository landscape is as follows:

Number of:	
Commercial Banks	5,705
Savings Banks	884
Credit Union	6,477
Total FI's	**13,066**

FDIC Reports

Number of institutions reporting	6,589
Total employees (full-time equivalent)	2,048,639
Total assets	$15,349,170,844,000 (or $15.3 trillion)

FDIC as of 9-30-14

CUNA Reports

	U.S.	U.S. Credit Unions						
Demographic Information	**Sep 14**	**Sep 14**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
1 Number of CUs	6,477	6,477	6,680	6,956	7,236	7,486	7,708	7,966
2 Assets per CU ($ mil)	173.2	173.2	161.0	148.8	134.6	123.8	116.3	103.7
3 Median assets ($ mil)	24.1	24.1	22.7	21.1	19.2	17.6	16.5	14.5
4 Total assets ($ mil)	1,121,508	1,121,508	1,075,312	1,034,868	974,186	926,610	896,824	825,802
5 Total loans ($ mil)	706,298	706,298	655,006	610,290	582,288	575,664	582,791	575,814
6 Total surplus funds ($ mil)	368,952	368,952	378,104	386,283	356,551	317,415	282,027	217,870
7 Total savings ($ mil)	951,264	951,264	922,034	889,579	838,505	797,303	763,341	691,766
8 Total members (thousands)	99,964	99,964	97,449	95,058	93,108	91,760	91,157	89,914

Credit Union National Association

There are 640 fewer financial institutions from the previous year or a loss of 4.7 percent. Industry analysts expect the shrinkage to continue this year, particularly among the smallest financial institutions, due to the continually increasing regulatory costs and to some older bank owners selling their institutions.

The past 20 years have shown continued concentration in the commercial banking space in the U.S., with banks with more than $10 billion in assets dramatically gaining deposit share, analyst firm Celent said in a 2014 report. Today the top five banks in the U.S. have nearly 40 percent of all domestic deposits.

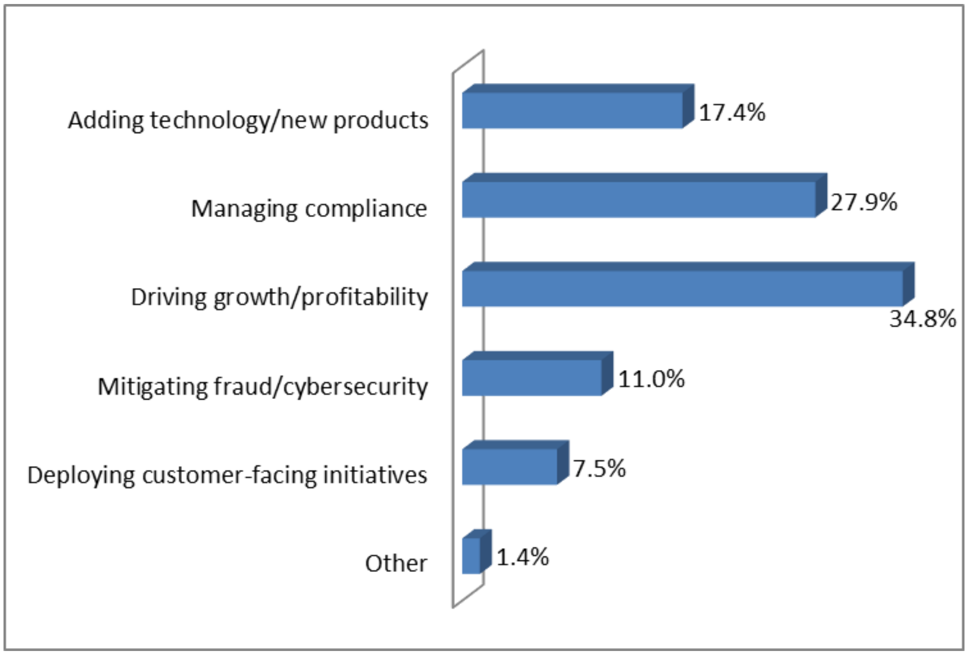
Similarly, credit unions of more than $500 million in assets are gaining deposit share and growing in number at the expense of smaller players. Credit unions with less than $50 million in assets are quickly disappearing, while those in the $50–100 million range are in a precarious position, according to Celent.

Cornerstone Advisors, Inc. predicts the consolidations will pick up among mid-sized banks struggling to grow revenues. Smaller banks struggle to manage resources to deal with compliance, while larger banks have additional regulatory costs and reduced per-transaction interchange income.

III. Spending Outlook

"Technology will be a defining factor for financial institutions in 2015," according to *2015 Banking Priorities Study*, a report by Computer Services, Inc. (CSI). "Not only will it help banks overcome their biggest challenge of the year, which is driving growth and profitability, but it offers a key opportunity enhancing mobile and omni-channel banking capabilities."

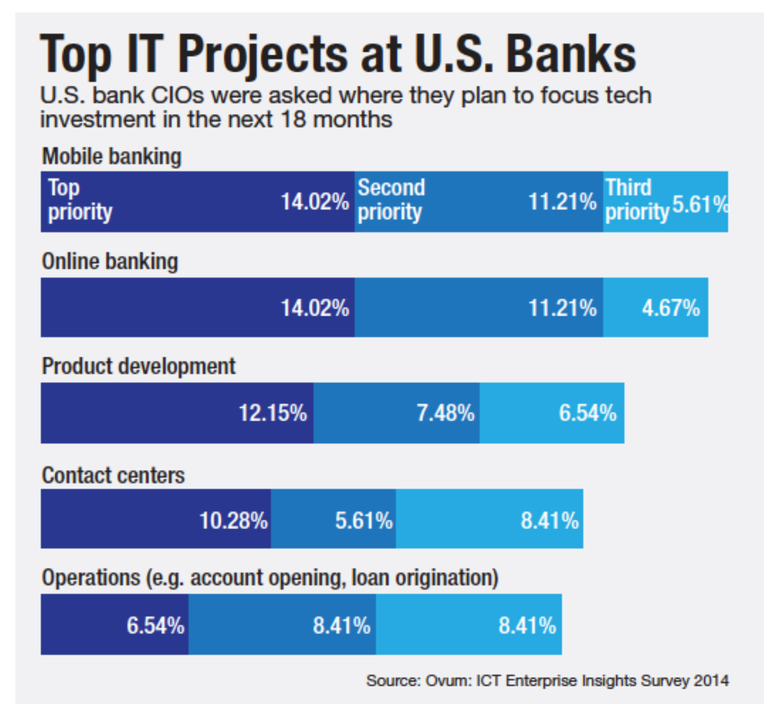
What are your greatest challenges going into 2015?



CSI

According to an Ovum: ICT Enterprises survey, financial institution CIOs will focus most of their tech investment on mobile and online banking (14.02 percent of respondents said it is a Top Priority), followed by product development (12.15 percent), contact centers (10.28 percent) and operations (6.54 percent).

The two biggest centers of IT spending growth among North American banks for the coming year, according to Ovum, are mobile banking, which is expected to grow 7.5% next year, and online banking, which is expected to rise 7% according to Ovum (originally published in *Bank Technology News* Dec. 8, 2014).



Ovum/ICT Chart

Driving growth and profitability are the main concerns for bankers going into 2015, followed by managing compliance, according to the CSI study.

While agreeing that financial institution technology spending will grow in terms of total dollars, it will still be in the .23 to .26 percent of total assets range it has been for several years, according to Cornerstone Advisors. Most financial institutions have grown assets, so technology spending is growing.

IDC Financial Insights says the primary drivers of bank technology spending will be:

- Legacy Modernization
- Leveraging the “3rd Platform” (cloud, mobility, social and big data/analytics)
- Industry Profitability and Growth
- Focus on Customer Experience
- Mobile Financial Services
- Risk, Security, Regulation and Compliance
- IT as a Business
- Internet of Things (constant connectivity of devices and new capabilities)
- Future of Work (how the workplace is evolving, using new tools, how/when/where we perform work, etc.

IDC director of consumer banking Marc DeCastro said financial institutions continue to move away from in-house systems to the on-demand model to help control costs. “With the rising cost of compliance and risk governance, the amount that’s left over shrinks every year.

“As that trend continues, financial institutions will continue to move outside of their physical walls with technology, with half of new applications launched within the next five years to be cloud-based,” said DeCastro.

A. Payments Technology Revolution Continues

Though it didn’t debut until October 2014, Apple Pay made the biggest splash in mobile payments. The mobile wallet was initially available at 220,000 point-of-sale (POS) locations, but that pales in comparison to the estimated total 12 million POS/merchant locations in the U.S.

Many of those retailers will be upgrading their POS terminals in the coming year to comply with the new EMV rules in October, which may also include Near Field Communication (NFC) capability needed to accept Apple Pay and other mobile wallets using the same technology.

“Apple Pay raises the bar for mobile payments in terms of consumer experience and security,” said Zilvinas Bareisis, a senior analyst with Celent. “However, given limited consumer reach and expected reluctance from the U.S. merchants to switch on contactless acceptance in their stores, Apple Pay’s success is not guaranteed. Time will tell if Apple can ignite mobile payments and succeed where so many others failed, but this development is certainly impossible to ignore.”

Forrester Research Inc. goes a step further, declaring 2015 “The year of Apple Pay” in one of its reports.

Apple Pay is one of several mobile wallet offerings. Google Wallet has been on the market for three years, but has yet to gain much traction.This perhaps may have lead to Google’s recent acquisition of Softcard to give it a more competitive edge or to compete with Apple Pay. Retailers have banded together to skirt interchange with their own offering, CurrentC®, but that won’t debut until later this year. Given Apple Pay’s early lead, several sources suggest it will be difficult to catch up.

Apple Pay At-A-Glance
@2014 Javelin Strategy & Research

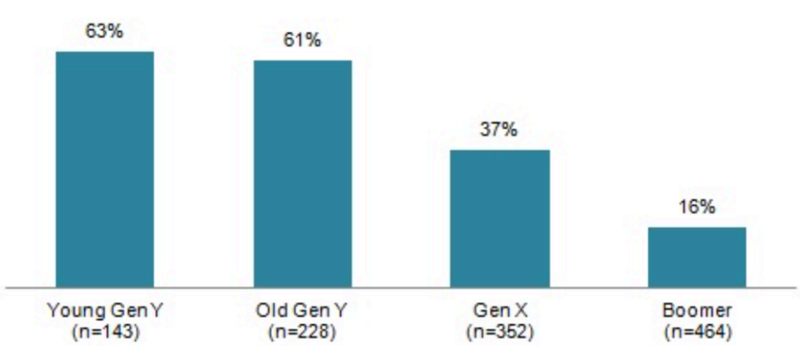
Javelin Strategy & Research

Though mobile wallets are still in their infancy, mobile payments (bill pay, P2P, click to pay, etc.) are catching on.

Capgemini's 2014 World Payments Report predicts that mobile payments will grow 60.8 percent in 2015. Though the total number will still represent only a miniscule portion of worldwide payments, the growth trend is clear.

U.S. mobile payments will top $142 billion by 2019, up from $52 billion in 2014, according to Forrester's five-year ForecastView model. Forrester adds that peer-to-peer transactions represent the quickest growing segment of mobile payments with an expected 26 percent compound annual growth rate through 2019.

Consumers who pay at least one monthly bill with mobile device



Aite

A POS terminal upgrade is already underway as some major retailers like Home Depot and Target attempt to avoid breaches like the ones that have occurred in the last year. By the end of 2015, 70 percent of U.S. credit cards and 41 percent of U.S. debit cards will be EMV-enabled, says Aite Group.

The EMV-enabled terminals will typically include NFC capability as well, which theoretically could give a boost to Apple Pay and other NFC-based mobile payment solutions. However, not all merchants will turn on the NFC capability.

Beyond mobile payments, different groups are pushing for faster clearance of various types of payments. NACHA, the electronic payments association™, is pursuing a same-day settlement initiative. The Clearinghouse which represents the largest 24 banks in the U.S. is also pursuing their own real-time settlement effort. Payments generally take up to three days to settle. The same-day or real-time settlement plans, could be phased in over three years, would include mandatory participation, meaning that some receiving financial institutions would need to upgrade their systems to ensure same-day settlement. To cover that expense, sending institutions would pay receiving institutions 8.2 cents per transaction, an amount that may be revised over time. Same-day ACH is expected to be used primarily for same-day payrolls, expedited bill payments, business-to-business payments and account-to-account transfers, according to NACHA.

According to Kurt Helwig, CEO of EFTA (Electronic Funds Transfer Association), the Federal Reserve is examining its own faster payments initiative and recently detailed their roadmap, Strategies for Improving the U.S. Payment System, available at http://t.co/lxiREsPSGU The report outlines four possible options that will require further study. Helwig said the Federal Reserve has been at the forefront of this push for the last 18 months and done a good job in engaging industry groups such as the EFTA.

"We are not saying the Fed has made a decision to build a faster payments system," Gordon Werkema, first vice-president and chief operating officer, Federal Reserve Bank of Chicago, during a 2014 briefing. "We have a process in place for consultation and workshops and then a roadmap. We outlined a process to define how it would go. That would then drive a calendar and time frame. We don't know the answer until we sit down with the industry."

The Fed acknowledges that there will be challenges with all of the options. For example, improving the ATM and PIN debit infrastructure would involve aligning many different networks, integrating with corporate cash management systems at banks, expanding the ability to use those networks for credit-push payments and changing the economic models behind them. Building entirely new infrastructure allows for more flexibility, but is also the most costly option, while simply improving ACH does not resolve the problem of dealing with systems that were not designed for near real-time notification and clearing.

The U.S. efforts follow similar programs in the United Kingdom, Singapore and a handful of other countries.

Consumer demand and pressures from non-bank financial services providers are prompting the move to faster settlements. There is no longer any value to owning the float, so consumers and businesses want immediate updates on balances once they make payments, and recipients want use of the payment as soon as possible.

If financial institutions don't move in this direction, the fear is that third-party financial providers will.

Bitcoin and other "crypto-currencies" are still in their infancy, but are gathering attention from regulators, bankers and consultants, some of whom discussed developments of this payment option at the Federal Reserve Bank of Chicago's payment symposium in the fall of 2014. Bitcoin enables the exchange of funds around the globe in minutes, far faster than any other currency and some U.S. merchants, such as Overstock.com, have started accepting Bitcoin payments, but the total number of merchants accepting the currency is still relatively small.

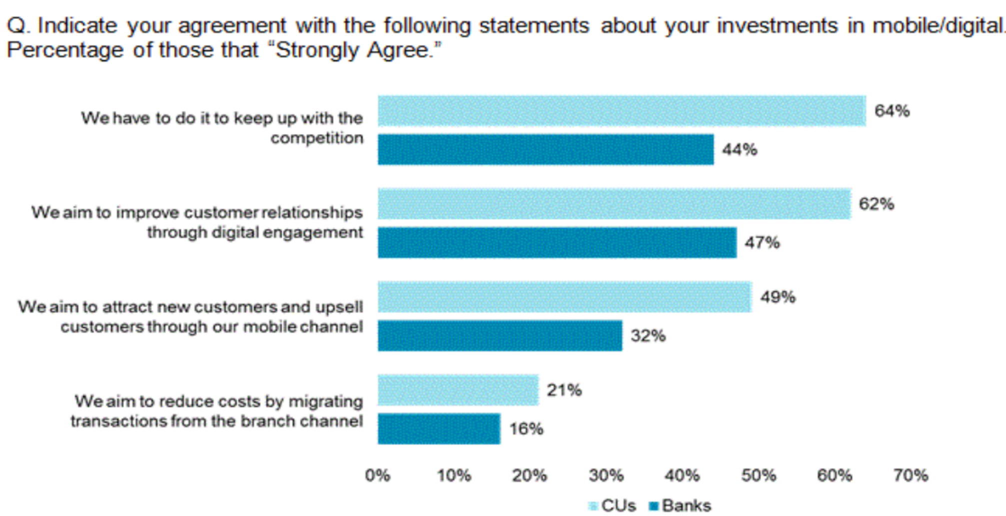
One of the concerns among regulators is that Bitcoin values can fluctuate wildly, so holding a prepaid Bitcoin card or some other Bitcoin account can go up or down in value. Bitcoin's market price was $12.69 on Dec. 1, 2012; $970 a year later – in January of 2015, it dropped below $300. Much of the total outstanding Bitcoins in circulation have been held as an investment, rather than used as a currency.

Much of the excitement within FinTech seems to be in the "block chain" technology and how Bitcoin can be used to reduce the fees associated with international payments.

B. Mobile First

Payments garner much of the attention but are only a portion of the quickly growing importance of mobile financial services.

Stated Rationale for Investing in Digital



Celent NA Retail & Business Banking Technology Survey 2014, n=154

Most experts agree that mobile is no longer an add-on, but should be the first consideration as financial institutions plan their strategies and their technology spending. Javelin Strategy & Research says that digital banking is the key to attracting and retaining affluent customers, which Javelin refers to as “Moneyhawks.”

10% of Affluent Clients Control $2.3 Trillion in Assets and are Likely to Switch Banks

	Affluent ($100K-$150K annual income)
Percent of Population	17%
Deposits at Primary Bank (per customer)	$88,394
Investable Assets (per customer)	$572,095
Likely to switch banks next 12 months	10%

Javelin Strategy & Research

High-Value Customers that Attract Banks’ Eyes
(Relative Profitability Index)

		Moneyhawks	Traditionalists
Revenue	Deposits	●	○
	Number of financial products	●	○
Acquisition & Retention	Size of segment	○	●
	Likely to recommend FI	○	●
	Likely to remain with bank	○	●
Cost Savings	Willingness to use digital banking	●	○

● Most Profitable ○ Least Profitable

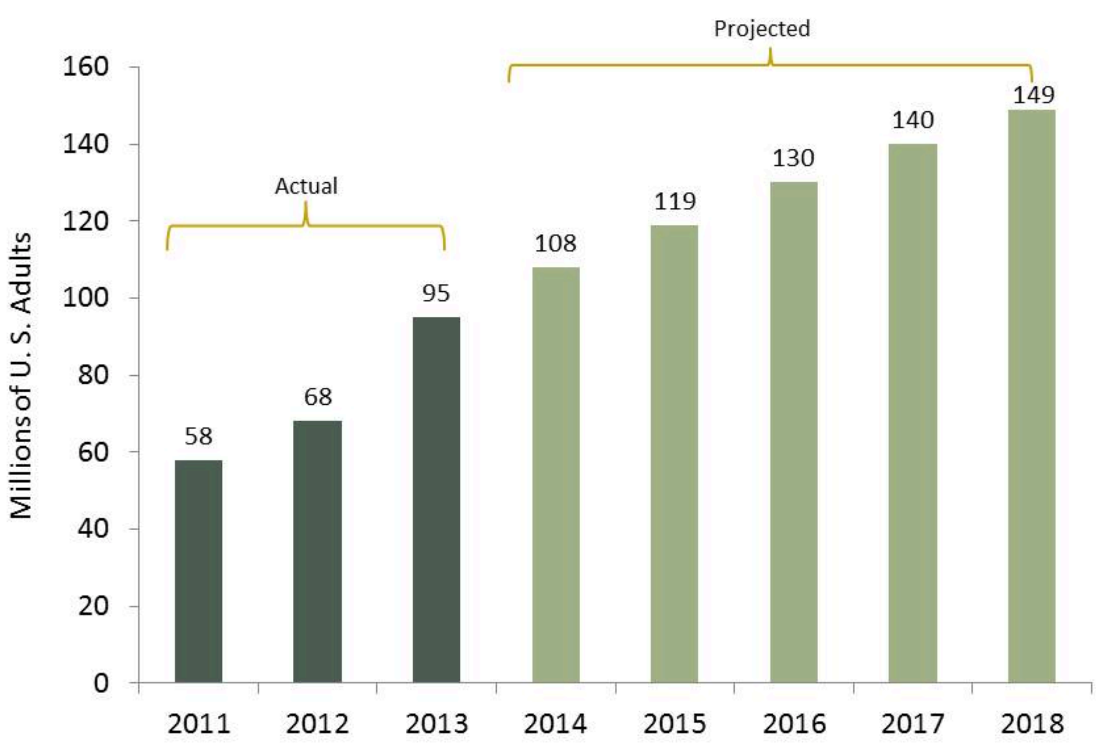
Javelin Strategy & Research

The move to mobile first coincides with customers' preferences and the continuing proliferation of smartphones, worldwide sales of which grew 20.3 percent to reach 301 million units in the third quarter of 2014, according to Gartner.

"Sales of feature (basic) phones declined 25 percent in the third quarter of 2014 because the difference in price between feature phones and low-cost Android smartphones is reducing further," Roberta Cozza, Gartner research director said when the report was released. In the third quarter smartphone sale report, smartphones accounted for 66 percent of the total mobile phone market, and Gartner estimates that by 2018, nine out of 10 phones will be smartphones.

"There will be more mobile banking users than Internet banking users in the next 18 months," predicts Robb Gaynor, founder and chief product officer for Malauzai Software, Inc. Javelin offers a similar strong mobile banking forecast.

Mobile Banking Adoption Increased by 40% in 2013
(Percent of U.S. adults using mobile banking in past 12 months)



Javelin Strategy & Research

As the mobile connection grows in importance, it ultimately becomes the primary channel for financial institutions to interact with their customers, says Richard Crone, CEO and founder of Crone Consulting LLC. "Banks sometimes overlook the fact that payment is the most frequent interaction customers have with their brand. In a world where the mobile app *is* the bank, delegating the payment experience to a third party is risky. Apple Pay has generated a lot of media attention in the last few months, but financial institution executives would be short sighted to use Apple Pay as a mobile payment strategy," he says. "They need to be integrating mobile payment with their own mobile banking apps."

Forward-thinking financial institutions are using mobile banking as a cross-channel enabler, providing customized services wherever the customer is, in the branch, at the ATM, at home and out shopping, Crone adds. "The one who enrolls is the one who controls. When banks enroll customers in mobile banking and mobile payments, they control the customer experience and can provide more value throughout, rather surrendering this interaction to Apple or another wallet provider."

Consumer shopping today is greatly influenced by deals and discounts, which has become a line of business in itself. "Apple Pay opens the door for retailers and financial institutions to cut deals to retain the upside from ads and offers, valued at $300 per active wallet per year, twice the typical gross revenue on a DDA account," said Crone.

"The mobile wallet isn't about payment, it's about the data and better visibility into customer shopping behavior, both benefiting the customer and building the bank's Gross Wallet Sales (GWS), the new metric for establishing the ads and offers value to the issuer vs. just card spend on bank-issued payment accounts," Crone says.

Crone points out that financial institutions need to leverage a common acceptance platform with retailers. One example is CU Wallet, a credit union mobile wallet collaboration that uses the same acceptance platform as MCX, the Merchant Customer Exchange consortium of the nation's largest retailers.

He adds that banks should also look to expand beyond their mobile offerings by having their payment cards enrolled with MCX and other retailers and by accepting retailer's private label credit and prepaid accounts within the bank's own mobile app.

"Aggregate or be aggregated," said Crone. "If you aggregate and provide access to all tender types, you'll have higher consumer adoption and value. You'll also have the opportunity to guide them with an inspiration bar to select one tender over another."

"Mobile will also drive core processing decisions at financial institutions and core providers without tightly integrated mobile banking are in danger of losing business," said Crone. More than a third of core processing contracts are up for renewal in the next two years. One critical feature bank executives want is direct reporting of balances and other information from the core to the mobile banking app and bank-branded mobile wallet, rather than from an ancillary system a step or two removed from the core.

Gaynor expects more institutions to follow the lead of Customers Bank's BankMobile division in enabling customers to open accounts online. The new customer only needs to fill out some digital paperwork and submit a digital photo of his or her driver's license.

Mobile solutions for business banking customers are growing at a rapid pace too, Gaynor added. Business customers need their own mobile solution; they can't just be an afterthought added on to a retail solution.

“The mobile business application needs to have functionality not found in consumer-oriented mobile banking applications, with positive pay, wire approval and other features,” said Gaynor.

“Business customers have been demanding their own applications for some time, but very few banks have business mobile applications right now,” said Gaynor. “It will become more of a trend.”

C. Ideas from Retail

Financial institutions tend to follow in the steps of retailers in terms of customer acquisition, retention and service. “Location is the next [identifying] cookie,” said George Garrick, CEO of G2 Ventures. “In-store marketing is huge.”

Beacons (a class of low-powered, low-cost transmitters that can notify nearby devices of their presence), combined with geo-fencing, targets customers within a defined area (e.g., 100 feet, five miles). Sears is experimenting with a beacon-enabled mannequin that can “wake up” when a shopper gets near it and inform the customer about the specifics of the clothes and any accessories it is wearing, giving customers information when they need it.

Retailers are embracing beacons to provide in-store messaging, mobile payments through open systems like Apple Pay and through closed-loop systems like Starbucks. Beacons are not only being used to make in-store offers, but also to market to customers when they are in a competitor’s store. For example, Sears can send a bedding discount offer to a customer in a *Bed, Bath and Beyond* store, hoping to “steal” the sale.

However, overuse of this technology will relegate beacon-related messages to spam in the mind of the consumer, retailers agree, so the strategy has to be used sparingly.

Retailers continue to focus on enhancing the customer experience, which runs the gamut from providing better offers, to targeted in-store offers, to better analytics designed to deliver more personalized offers to customers, and providing enhanced customer service.

According to McKinsey & Company’s director Somesh Khanna, 86 percent of customers stop doing business with a company due to poor customer service.

Retailers and financial institutions alike are moving to “responsive design,” which enables a mobile app to appear and work the same regardless of the size of the user’s screen. This is an increasingly important feature as the number and sizes of mobile devices continue to expand.

Improving the customer experience is behind banks’ move to customer-driven preferences for payments and omni-channel strategy (including branch redesign).

But some retailers are also taking a cautionary approach to analytics and Big Data in order to separate true data from questionable information. A classic example of this is TV viewership data. Today a person may have multiple televisions, but not all may be connected to cable or satellite. So viewership data can be skewed. Similarly, people may provide false information on social media, which is being used more as additional data by some financial institutions and non-bank financial services providers.

Perhaps the best brands in separating false and true data are large credit card issuers, who use a combination of location-based information, a customer's purchase trends and other data to alert them to "out of trend" transactions and potential fraud. Similarly, loyalty and other marketing programs need to make sure that they base their strategies on true transactions and other data.

Another essential element of enhancing the customer experience that retailers and financial institutions are both attempting to achieve is the omni-channel service enables customers to get the same information, perform the same transactions and receive the same level of customer service regardless of channel. This is becoming more important than ever as customers increasingly use different channels, sometimes on the same transaction. Accordingly, retailers are attempting to ensure that a customer can start an order on one channel and finish it in another. For example, a customer might start an order on the mobile phone, but might need a credit card number or other information not readily available, and will complete the order on a home PC. Another increasingly important retail omni-channel trend, particularly during the holiday shopping season, is the "order online and ship to store" concept, reducing shipping charges and helping traditional brick-and-mortar stores compete with Amazon.

The idea among retailers, which financial institutions are increasingly embracing, is to provide the same level of service and pricing regardless of what channel the customer uses, though even omni-channel retailers offer some Internet-only discounts because that channel is still less expensive to operate.

Starting in 2015 and growing for the next few years, Mercator Advisory Group expects increasing adoption of HTML5, next-generation payments, ibeacon, NFC, wearable technology and similar capabilities among financial institutions.

D. Branch Transformation

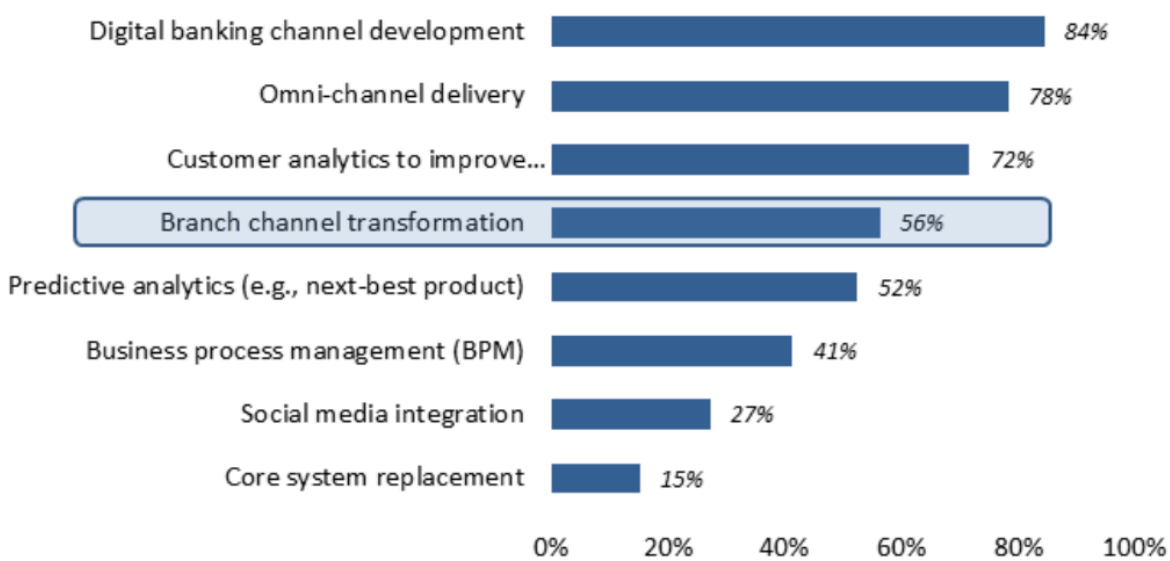
Branch transformation has been discussed for several years, but several analysts think 2015 will be the year this strategy moves from the talking stage to actual transformation.

IDC Financial Insights predicts that this will be an area of major investment over the next 12 months, with a 5 to 10 percent increase compared to 2014. Twenty percent of financial institutions are expected to try video banking to automate human interaction within the next two years.

On a worldwide basis, Wincor Nixdorf AG predicts that in 2017, banks will invest approximately $16 billion in branch transformation and related technologies.

Celent reports that while it falls behind some other spending priorities, branch transformation is indeed in financial institutions' plans.

Branch Transformation Is a Priority Among Half of Surveyed FIs



Celent survey of North American financial institutions, October 2014, n=156

The branch transformation ranges from closing branches to going to a central branch concept with smaller satellite branches to other configurations. Financial institutions are shrinking the footprint of branches and are adding video tellers, iPads for staff, and other technologies to shift branches away from teller transactions and toward customer service and sales.

Cornerstone Advisors refers to this branch transformation as "Delivery Redirect," calling for banks to align channels and resources to support future customer financial buying decisions.

"With transactions moving to digital channels, the branches aren't as important as they once were, but they are and will continue to be important destinations for complex advice and for problem resolution," said Khanna. However, even the advice and problem resolution role is increasingly shifting from the branch to the contact center, agreed several speakers at the 2014 Bank Administration Institute Retail Delivery Conference.

"The branch transformation should vary from institution to institution depending on the strategy of the individual institution," said Paul Schaus, president of CCG Catalyst.

"On the retail side, banks are investing more in support centers and away from the transactional side," Schaus said, adding that financial institutions are renewing their online and mobile banking platforms along with the branches to meet customer needs and expectations.

E. Core Issues

Celent predicts that the North American core banking market will grow at 3.3 percent annually for the next couple of years, reaching $3.3 billion in 2017.

Even though talk of core system replacement hasn't gone beyond the discussion stages at most banks for several years, in a December report Celent analyst James O'Neill said he expects the onset of mobile banking to push financial institutions to core modernization. However, he expects any such efforts to be done in stages rather than in a "big bang."

Citing consolidation of some U.S. core providers, O'Neill also expects international vendors to more aggressively target the U.S. market.

NUMBER OF BANKS, THRIFTS & CREDIT UNIONS THAT BOUGHT NEW CORE SYSTEMS IN 2013

Signed outsource agreements	165	77%
Licensed turnkey (in-house) systems	50	23%
Total	**215**	
Percent of banks, thrifts and credit unions that changed to a new core processing system		1.6%

CURRENT METHOD OF PROCESSING
(based on 2013 sales)
vs.
HISTORICAL PREFERENCE
(based on four decades)

Current choice of outsourcing	77%
Current choice of in-house	23%
Historical choice of outsourcing	45%
Historical choice of in-house	55%

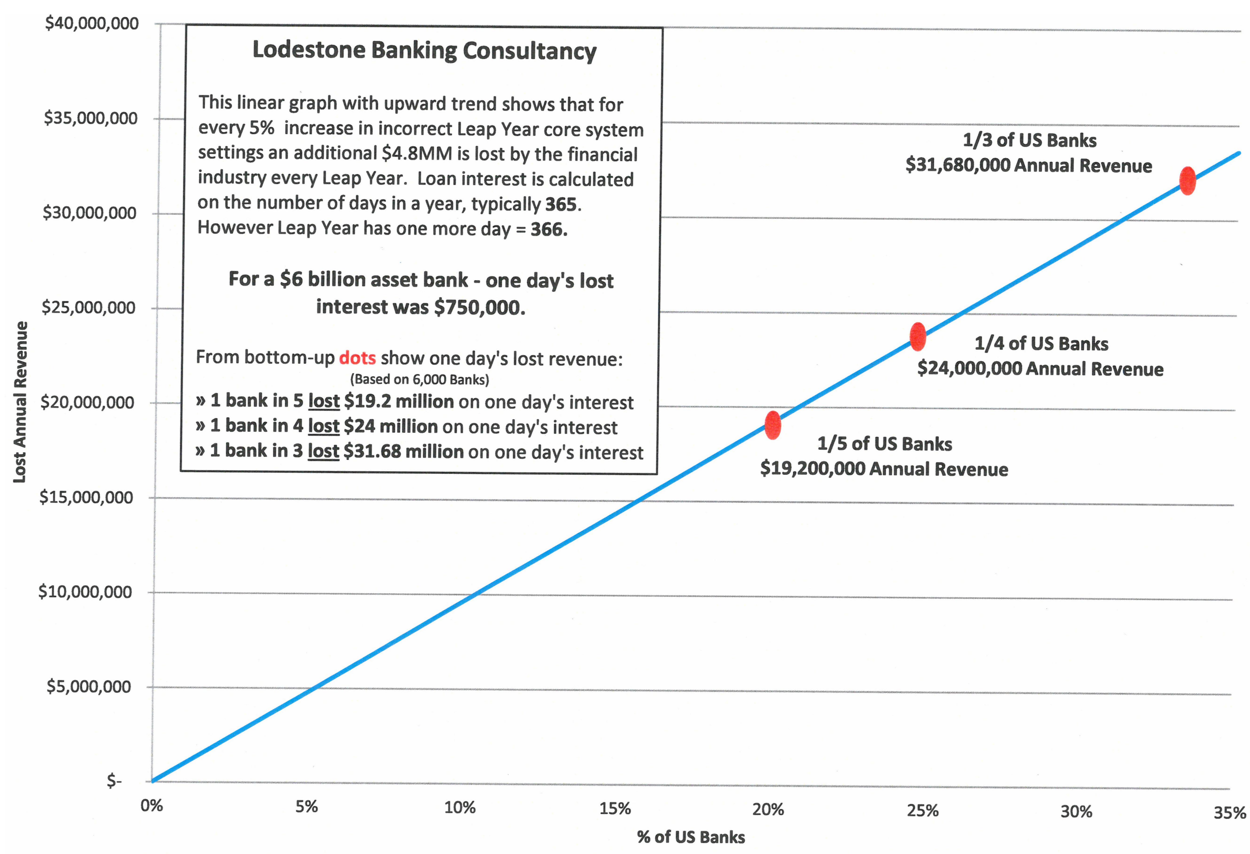
Computer Based Solutions, Inc. – Art Gillis

According to Paul Schaus, president and CEO of CCG Catalyst, there were about 135 core bank and thrift conversions in 2013 (this does not include credit unions).

Financial institutions are losing potential revenue because they use the default settings provided by core providers rather than optimizing the settings to maximize revenue, according to Mark and Shahin Clark of Lodestone Banking Consultancy, Inc. They estimate that every financial institution in the U.S. is losing out on $1 million in revenue for every $1 billion in assets because they haven't adjusted the default system settings of core vendors.

For example, a bank with a credit product might charge interest based on a 365-day year. But that means that every four years, it is missing a day of interest on Leap Day. While that might seem insignificant at first glance, the changing of this setting alone resulted in a $6 billion bank earning an additional $750,000 in revenue, according to Mark Clark – and the change took only a few seconds to complete.

Lost Revenue due to Leap Year Oversight



Lodestone Banking Consultancy, estimates based on only 6,000 banks

Similarly, financial institutions are failing to assess certain fees or missing other revenue opportunities that could be captured by readjusting the core system setting, according to Shahin Clark.

"Core vendors need to start providing more information on their system settings," she said.

F. Security

The possibility of a data breach is the prime concern for three-quarters of bankers surveyed for the CSI banking priorities report.

What are your top security concerns for 2015?

Data Breach	75.4%
Mobile Device Security	50.3%
Social Engineering	35.8%
Account Takeover	31.8%
Third Party (vendor) Access Management	26.8%
Outsourced Data Security	21.2%
DDoS Attacks	16.8%

CSI

Javelin points out that targeted data breaches and malware attacks are a lucrative source of account credentials and financial information for hackers. Non-card fraud nearly tripled from 2012 to 2013, the last year for which full figures are available, resulting in an estimated $5 billion in losses.

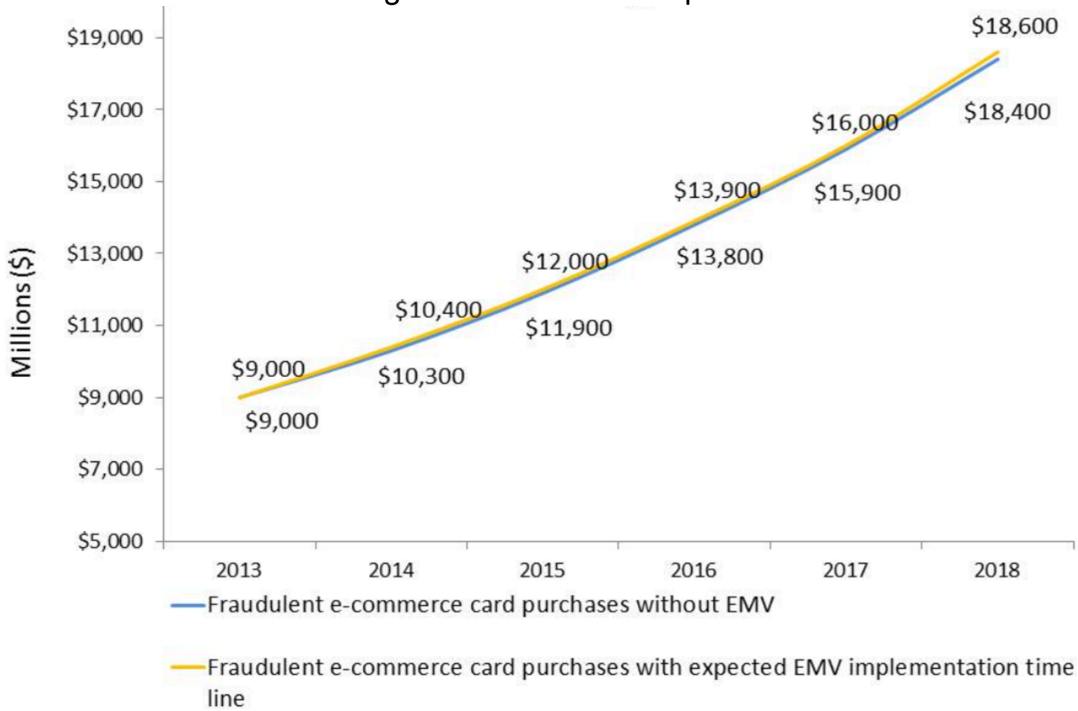
One of the critical factors in combating such fraud is requiring secondary authentication for high-risk transactions, according to Javelin. Yet only one in five financial institutions uses an additional level of security. One highly effective secondary authentication method is sending a one-time password to a mobile phone, but only one-fifth of the largest 50 U.S. financial institutions use this technique.

The concern about fraud is also driving the movement to EMV at the point-of-sale, though EMV in and of itself is only part of the fraud-fighting solution.

Lee Wetherington, director of strategic insight for ProfitStars, predicts that the U.S. will continue to see net increases in card fraud. Online card-not-present (CNP) fraud will continue to skyrocket until tokenization reaches wider adoption. Though counterfeit card fraud will be blunted by EMV, lost-and-stolen card fraud will remain unchecked in the U.S., as most issuers go to market with chip-and-signature as the primary cardholder verification method (CVM) for their EMV credit cards. As a result, lost-and-stolen card fraud will approach $1 billion by 2018. The industry could mitigate this fraud risk by migrating to chip-and-pin EMV rather than chip-and-signature.

Additionally larger merchants will tend to migrate to EMV first, so the concentration of fraud will shift, according to Wetherington. “EMV-enablement will take place gradually over time, beginning with credit cards and the largest box stores and ending with debit cards and the smallest merchants. In other words, over the course of 2015 (and perhaps thru 2017) the weakest links and last-to-adopt will suffer disproportionate amounts of fraud and fraud liability.”

Forecast for Fraudulent E-Commerce Purchase Will Grow,
Regardless of EMV Adoption



Javelin Strategy & Research

G. Analytics

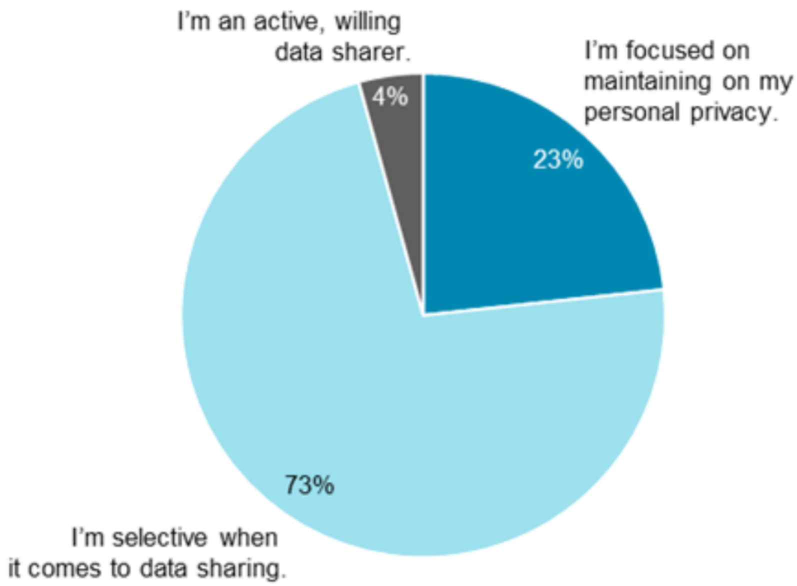
Financial institutions are spending an increasing amount of their technology budgets on analytics, particularly when it comes to fraud and marketing, says Sam Kilmer, senior director for Cornerstone Advisors.

Financial institutions will increase spending on analytics 5.8 percent in the coming year, according to Ovum, in an effort to better understand and target customers.

However, spending on analytics is concentrated among a small percentage of financial institutions. According to an *American Banker/SourceMedia* Research survey, 36 percent of bankers are looking for a new analytics solution. A Celent survey shows that 27 percent of financial institutions are exploring customer analytics and another 37 percent are in the experimentation stage. Only 28 percent are using customer analytics at the “line of business” level.

“Banks have always invested in analytics,” adds Cornerstone’s Terence Roche. But the effort was so big, that the analytics were fairly superficial. Now financial institutions are following the lead of the payment card issuers in drilling down to granular information, such as where a customer uses a debit card, and other sources of data to better target customers. (For the card issuers, the targeting is secondary to fraud detection and prevention.)

Which of the following best describes your willingness to share data about yourself with others?



Celent

H. Community Bank Challenges

Schaus predicts that the number of financial institutions will shrink considerably in the next few years, with most of the mergers and acquisitions in the community bank space, primarily due to the cost of compliance.

In order to better manage those costs, the community financial institutions will use technology planning consulting services to help with compliance, manage risk, and effect branch transformation, Jimmy Sawyers of Sawyers & Jacob, LLC predicts. Community banks will also use a host of technologies designed to bring together the human side that community banks are famous for and the technology side that customers are now expecting.

Community banks will reach out to retirement communities and university campuses with interactive tellers to reach new and old customers where it is most convenient for them. Similarly, they will use their various channels to offer digital concierge services, including education on financial management, such as how to apply for a mortgage or how to budget.

The community banks with less than $100 million in assets will need to grow or find a very specific niche in order to survive, according to Sawyers. Without growth or radical differentiation, these community banks will be overwhelmed with regulatory and compliance costs.

Larger community banks "are in a sweet spot" where they can adapt and survive, using co-sourcing with trusted providers, re-deploying resources from traditional branch services to support online and mobile services, and employing strategic sales technology planning to remain viable in a changing marketplace, Sawyers added.

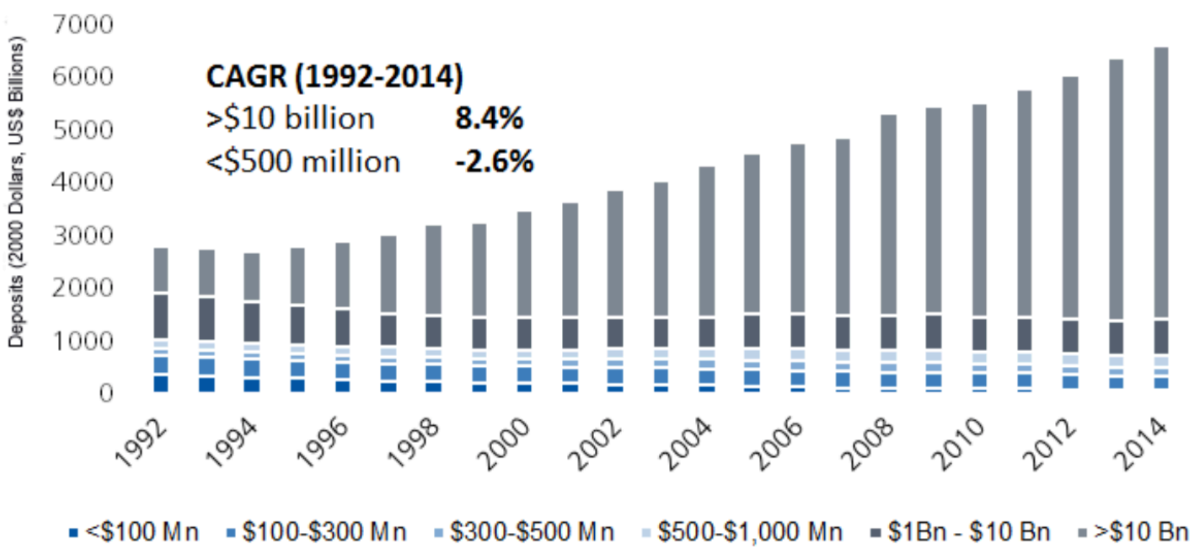
Yet even the community banks with more than $100 million in assets struggle with budgets that are much more limited than those of much larger financial institutions.

“There are a lot of toys out there; banks can’t buy them all,” Schaus says**.** For community banks as well as larger institutions, the technology priorities depend on the strategy of the bank.

“Rather than [the technology] with all of the bells and whistles, banks need to look at what keeps them competitive; what supports the business,” said Schaus.

Beyond the issue of rising costs, community banks have also been challenged in attracting deposits, Celent points out. Today the top five banks in the U.S. have nearly 40 percent of all domestic deposits.

The Largest U.S. Banks Are Gathering the Vast Majority of Deposits

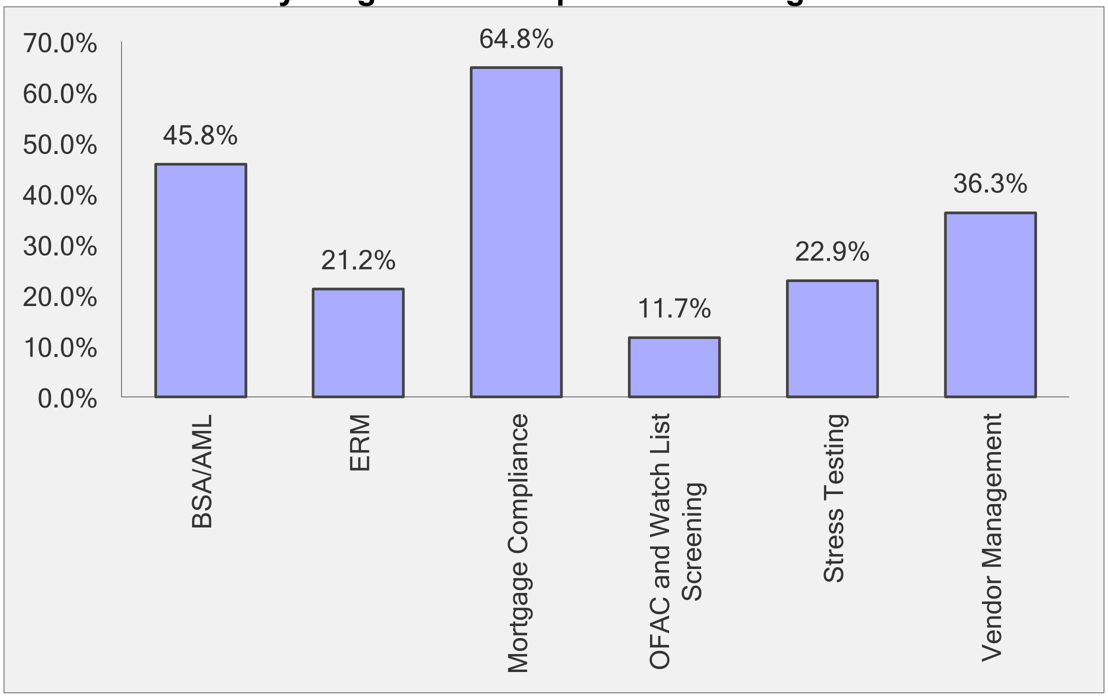


Celent

H. Compliance

Mortgage compliance is the top challenge for banks in 2015 due to Consumer Financial Protection Bureau (CFPB) regulations, particularly the TILA-RESPA Integrated Disclosure rule, according to the CSI Banking Priorities Report.

What are your greatest compliance challenges in 2015?



CSI

"Risk analytics, data aggregation, and regulation (RADAR) will dominate the CRO (chief retail officer) agenda, and over 50 percent of IT risk spending for the next 12 months as firms chase innovation to further improve risk predictability, reduce compliance costs and improve efficiency and enterprise controls," IDC's DeCastro said. Leading financial institutions will look to technology innovations that link performance to compliance.

DeCastro added that RADAR initiatives will be connected to core replacements, revenue profitability, financial and capital reporting and cybersecurity.

IDC Financial Insights recommends that financial institutions place risk, treasury and general ledger infrastructure at the center of any transformation efforts.

Cornerstone's Kilmer says financial institutions are increasing their focus on payments risk mitigation, particularly with large credits and the onus of CFPB audits.

IV. Contributed Articles

- Apple Pay is not a Mobile Strategy
- Top Ten Trends Impacting Bank Technology for 2015
- Realizing Value with Mobile Solutions
- Marketing to the Emerging Affluent
- The Changing Face of Core
- The Race to Better Technology
- Redefining Payments: Real Time Payments, Real Time Risk Management

Apple Pay is not a Mobile Strategy

Financial institutions using Apple Pay to attract millennials will need to drive customers to their own branded wallets to stay ahead in the race for enrollment


By Richard Crone and Heidi Liebenguth, Crone Consulting, LLC

Tim Cook, the CEO of Apple announced on October 16, 2014 that more than 500 "banks" were participating in Apple Pay. What is the relationship like between Apple and these financial institutions? Without the customary due-diligence required by FFIEC for a new processor contract, most of them had less than a week to examine and execute a non-negotiable agreement directly with Apple that required, according to Jefferies and Co., that they rebate 15 basis points for credit and a half a cent for debit for every Apple Pay transaction. Most of these institutions are under $10 billion in assets, so in essence Apple Pay negates their interchange protection created by the Durbin amendment with the remuneration directly to Apple. For many financial institutions, debit and credit card interchange contributes more than half of their earnings from transactions accounts.

For most, the added expense was justified by the risk of losing their most prized customers, the transaction-rich and less-loyal millennials. Committing to Apple Pay was more of a defensive move because numerous studies indicate more than half of the millennials are likely to switch their primary financial institution relationship for a mobile wallet.

The problem with that strategy is that the primary payment and "financial" relationship is now going to be controlled and branded by Apple.

This should be of great concern to the chief marketing officer of a bank or credit union as customers will be repeatedly receiving Apple brand impressions all around the payment event – an experience that is markedly different today with the customer having most of their mobile financial interactions through the credit union's own branded mobile banking app. Financial institutions must separate their business from their charities. Donating control of the mobile user interface and experience, with its potential to inform and motivate customers to use preferred tenders and activate new products, loyalty rewards and offers, in hopes of being chosen the invisible "default tender" in Apple Pay (or Google Wallet, Softcard (ISIS), PayPal, Amazon or any other 3rd party intermediary) is not a mobile payment strategy.

The Cost of Outsourcing the User Interface (UI)

This new scenario with Apple Pay is another illustration of the risk of delegating payment interactions to a 3rd party intermediary. It's going to cost more, and inserts several new mouths to feed into the payments revenue stream for financial institutions.

Financial institutions are used to relying on third parties for processing and other services, many even relying on the cooperation of other financial institutions through shared branches and ATMs. But Apple Pay is different. Here's why. Mobile banking is growing five times faster than Internet banking ever did; it is already becoming the most important service channel and branded interface that the bank or credit union has with its customers today. The typical customer interacts with the mobile banking app as much as 20 to 30 times per month, compared to maybe one or two visits to the branch per year (even less for a shared branch). Payments however, from a service interaction standpoint, occur 30 to 50 times per month, easily the most important touch point that a customer has with their financial institution and their money. There isn't a bank or credit union that shares its branded mobile banking user interface (UI) with another credit union or bank.

In signing up for Apple Pay, there's no question that the customer is enrolling with Apple. Apple controls the UI and the branding of Apple Pay, subordinating all other brands behind it.

What to Consider for a Mobile Payments Strategy

Careful review of the fully burdened cost of participating in Apple Pay requires that the credit union have a clear mobile payments strategy beyond Apple Pay to eventually offering payments through its own, branded mobile banking app. In this way, it can:

- Avoid the interchange costs paid directly to Apple
- Eliminate the tokenization fees to Visa, MasterCard and American Express by using their own tokens in their own branded wallet
- Circumvent the new processor charges for accounting and paying the fees to Apple, Visa and MasterCard
- Minimize the cost of providing tier one customer service since Apple, Visa, MasterCard and the processors have all insulated themselves contractually from this responsibility for Apple Pay
- Recapture the upside revenue potential from ads and offers, estimated to be worth about $300 per active mobile wallet user per year. The mobile wallet provides its greatest value to the customer as a marketing and on-demand servicing platform, not just a wallet
- Reduce the risk of losing the User Interface (UI), with its relationship-building customization, revenue-building tender steering and marketing options that come with a direct connection to the financial institution's customers, vs. reaching them through a 3rd party intermediary like Apple iAD or Google Wallet

Financial institutions are going to prefer using their own branded wallets to avoid all the costs listed above, and also gain new revenue streams through closer direct relationships with their customers, retailers and product manufacturers. In the end, financial institutions want Apple's marketing buzz, but not the Apple Pay transactions.

We personally lived through a similar scenario in 1996, the early days of the Internet, when Richard was the senior vice president and director of Online Banking at Home Savings of America, the largest savings bank in the USA at the time. He was part of team that convinced management and the board of directors of Home Savings to spend millions of dollars to be in the initial launch of online banking inside Intuit's Quicken and Microsoft Money. Home Savings met its first year projections in the first three months of the launch. Intuit and Microsoft helped educate consumers, build awareness and the initial base of online-savvy customers. However, within a year Home Savings was able to connect directly with customers through its own "app:" the Home Savings branded Internet banking site. Needless to say, Home Savings was able to abandon its financial commitment to Intuit and Microsoft and save millions of dollars. Apple may or may not have studied history, but they are doomed to repeat it.

Door Has Been Opened to Cut New Deals with Retailers Directly

The key point for financial institutions: simply signing a contract to issue or accept Apple Pay is not a mobile payments strategy. Just as Intuit, Microsoft or AOL were merely bridges to a financial institution's own branded Internet banking experience in the mid-90's, so will it be for their bank and credit union branded mobile banking apps. Because the one who enrolls is the one who controls, the safe bet in mobile payments is on your brand, your accounts in your own app. Ceding the payment UI to Apple Pay or any other 3rd party intermediary comes with great brand, processing and marketing risk.

Apple's entry into mobile payments now incents financial institutions to begin working directly with merchants, especially the Merchant Customer Exchange (MCX) to renegotiate a new set of clearing and settlement terms for the populating of private label tenders in bank and credit union wallets and the acceptance of financial institution wallets by merchants. Retailers and financial institutions have an opportunity to work together to connect directly with customers without the cost and risk of using 3rd party intermediaries such as Apple Pay, Google Wallet, PayPal, Softcard, etc.

To negotiate these relationships with large retailers and MCX, financial institutions will need to pool their efforts collectively as they have done successfully so many times before. The credit union movement has more than 100 million customers that can be leveraged to gain their rightful place at the bargaining table to establish mutually beneficial relationships directly with retailers. Retailers are now motivated to work directly with financial institutions, to protect their payment data from interloping 3rd parties, reduce costs and build loyalty for each respective customer base. This provides distribution and adoption reach for both retailers' private label payment types and financial institutions' open loop debit and credit accounts.

Apple's Supply Creates Demand for all Mobile Payment Types

Or in other words, all boats will rise with the rising tide…if you have a boat. If you don't, you're likely to get wet, maybe even have trouble keeping your head above water. The Apple Pay launch is an opportunity to leverage the market-making, educational and promotional power of Apple to sign up customers to your own bank or credit union branded mobile wallet, which every major consumer study indicates is the preference for mobile payment services. In doing so, the financial institution will be the system of record without having to pay a 3rd intermediary to reach customers and tokenize the transaction while building loyalty for their own branded user interface.

What all this necessitates is that the financial institution have a clear vision and articulated mobile payment strategy. Crone's rule still applies: The one who enrolls is the one who controls. All new payment types start with merchant acceptance. Apple Pay has renewed the efforts already afoot to redefine the relationships between financial institutions, retailers and their customers, opening the door to new compensation structures and new ways for each to better serve customers through their financial lives and shopping journeys, in their own branded, customer-focused apps.

Mobile Payment Will Drive the Next Wave in Payments for Banks as Buyers

Mobile banking and bank branded mobile payment will ultimately drive core processing decisions and competitive replacements in the years ahead. Already, in our direct and recent work with financial institutions preparing to select new core processing relationships we are finding that they are planning to use mobile payment functionality as one of the primary "tie breakers" in selecting or expanding the use of their core processing suppler. In short, mobile banking and payment is no longer grouped into the separate consideration for an ancillary Internet and mobile banking application. It has become core to the financial institution's identity.

Richard Crone and Heidi Liebenguth lead Crone Consulting LLC, an independent advisory firm specializing in mobile strategy and payments. Crone Consulting has helped define the mobile commerce and payments strategy for all sizes of financial institutions, large merchants and specialty retailers, restaurants, recurring billers, core processors, payment networks, telcos, consortiums and investors. The firm's payments optimization services have achieved 10 to 30 percent cost reductions and revenue increase through innovative self-service, alternative and mobile payment strategies. Richard and Heidi can be reached at www.croneconsulting.com.

Top Ten Trends Impacting Bank Technology for 2015

By Jimmy Sawyers, Sawyers & Jacobs LLC

"When the winds of change blow, some people build walls, and others build windmills."
Chinese Proverb

As we look ahead to 2015, the winds of change are clearly blowing. Bankers will be called upon to build "windmills" as new technology will be needed to drive efficiency, increase productivity, and meet the demands of today's tech-savvy customer; however, bankers will have to build walls to protect customer information, mitigate the risk of corporate account takeovers, and fight the growing number of cybersecurity threats.

To help our banker friends plan for the walls and windmills required to succeed in 2015, we offer ten predictions:

Prediction #1 – Cybersecurity Takes Center Stage

As of this writing, the Sony Pictures Entertainment corporate network had been down for six weeks straight due to the hack attributed to North Korea. Bankers have become all too familiar with corporate account takeover (CATO) incidents and data breaches at third-party processors but how will bankers react to a Sony-like breach where embarrassing emails, employee salary and healthcare information, and internal audit reports are leaked to the public? Adding to the damage, network and data destruction that could require weeks or even months to rebuild. Michael Lynton, the movie studio's CEO put it bluntly, "They came in the house, stole everything, then burned down the house." Would your bank survive such an incident?

Remote-access Trojans delivered by spear-phishing campaigns will remain the easiest way for intruders to penetrate bank networks.

Malicious software designed to exploit recently patched security weaknesses in Microsoft programs and third-party software such as Adobe and Java will keep bankers scrambling to enhance patch management efforts. Ransomware incidents will continue to grow as cybercriminals extort money from users with smartphones and other mobile devices becoming popular targets. Without the proper security measures and testing in place, banks could have intruders already inside their networks, plotting a future attack.

Those waiting for a piece of paper from the government to tell them what to do regarding cybersecurity are woefully behind and run the greatest risk of attack.

Bankers will rise to the cybersecurity challenge in 2015 and will hire qualified firms to ramp up IT Audits and conduct in-depth Network Vulnerability Assessments that include social engineering testing, vulnerability scanning, and enhanced penetration testing.

Challenge Question: Does your bank have the proper cybersecurity defenses in place and does it test them regularly?

Prediction #2 – Bankers Struggle to Harmonize the Blurred Lines of Their Digital and Physical Worlds

Many banks now exist in two dimensions, the physical world and the digital world. The brick and mortar of the physical world represented by branches tends to be out of sync with the bank's digital world of mobile apps and other online services. This dilemma is exacerbated from the customer perspective when one walks into a bank branch seeking help with a mobile deposit app only to be shooed away to a call center or online tech support site. More shudder-worthy is the branch employee's comment, "I don't use our mobile apps so I surely can't help you." Such dismissive customer service drives potentially loyal customers to the bank's competitor. More often these days that competitor is a non-bank.

As mobile apps become the predominant online banking system and preferred interface, traditional Internet banking as we know it will fade from the scene. Apps move to the desktop and exist across all screens, offering a consistent customer experience.

To put a banking spin on the Rudyard Kipling quote, "Oh East is East, and West is West, and never the twain shall meet," until bankers bridge the gap we will continue to see that, "Oh a branch is a branch, and an app is an app, and never the twain shall meet."

Challenge Question: How well does your bank coordinate its digital and physical worlds to harmonize the customer experience?

Prediction #3 – Successful Community Banks Become Smart Community Hubs to Promote Learning, Living, Working, and Giving™

Already active in their respective communities and critical to their local economies, community bankers will use technology to establish their banks as smart community hubs and improve the quality of life for their customers. Four areas of focus will be learning, living, working, and giving.

Bankers will facilitate lifelong education and knowledge exchange by providing access to personal financial tools and education, small business coaching, security awareness, and by connecting local knowledge leaders with the next generation of bank customers.

By guiding customers through major life events and their financial implications, bankers will help them achieve their goals in their 20s, 30s, 40s, 50s, and beyond. College, first job, first car, marriage, children, homeownership, investing, and retirement planning, bankers will segment customers in these age groups and help them focus on why they work and how their financial decisions can enrich their lives.

In a recovering economy with improved prospects for job-seekers, bankers will help customers start their careers and succeed, connecting employers and potential employees. Wise bankers will not hesitate to make a microloan to finance a suit and tie. Such a seemingly small transaction could be life-changing. Further, bankers will make the bank available when customers need it, often after their normal working hours.

Connecting local causes with the right resources will further demonstrate the importance of community banks as smart community hubs. Beyond sponsoring and hosting fundraisers, these banks will focus their social media channels on giving and community enrichment.

Such learning, living, working, and giving will be made possible by using technology tools for better customer communication ranging from online scheduling systems for customer meetings to after-hours video calls to discuss financial events. Banks will increase branch traffic by making conference rooms available to local community groups and small businesses for their use or for informative seminars and education on a variety of bank-sponsored topics. Bankers will learn that keeping customers engaged is a winning strategy and technology can help with that engagement.

Challenge Question: How well does your bank promote learning, living, working, and giving in your community?

Prediction #4 – The Branch Lives But Transforms

Branch footprints continue to shrink. The branch is not dead but it will look different in the future. New branch designs will incorporate technology and will offer a more visual customer experience from tablet computer banking to video walls, all in-branch. While tech-savvy customers rarely visit the branch, this does not mean the branch is obsolete. There are still times when customers and bankers need to meet in person.

Faced with the choice of building a $1.3 million branch or buying a $100,000 Smart ATM, many bankers will test the latter as a branch alternative. As we predicted last year, these Smart ATMs will enjoy widespread deployment and will be popular with customers.

As bankers continue to find ways to take the bank to the customer, on the customer’s terms, expect e-sign efforts to take hold. Bankers will help customers complete complex transactions using better file transfer tools and sophisticated online services. Serving customers remotely will be critical. However, don’t look to the sky just yet. Customers may not be ready for drone banking for quite some time (tongue firmly in cheek).

Challenge Question: Is your bank’s branch network designed for the future?

Prediction #5 – Technology Startups Spark Innovation and Stifle Stagnation

Those of us who collected baseball cards in our youth will recall the mistakes we made when we opened a pack of cards and were disappointed to get a no-name rookie in the batch instead of a well-known all-star player. Because we didn’t know the rookies, they got relegated to the “bad” pile, put on our bicycle spokes, or used as targets on the dart board. Big mistake, as those rookie cards are the most valuable when the player develops into a hall of famer. We often discount the unfamiliar as unworthy. We don’t recognize talent and potential when it’s staring us in the face.

In banking technology, just as in baseball, today’s rookies are tomorrow’s stars.

Startups can be viewed as risky, and most are, but they also represent necessary change in an industry beset by stagnation.

2015 will be the year we see more innovation to break 14 long years of relative stagnation in banking technology. Be open-minded to new technology and be able to spot those diamonds in the rough, the talented people, improved processes, and new systems needed to lead your banks into the future. Of course, the same due diligence fundamentals apply and should be followed for any significant decision.

Challenge Question: Are your veteran technology providers performing and delivering or is it time to consider some rookies with all-star potential?

Prediction #6 – Payments Innovations Disrupt Traditional Banking and Present Opportunities and Threats

Person-to-person payments and digital wallets will continue to evolve. Apple iPay, while not a new concept, has the critical mass to succeed due to the 800 million credit card numbers it has stored for iTunes accounts. Increased consumer use of such contactless payment systems will be the rising tide that lifts all banks' interchange revenues, especially those below $10 billion in total assets. Be sure to read the fine print in any agreement with Apple or any other third-party to avoid sharing too much of the bank's payments revenue in such new ventures.

With over 150 cryptocurrencies like BitCoin in existence, there will be a survival of the fittest and tremendous risk until the winners shake out.

An idea born in Brussels in 1991 comes closer to reality. Visa and MasterCard set a deadline of October 15, 2015, for retailers to accept EMV (EuroPay, MasterCard, Visa) chip and PIN transactions at point-of-sale (POS) terminals. The deadline is October 1, 2017, for automated fuel dispensers. Bankers will continue to upgrade their ATMs for EMV, in advance of the shifting deadlines, or will incur greater liability for fraudulent transactions.

Micropayments, typically defined as transactions less than $12.00, will gain ground.

Sub-cards and sub-accounts to bank the household, or the small business and its employees, will receive proper attention from bankers who recognize this opportunity to improve checking account utility and fend off competition.

Such cards and accounts offered by non-banking providers are vampires that will suck the life out of the traditional bank payments franchise if bankers don't wake up and meet this challenge head on, listening to customer wants and offering viable, easy-to-use alternatives that work seamlessly with the customers' current bank accounts.

Challenge Question: What is your bank doing to secure the payments franchise while increasing interchange revenue?

Prediction #7 – The Cloud Gets Scrutinized But Grows as a Platform

Bankers and consumers will proceed more cautiously to the cloud as security breaches, lost data, privacy concerns, and denial-of-service attacks expose the fragility of some cloud-based platforms.

As many celebrities found out during the Apple iCloud "hack," private photos are not very private when not properly password-protected by the user or not secured well by the services provider. Many tech experts rightly point out that much of the so-called "hack" of the celebrity photos could have been prevented if they had simply turned off the iCloud "Photo Stream" feature which uploads photos taken with an iOS device to Apple's iCloud servers automatically.

In addition to photos, many Apple users recently upgraded their iOS to find their private files were automatically uploaded to the cloud without their knowledge. Many began to receive other's texts as a result of default settings for group messaging in carriers' family plans, causing those senders privacy problems. Such default features will continue to surprise users who put blind trust in the cloud and do little due diligence.

However, due to its low-cost nature and efficient business model, cloud computing will grow in popularity and will certainly encompass more banking applications as 2015 progresses.

Challenge Question: What bank and bank customer data is stored in the cloud, and is it secure?

Prediction #8 - Risk and Regulation Change

Selected parts of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the USA PATRIOT Act will be repealed. Expect the Durbin Amendment to face much-needed scrutiny as this price control legislation is lifted.

Bankers will take a step back and assess their risk management programs to determine if they are ready for the likely threats of 2015 and beyond or are still mitigating known threats from the past 10 years, driving their cars (read banks) looking in the rearview mirror instead of out the windshield.

Regulators continue to stress the importance of Enterprise Risk Management (ERM) programs for banks of all sizes as bankers refine and focus their ERM efforts. High-performing banks implement annual Enterprise Risk Assessments and quarterly ERM monitoring and reporting, keeping their directorate informed and effectively executing their banks' strategic plans and navigating a changing marketplace.

Challenge Question: Is your risk management program fine-tuned for 2015 or still mired in 2005?

Prediction #9 – Wearable Technology Remains a Novelty That Presents Little Utility

I haven't worn a wristwatch in 10 years because I have a timepiece strapped to my hip in the form of my smartphone.

Early adopters of wearable technology such as Google Glass have more often been viewed as slightly creepy or attention hogs instead of high-tech trailblazers. In social interactions one does not want the other person in a position of control over him or her, possibly recording your conversation. This unwritten social rule is why certain smug users of Google Glass have earned a not-so-nice nickname that cannot be printed here. Use your imagination. It begins with "glass."

Remember the Speedpass watch? I had one of these 12 years ago and loved it. It was the precursor to technologies like Apple iPay and allowed one to wave a wristwatch, containing an imbedded radio frequency identification (RFID) chip, near a gas pump whereby the transaction would take place just as if one had dipped a credit or debit card into a card reader. Still available as a key fob, the Speedpass watch just never gained traction and never enjoyed widespread appeal.

Wearable technology will remain more popular to fitness, not financial, applications. If Dick Tracy failed to make the wrist radio cool almost 70 years ago, chances are it won't happen in 2015.

Challenge Question: Will wearable technology gain financial utility or will it remain on the fringes of society?

Prediction #10 – Technology Spending Increases

We expect bank technology spending to increase around 7% in 2015 as the economy expands and bankers leverage technology to meet growing consumer demand for more advanced services, and initiate projects to improve network infrastructures, performance, and security.

Bandwidth, software, and hardware upgrades will be top priorities as bank employees demand the tools necessary to produce and as bank customers demand more high-tech services. Systems that seemed fast and sophisticated five years ago will seem slow and antiquated in 2015. Strategic technology planning will remain a valuable exercise to maintain awareness, establish priorities, and increase the likelihood of successful tech projects. Bankers will ask for more assurance that their systems are secure and will invest in the audits, assessments, and testing necessary to gain that assurance. Their directors, regulators, and customers will demand such security and a proactive approach.

Challenge Question: Is your bank's technology budget aligned with the opportunities that 2015 will bring?

Summary

Arthur Burt once said, "Nothing happens until the pain of remaining the same outweighs the pain of change." Faced with more demanding customers, cybersecurity threats, and the need to run a more efficient bank, the community bank model must continue to evolve and change to meet these challenges. The pain of staying the same will be too great. In 2015, high-performing banks will use technology to effect the positive change required to compete at a higher level and with greater velocity than ever before.

Wishing you all the best for a successful year filled with exciting innovation and strategic goals achieved.

Sawyers & Jacobs LLC helps banks in four major areas: Technology Planning, Risk Management, Network Solutions, and Business Continuity. Our mission is to help our clients use technology securely, effectively, and profitably to better serve their customers, comply with laws and regulations, contain costs, and compete. Making Banks Better™. To learn more, visit www.sawyersjacobs.com , call 901.487.2575, or email jsawyers@sawyersjacobs.com.

Realizing Value with Mobile Solutions

By David Eads, Founder, Mobile Strategy Partners, LLC

Investment in mobile solutions will continue to be extremely important for banks and credit unions in 2015; probably safe to say for the rest of our careers. I hope this doesn't come as a surprise. The interest, enthusiasm and experimentation with mobile financial solutions over the years have been widely publicized and exciting to watch. At the time of writing, 61 news articles were identified by Google, all published in the last 24 hours just on the topic of Apple Pay, and we are months after its official launch. The challenge for financial services executives is to make sure all of the interest, enthusiasm and experimentation lead to successful deployments of meaningful solutions that maximize business value.

From Strategy to Execution

There is certainly no shortage of ideas for mobile solutions that can benefit the financial institution and its clients. For example, consider how you might enable all of the activities currently supported in your branch and call centers through the mobile devices carried by your customers and employees. This exercise should include setting aside tradition and reevaluating assumptions to completely reimagine enrollment, onboarding, communication and collaboration with a bent toward leveraging mobile technologies to their fullest extent across both sales and service activities. There is no reason today that a critical, albeit complex transaction or even an interaction with a financial advisor couldn't be supported on a plane at 30,000 feet. Or, that a relationship could be established by a new customer riding the bus. Or, that your sales staff should be confined to a branch or be forced to shuttle paper around when they do leave the building.

The abundance of ideas, along with associated hype, excitement and buzz words has been frustrating for many bank and credit union executives that are inundated with solicitations, suggestions and funding requests for new and improved mobile solutions. Once you have the ideas, the trick is to determine which represent the best opportunities to solve real problems and add the most value to your financial institution. Executives must ensure their institutions aren't taking action for action's sake, but are making investments and taking calculated risks that align with their strategies and help achieve real business objectives. The goal is to make sure your "digital devotees" both internally and externally are generating more revenue at a lower cost rather than the reverse.

Next, it is time to engage the right team and execute. Creating a clear vision and strategy is one thing; executing it is another. Mobile initiatives done right require not only hard-to-find mobile strategy and technology expertise but the ability to execute projects at a more rapid pace than ever before. Plus, the most beneficial projects tend to require deep financial services expertise as well as the ability to engage key constituents across the organization. As an example, when our team began helping larger financial institutions in their efforts to implement mobile remote deposit, it was not uncommon to have 20-30 people in the room representing diverse areas across the organization in vendor evaluation and requirements definition phases. In many cases, these groups were meeting together for the first time ever. Being able to bridge gaps and create alignment across these business, technology and operations groups was key to success.

Investing in the Right Solutions

Of course all of this only makes sense if you are focused on solving the right problems in the first place. When we work with financial institutions, we look for problems in the market that are causing significant pain to the organization itself and/or its clients, that are pervasive (not unique to a single client or a rare use case) and for which there will be a clear return on investment. The return on investment typically depends on being able to achieve large cost savings and/or go after new market opportunities that are meaningful to the institution from a revenue standpoint; and where it can dominate and experience a high growth rate.

For example, over the past year, one consistent theme we have started seeing across a wide range of financial institutions is conscious decisions being made to shift the focus of mobile initiatives beyond just servicing customers to deploying technology to improve sales results. There is certainly a lot of work that remains to get to the ideal state in servicing, but sales seems to be key for 2015. Part of the reason for this is that financial institutions are already seeing up to 30 percent or more of overall web traffic coming from mobile devices. This is the case even without mobile optimized sites. Given stated priorities to establish new customer relationships and drive new product sales, it would be a huge mistake to not invest in expanding and monetizing this traffic. This is a clearly a problem to be solved that meets the criteria outlined above.

In order to monetize mobile traffic, financial institutions need to first make sure accounts can be opened through mobile devices in the first place. Having a way to accept an order the moment the customer is ready is obviously key to maximizing the value of your marketing spend. We also recommend strategies and investments that help improve automated decisioning and that eliminate chasms between opening the account and realizing desired behavior from new customers such as account funding, making an initial transaction, setting up direct deposit, enrolling in mobile banking, and utilizing alerts. Leveraging mobile devices to support the account opening process in full and assisted-service environments has also started to become of interest and can be an easy stepping stone to full self-service account opening. This includes in-branch use cases as well as empowering personnel outside of the branch to be more efficient during corporate client site visits and other events such as freshman orientations at colleges and universities.

Maximizing Success

Putting in place a culture of innovation to improve both sales and servicing in light of what is now possible through mobile will help separate you from your competition as we move forward in 2015 and beyond. Many advocate a mobile-first approach to design and thinking. We similarly believe taking this approach provides a way to leapfrog ahead of current paradigms and provide better value to the customer. Start with a basic question, what would happen if your customers, for whatever reason, suddenly became unable or unwilling to visit your branches? In an ideal state, they would experience zero detriment as they would be able to fully interact and transaction with your institution through mobile.

Beyond the recommendations presented above, here are a few other tips we recommend from our work with more successful financial institutions. As you embark on the New Year, we hope they will help you evaluate how you match up to best practices and how you can improve in the future.

1. **Get the right people on the team**

   This is this is key to creating a culture of innovation and value creation; teams can be structure with existing personnel from across the organization and supplemented where necessary with experts. Where possible make sure that you dedicate personnel to upcoming strategic efforts apart from day to day operations and large infrastructure and/or bank conversion initiatives. As an example, we recently completed an engagement with a financial institution to define its mobile strategy and requirements for key projects at the same time it completed a successful core conversion. This helped it make sure it didn't miss a beat the second the larger team came up for air.

2. **Focus on eliminating constraints**

   Advancing mobile initiatives over the long-term will require eliminating as many constraints to innovation as possible. What is the biggest thing holding you back from delivering high value mobile solutions to your clients? Focus on resolving the biggest constraint first, then move to the next. Constraints can be found in individuals (perception, intellection, expression), groups (emotion, culture, environment, processes) and organizations (strategy, structure, resources). Constraints can also be related to basic factors in our industry (competition, suppliers, markets), society (values, regulations, history) and technology (physics, time, resources).

3. Take action

Despite the constraints, the best financial institutions make decisions and take action. At some point you have to stop talking and start doing. Action may be focused on creating a new solution, replacing an existing one, or eliminating some of the constraints listed above. Some of the best innovation ideas we've seen have actually come out of constraint discussions and provide both cost savings and increased value to the financial institution at the same time. More successful financial institutions are often those who are simply willing to try what others aren't and/or are those who become adept as extremely fast followers.

4. Structure good partnerships and vendor relationships

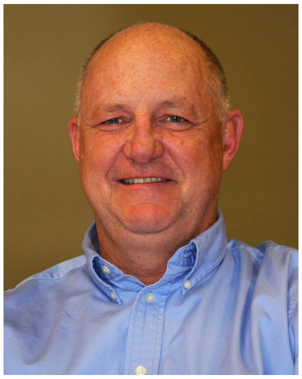
Financial institutions require strong partner and vendor relationships in order to deliver their mobile visions and strategies. These suppliers provide valuable software, services, labor, knowledge and other important pieces that make up your value chain. Even so, financial institutions need to be careful to avoid outsourcing critical components necessary to deliver mobile solution offerings. This is harder than it seems. Over the years, many financial institutions have made hasty buying decisions to accommodate a short-term defensive positions in mobile banking. Sadly, some of the vendors that are being counted on for innovative new solutions aren't delivering. That said, there is little need to rely on one single vendor to deliver all current and intended solution offerings. For example, new investments in mobile sales capabilities aren't constrained by legacy mobile banking relationships. Further, investments can be made now to putting in place mobile infrastructures, reference architectures and integration platforms to support new solutions with a longer-term plan to utilize the same for replacement solutions once the financial institution is ready.

5. Leverage data to make decisions and track progress toward goals

Of utmost importance to success in mobile initiatives is the ability to leverage data and analytics to drive intelligent decision making and monitoring of mobile solutions. Financial institutions will be well served by making sure that hard metrics are tracked religiously to ensure profitability. This includes progress toward retention, new customer acquisition and cross sell goals. Other metrics are becoming increasingly measurable as well through advanced traffic and data analytics as well as customer interaction tools. Make sure your assumptions are clearly stated at the beginning of any new initiative and track progress toward those assumptions to avoid missteps and improve results throughout the product lifecycle.

Mobile Strategy Partners, LLC was first to market with online, mobile web and native account opening solutions for customers and employees and is a leading provider of strategic and technical advisory services and solutions to the financial industry. MSP principals have decades of experience defining and launching digital financial solutions servicing name brand clients and millions of people around the world. Founded in 2009, MSP helps organizations compete by getting their strategy "from PowerPoint to Production." For more information, please visit www.mobilestrategypartners.com.

Marketing to the Emerging Affluent



By Mark Vipond, CEO D3 Banking

Many banks are devoting an increasing amount of their marketing and technological resources to court the mass affluent who represent 13 million households with a total income 50 percent higher than the U.S. National Average.[1] However, this appealing demographic is a difficult group to attract and keep. Their selection of products and services is based on convenience, returns and rewards while regularly juggling relationships with up to a half a dozen different organizations that provide them with financial services, exhibiting little loyalty based on past relationships.

Banks that want to increase their market share among the mass affluent should consider focusing their efforts on the "emerging affluent." Members of the emerging affluent include Millennials and Gen Xers 30 to 45 years old with an annual income of $80,000. PwC[2] estimates the emerging affluent accounts for 39 million U.S. households that control 51 percent of investable assets. Focusing on this segment's potential is a far more cost effective strategy than pouring efforts into a market already over-saturated with financial services offerings from a variety of traditional and investment banking institutions.

Citibank[3] is a notable pioneer in this area. Years ago, it introduced international campaigns to reward emerging affluent customers with better interest rates if they use the bank's tools to manage their personal portfolios. Citibank's effort to help manage and grow portfolios was also a way to learn more about the customers through the account data the customers provided as part of the process. Being able to accumulate this data and access it easily for analysis is key to retaining the emerging affluent as their assets grow, and they become full-fledged members of the mass affluent.

Many of today's regional and community banks face a challenge when it comes to getting the data they need when they need it to help foster the role of trusted advisor with the emerging affluent. The service channels they use to reach their customers are

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1 2012 Nielsen Report: *Affluence in America: A Financial View of the Mass Affluent.* Based on Nielsen Financial Track 2011 and Nielsen P$YCLE Segmentation

2 http://www.nytimes.com/2012/05/30/business/global/banks-in-asia-target-the- emerging-affluent.html?_r=0

3 http://www.pwc.com/en_US/us/financial- services/publications/viewpoints/assets/pwc-recipe-for-success-institutions- deploy-capital.pdf

fragmented and disparate. This is true of even the digital channels where many organizations maintain separate solutions for online, mobile, PFM and other services.

These silos isolate the data that is essential to personalizing the services a bank delivers when attempting to attract and retain the emerging affluent. They are an extremely tech savvy group and spend time online actively researching deals, rates and promotions. Proactively addressing these issues for them will give a bank the upper hand against its competitors, some of whom are non-banks.

Several years ago, personal financial management (PFM) was believed to hold the promise of helping customers with their planning while providing institutions with information vital to assessing the customer's needs. The promise has been largely unrealized. Adoption rates for PFM are low largely because most offerings are another standalone feature in the digital experience that requires considerable work by the customer to prove useful.

The data available from PFM services needs to be a part of the digital banking experience and the data obtained should also be provided to the bank whether the customer chooses to do the work or not. Only then can most banks perform the level of personalization needed to reach the emerging affluent as well as its other key customer segments. With a view to the customer's financial position, an institution can proactively offer a better credit card, student loan, savings program or mortgage than the customer is getting elsewhere. Those are the experiences that will help a customer make or save money, and as a result can increase wallet share and customer loyalty.

The digital prowess of the emerging affluent community will also demand that an institution provide consistent and intuitive digital services, both before and after the secure log-in. Amazon is a prime example; no matter what device you use to access your account, the experience is the same. With one in six consumers leaving their financial institutions due to a poor digital experience,[4] banks must be exceptionally careful when handing off the services they provide to customers online to third party providers. Letting those third parties control a service offered through the digital channel can compromise the consistency of the user experience and surrender valuable data related to the customer's activities and preferences.

Not all of your emerging affluent targets will become mass affluent; however, if your bank plays an active and personal role in growing their wealth, it will be noticed and appreciated. Helping a customer make and save money through personalized ideas, services and offers is much more than the customer experience we were dreaming of even five years ago. The nirvana of banking is rapidly changing as technology exponentially expands our ideals. The banks that will capture the greatest share of the mass affluent market will see the digital channels holistically to ensure a consistent user experience and capture the data required to offer personalized, seamless e-banking services to the emerging affluent. While it might be the easiest way to target this market today, it is also the wisest long-term investment.

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[4] Google Our Mobile Planet Study 2012, J.D. Power Associates Retail Bank New Account Study 2011, Google "What Users Want From Mobile" Study 2012

Mark Vipond is CEO of D3 Banking, an innovator in data driven digital™ banking. He can be reached at Mvipond@D3banking.com

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The Changing Face of Core

Rethinking how core fits into your technology strategy opens the door for innovation and differentiation

By Paul Schaus, President and CEO, CCG Catalyst

At one time, not too long ago, the core system was the undisputed one system to rule them all. Today, while the core system obviously still plays a leading role as the system of record for banks, how it actually performs that function is changing. And the changing face of core is a positive development for banks that will no longer be held hostage by their long-time core vendors.

While the domestic core vendor market has stagnated, international vendors with modern-architecture systems are making inroads into the U.S. core market.

Competition breeds innovation, and innovation from non-U.S. vendors will push domestic core vendors to shake off their lethargy and embrace new models for core processing, including evolving the core from a fully-functioning system to a transactional database fronted by apps rather than with functionally built into the legacy core system.

Core as Transactional Database in the Cloud

While core systems haven't been updated from the ground up in years, core vendors have been busy releasing new versions of ancillary systems—complete with bells and whistles--that surround the core. This trend will continue, relegating the core system to the role of transactional database. The core will simply hold the data, a skill that those legacy databases have honed over the years and are extremely good at, and the ancillary systems will continue to focus on offering new functionally.

Since it's the ancillary systems that really drive competitive advantage for a bank, this model will work just fine.

One major technology vendor described this evolution of the core system as a transition to a big data repository in the cloud, whether that cloud is private, public or hybrid. Luckily fears about data security in the cloud have largely abated. Any bank that outsources core processing to a third party vendor is accessing their data from a private cloud. In the cloud, core system data will be accessible to multiple banking vendors via various access points.

Avatar is More Than a Movie

In this model with the core serving as a rock solid database, ancillary applications will focus on analytics. Technology vendors are developing avatars for customer service functions with thousands of vocabulary words. Add in analytics and you'll be able to accurately predict behaviors. It sounds like science fiction, but it's already in use and will become required for customer delivery of products and services.

Another vendor states that self-service and smart computing will merge into a single channel with avatars serving banking needs 24 by 7.

Since apps can be utilized on any device, the presentation layer is moot. Whether a customer is using a smartphone, a laptop, a kiosk, a television, or even a wearable such as a smart watch or a Google Glass-like device, apps can access different channels and provide a true omni-channel experience. If a customer begins a transaction on their mobile device and chooses to complete the transaction on their laptop, the app would seamlessly allow that transition without the customer having to rekey data or start the transaction over.

One reason apps will become mainstream is that they put the power of data in the hands of the end users. Customers demand instant access to information and they demand that information is available in an omni-channel experience. The core system could never meet those demands. Apps accessing a database in the cloud can.

The evolution of the core system from a system that controls basic transaction and accounting functions as well as ancillary services such as online banking to an app-dependent transactional database is a game changer. This change has the potential to overturn the stranglehold that domestic core providers have on the banking industry, freeing banks to select apps from innovative new vendors Rather than rely on their core system, banks will have more options for differentiation and to provide an omni-channel experience for their customers.

For the first time in a long time, banks will be in the driver's seat.

Paul Schaus is the president, chief executive officer and founder of CCG Catalyst, a bank consulting firm. Contact him at consultant@ccg-catalyst.com or 1-800-439-8710.

The Race to Better Technology

By Stephen Bohanon, Founder of Alkami Technology Inc.

As startups and tech companies race to develop new ways to help people manage their money and make payments, digital has taken center stage. The key to designing relevant and useful technology is to understand the behavior of today's consumer.

Consider that the vast majority of consumers move from device to device or use multiple devices at the same time throughout the day[5]. This is especially true with managing finances, with 59 percent of banking activities starting on a smartphone, followed by 56 percent continuing on a PC or laptop.

Financial institutions that fail to recognize this behavior and the need for digital channels will be left behind. Remember Blockbuster and Kodak? Because they failed to join the new digital era, they were no longer appealing to tech-savvy consumers and were therefore eliminated by the competition.[6]

Financial institutions face similar risks, and while most of them recognize this behavior and offer both mobile and desktop banking platforms, only the most innovative are providing *consistency* across those channels – a trend we expect to see grow.

Driving this innovation are institutions like First Tech Federal Credit Union, located in the heart of Silicon Valley. The CU recently selected a fully-integrated online and mobile banking bill payment solution to deliver the ultimate digital banking experience. The bundled solution features CO-OP's MemberPay^{Plus}, a fully hosted solution that allows First Tech's tech-savvy members to receive, view, manage and pay *all* bills, electronic or not. The bill payment solution is fully integrated with Alkami's ORB Platform to deliver functionality, security, flexibility and extensibility with a superior architecture designed for the future of digital banking.

Some of the emerging FinTech trends are disrupting traditional methods of financial management, banking and payments. Because of the rapid adoption of digital banking, physical branches are less relevant today in their current form. In fact, more than one-

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[5] Google, "The New Multi-screen World: Understanding Cross-platform Consumer Behavior," 2012
[6] Bain & Company, "The Digital Challenge to Retail Banks," 2012

third of Americans have not been into a branch in six months. While there is no denying that branch traffic is declining, branches are not going away, but they must change.

Tom Newins, president and CEO of Anchorage, Alaska-based Credit Union 1, agrees. “Branches are never going away. What will and is changing, however, is how we bank. More than half of our members are online, but they still expect the same level of service as what they receive at the branch,” Newins told us.

Credit Union 1 is replacing its existing system to provide its members with a modern digital banking experience consistent with the service received at its branches. The credit union anticipates the new platform to better support members’ needs by equipping them with the tools and resources necessary to better manage their monetary transactions.

The most innovative institutions – like Credit Union 1 – will transform the overall banking experience by empowering consumers to initiate processes at the digital channel that can be taken to the physical branch. An example of this is Apple, where consumers make appointments with Apple’s Genius Bar, and then visit the store at their scheduled time. By effectively integrating the digital and physical channels, consumers have a more enjoyable experience with superior convenience.

In terms of new technology, there are certainly leaders in FinTech pushing the envelope. Digital banking is a necessity – everyone knows that – but not all digital platforms are alike. The industry leaders that will truly innovate are those delivering platforms that are beautiful, engaging and intuitive.

With the Facebooks, Googles and Amazons of the world – all shaping consumers’ digital expectations – consumers are actually the ones driving these changes. Financial institutions must provide a user-friendly, engaging, well-designed digital banking platform to remain relevant. It’s that simple.

Ultimately, as consumers set a new standard for how we bank, startups and tech companies must deliver technology that aims to improve the digital experience, and financial institutions must invest in that technology to remain relevant.

Stephen Bohanon is Founder, Chief Strategy and Sales Officer of Alkami Technology Inc., a provider of digital banking solutions. For more information on Alkami, call 877-725-5264 or email info@alkamitech.com.

Redefining Payments: Real Time Payments, Real Time Risk Management

By Suresh Ramamurthi, chairman and CTO of CBW Bank, and president and CEO of Yantra Financial Technologies

Around the globe, variations of real-time payments models are quickly emerging. Researchers typically point to the U.K.'s Faster Payments Service (FPS) as one of the most successful accelerated payments systems to date. Launched in 2008, the U.K.'s model is now being emulated in many different countries including Poland (launched in 2012), Sweden (launched in 2013) and Singapore (in development). Mexico has successfully launched a fast payment system that can deliver funds within minutes. Growing momentum for faster payments, combined with increasing clarity surrounding pricing, network coverage and compliance has set in motion a movement that many believe will result in the emergence of a tangible, real-time payment infrastructure here in the U.S. within the next 12 months. This emerging technology will be a game changer and has the potential to positively impact organizations in nearly every line of business.

Initial Results Point to Long-term Success

In addition to the much touted early success stories of digital peer-to-peer (P2P) payments, real-time payments are also improving operations for a variety of organizations in multiple business sectors. Some examples include: insurance companies can now deliver claims payments instantly regardless of the day of the week or time of day, check cashers are able to credit customers' accounts instantly, providing immediate access to funds, and online merchants are now able to receive payment instantly, again gaining immediate access to funds that traditionally wouldn't be available for 24 to 48 hours.

The healthcare industry is yet another industry that can be transformed with the advent of faster payments. Lack of contextual information in current check and ACH payment systems has historically been a challenge for this industry, but it will finally be resolved by adopting faster payments methods and having real-time access to transactional data which can significantly improve the decision making and analysis process.

The Opportunity for Financial Institutions

The problems with the current money movement methods are widely acknowledged within the financial industry. However, as a whole the industry itself remains reluctant to embrace new technologies that would enable a faster payments infrastructure. The apprehensions about adopting new payments methodologies are reminiscent of the apprehensions expressed about the Internet in the early 90s. When experts asserted it was possible to connect everyone in the world via the Internet, people thought the idea was absurd, and that it would never truly work much less be accepted. The same reluctance exists today among financial institutions at the idea that real-time payments, and more importantly, real-time risk management is not only a possibility, but also a reality.

Accelerated payments provides tremendous opportunities to financial institutions, most notably in the ability to offer wider variety of payment options available to customers, in turn increasing transaction volumes and revenue while growing their client base. In this digital age, services like instant payments to any U.S. bank, direct remittance transfers abroad and specialized debit cards are now possible, yet still remain relatively unavailable to the masses. Ironically, for most banks in the U.S. it still takes longer to send money to another country or even another state than it would to travel the same distance. Despite the widely documented benefits of faster payments, a majority of financial institutions remain reluctant to introduce new products or adopt new payment methods because of the perceived risks associated with hastening the movement of money.

Combatting the Risk in Real-Time

Having the ability to view customer transactions in real-time will be key to the success of this new payment system in the financial industry. With access to real-time data in, financial institutions gain the ability to analyze virtually every aspect of a transaction within seconds, including what other payments the customer recently made and potential concerns regarding a specific transaction. Also, financial institutions can assign risk levels to certain transactions based on pre-determined criteria. Ultimately, banks gain an in-depth understanding of what types of activities its customers are engaged in and with whom they are transacting, as well as the potential implications for the institution.

Fraudsters will continue to improve their ability to infiltrate existing banking systems. As a result, financial institutions are faced with increasing regulatory pressure to establish stringent anti-money laundering procedures and the growing demand to process payments faster. Instituting real-time risk scoring and risk detection models is critical to ensuring the bank and its account holders are protected from current and future threats. Leveraging the latest technologies and complex mathematical algorithms, there are systems available today that provide financial institutions a real time detailed view of all customer transactions including the type of activity completed and with whom the transaction was conducted. In turn, this data equips banks to quickly identify and respond to potential threats and negative implications.

Conclusion

In this shifting global landscape real-time risk scoring, that takes into account all variables, both historic and contextual, is even more critical. Just as a fast car needs good brakes, faster payments will need real-time compliance and risk management thresholds in place.