A collection of research, observations and articles about what technology, solutions and services U.S. bankers will buy in 2013 and the changing financial industry landscape.

Prepared by:
January 2013

Dear Readers:

As a company that tracks changes in the financial and payments industry, we see a lot of possibilities to improve how consumers and commercial customers interact with their financial institutions (FIs) and make payments. We are constantly reminded that technology is not a department, but rather is everywhere, including in the hands of customers.

To that end, my credit union tested my patience by telling me that their online banking did not work with my updated Safari browser and that I needed to contact Apple. I decided to use Foxfire as a workaround. How many of us will change FIs because of how easy or hard they make it do business with them?

My opinion is that demographics, technology preferences, lack of brand loyalty and customer experience will eventually force banks and credit unions to seriously evaluate their services and the technology needed to deliver those services. There should be little room for “Because that is the way we’ve always done it.”

Bankers As Buyers™ provides opinions of persons we trust and a collection of research we think illustrates a trend, preferences/beliefs or concerns.

I’m pleased to share with you this year’s report, which has been greatly enhanced by information provided or originally published by:

- Aite Group – Christine Barry, Ron Shevlin
- American Banker
- BankInfoSecurity
- Banno – Wade Arnold
- Jeanne Capachin
- CARDFREE – Jon Squire
- Celent – Bob Meara
- Clientific – JP Nicols
- Comscore
- Cortera – Jim Swift
- CSI – Dan Holt
- Credit Union National Association
- Crone Consulting, LLC – Richard Crone and Heidi Liebenguth
- Federal Deposit Insurance Corporation
- Federal Reserve Bank of Cleveland – Sandra Pianalto
- First Annapolis Consulting
- Fuze Networks – Dave Wilkes
- IDC Financial Insights
- KPMG
- Jack Henry Banking – Stan Viner
- Javelin Strategy & Research – Mark Schwanhausser
More information about specific areas of interest is available by reaching out directly to our contributors.

While this material is copyright protected, I’d like to encourage you to share this research with your business associates, clients, prospects and friends within the industry.

Sincerely,

Scott Mills, APR
President
William Mills Agency
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I. Year in Review

The past 12 months saw financial institutions continue their slow climb out of the financial crisis of the previous few years.

Delinquencies and foreclosures have begun to fall as industry and government programs start providing relief to selected homeowners who found themselves underwater as a result of the collapse of the housing collapse, a weak economy and a poor job market.

“There were more positives than negatives for community banks in 2012,” added Jimmy Sawyers, founding member of Sawyers & Jacobs, LLC.

Though foreclosures are declining slightly, part of the decline is due to delays in resolving some of the bad debt rather than outright correction of it. Certain lenders opted for more short sales rather than foreclosures in 2012, helping to further resolve some of the outstanding hangover from the housing crisis, though a large number of borrowers are still upside down with their mortgages. Houses are still generally valued 30+ percent less than their previous highs.

Strength was returning to the financial services industry after the housing and mortgage problems of the previous few years hit bottom, but the recovery is expected to be slow and grinding. With a light on the horizon, albeit distant, there is evidence that some of the deferred technology plans of the past few years will come to fruition in 2013.

One of the technologies that gained a stronger foothold in 2012 was mobile banking, including mobile payments, as financial institutions sought to meet increasing consumer demand for anytime, anywhere financial services.

Mobile technology also provided hackers with another entré into accounts, primarily because consumers do not perceive smartphones as small computers; therefore, they do not take the same care to protect them as they do laptops and desktops (there does not seem to be a ready supply of smartphone security solutions either). This is only one area of continued, heightened security concerns as fraudsters seek to gain access to accounts through a variety of creative measures from inside and outside financial institutions.

The 1,279-page Dodd-Frank legislation, with only one-third of rules defined by the end of 2012, led to increased compliance costs, a trend expected to continue throughout 2013 and beyond.
II. Spending Outlook

A. Market Size
According to the FDIC and Credit Union National Association (CUNA) September 2012 data, the depository landscape is as follows:

Number of:

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>6,168</td>
</tr>
<tr>
<td>Savings Banks</td>
<td>1,013</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>7,029</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14,210</strong></td>
</tr>
</tbody>
</table>

The total number of FIs represents a 3.7 percent decrease from last year’s report, in line with the 3.5 percent decrease a year earlier and far better than the 5.7 percent decline between 2010 and 2011.

Further consolidation is expected, perhaps at an accelerated pace as some of the more expensive elements of Dodd-Frank take effect. But while some predict fast consolidation in the number of financial institutions, others point out that such predictions have previously come and gone. So while some consolidation is likely, there will be no rapid decrease in the number of financial institutions.

Some smaller financial institutions, with aging ownership, executives and boards will likely consolidate as a means to leave the industry, according to Jeanne Capachin, former research vice president for IDC Financial Insights.

<table>
<thead>
<tr>
<th>Asset Size</th>
<th>Number of Institutions</th>
<th>Percent of Total Institutions</th>
<th>Assessment Base** ($ Bil.)</th>
<th>Percent of Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1 Billion</td>
<td>6,522</td>
<td>90.8%</td>
<td>1,253.7</td>
<td>10.2%</td>
</tr>
<tr>
<td>$1 - $10 Billion</td>
<td>551</td>
<td>7.7%</td>
<td>1,261.5</td>
<td>10.3%</td>
</tr>
<tr>
<td>$10 - $50 Billion</td>
<td>71</td>
<td>1.0%</td>
<td>1,232.7</td>
<td>10.1%</td>
</tr>
<tr>
<td>$50 - $100 Billion</td>
<td>18</td>
<td>0.3%</td>
<td>1,154.0</td>
<td>9.4%</td>
</tr>
<tr>
<td>Over $100 Billion</td>
<td>19</td>
<td>0.3%</td>
<td>7,341.8</td>
<td>60.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,181</td>
<td>100.0%</td>
<td>12,243.6</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Excludes insured U.S. branches of foreign banks.
** Average consolidated total assets minus average tangible equity, with adjustments for banker’s banks and custodial banks.

Source: FDIC
B. Spending Projections
IDC Financial Insights expects North American financial institution technology spending to increase to $57 billion though issues with the “fiscal cliff” or unforeseen economic difficulties could rein back technology spending.

Raymond James predicts North American bank IT spending will continue to grow at the three-year (2009-2012) compound annual growth rate of 3.1 percent.

“One of the predictions we had last year focused on IT reliability, and this topic will influence our upcoming 2013 predictions as well,” said Capachin. “We predicted that in 2012, IT reliability would become a major risk factor, mainly due to the age and complexity of key systems. Sad to say, we had some very public technology outages in 2012.

“Financial institutions have long ‘wish lists’ of technology projects, but they continue to be constrained by tight revenues and the need to ensure all compliance and security issues are addressed.”
Financial institutions remain wary of any unsettled “fiscal cliff” or any other issues that would push the economy into another recession. So most financial institutions are planning technology investments around expected and “worst case” scenarios. If the economy declines, and as a result, financial institution revenues falter, some green-lighted technology investments will be put on hold. Compliance and security investments would likely remain untouched, but any innovative technologies considered more discretionary would be put off.

Though there are a few instances of banks making more long-term technology investments, most will be those that are expected to pay off within six to nine months, according to Capachin.

Mobile banking is at the top of nearly everyone’s list as one of the technologies that will garner the lion’s share of the technology budget, but Dodd-Frank as well as other various federal and state regulations will mean that compliance-related technology spending will by necessity be a close second for many financial institutions and may be at the top of the list for some others.

**North American Bank Spending Forecasts**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 4: &lt;$100M</td>
<td>767.58</td>
<td>754.51</td>
<td>752.01</td>
<td>767.92</td>
<td>788.30</td>
<td>813.61</td>
</tr>
<tr>
<td>Tier 3: $100M - $1B</td>
<td>4,759.54</td>
<td>4,900.46</td>
<td>5,017.30</td>
<td>5,230.25</td>
<td>5,474.08</td>
<td>5,752.60</td>
</tr>
<tr>
<td>Tier 2: $1B - $10B</td>
<td>9,237.82</td>
<td>9,671.05</td>
<td>10,046.2</td>
<td>10,612.7</td>
<td>11,252.3</td>
<td>11,981.9</td>
</tr>
<tr>
<td>Tier 1: &gt;$10B</td>
<td>36,873.8</td>
<td>38,158.1</td>
<td>39,065.7</td>
<td>40,461.7</td>
<td>41,895.5</td>
<td>43,371.2</td>
</tr>
</tbody>
</table>

Source: IDC Financial Insights

The largest financial institutions are seeing slower growth rates in technology spending than their smaller counterparts. According to IDC Financial Insights, the next tier of banks, those between $1 billion and $10 billion, will have the largest percentage increases in technology spending in 2013, 2014 and 2015.
III. Spending Breakdown

A. Mobile Banking
As smartphones and tablets become more commonplace among bank customers, mobile banking technology is expected to affect all aspects of financial institution technology spending.

Edward O’Brien, director of the banking channels advisory service for Mercator Advisory Group, Maynard, Mass., said that mobile banking has penetrated the U.S. market not only faster than other financial technologies, but also faster than innovations like the automobile.

Source: Mercator Advisory Group
Mobile payments are a major driver behind mobile banking and a major potential customer retention tool and revenue source for financial institutions, according to Richard Crone, Crone Consulting, LLC.

“The consumer demand for mobile payments is off the charts,” said Crone. So banks that lag behind in offering mobile banking and mobile payments risk customer disintermediation. Bank of America has had tremendous success leading with mobile payments as a customer acquisition technique.

“Those who enroll are those who control,” Crone said, adding that mobile payments also enables banks and merchants to work together to cross-pollinate each other’s businesses.

Mobile banking is on the rise, now used by 33 percent of mobile consumers, up from 24 percent in 2011. Of the top 25 U.S. financial institutions by deposits, about half are offering mobile person-to-person (P2P) transfers and mobile remote deposit capabilities, a figure that has more than doubled since 2011, according to Javelin Strategy & Research. Javelin reported that mobile banking added 10 million more U.S. adults in the past year, as smartphone usage surpassed feature phones and tablet adoption surged to 21 percent.
Mobile banking growth appears to be at the expense of traditional online banking.

“A lot of banks are getting on board with mobile banking,” said Sawyers. “Banks really do need to have a mobile banking strategy.”

“Aite Group anticipates that mobile banking users in the United States will triple between 2012 and 2016,” added Ron Shevlin, Aite senior analyst. “Tablets will become financial
management devices, and smartphones will become financial transaction devices. Financial institutions should invest accordingly.”

As impressive as the growth is in smartphones, tablets could be more of a factor in the growth of mobile banking, according to David Peterson, executive vice president of customer experience and innovation of Q2 Banking, Austin, Texas. “The tablet offers a unique way to engage with the financial institution.”

Tablets offer larger screens than do smartphones, so they provide more customer friendly interfaces for more complex banking interactions (e.g., review of a statement). While one can quickly access banking information on a smartphone, say for payments, messaging and similar communications; smartphones are a little cumbersome for interactions where a larger screen is preferred.

The key for financial institution executives, Peterson said, is to understand and leverage the tablet, smartphone and other devices that customers use to interact with the financial institution, and to then present them with the right capabilities for the right device.

One of the mobile technologies more banks are expected to adopt in 2013 is remote deposit capture (RDC) or mobile deposit, enabling a consumer to take and email a picture of a check for a deposit. The technology has been popularized by a couple of the nation’s largest financial institutions that feature the capability prominently in their advertising campaigns.

Celent, part of Oliver Wyman Group, reported that 80 percent of financial institutions are considering mobile RDC.

“Widespread adoption of mobile RDC is a given, but it won’t necessarily be easy,” said Bob Meara, senior analyst with Celent’s banking group. “Balancing regulatory compliance, risk management, and growing consumer demand will challenge many institutions.”
“It’s a very hot area of focus,” said Shevlin who expects the mobile channel to also build on the momentum of online account opening for deposit and non-deposit products. “Mobile banking and mobile remote deposit capture will be critical to keeping core customers.”

In addition to the consumer convenience and marketing capabilities offered through mobile technologies, mobile alerts of suspicious account activity delivered through text messages provide an additional proactive security layer, added Sawyers.

“Account alerts to mobile devices will be a high priority area for banks in 2013,” said Shevlin, pointing out that mobile devices, while providing new means of committing fraud, also offer an additional level of protection in that they provide location-based information. So the
A financial institution can confirm the location of a customer for any suspect mobile transactions.

In December, Steve Ellis, executive vice president and group head of the Wells Fargo Wholesale Services Group, said that voice recognition will be among the upcoming features for the bank’s mobile banking application.

Even though many of the largest banks and some community banks are moving strongly into mobile banking, others are taking a wait-and-see attitude, and as a result credit unions are going into mobile banking more aggressively, according to Javelin Strategy & Research, which reported in December that “credit unions are outperforming community banks in mobile banking, with nine out of ten credit unions offering Web-based mobile banking. Meanwhile, three out of ten community banks reviewed do not offer a single form of mobile banking.”

Fran Kester, national sales manager for Symitar, a Jack Henry & Associates company, agreed with Javelin saying that almost every credit union has a mobile banking strategy in place. “Most credit unions use whatever solution their core processor offers but some of the larger ones have self-developed solutions; however, security still is a primary concern regardless of your size,” Kester said. “Over the past few years, several mobile vendors have gone out of business and that leaves [those] credit unions in a lurch. It is important that they partner with a firm that has a proven track record, one that has innovative solutions and one that is here to stay.”

Customer and member adoption is very important – if the solution is not easily usable, adoption rates will be low. Kester added, “Offering more than balance inquiry and funds transfers will be paramount. Internet banking once billed itself on the benefits of account-to-account (A2A) transfers. Today, that is not the case. Being able to see a clear picture of your entire financial portfolio is what will attract new customers or members to any financial institution.”

Q. To what extent are the following your credit union’s business objectives for its online banking offerings? (n=481)

- Enhance the member experience: 10%
- Maintain competitive parity: 18%
- Build member trust: 22%
- Up/cross-sell existing members: 36%
- Acquire new members: 36%
- Obtain competitive differentiation: 35%
- Reduce branch services costs: 39%
- Reduce call center costs: 38%
- Prepare for mobile payments: 36%
- Generate revenue: 18%

Source: Aite
Banks aren’t standing pat with their mobile banking offerings. According to First Annapolis, 81 of the largest U.S. banks offer mobile banking. While most banks are focusing on app development, a majority also continue to invest in mobile Web and SMS to expand omni-channel presence.

Source: First Annapolis

B. Compliance

Compliance costs continue to grow as more elements of the Dodd-Frank legislation are defined. Compliance with other federal laws and statutes also continues to be more costly as regulators scrutinize bank operations and practices more tightly in an attempt to avoid some of the issues that led to financial institution failures at the end of the last decade.

Lenders will have to concern themselves with the Dodd-Frank Qualified Mortgage rules as well as new appraisal rules and related laws.

Though like Dodd-Frank, delays have been the rule with Basel III implementation, another law that will increase compliance costs for banks.

“Engineering regulatory compliance and transparency into corporate, trade and transaction, customer servicing, and reporting will be top priorities for North American banks and investment services firms,” said Capachin.

She says that financial institutions will need to leverage compliance-aware data management strategies that incorporate the needs of risk, finance and legal/regulatory operating units at both line-of-business and oversight levels to try to manage compliance costs.

However, anecdotal evidence is showing that some Sarbanes-Oxley-related compliance costs have come down a little for community banks, Sawyers noted.

“When there are new laws, there’s always a lot of moaning and groaning about the cost of compliance,” said Sawyers. “But people get innovative. They start to do more with less. They adapt to the new playing field.”
C. Analytics/Big Data
To take advantage of the increasing amount of structured and unstructured data available from account information and from non-traditional sources like social media, financial institutions are going deeper into analytics to uncover those customers and prospects most likely to provide profits for the financial institution.

Financial institutions have used MCIF, CRM and similar systems for years. But those systems typically cannot incorporate the unstructured data that is increasingly becoming critical in today’s marketing efforts, according to Mercator’s O’Brien. Now technologies from IBM, Oracle, SAS and others are enabling financial institutions to make sense of the data.

“The analytics is improving,” said O’Brien. “Financial institutions don’t have to send offers out to 150,000 people; now they can be selective and only send offers to people who are really interested in the products; that makes a difference.”

O’Brien added, “Investment in the digital universe and digital data has increased more than 50 percent since 2005, to over $4 trillion, and is expected to grow to $5 trillion by 2015.”

“The growth of data is outpacing the growth of technology,” said Jim Swift, CEO of Cortera. As banks embrace Big Data, they are building better risk models than they have in the past, he added. Being able to leverage raw data will be increasingly important to a financial institution’s profitability, both in terms of serving consumers and in serving small businesses.

Celent, however, takes a much more tepid view about Big Data, saying in the firm’s Top Trends in Retail Banking in 2013 report: “Big Data is on the lips of most technology vendors. Banks have a lot of data and get to listen to many Big Data pitches. Celent does not yet believe that this is appropriate for most banks. Before banks try to tackle unstructured data they don’t own, why not use the structured data they do own?”

Consultants and bankers alike point to Big Data’s usefulness as a fraud detection tool. In a 2012 interview with BankInfoSecurity, Aaron Caldiero, Zions Bank’s senior data scientist, said that all banking institutions should collect as much data as possible, even if they don’t exactly know what to do with it just yet.

D. Security/Fraud Prevention
Several factors keep security and fraud prevention investments at or near the top of every financial institution’s technology investment priorities: growing threats from an ever more creative fraud community, increasing scrutiny of security controls by regulators and the need to protect financial institutions’ reputation as trusted financial partners.

Javelin believes offering superior security drives bank loyalty. One-third of household financial managers indicate that security is one of the top three factors they take into consideration when choosing a new financial institution.

However, a Javelin report shows that the concern over security does not extend down to Gen Y. Almost one in ten Gen Y consumers do not use antivirus software, citing the use of a Mac. Yet 600,000 Macs were infected with “Flashback” malware in the spring of 2012 (most were in the U.S.).
Though not fraud per se, a closely related issue prompting financial institutions to reconsider their digital delivery systems, including any services provided via the cloud is the increasing threat from Denial of Service attacks, said Jim Bruene, editor of Online Banking Report and founder of Finovate Group.

Closely related to security/fraud prevention is the concept of disaster recovery – the disaster could be a security compromise according to Steve Tomson, director of sales for ProfitStars – a Jack Henry & Associates company.

The growth in hacking attempts continues unabated, Tomson added, pointing to the following ProfitStars figures:

- Every day, our firm blocks more than 20,000 attempted virus connections;
- ProfitStars has found criminal data-stealing viruses in more than 80 percent of FIs;
- Our firm is monitoring more than 4.4 million malicious locations on the Internet that are known to service financial fraudsters; and
- The most recent high-dollar fraud attempts that we’ve captured targeted FIs using two-factor tokens.

E. Small Business

Banks have held off on some of their technologies geared to small business as they’ve tried to shore up regulatory, compliance and retail banking-related technology needs the last few years, according to Christine Barry, Aite Group research director.

Barry expects some financial institutions to revisit small business technology needs in 2013, with technologies that will provide them with 360-degree view of all business transactions, particularly for owners of multiple businesses (e.g., a doctor or accountant who has rental properties, a restaurant franchise and other businesses).
According to Jack Henry Banking, small businesses are drawn to those financial institutions that have the technology to support bill pay and to offer other time-saving products and services.

Most banks had eschewed small business analytical tools during the last few years due to other priorities, but will look at them again in order to have a better handle on small business cash flows, a financial measure that’s often more telling than balance sheets or profit-and-loss statements.

Cortera’s Swith agrees, pointing out that small business analytic systems have to be able to gather and analyze more information in order to make better credit underwriting decisions.

Barry also expects to see financial institutions increase their use of predictive analytics to identify those small businesses most likely to add to the bank’s bottom line.

Celent reports that while the bank market for commercial RDC is saturated, commercial customers themselves have continued adoption, leading to an industry-wide gain of about 16 percent.

Source: Celent

This increase has many banks reconsidering RDC technologies, with as many as one-fifth considering changing vendors, according to Meara.
### F. Branch Technology

For several years, consultants have discussed the need for branches to become more sales-oriented and less transaction-oriented, but branch construction still remained relatively strong until a few years ago and the branches continued to remain primarily transaction-oriented. A continuing margin squeeze is likely to push banks to adopting more of a sales model for the branch locations, consultants say.

“While substantive branch transformation remains a rarity in North America, there appears to be a growing consensus that the status quo is unsustainable. Celent couldn’t agree more. In comparing 2010 and 2012 survey results, considerably more institutions indicate intentions to make modest to sweeping changes in branch configuration.” Celent said in its *Top Trends* report.

The move to mobile RDC could drive down branch traffic even further, forcing financial institutions to finally make the major commitment to convert branches to sales offices, which has been discussed for years but has yet to occur at a significant rate.

“The banks haven’t been making the financial investment to make this happen,” said Capachin. “But they haven’t been making profits on a huge percentage of their customers, so it’s more important to figure out how to sell them additional products and services at the branch.”

One technology some financial institutions are deploying to increase branch sales is tablets, which enable a banker to easily share information in an eye-catching and customer-friendly
manner at the branch location. Many of the largest U.S. banks and some regional institutions have added the devices to many of their branch locations.

The largest announced deployment of tablets is at Barclay’s in the U.K. The financial institution announced in late November that it had purchased 8,500 iPads, said Online Banking Report’s, Jim Bruene.

An older technology getting increased adoption is branch/teller capture, according to Celent, which expects a 98 percent adoption rate of branch and/or teller capture solutions within the next two years.

“With more financial institutions rethinking the branch channel, teller capture is enjoying a renaissance,” said Meara. “It is being installed to meet both customer service and operations goals. The technology improves efficiency at the branch level.”

![Branch Capture Is Nearly Ubiquitous, But Scanner Deployment Continues](image)

Source: Celent

While not entirely new, an innovative solution that Albany, N.Y.-based SEFCU ($2 billion in assets) and some other financial institutions, are deploying is a mobile branch using a small truck or a motor home-sized unit that may or may not be used in a single location. A few financial institutions employed such solutions in areas affected by Hurricane Sandy shortly after the disaster.
G. Cloud Computing
The conversation around cloud computing has shifted from trying to convince financial institutions about the various advantages of moving to the cloud to financial institution executives asking about different cloud strategies, according to Dan Holt, president and general manager, Managed Services, CSI. “They’re already convinced about moving to the cloud.”

“The trend toward outsourcing will be nothing short of amazing the next 36 months,” said Stan Viner, general manager/banking sales at Jack Henry Banking.

Viner added that staunch in-house technology proponents are now open to cloud solutions as they have become proven.

IDC Financial Insights pointed out that “Only a handful of North American large banks remain averse to public cloud. The rest have developed processes to manage vendors, evaluate appropriate workloads, and ensure compliance with institutional and regulatory requirements.”

Cloud solutions also provide the processing capacity to handle the increasing amount of Big Data, according to IDC Financial Insights.

Holt credited the shift in attitude toward the cloud to additional time and proven successes with cloud-based technologies. Though nationally there have been some cloud outages, affecting Amazon, GoDaddy, Microsoft and Google, cloud-based systems offer redundancy and scalability that bankers can’t afford to build in-house.

Holt expects financial institutions’ growth in use of cloud services to be near the upper end of total worldwide growth predictions, which range from 19.6 percent (Gartner) to 27.6 percent (IDC).

Another trend Holt sees is financial institutions shifting from moving some computing capabilities to the cloud to moving “everything” so that bankers can focus on their areas of expertise.

Customized technologies tend to be the last ones moving to the cloud, Holt said, adding that cloud security systems are also becoming increasingly outsourced.

H. Community Banking
Community banking continues to thrive despite the predictions of some that the smaller banks will fall victim to the rising cost of regulatory compliance, according to Sawyers.

In the 2012 KPMG Community Banking Outlook Survey:
• 47 percent of respondents identified regulatory and legislative pressures as the most significant barrier to growth over the next year;
• 35 percent said regulatory compliance costs were having the greatest negative impact on financial performance; and
• 27 percent said that bank management’s top initiative in the next two years will be navigating significant changes in the regulatory environment.
Others scoff at the idea of rapid consolidation. “You hear a lot about too big to fail and too small to survive,” said Sawyers. “McKinsey predicted in 1985 there would be no more than 100 banks in the U.S. by 1990. We’ve heard about community banks going out of business due to new regulations before. We heard it with FDICIA, Sarbanes-Oxley, the Patriot Act and a host of other compliance burdens over the years. I’m optimistic, I don’t see any well-capitalized, well-managed community banks going out of business.”

Capachin agreed, calling the predictions of rapid consolidation of community financial institutions, “A lot of hot air.”

However, community banks still must be aggressive in pursuing strategies and technologies that lead to lower costs. So Sawyers sees increasing attention paid to vendor management, to ensure that every vendor is indeed providing value.

“More banks are looking at their core processing relationships,” added Sawyers.

**I. Payment Technologies**
While much of the focus on payment technology is on mobile, financial institutions are looking at improvements in online payments, ACH, P2P payments and even prepaid payment cards to attract customers from the high-end (online banking and ACH) to the low-end (prepaid cards).

“The interesting challenge that banks have is trying to understand how people will transact with money in the future,” said Dave Wilkes, CEO of Fuze Networks. “The reality is there is really no such thing as an unbanked consumer.”

The consumer may not be banked in the traditional sense, but the bank payment system is still the engine underlying payment cards and mobile payment systems. Yet QR codes and other mobile payment technologies could cut into some of the business as well as disassociating the bank brand from payments, some experts say. That concern was part of the drive behind the major credit card issuers becoming partners in Isis, the mobile wallet devised by T-Mobile, Verizon and AT&T.

“My grandson will bank much differently than me; he will have all his [financial] services on his mobile device,” said Wilkes, adding that banks will need to offer prepaid cards and similar services to retain customers in the future.

Similarly, the banking industry can jolt online banking and online bill pay back to life by converting 22 million Americans who already pay bills online at biller websites, according to Javelin.

“The future of banking is going to evolve rapidly from ‘view + do’ to a mindset of providing ‘view + do + advice,’” said Mark Schwanhausser, Javelin director of multichannel financial services. “It’s time for banks and credit unions to raise their aspirations beyond being an efficient pipeline for paying bills to instead become a place where customers gain control, oversight and insight into their bills, spending, cash flow and overall finances.”
Javelin estimates that consumers transferred more than $195 billion in 2011 using online, mobile, and other electronic channels. P2P transfers accounted for $21.6 billion of the transfer market, while the bulk of transfers were made between individuals’ own accounts.

Comprising an estimated 35 million U.S. adults (15 percent of the U.S. population), the “underbanked” are typically young, ethnically diverse, and more likely to use the “computer in their pocket” (e.g., their mobile phones) to conduct their banking, according to Javelin. Underbanked individuals don’t typically have a primary banking relationship and checking account.
“FIs can engage the underbanked through mobile transfers. The U.S. underbanked are prime consumers for wire transfers and remittances. Twice as many underbanked consumers sent wire transfers as the average consumer, a market that totaled $48 billion in outflows from the U.S. Underbanked consumers make twice as many P2P transfers than the average mobile consumer. Further, one in three underbanked consumers are likely to conduct international mobile money P2P transfers, taking a lion’s share of the $501 billion global remittance flow in 2011.”

According to First Annapolis Consulting, electronic P2P is approximately an $80-120 billion market opportunity. Rapid growth is being driven more by use cases like ad-hoc bill payment, micro-merchant purchases, and intra-family transfers, than by the “split the dinner bill” transactions historically associated with P2P. First Annapolis adds that three distinct business models are emerging that are driven by integration with either banking applications, wallets or social networks. These business models leverage the strengths of various providers, such as the networks of Bank of America, Chase and Wells Fargo (via clearXchange) with an estimated 70 million online consumer accounts, and PayPal with an estimated 50 million active accounts in the U.S.

Payments will become faster, more efficient and will offer consumers more options as the industry evolves, Sandra Pianalto, president and CEO of the Federal Reserve Bank of Cleveland, told an audience at the Federal Reserve Bank of Chicago’s payments conference in the spring.

The Federal Reserve is looking for faster ACH settlements, Pinalto said, citing Britain’s Faster Payments effort. That project went live four years ago, and it demonstrates that it is possible to accelerate end-to-end delivery of individual payments from the next day to no more than an hour or two on the same day, according to Pinalto. The system was a collaborative enterprise of banks, technology vendors and regulators. The Faster Payments Service and Britain’s ACH system operate independently. The Faster Payments Service now carries payments traffic that is equivalent to 13 percent of all ACH volume in that country.

“Payments will continue to evolve,” said John Balose, principal marketing manager for banking services for ORCC. “Fifteen years ago, few people were using online payments. The mobile solutions have changed everything. It’s a very fractured market.”

Indeed, there are nearly 50 digital wallet providers, with more expecting to emerge.

“Consumers are going to select the payment solution that delivers what they want at a particular time,” Balose added. So the consumer using paper checks may opt for online payments on occasion to avoid a late payment charge. “Consumers are going to drive when and where payments are made.”

**J. Loyalty Programs**

Part of consumers driving where and when payments are made will be in choosing digital wallets and other payment systems that provide loyalty rewards. ORCC partnered with Truaxis in 2012 to provide loyalty solutions to financial institutions.

“The next powerful application will be point of presence, which provides an immediate satisfaction element” by providing the rewards immediately upon a customer electronically checking in at a retail location,” said Crone.
Bank of America in August officially launched BankAmeriDeals (powered by card marketing and analytics provider, Cardlytics), which offers online and mobile cash back options. The program was developed using feedback from the bank’s “voice of the customer” program, said B of A spokesperson Terry Burke.

Customers choose the deals they want through Bank of America’s Online Banking and Mobile Banking app. Cash back deals are put into the customers’ accounts and are in addition to other rewards customers may already receive. Through the program, which has been rolling out in phases throughout the country, more than 130 million cash back deals have been served to customers. The program is free for the bank’s online banking and mobile banking customers.

In this way, offering loyalty programs enables banks not only to provide an extra relationship with customers, but it also provides them with a beneficial offering for small business merchants, said Jon Squire, CEO of CARDFREE, which started offering its white-labeled digital wallet to merchants in December.

“Anything that helps build habitual performance (e.g., regularly buying coffee products) builds greater loyalty,” said Squire. Positioned correctly, such loyalty programs can also help better position the bank’s brand in the payments arena.

**K. Personal Financial Management (PFM)**

Another growth area is in Personal Financial Management (PFM) tools. These tools help an individual or a family make more sound financial decisions to obtain, budget, save and spend over time. They also take into account various financial risks and future life events. According to Javelin, digital financial management offers both financial institutions and billers a gateway to deeper customer engagement and increased profitability, while consumers can gain greater control, access, and security of their finances.

Wade Arnold, CEO of Banno, which offers white-label mobile and Web solutions, believes that by offering PFM tools though the Web site, financial institutions can obtain more customer information, develop richer analytics and create actionable insights. He said, “Many bank Web sites are nothing more than information derived from pamphlets. Unfortunately, that fails to get the most out of the cost of developing and establishing the Web site. Web sites today need to be driven by a responsive design format and allow financial institutions to adjust them for online, mobile and tablet users.”

Having responsive design provides a single URL that automatically responds to any type of device or browser and its screen size to better prepare financial institutions for mobile-focused services and multichannel banking. Combining these channels lets financial institutions ease the burden of compliance as well as archiving and maintaining site updates while strengthening SEO (Search Engine Optimization) and analytic data all by having a unified e-channel.

Arnold also thinks that mobile PFM is going to be very important in the coming year. “A financial institution’s Web site needs to be more than ‘just a shingle on the Internet,’” Arnold added. “Good PFM capabilities let the customer centralize his or her financial information, while enabling the financial institution to provide insightful advice based on that customer’s
information. Having this information at the bank rather than through a third party gives the institution solid insight on what products are best for which customers.

“Gen Y lives by their smartphone. Texting, shopping, photographs and banking and maybe even a phone call, all take place on the smartphone. Having a tool that ties location, upcoming bills, historical spending and other data together gives users a complete view of their financial position. It satisfies the real-time purchasing ability that consumers are demanding in mobile services.”

“PFM’s adoption and success will improve in the coming year due to its expansion to mobile and tablet devices,” said Ryan Caldwell, CEO and founder of MoneyDesktop, a personal financial management (PFM) solutions provider for banks and credit unions. “Mobile access to PFM tools not only increases the convenience for users, but allows the experience to take advantage of mobile-only features, such as touch screens. A stand-out user experience, across all devices, is what will drive user adoption and prolonged use of the service.”

“The key is to deliver a digital experience that doesn’t just match the paper experience – it beats it hands down,” said Schwanhausser. “That will start with providing consumers with always-on, real-time access through online and mobile devices. From there, the conversion to a digital lifestyle will require increasing transparency, greater customer control, and greater integration – which will lead to unprecedented security and goal fulfillment.”

Consumers are seeking ease of use and convenience, so they will go to the PFM that offers these attributes, whether from a financial institution or from a third party. By enrolling the customer in its PFM, the financial institution continues to control the relationship and the access to the underlying data. If the consumer opts for the third-party PFM, the control of the relationship and data shifts as well.

Another thing banks could do to improve the adoption and effectiveness of PFM is actually include the bank in the process. “Customers are looking for insights and advice, not bigger piles of data,” said JP Nicols, CEO of the advisory firm Clientific. “Knowing that I spent $250 at Starbucks last month is not nearly as useful as understanding how that could impact how I’m saving for tuition or my kids’ tuition. Clients should be able to share their data with their advisor and tie their actual spending and saving habits to their financial plans.” Both customers and banks are likely to benefit, Nicols said.

“PFM adoption leads to the institution becoming the financial data hub for an account holder and almost certainly leads to the FI gaining additional business from that user, increasing assets for the bank or credit union,” said Caldwell.
Jeanne Capachin

**U.S. Banks and Core Replacement**

BBVA Compass has gone where other large U.S. banks have feared to tread, moving to a real-time core processing system. This is an important milestone in its four-year, $362 million project to transform its technology and operations. The bank now has all its deposit accounts converted to the Alnova software, running in a mainframe environment. Consumer loans, mortgage, small business loans and debit cards will be rolled out in future phases, beginning with loans in early 2013.

Following are a few key takeaways for banks considering a similarly bold investment:

**Large institutions can and will move to real-time processing:** Moving to real-time processing in the US, where checks are still prevalent, has been questioned. Certainly, there are still workloads that require batch processing. However, real-time emulation and memo-posting increase the operational and technical overhead at every bank running batch deposit account processing. There is higher ongoing operational expense, as well as more complex (and slower) product development and innovation. At BBVA Compass, moving away from batch processing would provide clear benefit, but required lots of planning and operational process review. This technology change required at least as much operational change to ensure success.

They made the decision to move forward with Alnova in a mainframe environment – duplicating the environment BBVA has successfully implemented in nine of their other subsidiary banks worldwide. But the technical aspects are just one part of the transformation. Large U.S. banks have built operational groups and business processes around batch-processing workflows and timeframes. As Sergio Fidalgo, CIO of BBVA stated, the operational impacts required “literally thousands of hours” of planning and discussion. Similarly, customers have certain expectations about check float and processing times that are shortened in a real-time environment. Customer communications were fine-tuned as state-by-state implementations proceeded through 2012, recognizing that customer practices would need to adjust to real-time posting, just as bank practices were changed.

**Can you achieve relationship banking without a central customer information file?:** The retail banking revenue model is broken, and for many banks, cross-selling and relationship banking is the path forward. BBVA globally touts itself as a relationship bank, but with 26 customer information files (CIF) at the U.S. bank, they didn't have the complete customer view they needed to evaluate customer value or make appropriate offers in this region. Banks that have grown by acquisition and developed siloed lines of business have the same issue. Institutions have tried to solve the problem by building customer information
warehouses, but like the overhead of memo-posting, this layers on additional complexity, expense, and risk.

Moving to a single CIF provides both operational efficiency and greater transparency into customer value. At BBVA Compass, operational efficiency is already being seen at the branches. The combination of real-time processing and a central CIF lets BBVA Compass bank staff make customer information changes immediately. Rather than inputting into multiple systems and then waiting for overnight processing, they can make the changes real-time and ensure that’s it done right the first time. Looking forward, BBVA Compass will be able to tailor product offerings and reward high value customers effectively with the tools Accenture has provided. We expect pricing and billing of retail banking to evolve dramatically in the U.S. as practices change and banks re-evaluate free checking for all. As this evolution continues, BBVA Compass will have the ability to adjust products, pricing, and marketing in a changing environment.

**Non-U.S. core banking software can be adapted to the U.S. market in line with a transformation project:** In 2008, when Accenture and Alnova were chosen for the project, the software was not localized for the U.S. market. Many banks would consider this a deal-breaker, and it is certainly more risky to choose a software solution that requires coding before it can be implemented. Substantial new code development should be expected to complicate any project, and will require aggressive testing and flexible project plans to ensure that any slippage doesn't impact important deliverable dates. This additional effort and risk was considered as part of the vendor evaluation, but in the end, Alnova and Accenture won the day – without a U.S. reference client or complete code base, yet with a strong existing relationship between BBVA and Accenture. As the BBVA Compass team moved forward with its own coding, integration, and process changes, Accenture’s software group was also progressing forward with coding to localize the base product for the U.S. market.

According to Colin Davies, senior managing director of Accenture’s Software Group, U.S. localization was a strategic investment for Accenture. His group worked closely with Accenture’s consulting team and BBVA’s development group to determine which enhancements would be incorporated into the base Alnova product, and which were custom requirements for BBVA Compass.

**Don’t discount this project because BBVA Compass is foreign-owned:** Certainly, having success within the global institution with Alnova and Accenture, and having the executive mandate to make the change provided BBVA Compass with certain advantages. But regardless of how and why the decision was made, the end result is that BBVA Compass may in fact have both operational and technological advantages that its peer U.S. institutions cannot claim. It also provides proof to regulators, bank board members, and shareholders that core banking replacement projects in the U.S. can be completed successfully within a reasonable budget and timeframe. Manolo Sanchez, CEO of BBVA commented that the business case for the project has evolved from 2007 until now – but this wasn't a short-term dollars and cents decision.

The project was undertaken as part of the bank’s long-term goal to increase customer-centricity, hence the moniker, “Project Centric.” It was clearly stated that this was never an IT project, but rather a bank strategy project.
As a U.S.-based subsidiary of a foreign-owned bank, BBVA Compass has a broader perspective than many other institutions. Executives at the U.S. bank can see how the bank serves clients and operates in other markets, and can take those best practices and apply them to the U.S. market. Certainly, there are differences between the U.S. banking industry and other markets. For example, Sanchez acknowledged that achieving the 41 percent efficiency ratio of the Spanish bank is not achievable for the U.S. bank, due in part to some of the compensation and regulatory practices that are common practice here. He does think it's realistic though to reduce his efficiency ratio by 10 percent, thanks to operational savings and the efficiencies they have achieved with “Project Centric.”

“Project Centric” was unique for many reasons, and the bank made choices to build out custom code, partner with a non-U.S. provider, and invest in technology when many banks have been hunkering down. Regardless of whether these options are right for other U.S. institutions, this bank has moved all its deposit accounts to a single CIF, they're running a more modern core system, and they are processing in real-time. BBVA Compass is a full-service U.S. institution, not just a branch serving a small segment of international clients of the parent company. We think the BBVA Compass experience is one that provides guidance to other U.S. banks considering strategic transformation.

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Technology in Wealth Management: Opportunity or Threat?

Wealth management is an attractive business line for banks. Affluent clients hold higher balances, have lower credit default rates and utilize more fee-based services than the average branch consumer. No wonder forty percent of bank leaders surveyed by KPMG in June 2012 said that wealth management would be a critical component of their growth plans.

That's not to say it’s an easy business. The economic, regulatory and competitive challenges that all banks are facing impact wealth managers too, and changing demographics pose a unique threat to the segment. The reality is that technology will present both opportunities and threats in 2013.

Unique Challenges
Technology companies like to describe their role in a “value stack” for clients. In banking, the value stack is comprised of three primary sets of activities undertaken for the benefit of their customers. The first set is balance sheet activities—gathering deposits and making loans. The second set is payment activities—moving dollars and data from point A to point B. The last set is advisory activities—providing expertise and advice. Most bank departments can provide some combination of all three activities, but wealth management is primarily about deploying intellectual capital to help clients grow, protect and transfer their wealth effectively and efficiently.

Technology has generally been more of a threat than an opportunity to the wealth management business over the past twenty years, as financial information became more easily accessible and online brokers democratized trading platforms. Firms that made money simply by being gatekeepers of asymmetrical information evolved or died.

Most financial firms have tended to allocate their tech spending to two extremes; either for enterprise needs to meet compliance mandates or improve internal operations (ERP, CRM, core systems, trading platforms, etc.) or to enable self-service for their customers (ATMs, online banking and brokerage, mobile banking, etc.).

Survey results fluctuate during different economic environments, but over the long run, roughly a quarter of clients prefer self-service in managing their money. A slightly smaller group wants to pay someone else to do just about everything, but most clients fall somewhere in the middle. They don’t want to pay excessive fees for services they don’t want or use, but they want advice when they want it, usually related to a change in circumstances, such as an inheritance or a major life change.

In other words, self-service alone is not enough, and firms will need to invest in technologies that can scale profitable advice delivery.
Unique Opportunities
Financial institutions of all sizes want to improve their business with affluent customers (those with at least $100,000 in assets) and high net worth customers (those with at least $1 million). These customers want and need advice on managing and transferring their wealth, and there is a massive opportunity to leverage technology to enhance, not replace, the advisor/client relationship.

Banks are struggling to grow revenues and manage expenses, and technology can help in addressing four key challenges:

1) Acquiring new clients and taking market share. Seventy-nine percent of financial advisors surveyed by wealthmanagement.com said that their number one avenue for growing their business over the coming 12 months would be acquiring more clients. They are all convinced they will take market share from one another, but a compelling and differentiated value proposition will be required. Banks will need to use analytics to determine segment behaviors and needs; social media and content management systems to reach targeted prospects with their thought leadership; and onboarding tools to ease the pain of switching institutions.

2) Retaining current clients and future generations. Banks are investing in new mobile and tablet technology to improve client engagement and meet the expectations of younger generations. Forty-two trillion dollars of wealth is expected to pass down from the Traditionalist generation (those born before 1945) and the Baby Boomers (born roughly between 1946-1964) down to Generation X (1965-1983) and Generation Y (1983-2001) over the next couple of decades. Ninety percent of beneficiaries have little interest in staying with the firm that managed their ancestors’ wealth.

Millionaires under age 45 today are four times more likely to be interested in their advisor’s blog posts or Twitter feed, and nearly six times more likely to ‘like’ their advisor on Facebook than older millionaires. Tablets have the capability to transform the across-the-desk client/advisor conversation to a shoulder-to-shoulder collaboration, but the technology cannot do it alone. Firms will also need to invest in designing new client discovery protocols and advisor training. Remember when laptops came on the scene and revolutionized the client/advisor experience? We don’t either.

3) Expanding existing relationships. Forty-nine percent of advisors in the survey cited above said they planned to grow their business from increasing business with their current clients, the second most popular response. Again, this is about taking market share, and banks will need to offer a better client experience. They will also need to go beyond PFM to add context and insight to big data dumps, tying account aggregation data to financial plans and adding client portals to improve collaboration.

4) Managing expenses. Banks often perform brain surgery when prescribing an aspirin would work, and sometimes vice-versa. Workflow automation and Straight-Through Processing solutions can improve the efficiency of routine transactions and decision-making, and free up advisors for their highest and best use—acquiring, retaining and expanding their client relationships. Any advisor can deliver their best advice when they have an in-depth knowledge of their clients’ situation, preferences and goals. Better reporting and analysis of data aggregation can be a big help.
No Silver Bullet
Technology can definitely help banks address these challenges, but the payoff can be elusive. Merely implementing a piece of technology without the context of delivering true value to clients will typically become an expensively disappointing project. The gap between high expectations and the longer growth curve of real value often leads to the “hype cycle” that Gartner describes so well. The gravity of reality will inevitably pull banks down from the Peak of Inflated Expectations and into the Trough of Disillusionment.

Further exacerbating the challenge of realizing the promise of technology is the industry’s own habit of viewing it as a threat (or simply irrelevant) rather than as an opportunity.

Finextra recently reported on a YouGov survey in which 76 percent of 1,000 high net individuals said “It’s not a focus on technology they want, but a one to one personal service.” The article also cited a separate study by UK Private Bank Duncan Lawrie of 350 wealthy individuals, in which only 12 percent “said that the introduction of new technologies and innovations would make them switch banking provider.”

“It seems that the key for banks to trying to re-establish their customer’s faith and loyalty is to sit down and talk,” YouGov is quoted as saying in its summary of the results. Does this mean that all clients really want after all is a face-to-face personal relationship with their advisor, new fangled technology be damned?

As much as this might be welcome news to legions of baby boomer financial advisors and bank executives, we don’t think so.

We have not examined the raw data of either of those surveys, but based on other research and our industry and client experience, we don’t believe clients are saying “don’t give us technology,” but rather “don’t think that implementing technology alone will cause us to be happy with your firm.”

Delivering personalized service and advice that is relevant and useful on the clients’ terms is what is needed, irrespective of technology. Many firms fail at this despite using technology that is only an upgrade or two from the set of “Mad Men.” We have yet to yearn for a good old face-to-face meeting with our Google representative in his office, but we do believe that technology should support and enhance the advisor-client relationship.

We also heartily agree that technology alone is not enough for the majority of clients to feel value (or valued) from their wealth management firm, but we also believe that some in the industry are employing a lot of wishful thinking in interpreting the results of such surveys.

Executives at Blockbuster and Circuit City probably felt the same way.

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**Beyond Mobile Banking: Mobile Payments Keep the Customer’s Finances Safe at Her Financial Institution**

Enrolling customers in their own mobile payment app is the key for financial institutions to continue to retain the core customer relationship, and also provides key revenue opportunities beyond those offered by traditional payment and deposit accounts.

Mobile payment is more than just payment. The right mobile payment platform enables the financial institution to increase its overall franchise value through a Customer Relationship Management (CRM) database where customers are known and contactable before, during and after each payment. Armed with this, mobile payment can be further leveraged to:

- Garner the “big data” that will help you guide customers in better budgeting, spending, insurance and saving decisions;
- Create new lines of business in providing aggregated data to merchants who enroll their private label prepaid/gift accounts;
- Consummate prepaid promotional sales from traditional advertisements displaying QR codes such as television, print, outdoor, etc., closing prepaid sales without the need for prepaid accounts;
- Gain access to new sources of revenues from actionable offers and advertising from complementary businesses and Consumer Packaged Goods (CPGs) companies
- Sharpen customer insight using the mobile credentials to better track member preferences;
- Implement card-less loyalty programs without disruptions to the point of sale;
- Negotiate early mover promotional incentives and discounts for preferred tender types; and
- Enhance the utility of mobile banking, ATMs and other customer touchpoints for additional convenience for the customer and the institution.

Because mobile is the cross-channel enabler, present and used in every other channel, it offers financial institutions a unique opportunity to deepen the customer relationship and value across every interaction, from the contact center to the branch to the ATM and online. Additionally, mobile payments provide a way for financial institutions to collaborate with their merchant community for additional benefits. Cross-pollination enables the financial institution and the merchant to share customer information that provides a more complete picture of preferences, financial wherewithal, demographic background, etc., in order to make better targeted offers that will be valued by the customer.
The strategic issue is whether the financial institution wants this new customer touchpoint under its control or under the control of unauthorized third party intermediaries and free-riders on the financial institution’s brand. The key strategic point: The one who enrolls is the one who controls.

**Mobile Update**  
According to Gartner, Inc., worldwide mobile payment transaction values were expected to surpass $171.5 billion in 2012 (a 61.9 percent increase from 2011), with the number of mobile payment users to reach 212.2 million in 2012 (a 50 million user increase over 2011). IDC Financial Insights predicts that mobile commerce will surpass $1 trillion in 2017.

The stars are in perfect alignment for mobile payments to continue this type of growth. The sales of smartphones are sharply outgrowing those of feature phones and personal computers, a trend that first emerged near the end of 2010 and will only continue to grow.

According to IDC, global smartphone volume in the fourth quarter was an estimated 224.5 million units, representing a 39.5 percent year-over-year increase. For the year, smartphone shipments were expected to increase 41.5 percent to 717.5 million units. Through 2016, smartphone growth is expected to continue at an 18.3 percent compound annual growth rate.

The popularity of iPads and similar devices provide further support for the mobile payments trend, particularly among younger people – the financial institution customers of the future.

According to a Piper Jaffray survey of 7,700 teens conducted in 2012:
- 40 percent owned iPhones (up from 34 percent six months earlier);
- 62 percent planned to buy an iPhone within the next six months (22 percent said their next phone would run Android);
- 44 percent owned a tablet (up from 36 percent six months earlier); and
- Of those who do not own tablets, but planned to buy one in the next six months, 74 percent hoped to buy an iPad.

**Retailers Take Leading Position**  
Mobile payments provide the consumer with the ability to have payments, loyalty information, digital coupons and other information all in a single, convenient location. There are studies showing that consumers are more apt to leave their wallet at home than their mobile phone. The mobile device is always handy and easy to use with a mobile payment app. As a result, the consumer demand for mobile payments is off the charts, as evidenced by the success at some retail locations.

The most dramatic case of the quick uptake of mobile payments is not at a credit union or any other type of financial institution, but at coffee retailer Starbucks:

*Since rolling out mobile payments in 2011, Starbucks has enrolled more than 5 million customers in its mobile payments program. It’s the most successful launch of a new payment type in the history of man. By December, Starbucks was doing 2.1 million mobile payment transactions per week.*

In August 2012, Starbucks took a $25 million financial stake in payments provider Square, and Starbucks CEO Howard Schultz was appointed to the Square board of directors.
Starbucks is the largest of Square’s estimated 250,000 merchants using the company’s mobile wallet. The merchants have about 3 million customers using the Square mobile payment app.

Other retailers have also been much more aggressive than financial institutions in developing and launching mobile payment apps. Following Black Friday, eBay and PayPal reported a 153 percent and 193 percent year on year increase in mobile payments, respectively. PayPal is piloting a mobile app that lets a consumer click a participating retailer’s icon on their mobile phone before walking into a store, which triggers the appearance of the consumer’s account information and photo on the cash register screen. The photo would then be used by the clerk as payment authorization.

PayPal and Google Wallet are working with Discover Card to couple the mobile payments with a plastic card, which enables use of the electronic wallets with merchants who do not have NFC-enabled terminals.

Merchant Customer Exchange (MCX), a joint venture of Target, Best Buy, Wal-Mart and several other large national merchants, is developing its own mobile payments platform expected to enable the participants to operate their own payment system, which would empower them to aggressively negotiate and possibly eliminate some interchange fees. MCX would also potentially enable the participating merchants to earn additional revenue by controlling the advertising in the apps to customers.

Some financial institutions are not far behind the retailers in mobile engagements. Bank of America, for example, is enrolling 200,000 customers a month on its mobile banking app. U.S. Bank in December launched its own mobile payments wallet. The app enables mobile device owners to apply for the U.S. Bank Go Mobile payment service.

Retailers, financial institutions, and powerful third party intermediaries such as Google, Isis, PayPal and others, are all pursuing the potential benefits of mobile payments, including controlling interchange costs (a major reason behind the MCX effort), customer retention, advertising tie-ins, customer Big Data information and security.

Mobile advertising and gross revenue opportunity is two to three times greater than the gross revenue available from the fees earned on traditional card-based accounts, and five or more times better than the revenues available from a simple demand deposit account, a critical factor as financial institutions seek additional sources of income.

Mobile payments can work for the FI or against it, depending on who controls the ancillary services and data. By enrolling a member in mobile payments, the financial institution owns the customer relationship for that activity, as well as gaining information on the customer’s spending habits, which helps to offer better targeted promotions.

If the merchant or another third party enrolls the member, on the other hand, those targeted advertising dollars become potential costs rather than benefits for the FI. The result is potential incremental revenue of $1,546 if the financial institution enrolls the customer – or potential incremental cost of $1,340 if the financial institution wishes to advertise to the consumer enrolled by another party. In addition to these hard dollar differences, there’s also the harder to compute, but still important issue of brand identification.
If the customer enrolls in the financial institution’s mobile payment app, he or she identifies any payments, purchases or other activity done through the app with the issuing financial institution. Mobile payment is a natural extension of the financial services offered by the FI in its mobile banking app, and the FI is well positioned to play this role as the trusted financial partner. If on the other hand, the consumer enrols with a third party intermediary such as Google, PayPal, ISIS or others, mobile payment may become the first step to developing a trusted financial relationship with that entity...one that could grow to include budgeting and purchasing other financial products and services. If so, the existing FI relationship is likely to suffer.

In summary, financial institutions find themselves at an inflection point in the payments industry. New technologies have made it possible to literally completely replace the current 50-year old payment credential delivery infrastructure (cards) and acceptance infrastructure using mobile devices and low cost, off-the-shelf hardware and open software solutions.

This inflection point has created both an opportunity and threat for traditional financial institutions. Mobile payments can empower financial institutions to redefine the payments infrastructure in a way that eliminates or reduces third parties’ control over the hardware and software deployed at retail locations and used by their customersi, and in the process reduce costs, increase net new revenue streams, and create a better, more valuable experience for customers. But if financial institutions stand idle, they may miss the boat as new third parties seize these opportunities for themselves, as well as the customer relationship and loyalty.

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Top Ten Trends Impacting Bank Technology for 2013

Growing up in rural West Tennessee, I learned many valuable lessons during long summer days spent shooting BB guns, playing sandlot baseball, riding horses, and roaming the deep woods and river bottoms seeking adventure. For my buddies and me, our favorite days were spent at our “campsite” where we had several “Lord of the Flies” moments as we tested our skills and courage. At this campsite, some of the older boys had hung a rope from a gigantic oak tree. Like a troop of monkeys, we spent countless hours swinging on that rope which was positioned over a deep gully.

To succeed, one had to get enough momentum to reach the other side of the gully but know when to let go of the rope and land safely on the other side. Not enough momentum and one would swing back, lose control and either crash George of the Jungle-like into a tree or twist helplessly until someone with a long branch could rescue you from your failure and humiliation. Likewise, not timing the release of the rope just right could result in a rough fall and some scrapes and bruises. But, a bold swing with a well-timed release would result in a perfect landing worthy of Tarzan.

It was a great feeling and typically established one as not quite Lord of the Jungle but certainly King of the Campsite for that brief moment in time.

In the jungle that is the banking industry, the past few years have seen some bankers hesitant to take a swing at all and some who swing but are reluctant to let go of the rope. The result has been much twisting in the wind and just hanging on, safe from the bumps and bruises associated with a hard fall but not moving forward and not having much fun.

As we look ahead to 2013, we believe now is the time to take that bold swing and make that perfect landing. Employing the right technology will be critical to success. To score that landing, we offer the following predictions:

**Prediction #1 - Tablet Computers Evolve with Some Misfires Along the Way**

Apple hits another homerun and will see insatiable demand for the iPad mini due to its size and price point. The Microsoft Surface tablet will miss the mark initially due to its higher price point, limited marketing, and poor distribution by big box retailers but will rebound as more users demand Microsoft Office capabilities from their tablet computers. Despite my hope that Microsoft will unite the devices and offer Windows phones, tablets, gaming systems, and laptops on a single interface allowing access to network resources within one’s organization and from the cloud, it appears I’ll have to wait a bit longer. Windows 8 adoption will be slow as many bankers just recently upgraded from Windows XP to
Windows 7 and will prefer to stick with 7 for the time being, partly due to their banking application vendors being slow to certify Windows 8. Those users who migrate to Windows 8 will find that having a PC with a touchscreen increases utility.

However, don’t count Microsoft out. By the end of 2013, expect Microsoft to adjust its course and get closer to the device unity we all seek. In the meantime, maintain a flexible tablet computing strategy as last month’s hot buy will cool quickly and next month’s new version will continue the tablet evolution. According to the Pew Research Center, as of October 4, 2012, 25 percent of American adults owned a tablet computer, up from only 4 percent in September 2010. Faced with the realization that prohibition is futile, bankers will deploy more sophisticated tools to manage the increasing number of BYOD (Bring Your Own Device) endpoints on the network, resulting in better security, increased efficiency, controlled costs, and a more engaged and productive mobile workforce.

**Challenge Question:** What is your bank’s tablet computing strategy?

**Prediction #2 - Small Banks Get Serious About Small Business**
In 2013, bankers will seek to expand their small business relationships by “banking the family” which will include business owners, their families, and the business’s employees – the work family. By offering a full-service banking package, complete with mobile banking via smartphone and tablet, interfaces to QuickBooks and other leading small business accounting systems as well as PFM (Personal Financial Management) solutions, bankers will cement these profitable, long-lasting relationships.

One obstacle that remains to executing this strategy is many banks’ inability to define the customer relationship and offer a summary view. Legacy systems that are still Customer Information File (CIF)-based will require a database re-boot to meet the sophisticated demands of tech-savvy business owners who expect their bankers to know them by more than just their account numbers. Community banks will benefit from missteps made by their big bank brethren whose fee structures continue to contain more sticks than carrots.

**Challenge Question:** Can your bank define a small business owner’s entire banking relationship on one page?

**Prediction #3 - Security Strategy Becomes as Important as Security Tactics**
As recent security breaches have shown, security is no longer a minor issue relegated to matters of password composition and acceptable use policies. Security has become a strategic issue that can make or break a bank or a technology provider. Expect more banks to develop Security Strategic Plans as Data Loss Prevention (DLP) programs complement banks’ Information Security Programs and other risk management efforts.

Bankers will realize that security at outsourced providers is just as important as security within their banks. It doesn’t matter where the hardware or the data resides physically, the responsibility for security cannot be outsourced. Technology providers will be pushed to answer tough questions and prove adequate controls beyond the basic SSAE 16 (formerly SAS 70) requirements and reporting.

Cybercrime will increase as criminals get more sophisticated, networks become more open, and data becomes more mobile. Small business customer relationships will require
collaborative security awareness education to help mitigate risk of account takeovers and resulting ACH and wire fraud.

**Challenge Question: What is your bank’s security strategy?**

**Prediction #4 – The Checking Account Gets Modern**

Despite the technology available, some banks’ checking accounts operate no differently than they did 50 years ago. Driven by consumer demand for convenience, the checking account will undergo an extreme makeover with better access and increased use of technology channels. Prepaid cards such as Bluebird, a joint venture by American Express and Wal-Mart, will force bankers to break out of their comfort zone and make the checking account the feature-rich centerpiece of the customer relationship. Email and text alerts, subaccounts for family members, remote deposit capture via smartphone, mobile photo bill pay, P2P payments, customized debit cards, and free ATM access will all become expectations by today’s advanced consumer.

Long a difficult sell for most banks, bill pay will see revived interest as customer fatigue over frequently reissued credit cards (due to third-party security breaches) causes cancellations of the bill pay via credit card pull and stimulates conversions to a lower maintenance bill pay push from checking. Innovations in small business credit, such as Google’s AdWords Business Credit Card, will force bankers to offer qualified small business owners easier access to credit through a variety of specialized channels. Bank surrogates such as SmartyPig, Mint, and Simple will push bankers to birth some of their own new, high-tech apps for visual banking via mobile devices.

Less focus on systems and compliance and more focus on utility and the customer experience will blast the rust off the checking account and help banks compete with the increasingly innovative products and services of non-banks. Also, expect banks to begin dispensing prepaid cards at ATMs to answer Bluebird’s call to the banked and the unbanked. According to a 2012 NerdWallet study, the average prepaid card charges nearly $300 in basic fees each year. Bankers will reel these lost customers back in with their own versions of prepaid cards (in the slow-dying plastic form and in new smartphone apps) as an extension of the checkbook.

**Challenge Question: Are your checking accounts using all the technology features available via your advanced systems?**

**Prediction #5 – Strategic Technology Planning Becomes Critical to Bank Survival**

After years of playing the waiting game with many tech projects put on hold or grossly underfunded, bank CEOs will call on their IT people to become more strategic to help banks grow. IT should be a means to an end, not an impediment to progress. Those who craft strong strategic technology plans will map a course for success.

Smart bankers will realize that operations and technology benchmarking is a futile exercise designed to make their banks followers. Instead, they will look inward to the individual bank’s productivity, efficiency, and decision-making ability to craft strategies and monitor performance unique to the bank, its customers, and its markets. The proper inward focus on what makes the bank successful will trump an overly outward focus on the competition.
Ralph Waldo Emerson said, “Do not go where the path may lead, go instead where there is no path and leave a trail.”

**Challenge Question: When it comes to strategy and performance, is your bank an “innie” or an “outie”?**

**Prediction #6 – Effective Vendor Management Exposes the Pretenders and Rewards the Performers**

Faking sincerity won’t cut it anymore. Bankers will require their providers to demonstrate and deliver value, not just talk a good game, as they inventory their contracts and determine what they bought and what they got sold. As we tell our clients who engage us for system selection help: (1) Have a compelling reason to convert, otherwise don’t; and (2) the incumbent is the leader until unseated. In 2013, expect more compelling reasons and more incumbent fumbles.

Recently, during a system selection engagement, a relatively new core processor refused to answer the bank’s Request for Proposal (RFP), which was very brief but required the vendor to answer certain questions in writing. The vendor’s refusal smacked of the quote, “Ask me no questions and I’ll tell you no lies.” Some attribute that quote to the Anglo-Irish novelist, playwright, and poet, Oliver Goldsmith but the more cultured among us prefer to credit Ernest T. Bass from the Andy Griffith Show. Clearly, this vendor did not want to be subjected to the scrutiny that the RFP required. That was a major red flag and needless to say, that is where the vendor was dropped from the evaluation process.

**Challenge Question: Is your bank’s technology provider marriage a happy one or is it time for counseling, separation, or divorce?**

**Prediction #7 - The Core Processing Outsourcing Trend Continues But Invites More Scrutiny**

The core processing provider oligopoly we reviewed last year is having an impact as more providers attempt to drive banks to the outsourced environment where providers can improve their profit margins as they leverage their data center investments and wring more efficiency out of recent acquisitions. The majority of community bankers have been on their current core processing system for over 10 years with 55 percent outsourced and 45 percent in-house (Source: ICBA), not exactly an area with frequent change. Some core processing providers now refuse to submit in-house proposals. This lack of competition and choice is not good for banks.

Bankers will begin to push back slightly as they realize that outsourcing comes with its pros and cons: Pros in terms of limited capital investments and cons in terms of higher per unit costs of growth and less control.

Core processing provider decisions are no longer just about who runs the bank’s deposit, loan, and general ledger systems. Such decisions are now about much more, including the bank’s image item processing, ATM/debit card processing, ancillary systems such as document imaging, loan origination, teller and deposit platforms, and new delivery channels and payments systems demanded by more mobile consumers. Such a decision is critical to the bank’s future ability to compete. Complex decisions such as this require intelligent and thorough analysis.
The trend to outsourcing will continue, but bankers (and their examiners) will scrutinize vendor claims of “don’t worry about disaster recovery” as recent tornadoes, ice storms, hurricanes, and floods have exposed the Achilles’ heel of outsourced providers, especially those with data centers in coastal areas. Even the most geographically challenged bank customer has a hard time understanding why a Florida bank’s systems are down because of an ice storm or a Missouri bank’s systems are down because of a hurricane. Natural disasters aside, security breaches will continue to plague third-party processing centers. As with any low-probability, high-impact (“Black Swan”) event, the vendor’s future reputation depends on how the incident is handled, not that it happened. Expect outsourcers to further harden their data centers and their business continuity and incident response plans.

*Challenge Question: Does your bank’s dependence on third-party relationships present an acceptable level of risk?*

**Prediction #8 – Enterprise Risk Management Models Mature and Become the Centerpiece for Every Well-Managed Bank**
Enterprise Risk Management (ERM) has many definitions but can be simply described as a process that provides a high-level, top-down view of a bank’s key areas of risk, allowing the bank’s board of directors to identify potential threats that may affect the bank and therefore help to manage the bank within the bank’s tolerance for risk.

Flying the bank by the seat of one’s pants is no longer adequate. More sophisticated and quantitative measures of risk must be used in a rapidly changing banking environment. In recent years, bankers have faced risks for which they were unprepared, and in some cases unaware. These risk events caused some banks to crash and fail as they lacked the resilience to bounce back from adversity by mitigating risk and limiting the bank’s exposure.

Every castle wall is only as strong as the people behind it. Overseeing risk management enterprise-wide is a key role of a bank’s directorate. Without clearly understanding possible threats, their likelihood of occurrence, their magnitude of impact should they occur, and their related risk, board members cannot make the informed, strategic decisions necessary to manage risk and preserve and grow stakeholder value.

*Challenge Question: Does your bank have an Enterprise Risk Management program customized to its unique environment and challenges?*

**Prediction #9 - The Customer Relationship Culture Replaces the Sales Culture**
Think about your last purchase. Did you “buy” something or were you “sold” something? In today’s information age where one can research products and services online before buying, the old sales tactics simply don’t work. By focusing on the customer relationship, bankers can implement a culture that has customers buying products and services because they want to, not because they are being accosted.

Bankers will ask more out of their core systems and will buy more advanced CRM (Customer Relationship Management) systems as they attempt new ways to define value in customer relationships. Consumers continue to be influenced by loyalty programs when choosing an airline or hotel or just buying gas or milk. Bank customers will follow suit. Expect more customer loyalty programs and incentives to drive customer wallet share in leading banks.
Challenge Question: Which can your bank’s executive management team name more easily: the Top 25 college football teams or the bank’s Top 25 customers?

Prediction #10 – IT Risk Management Trends Prove What Passed in the Past Won’t Pass Anymore
2012 saw many bankers get an education and a rude awakening on what constitutes proper IT risk management. Lulled into complacency by the cursory IT exams and weak IT audits of the past, many banks faced regulatory enforcement orders in 2012 for not having the proper controls, documentation, or audit coverage. A new breed of trained examiners and more thorough IT exams exposed weaknesses and areas long overdue for improvement. What we call the “Deuces Wild IT Audit” won’t fly anymore. That’s where a bank gets two days of fieldwork, a two-page report, and expects a 2-rating on its regulatory IT examination. An expanded IT and Operations environment requires an expanded IT audit scope. Mobile banking, social media, virtualization, enhanced multi-factor authentication, and mobile remote deposit capture are a few areas requiring expanded coverage.

The 2012 ICBA Community Bank Technology Survey cited bank’s top technology concerns as (1) Complying with regulations; (2) Protecting data and infrastructure; and (3) Detecting and mitigating fraud. “Compliance” was cited as the number one area of increased IT spending. Accordingly, lightweight IT Audits and basic Network Vulnerability Assessments will be replaced by more comprehensive, collaborative, and competitive reviews by firms that understand technology and security but most importantly, the unique environments that drive the business of banking.

Smart banks ensure adequate coverage by requiring IT audits and network vulnerability assessments that have true value, are collaborative in nature, offer practical recommendations, and provide forward thinking related to recent technology innovations and serve as an early warning system regarding potential risk.

Challenge Question: Is your bank’s IT audit firm keeping up and delivering quality reports, expanded scopes, and fresh bank-specific perspectives on IT risk management trends?

Summary
Grab the rope, get a running start, take a bold swing, and execute a perfect landing in 2013 by employing the right technology, high-performing providers, and strong IT management. And remember, it’s quite acceptable to yell like Tarzan when you stick that landing.

Best wishes for a high-flying, fast-swinging 2013 filled with safe landings and the satisfaction that comes with earned accomplishment.

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