Bankers As Buyers 2011

A collection of research, observations and articles about what technology, solutions and services U.S. bankers will buy in 2011 and the changing financial industry landscape

Prepared by:
William Mills Agency
www.williammills.com

v6

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Dear Readers:

Whether you are a banker, vendor, service provider or someone with a vested interest in financial technology, we hope you will find this year's report of value. We have tapped some of the brightest, best-informed individuals for their insights and companies' research for your consideration. This year's survey has been greatly enhanced by information provided by or originally published by:

Aite Group
Christine Barry
Ron Shevlin

Ariva

Bradway Research
Bill Bradway

Bank Systems & Technology/
Information Week

CCG Catalyst Consulting Group
Paul Schaus

Celent, a member of the
Oliver Wyman Group
Jacob Jegher

Continuity Control
Andrew Greenwalt

Co-op Services Credit Union
Norm Thomas

Cornerstone Advisors
Michael Croal

Credit Union National Association
(CUNA)

Crone Consulting, LLC
Richard Crone

Equifax

Federal Deposit Insurance Corporation
(FDIC)

FinServ Strategies
Maggie Scarborough

HEIT
Dan Holt

IDC Financial Insights
Jeanne Capachin
Michael Versace

Independent Community Bankers of
America (ICBA)

Javelin Strategy & Research

Meredith Whitney Advisory Group, LLC
Meredith Whitney

Online Banking Solutions
Joe Spatarella

ProfitStars, a Jack Henry Company
David Foss

Sawyers & Jacobs, LLC
Jimmy Sawyers

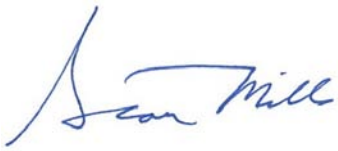
TransUnion

TTV Capital
Sean Banks

While *Bankers As Buyers* contains a lot of information, it is meant to provide a high-level look at the forces shaping technology spending – please do consider reaching out to our contributors for more detailed information about those areas you would like to know more about.

While the material is copyright protected, you have my blessing to share this document with your business associates, clients, prospects and friends within the industry.

Sincerely,



Scott Mills, APR
President
William Mills Agency

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Introduction

Smartphones replacing the PC in importance, social media, cloud computing, compliance and much more are all discussed in this year's report – we even have our first ever reference to Rudyard Kipling. In retrospect, 2010 was not a banner year. We observed: technology decisions required substantially more board-level review and approval; compliance topped bankers' concerns; and capitalization levels took center stage, all of which contributed to longer selling cycles and increased scrutiny of deals.

There are, however, reasons for optimism. Signs point to the second half of 2011 as being the time for spending to loosen up.

The good news for financial technology is that the financial industry HAS to invest to address operational and credit risks; update legacy systems (or better yet, replace them); and meet or exceed competitive pressures. It simply takes more technology to run a financial institution today than in years past.

While media tends to focus on sexier, customer-facing technologies, the backoffice, infrastructure and integration of technologies may offer financial institutions and their vendor partners more ways to wring out better margins and make better decisions for attracting and managing profitable customer relationships.

Looking back, we also saw:

1. "Mobile" was on everyone's lips at BAI Retail Delivery 2010 conference.

2. New forums for learning about and discussing fintech, such as Finovate, increased in importance.

3. Large vendor conferences continued to grow and provide great content for bankers.

4. New organizations appeared, such as, TAG FinTech in Georgia, which is getting a reputation as a payments and fintech hot spot (NCR, First Data, Equifax, Firethorn, Cardlytics, Verifone and more call the state home).

5. *American Banker*, *BTN* and IDC Financial Insights' FinTech 100 demonstrated the velocity of change in ranked company revenues and continued growth and importance of international companies.

6. The payments segment appeared to lead in investments and volume of innovation.

I. Year in Review

The previous 12 months were much like a look in the mirror of the previous 12 months for many financial institutions and the U.S. economy as a whole, though there were some signs in December that the economy was perhaps going to break out of the morass. Unemployment hovered near 10 percent for most of the year, interest rates for mortgages and for deposits continued to stay at or near record lows, and failures of financial institutions continued to grow in number.

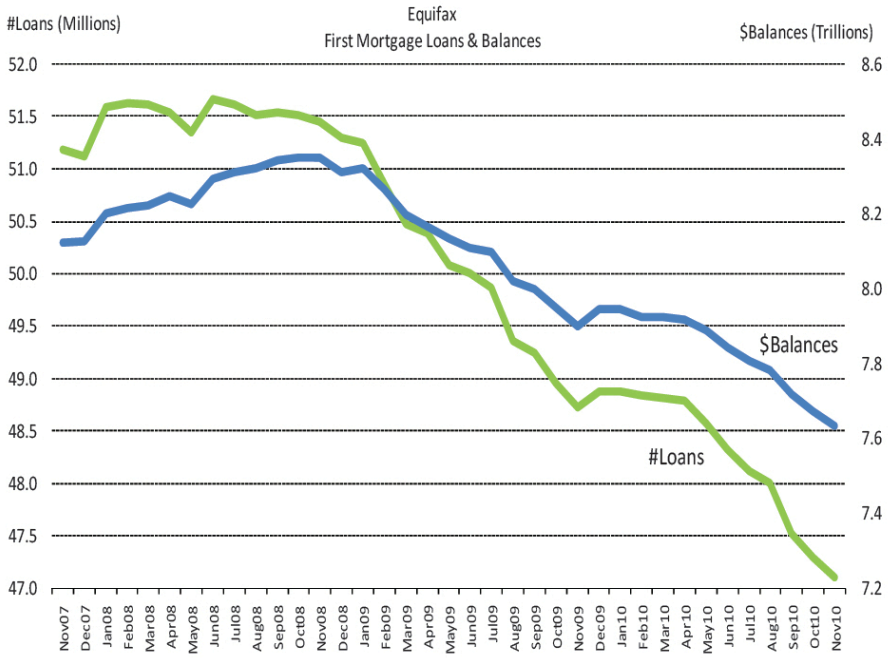
Still, there were signs that financial institutions that had weathered the storm of the last couple of years were again positioning themselves for better economic times as their technology spending picked up slightly in the second half of the year, setting the stage for what some experts are calling a mild rebound in 2011.

"Banks finished 2010 better than was expected at the beginning of the year," said ***Jeanne Capachin***, research vice president, corporate treasury and spending guides for IDC Financial Insights. "The deposit balances are higher now after hitting a trough in 2009-2010. The banks started increasing their investments in technology again in the second half of 2010."

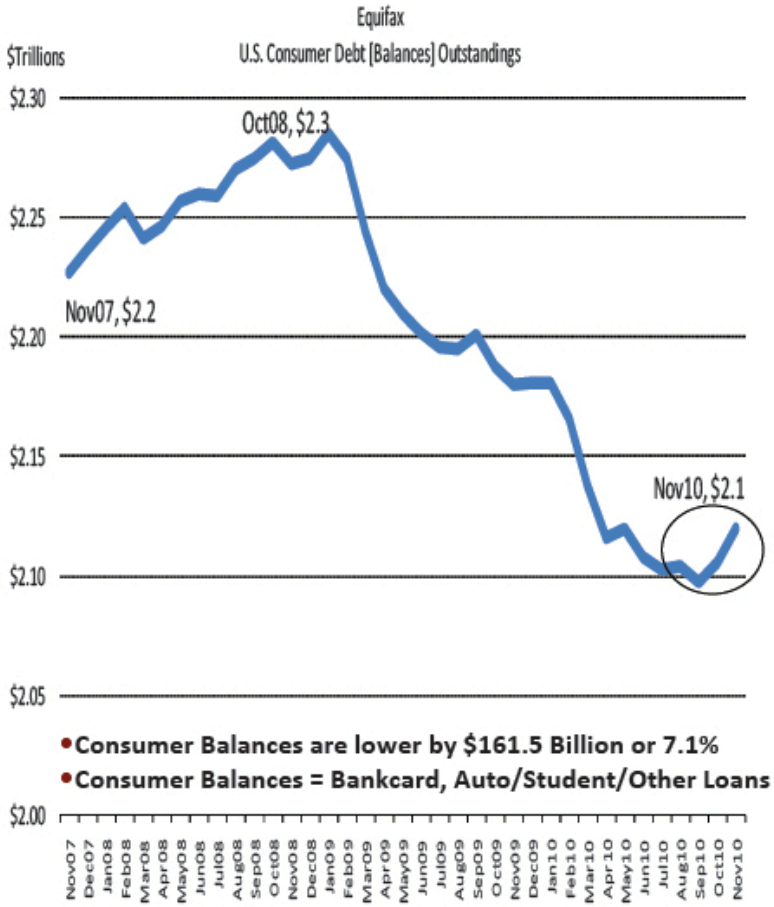
However, financial institutions won't spend any extra money on technology without a wary eye on the past, particularly with a high volume of foreclosures continuing into the new year, though there are some signs that credit and delinquency issues are softening at least a little.

Indeed, ***Jacob Jegher***, senior analyst for Boston-based Celent, a member of the Oliver Wyman Group, said his firm's outlook for financial institution technology spending "includes a lot of caveats" dependent on a continuance of the recent improving economic trends.

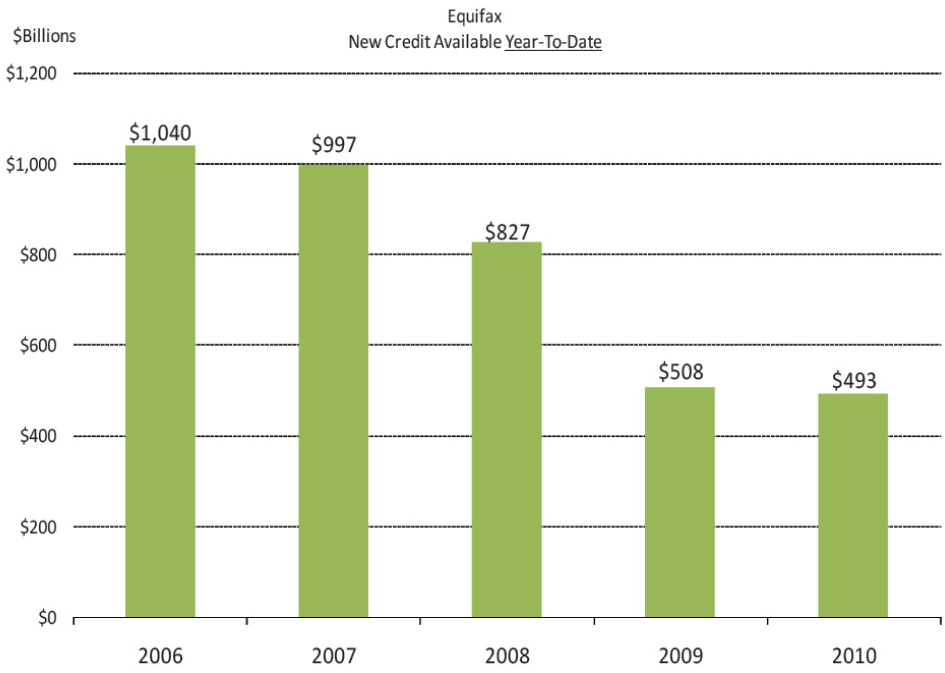
Equifax research shows the sharp drop-off in loans and consumer credit over the last couple of years. Consumers and lenders alike have only recently started to feel more comfortable about credit (see circled portion on right of second chart).



Source: Equifax



Source: Equifax



Source: Equifax

According to the TransUnion annual forecast of consumer credit, national mortgage loan delinquencies (the ratio of borrowers 60 or more days past due) will drop nearly 20 percent by the end of 2011 to 4.98 percent from an expected 6.21 percent at the conclusion of 2010.

New bank card origination growth appears to be underway, according to Equifax, with more financial institutions issuing more cards in November 2010 than in 2009. Credit limits, however, continue to fall.

The housing collapse and credit crunch of the last couple of years also resulted in new legislation aimed at preventing some of the same problems from occurring again. Just how those regulations will affect financial institutions remains to be seen because some of the rules have yet to be written, and the 2010 elections have put new legislators in office with different viewpoints from some of those who worked on the original bill. The amount of regulatory and compliance spending, which has to take priority in financial institutions' technology budgets, will determine the amount of funds left for other technology investments.

II. Spending Outlook

A. Market Size

Though the last 12 months didn't see some of the larger mergers that had been the norm over the last few years, there were considerable acquisitions of smaller institutions, including many that had failed to maintain an adequate level of capital. More than 150 banks failed in 2010, compared to 140 in 2009, 25 in 2008 and just 3 in 2007. Credit unions were affected as well, with nearly 30 credit unions failing for the second straight year. Additionally, there were nine purchase and assumptions (in which only certain portions of an institution are acquired) and 10 assisted mergers of credit unions. Credit unions are expected to see a significant hike in insurance premiums in order to shore up the National Credit Union Share Insurance Fund.

According to FDIC and Credit Union National Association September 2010 data, the depository institution landscape is as follows:

Number of:	
Commercial Banks	6,622
Savings Banks	1,138
Credit Unions	7,536
Total	15,296

This represents a 5.7 percent drop from last year's report, and though some failures are likely to occur in 2011, the consensus is that the worst is over. However, credit unions, which had solvency issues arise later than banks, may also be later to eliminate most of the problem, particularly with the financial difficulties members are facing. Credit unions didn't succumb to mortgage problems early because of conservative lending policies, but eventually couldn't avoid the issues caused by declining home values and job losses by mortgage holders.

According to CUNA, the number of credit unions fell by 2.2 percent. The National Credit Union Administration's third quarter call report revealed 362,480 bankruptcies through the third quarter of 2010, compared to 329,656 over the same nine months of 2009. As a result, the technology spending priorities for credit unions are likely to diverge from those of banks, according to some experts.

While some banks are looking for growth, many credit unions are closer to the survival mode banks were in a year ago.

FDIC Statistics on Depository Institutions $ in 000's	All Institutions 9/30/2010 Total (Sum)	All Commercial Banks 9/30/2010 Total (Sum)	All Savings Institutions 9/30/2010 Total (Sum)
Number of institutions reporting	7,760	6,622	1,138
Total employees (full-time equivalent)	2,042,030	1,876,036	165,994
Total assets	$13,383,290,708	$12,130,344,322	$1,252,946,386
Cash and due from depository institutions	$1,027,872,264	$947,142,124	$80,730,140
Interest-bearing balances	$826,961,043	$760,512,459	$66,448,584
Securities	$2,641,606,691	$2,337,748,146	$303,858,545
Federal funds sold & reverse repurchase agreements	$449,899,189	$442,941,706	$6,957,483
Net loans & leases	$7,147,372,875	$6,382,566,517	$764,806,358
Loan loss allowance	$241,861,210	$228,071,696	$13,789,514
Trading account assets	$765,763,839	$764,426,276	$1,337,563
Bank premises and fixed assets	$119,495,573	$109,205,230	$10,290,343
Other real estate owned	$53,320,124	$47,273,890	$6,046,234
Goodwill and other intangibles	$394,095,796	$374,194,185	$19,901,611
All other assets	$783,864,357	$724,846,248	$59,018,109
Life insurance assets	$125,569,367	$114,340,842	$11,228,525
Total liabilities and capital	$13,383,290,716	$12,130,344,339	$1,252,946,377
Total liabilities	$11,858,729,304	$10,751,659,477	$1,107,069,827
Total deposits	$9,273,623,093	$8,372,919,384	$900,703,709
Interest-bearing deposits	$7,587,856,080	$6,738,949,931	$848,906,149
Deposits held in domestic offices	$7,738,035,014	$6,837,463,770	$900,571,244
% insured	55%	52%	88%
Federal funds purchased & repurchase agreements	$613,810,482	$564,776,932	$49,033,550
Trading liabilities	$318,488,252	$318,031,478	$456,774
Other borrowed funds	$1,155,829,374	$1,019,280,660	$136,548,714
Subordinated debt	$150,822,674	$148,776,280	$2,046,394
All other liabilities	$346,155,429	$327,874,743	$18,280,686
Total equity capital	$1,524,561,412	$1,378,684,862	$145,876,550
Total bank equity capital	$1,505,516,433	$1,359,854,247	$145,662,186

U.S. CU Profile

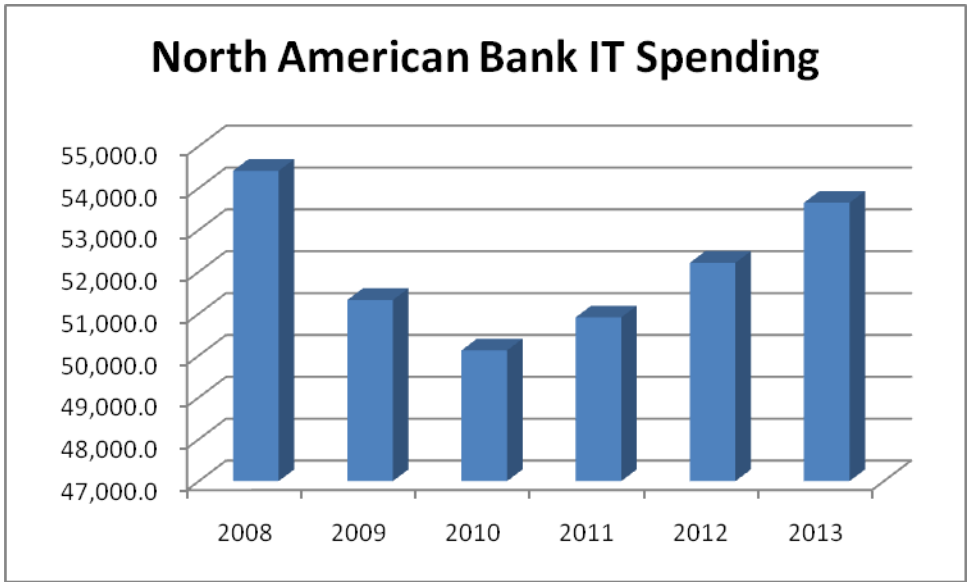
	U.S. Credit Unions					Asset Groups - Sep 2010			
Demographic Information	**Sep 10**	**2009**	**2008**	**2007**	**2006**	**< $5Mil**	**$5-$20**	**$20-$100**	**> $100 Mil**
Number of CUs	7,536	7,708	7,965	8,268	8,535	1,882	2,105	2,147	1,402
Assets per CU ($ mil)	122.1	116.3	103.4	93.1	85.1	2.1	11.1	46.5	565.5
Median assets ($ mil)	17.4	16.5	14.5	13.1	12.5	1.8	10.4	41.0	247.7
Total assets ($ mil)	919,994	896,824	823,612	770,100	726,208	3,913	23,423	99,758	792,900
Total loans ($ mil)	577,826	582,791	575,813	539,546	506,686	1,951	11,895	56,361	507,619
Total surplus funds ($ mil)	307,390	282,027	217,340	199,252	190,548	1,922	10,914	39,373	255,181
Total savings ($ mil)	790,718	763,341	691,765	646,820	615,303	3,252	20,128	87,491	679,848
Total members (thousands)	92,018	91,157	89,912	88,497	87,386	1,117	4,321	13,988	72,593
Growth Rates									
Total assets	3.8	8.9	6.9	6.0	4.6	2.3	3.9	4.1	4.6
Total loans	-1.2	1.2	6.7	6.5	7.8	-1.9	-1.3	-0.2	-0.5
Total surplus funds	14.6	29.8	9.1	4.6	-3.9	6.9	10.1	11.1	16.2
Total savings	5.6	10.3	6.9	5.1	4.2	3.6	5.5	6.2	6.4
Total members	0.7	1.4	1.6	1.3	1.4	-2.4	-0.2	-0.1	2.2
% CUs with increasing assets	70.4	80.9	74.7	57.4	45.5	55.2	73.6	76.5	76.8

Source: Credit Union National Association

B. Spending Projections

The challenges for bankers and the companies that provide their products and services are expected to continue in at least the first half of 2011, with bankers again looking at new regulatory requirements as the main driver of much of their technology spending.

IDC Financial Insights expects financial institution technology spending to increase by about two percent for 2011 to just under $51 billion. Others predict a slightly greater increase in spending as financial institutions move forward with projects that have been put on hold the last two years, but even the most generous estimate calls for growth nearing four percent, still putting it below growth of some years earlier in the decade. The writing is on the wall for slow growth moving forward as financial institutions move to more Software as a Service (SaaS), cloud-based and outsourced technology that leverages IT investments by lowering the amount of capital expenditures. In some cases, the on-demand technology costs less than buying and installing on-premise systems, enabling financial institutions to get more technology usage for each dollar spent.



Figures in $ millions
Source: IDC Financial Insights

In an effort to better manage IT expenses, banks can often get better pricing from vendors, according to ***Paul Schaus***, president of CCG Catalyst Consulting Group, Phoenix, Ariz. “There is a lot of competition among the major vendors because Wall Street is focusing on the revenue side. There are some crazy opportunities happening now on the buyers’ side.”

While he agrees that financial institution technology spending will grow in 2011, Bradway Research founder ***Bill Bradway*** said the type of technology spending will differ vastly from institution to institution.

“The individual profiles of the banks differ so much from each other that it makes it impossible to categorize the spending, said Bradway. “Wells is still integrating Wachovia

– that probably has another two years to run. So right now, Wells is sustaining two different platforms. Citibank is looking to consolidate on a common platform. What Citi is doing doesn't fit what U.S. Bancorp is doing. Union Bank of California is implementing a core systems replacement project. Citizens Bank (Providence, R.I.) is spending on a branch system."

Accordingly, it is hard to make sweeping specific predictions about how financial institutions will spend their IT budgets.

III. Spending Breakdown

A. Regulatory/Compliance Spending

The CARD Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Basel III Accords as well as pressure for ever-increasing transparency will continue to be top-of-mind for financial institutions in 2011.

The top 100 financial institutions will spend over $100 billion a year implementing risk governance frameworks by 2012, according to research from business advisory firm Deloitte.

“One of the big issues is regulatory change,” said Capachin. “But the rules for some of the regulations have yet to be written. So funds are being set aside for regulatory compliance.” But until the rules are written, which will likely be sometime in 2011, and financial institutions have some time to interpret the impact of those rules, those funds are unlikely to be spent. So any resulting technology investments are unlikely to come until later in the year or perhaps even in 2012.

Bradway adds that compliance technology vendors will be attempting to catch up once the Dodd-Frank rules are finalized.

Even though there is likely to be some delay before funds are disbursed for technology to support the new regulatory and compliance mandates, the impact of the new rules is looming for large and small financial institutions alike.

According to the 2010 Independent Community Bankers of America (ICBA) Community Bank Technology Survey, the top technology concerns are (multiple responses were permitted):

Issue	Respondents citing
Complying with regulations	82%
Protecting data and infrastructure	63%
Systems availability and recovery	61%
Detecting/mitigating fraud	57%
Adding value to the organization	44%

Sixty percent of respondents said their IT spending for compliance will increase. Fifty percent said their security spending would increase, and 49 percent said their risk management spending would increase.

“Risk reporting will accelerate,” Schaus said. “Bankers are looking at their systems and at how they can provide the necessary data.”

One issue, cited by Capachin, Schaus and several other industry experts is a comprehensive, enterprise-wide reporting system. One of the issues that kept regulators

and financial institutions themselves from recognizing, and perhaps limiting the credit problems of the last couple of years was that systems reporting risk in mortgage loans were not integrated with systems that reported risk for credit cards and other loans.

"The financial institutions have been using different databases for risk. The sources of data might be the same, but risk measurement for unsecured credit might be different than risk management for secured credit, so there were inconsistencies. Regulators want a single version of the truth," said Capachin.

Compliance has become such a daunting undertaking that ***Dan Holt***, CEO of Fort Collins, Colo.–based HEIT, expects an increasing number of financial institutions to outsource the compliance function, much as they do with payroll and other non-core competencies. With such volatility in today's regulatory landscape, institutions are better served partnering with a managed services provider to ensure a strong ongoing compliance posture and not just at examination time.

For example, Co-op Services Credit Union, a $365 million institution based in Liovonia, Mich., has engaged a consulting firm for managed regulatory and compliance services. The firm, which had previously provided regulatory and compliance consulting on an ad hoc basis, now manages these needs on an ongoing basis. "It's a more proactive approach," Thomas said.

As security needs grow, Thomas expects an increasing number of small financial institutions to follow a similar strategy.

B. Security Spending

Closely tied to the financial institution's regulatory-related spending will be security-related spending in 2011. Cybercrime is a multi-billion dollar problem and an issue that financial institutions have to defend diligently against because they are natural targets, Holt said.

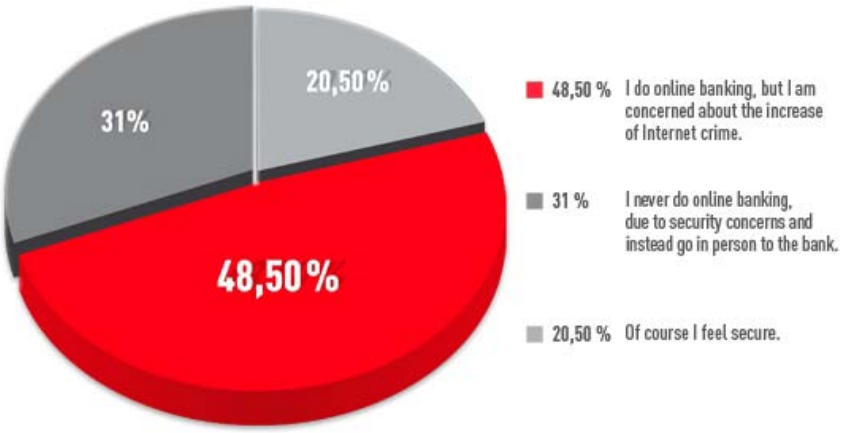
Norm Thomas, vice president of information technology for Co-op Services Credit Union, agrees. "Attacks attempting to get at non-public information are growing, particularly at this time of year."

One favorite tactic of fraudsters is to blast out phishing e-mails after a financial institution's closing hours on Friday, informing customers that their debit card has been compromised and requesting they call a specific number to provide information. At the other end of the line is a criminal ready to record all of the pertinent debit card details.

"People don't want to be without their debit cards at Christmas time," said Thomas, explaining why such deception can be particularly effective.

It is essential for financial institutions to maintain top-level security in order to maximize the use of their online banking channels. A recent worldwide survey from Ariva, an

antivirus and IT security firm based in Germany, shows that one in three people don't use online banking due to security concerns.



Source: Ariva

Javelin Research recommends offering free or discounted antivirus software to encourage more customers to use the online channel. A Javelin report also reveals that customers want an easier process for opening online accounts, a factor that ***Jimmy Sawyers*** of Sawyers & Jacobs LLC of Collierville, Tenn. cited as well.

Sean Banks, principal with TTV Capital, an Atlanta-based financial technology venture capital firm, adds that payment security is essential for banks that want to compete in the online marketplace. So online payments should occur through a hosted Web page using tokenization, providing better security than providing payment card information directly on a merchant's site.

Security attacks continue to become more sophisticated with "man-in-the-browser attacks," in which the malware appears as a legitimate part of the screen, and other sophisticated threats, according to ***Maggie Scarborough*** of FinServ Strategies, Baltimore, Md. "These attacks have become so sophisticated that you can no longer tell there's a problem. This is a serious problem and a huge driver of change as banks try to button up security for their online banking channels. The Web is a dangerous place."

Joe Spatarella, vice president of sales and marketing for Online Banking Solutions, Atlanta, said that financial institutions must employ secure browsers and an integrated single sign-on to help ensure security for online banking users. The single sign-on uses multi-layered security to combat various types of online fraud, which, Spatarella said, has grown to more than $1 trillion, and costs U.S. businesses more than $8 billion annually.

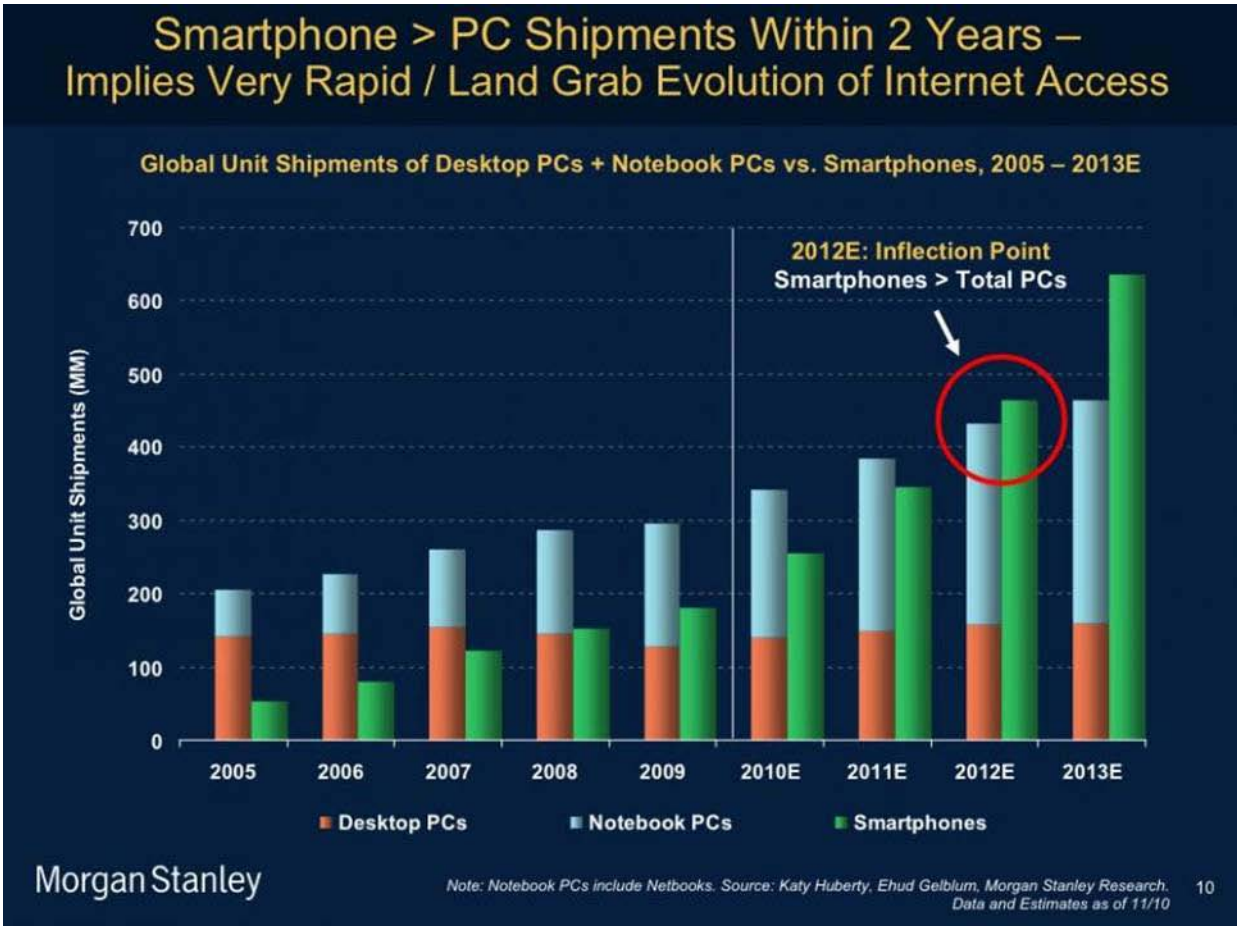
C. Mobile Technology

Mobile banking continues to gain buzz as consumers increasingly find smartphones and other handheld devices with online capabilities as integral parts of their daily lives. Consumers are looking to use these devices for everything from online shopping to

mobile wallets. According to ***Richard Crone***, CEO and founder of Crone Consulting LLC, the number of smartphones will soon outnumber the number of other cellular devices. Smartphone sales will also outstrip PCs by 2012.

"Mobile banking is growing faster than Internet banking," Crone said. "With a mobile device, everything you need is right in your hand."

"The smartphone is the new PC," said Sawyers.

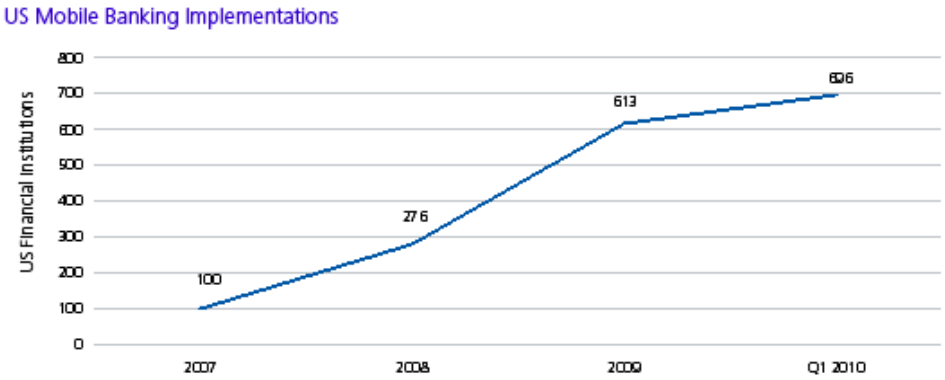


Source: Morgan Stanley

But for the most part in the financial arena, the consumer desire and the projected capabilities are far outstripping what is available now.

"Mobile seems to be something where financial institutions are using the lowest-cost solution," Capachin said. "The mobile spend right now is relatively small. There are a couple of vendors out there that are providing good solutions. This is not something a financial institution should develop on its own."

Capachin and other financial industry experts say financial institutions need to do a better job of marketing their mobile banking solutions.



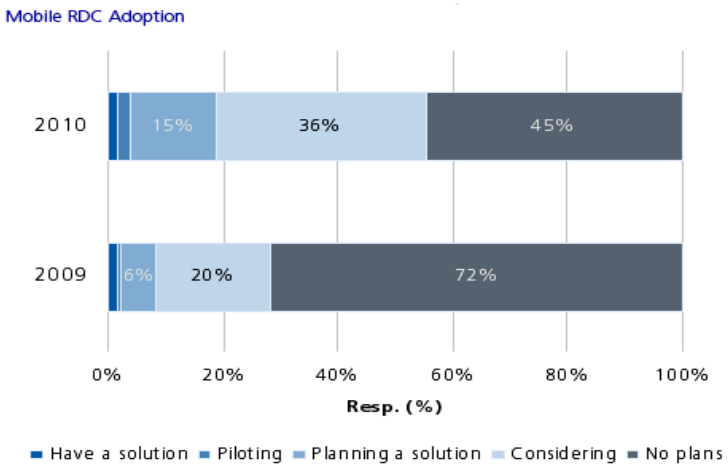
Source: Celent

According to Celent, an Oliver Wyman Company, the mobile banking market has changed significantly in terms of predominant technologies, features/functionality, and consumer adoption. Correspondingly, there has been a considerable shift in Celent's evaluation of vendors in this market, as some have kept up with market developments (or even led them), and others have lagged. The same can be said of financial institutions. While most of the larger financial institutions have mobile banking, many of the smaller ones have yet to embrace the mobile channel.

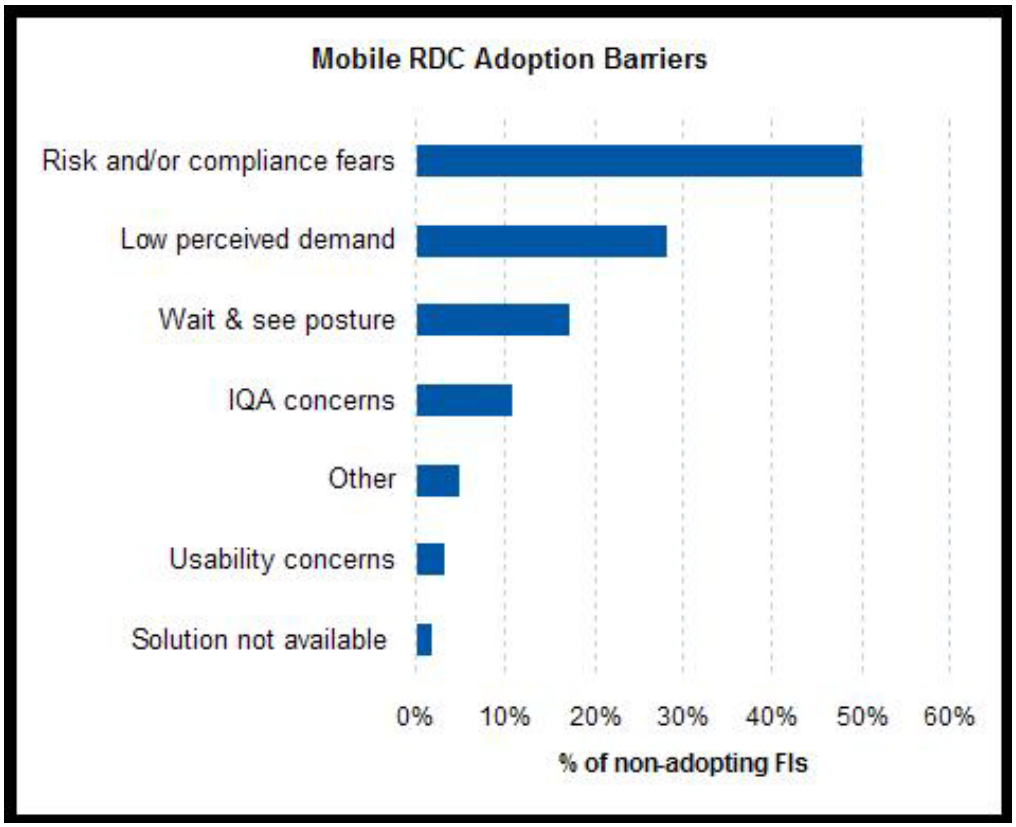
"Mobile banking isn't just cool, it's a risk management tool," said Sawyers. "In 30 seconds, I can check to see if a payment has cleared and check the balance on my account."

If there's any issue, he can call the bank immediately to stop processing of any fraudulent payments.

Mobile banking is evolving, with financial institutions seeking to add more functionality to their mobile applications. According to Celent, the number of financial institutions offering mobile remote deposit capture (using a smartphone to capture the image) doubled between the end of 2009 and the end of 2010.



Source: Celent



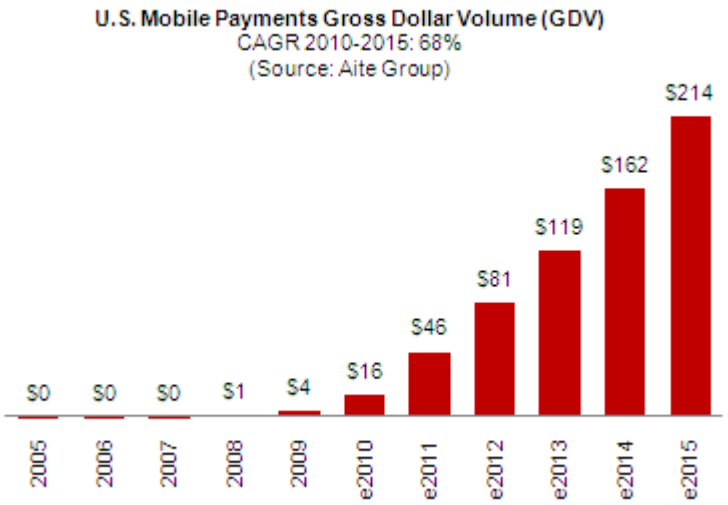
Source: Celent

Crone said that the largest financial institutions are moving to their second or third versions of mobile banking and that the ones that will be the most successful will be those that use mobile banking to drive mobile payments, which in the future could include using the mobile phone instead of magnetic stripe cards for purchases.

“Payments is where the innovation will come from,” Capachin concurs.

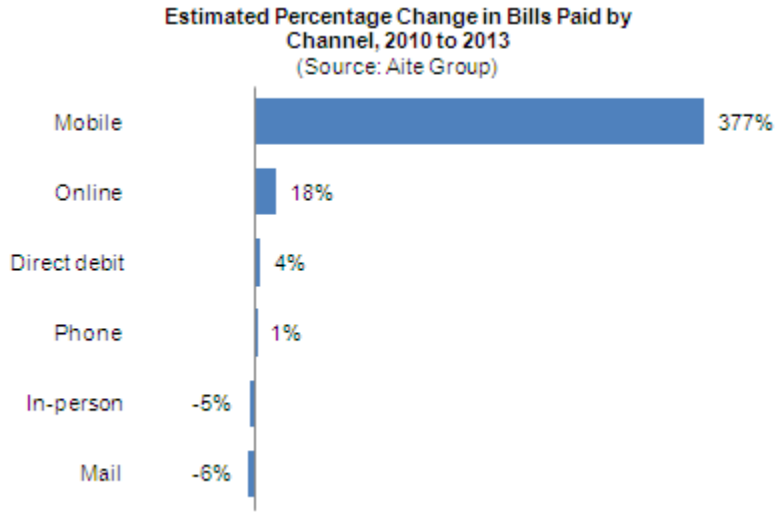
The banks will be competing with telecom firms in the mobile payments arena. Some of the major carriers are also developing plans to use the smartphone as a mobile wallet, partnering with Internet gateway firms to take some of the market share of the payments business.

Mobile payments will account for $214 billion in gross dollar volume by 2015, up from $16 billion in 2010 – a 68 percent compound annual growth rate between 2010 and 2015, according to Aite Group.



Source: Aite Group

Similarly, there will be a sharp growth in mobile bill payments in the next few years, according to Aite Group.



Source: Aite Group

Though the telecom firms have taken the first steps in mobile payments, some financial institutions recognize the opportunity as well. Bank of America plans to issue contactless stickers to its credit and debit card customers in 2011. Contactless stickers can be attached to mobile phones and other devices, so they can be used like a contactless card at the point of sale.

D. Channel Technologies

While mobile banking is one of the newer channels, it isn't the only one in which financial institutions will invest in 2011.

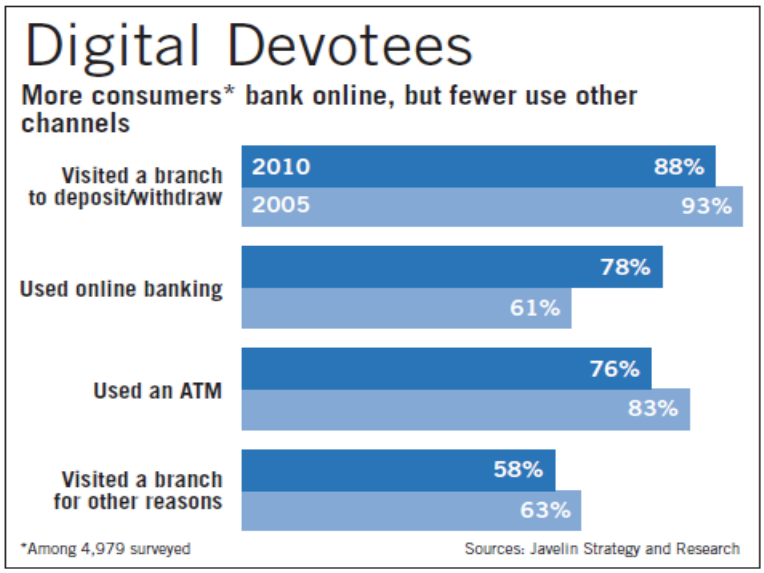
Internet banking sites have become very mature, according to Capachin. So Citi, Bank of America, JP Morgan and some other financial institutions are looking to revamp them to provide more content to their clients. The revised sites will include things like videos from their staff and other industry experts, offer more self-service capabilities, and the like.

“What they do will drive the rest of the market,” Capachin said.

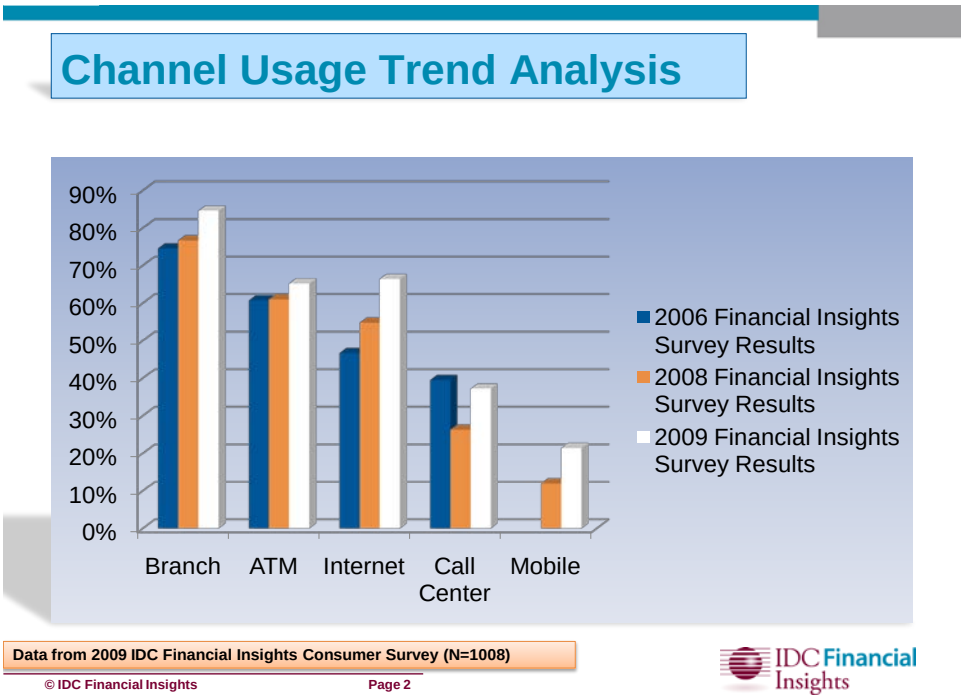
Javelin Strategy & Research, Pleasanton, Calif., estimates that the banking industry can gain nearly $8.3 billion in operational cost savings by migrating customers to online banking channels. About $6.9 billion in this expense would come from converting non-online customers to online banking and bill pay, enabling financial institutions to reduce costlier branch and call center transactions, decrease the number of paper statements, and reduce check and cash processing costs.

One way some large banks and small banks are attempting to reduce branch transactions is by pushing remote deposit capture into the consumer end of the market. This could drive more financial institutions to offer the technology at little or no cost to customers, who are latching onto it where available, according to Capachin. But she doesn’t expect the amount spent on remote deposit capture in 2011 to be very large in absolute dollar or percentage-of-spending terms.

Yet there’s no denying that remote deposit capture is becoming more of a mainstream technology. ***David Foss***, president of ProfitStars, a division of Jack Henry & Associates, Inc., said his firm now supports RDC solutions at more than 1,500 financial institutions and 155,000 business sites along with branch deposit capture for more than 2,250 financial institutions and 100,000 end users.



Source: Javelin Strategy and Research



Source: IDC Financial Insights

As branch use drops, so do the priorities of branch technologies in the typical financial institution's budget. According to Celent, discussion of "the branch of the future" has fallen by the wayside. In a November 2010 research note, bank analyst ***Meredith Whitney***, CEO of Meredith Whitney Advisory Group LLC, forecast that U.S. financial institutions will close more than 5,000 branches by mid-2011. She cited falling loan-to-deposit ratios, regulatory limits on fee income and other factors.

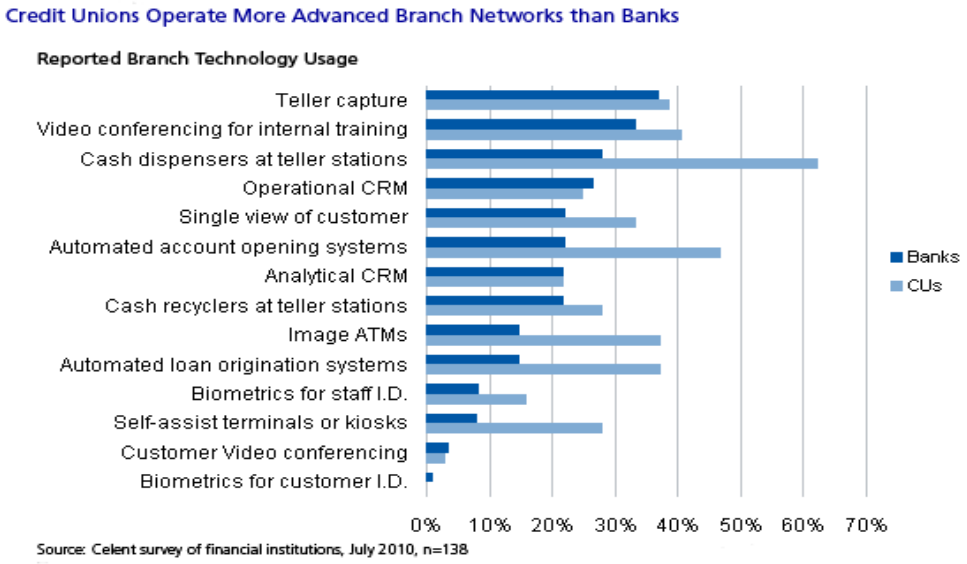
Branch technologies need to be updated in order for financial institutions to gain the most efficiency out of the brick-and-mortar. Co-op Services Credit Union, for example, uses self-service stations at its branches so that members can handle their transactions quickly without the need for tellers at every terminal.

According to Celent, the smallest institutions have less automated branch networks than larger firms. Midsize and large institutions operate multiple systems and are in need of platform consolidation prior to investing in more sophisticated branch automation systems. Larger institutions have been more apt to invest in transaction automation.

Michael Croal, senior director with Cornerstone Advisors, said more financial institutions are investing in branch capture technologies for deposit and for loan transactions. Eliminating paper not only increases efficiency, but also contributes to financial institution efforts to become more green. "While some are just setting their strategies, others are actually writing checks for the imaging equipment," said Croal.

For financial institutions to get the most of that technology on the loan side, most will have to re-engineer their lending processes from origination to closing, according to

Croal. Most of the legacy systems are configured for the movement of paper, not digital information.



Source: Celent

E. Community Bank Perspective

Community banks are looking at regulatory/compliance burdens that are more onerous than ever before in terms of cost.

"Compliance is the top challenge for community banks," said ***Andrew Greenwalt***, founder and CEO of Continuity Control, New Haven, Conn. "The challenge is very broad in that category."

Typically banks use separate systems for compliance with the myriad rules for the Bank Secrecy Act, Red Flags rules, Patriot Act and the host of other rules and regulations, according to Greenwalt. This means numerous silos of operation and high compliance expenses.

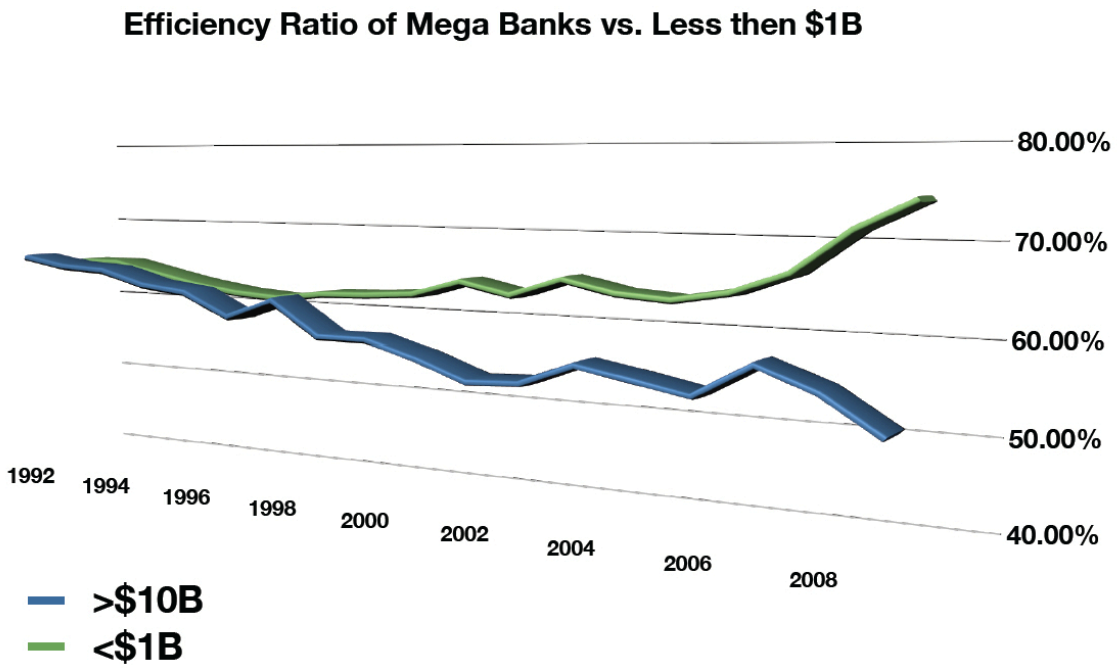
Yet Sawyers is hopeful that some of the regulations will be tweaked to offer some relief to community banks.

"I'm optimistic that community banks will be segregated as they should be from larger banks," Sawyers said. "We've already seen some of that with Sarbanes-Oxley Act compliance requirements as small, publicly-held community banks are now exempt from Section 404(b) of the Act. That change alone can save some banks over a hundred thousand dollars in compliance costs."

According to the ICBA Technology survey, the top technologies that community financial institutions plan to launch within the next two years are:

1. Mobile Banking
2. Document Imaging
3. Remote Deposit Capture
4. Online Account Opening
5. Server Virtualization
6. Customer Relationship Management
7. Social Networking
8. Voice over Internet Protocol
9. Electronic Statements
10. Video Conferencing

One of the biggest issues for community banks is the need to improve efficiency ratios, according to Greenwalt. Only a few years ago, it cost about the same for large financial institutions and small financial institutions to earn a dollar. But while the ratio has stayed relatively steady for the largest financial institutions at 50 cents on the dollar, the amount for community banks has risen sharply to nearly 80 cents.



Source: Continuity Control

F. Cloud Computing, Software as a Service

Operating in the cloud enables financial institutions to leverage their investments in technology. Rather than purchasing and maintaining hardware and software on premises, the financial institutions pay for the storage and processing power that they use on a periodic basis, sharply reducing capital expenditures. It is an extension of the concept of SaaS.

"Cloud and SaaS save time and money; institutions become very agile as technology and the market changes," said Holt. With cloud computing, a financial institution can add more (or just change) computing capacity in a single day than what it would take from an internal team in a year with on-premises system. The focus internally becomes strategic.

"Google is part of almost every conversation," adds Greenwalt. But the concept is still in its early stages.

According to a *Bank Systems & Technology/Information Week* study, 42 percent of bankers plan to deliver just one percent to nine percent of IT services over the cloud in the next 24 months. More than a third of respondents (37 percent) expect to deliver 10 percent to 25 percent of IT services over the cloud in the next two years.

Financial technology vendors use cloud technology as well in order to deliver their services at lower costs. For example, Online Banking Solutions uses cloud computing and virtualization technologies to scale up and down its services to its customers as needed.

"Public cloud providers are not the answer for most financial institutions because many have data centers scattered globally, where you have limited legal control and risk management. So a cloud customer does not know where data resides at any particular time. Such a scenario is not acceptable for financial institutions from a regulatory, security or risk standpoint," said Holt.

"The public cloud providers are great technology companies, but they typically are not very good service companies," Holt explained. "Banks want to be able to call someone if they have an issue with their service, like a loan process, security, or end user support. You need experts that understand the industry. You don't want someone who doesn't know what FedLine is."

But much of the talk of moving to the cloud starts with virtualization, according to Co-op's Thomas. He sees plenty of value in virtualization – the credit union is adding VMware across some systems in order to reduce software licensing costs – but he said that's as far as his or most other financial institutions are willing to go.

G. Social Media

Social media has moved into the mainstream, going from a business curiosity only a few years ago to an integral part of financial institutions' marketing efforts today.

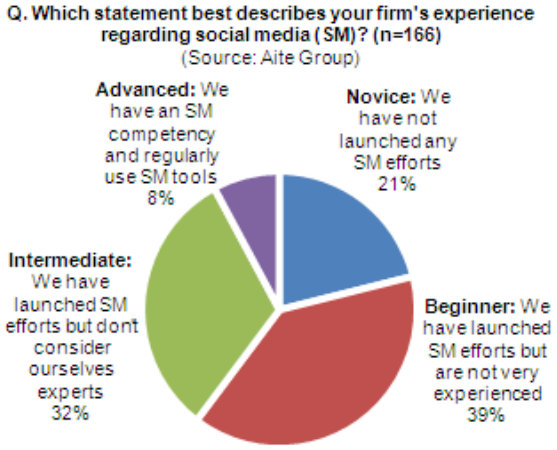
"By 2012, two-thirds of financial institutions will look to social media to increase customer retention, and nearly half will expect to generate revenue from their social media efforts," said ***Ron Shevlin***, senior analyst with Aite Group.

Most of those efforts are still in their infancy. According to Aite Group, 30 percent of financial services firms have no dedicated budget for their current social media initiatives, 90 percent of firms expect to have dedicated budgets by 2012, with many spending between six percent and 10 percent of their total marketing budget on social media initiatives.

Jegher thinks that Twitter might have value for some financial institutions, but sees little additional return from Facebook. More valuable, according to Jegher, might be blogs the bank provides to educate customers about the value of any financial institution programs.

Banks' social networking programs are succeeding where bankers avoid the "hard sell" and truly embrace the interactivity of the medium, Sawyers adds. "Banks should use social media to ask questions, inform, entertain, and educate. The user community will respond favorably if properly involved. Financial institutions headquartered in college towns have done well in this respect because they tend to better understand the dynamics of social media."

With the continued adoption of social media, financial institutions are learning hard lessons when it comes to monitoring the proper usage of these channels internally. While we're seeing a marked increase in business use, personal use continues to soar exponentially. "This means that your teller is likely on Facebook regularly and sending tweets," said Holt. "It comes down to a technology management concern and financial institutions need to start thinking about implementing social media usage policies to mitigate compliance and security risks."



Source: Aite Group

H. Integration

Investments in enhanced transaction systems are the best way for financial institutions to become more compliant as well as more efficient, according to Scarborough, who expects to see consolidations of payments management systems to more effectively handle wires, ACH, checks and other transactions.

Greenwalt expects to see more integration among compliance systems, enabling financial institutions to meet the requirements of various rules and regulations via a common technology platform.

Many financial institutions will also be looking to improve integration between their imaging and online banking systems, according to Scarborough. Loan systems also need better integration to be more efficient and to lower costs.

“Banks are going to have to re-engineer existing systems to make them more efficient,” Schaus said, adding that any re-engineering could take 18 to 24 months.

Foss said that financial institutions need technologies that will easily integrate with core systems, enabling banks to offer services such as account opening or mortgage origination without a lot of integration between the front end and back end.

I. Analytics

Several experts expect to see further investments in analytics as financial institutions attempt to maximize customer profitability, particularly in light of the regulations limiting fees for some services. TTV Capital’s Banks adds that improved analytics will help financial institutions offer better targeted rewards programs for debit cards and other products and services.

“With interchange fees being compressed, financial institutions want a way to drive new revenue opportunities around debit transactions,” said Banks.

So Banks expects to see many financial institutions adopt technologies which helps analyze consumer demographics, spending patterns and other related information to help offer targeted marketing and rewards programs that will spur customer debit card use.

Banks added that he sees a greater impetus for financial institutions to add rewards programs. Indeed, a Federal Reserve Bank of Chicago study released at the end of 2010 that shows credit cards that give cash back or offer reward points prompt consumers to spend more and accrue more debt. They found that just the initiation of a 1% cash rewards program yielded, on average, a $25 reward each month for the credit card company. It determined there was an increase in spending by $68 a month and in credit-card debt of $115 a month.

Analytics are expected to help financial institutions boost other areas of profitability as well.

“Banks need to manage vital performance indicators to improve profitability and provide better insight into business problems,” said Foss. But many of these performance indicators exist in separate silos across the financial institutions. To get quicker and more actionable information, financial institutions need consolidated reports of this information.

Foss added that financial institutions' profitability relies on careful analysis of business objectives and the development of strategies that can improve operations, competitive advantages, and financial performance.

"All financial institutions, regardless of their asset size or charter, typically generate the majority of their profits from a select group of customers," added Foss. "We believe the financial institutions that will weather the down economy and prosper during the next few years must pay careful, regular attention to the customers, officers, and products that contribute the most profitability."

J. Core Systems

"The number of core system replacements at financial institutions will slowly begin to increase due to necessity as well as pent-up demand and the desire from healthy banks and credit unions to take advantage of new market opportunities," said Christine Barry, research director with Aite Group. "To capitalize on the new business opportunities coming to market, it is essential that core vendors not only offer a broad portfolio of tightly integrated solutions, but that they implement a unified go-to-market strategy across their organization."

Core system replacements have started in Canada, according to Scarborough, adding that global core providers are picking up some market share from some of the traditional core providers. "The core providers here have to get better," said Scarborough.

Schaus expects to see more financial institutions going to outsourced core systems and hybrid systems combining outsourced and in-house core solutions.

K. Other Technology Spending

With the items above and concerns about the economy and revenues, spending on other technologies will be limited again this year.

Holt expects to see an increase in spending for online financial management technologies that would help customers (business and consumer) better manage their finances. Some commercial banks already provide such functionality for free, providing customers with better financial planning tools and providing the financial institutions with better customer "stickiness."

Similarly, on the commercial side, financial institutions are looking to provide customers with more advanced invoicing and accounts payable solutions, according to Scarborough. Combining the invoicing and payment components enables financial institutions to help their business customers be more efficient.

Financial institutions with global operations, like Citibank, HSBC and JP Morgan are looking at replacements of general ledger systems in order to move to the internationally accepted IFRS accounting system and away from U.S.-based GAAP, according to Capachin.

Another area that could see some significant investment is in Windows 7 operating systems. Many financial institutions held off on Vista due to some of its much-reported problems and due to tight technology budgets over the last couple of years. But Windows XP systems are becoming very long in the tooth and don't have some of the benefits of Windows 7, including better integration with some newer technologies.

But these "other" technology investments will only occur once the more pertinent needs are met.

IV. Featured Articles

Jimmy Sawyers
Sawyers & Jacobs LLC

Top Ten Trends Impacting Bank Technology for 2011

The 70's and 80's series of Reese's TV commercials showed two people accidentally colliding and mixing snacks with one exclaiming, "You got your chocolate in my peanut butter," while the other replied, "You got your peanut butter in my chocolate." Of course, the incident ended well as they discovered the two combined for a tasty new snack and the Reese's peanut butter cup was born. A snack tragedy turned to sheer happiness. In today's banks, the "chocolate" is consumer technology and the "peanut butter" is corporate networks. The consumerization of technology continues to introduce opportunities and threats forcing bankers out of their comfort zones into some uncomfortable decisions. In 2011, bankers making these tough decisions must balance security, convenience, profitability, and productivity. To paraphrase the Reese's commercial, bankers just might find two great technology platforms that work great together.

For your bank's strategic consideration, we present 10 predictions for the new year.

Prediction # 1 - The Mobile Workforce Becomes More Demanding
Employee-owned technology will be allowed to access corporate applications. One example already taking hold is smartphones as some firms are permitting employees to use their iPhones, BlackBerrys, and Droids to integrate with corporate e-mail with the understanding that when the employee is terminated the device will be wiped. Employers will offer "smartphone allowances" in lieu of buying and maintaining bank-owned phones.

The iPad will drive a whole new range of tablet devices that become more robust and business-friendly, eventually replacing laptops.

Challenge Question: Is your bank accommodating or stifling the mobile workforce?

Prediction #2 - Presentation Technology Gets Integrated
Board members will wonder why the technology they use at home is not present in their bank's boardroom. Across America, bank boardrooms finally get equipped with the latest presentation technology including large screen, high-def displays, LCD projectors, laptops, tablets, and wireless Internet access points. Many now have a hodgepodge of devices that don't work, lack connectivity, or have so much security applied from the local IT Dilbert that they are unusable.

Stationary, desktop PCs in boardrooms and underutilized smartboards will be thrown in the nearest dumpster. Uninformed and unskilled IT staff who say, "We can't do wireless because the regulators don't like it," will be on the unemployment line.

A wealth of technologies will combine to make meetings more interactive and effective.

Challenge Question: Is your boardroom technology up-to-date?

Prediction #3 - Security Gets Specific
No bank wants to be involved in a Wikileaks-type incident. Bankers have learned by now that effective security requires a multi-layered, multi-pronged approach that considers technology and people. Continuous security monitoring, proper system hardening, and a variety of anti-malware and policies have become fairly standardized. However, security awareness in most banks remains a hodge-podge of generic training and contrived admonishments, often not specific to banks. Such training will be replaced by bank-specific, targeted, security awareness education and related employee testing.

Opinions regarding acceptable use of technology can vary from person to person depending on age, background, and values. What is considered acceptable for some may not be acceptable for a bank. Employees must be educated on the perils and pitfalls of security threats.

Security budget dollars spent on security awareness will be the best money a bank can invest for reducing information security risk and preserving a bank's most valuable asset…customer trust.

Challenge Question: How effective and bank-specific is your bank's security awareness program?

Prediction #4 – Mobile Banking Becomes a Game Changer and Bank Switcher
As of September 2, 2010, 82 percent of American adults owned a cell phone, BlackBerry, iPhone, or similar device (Source: Pew Internet and American Life Project). Mobile banking is a game changer and a service for which people will switch banks. It is also an excellent risk management tool, allowing customers to monitor their accounts more frequently and easily than traditional Internet banking. This is a big benefit given the current levels of cybercrime and ACH fraud. Morgan Stanley Research projects more smartphone than PC shipments in 2012, an inflection point that illustrates the power of

the smartphone and its potential business impact. 4G wireless broadband will allow more robust applications to be delivered via smartphones.

There are more mobile phones than credit cards on the planet. Google's Nexus S smartphone will run the Android Gingerbread operating system and will feature near-field communication (NFC) chips which will allow users to make mobile payments directly from their smartphones without having to pull out plastic. This could be the standard that fires up the ovens of mobile commerce and brings the convenience promised for years.

Challenge Question: What is your bank's mobile banking strategy?

Prediction #5 – Social Media Changes Communications and Payments
Social media will continue to expand as bankers who started a Facebook page in 2010 will take it to the next level in 2011 and learn about the power of Yelp, YouTube, and other social media sites. Facebook will change communications as we know it as they introduce seamless messaging where users can talk to friends via SMS, chat, email, or the messages feature of Facebook, making such interaction more like a conversation than a message.

Watch out for the virtual currency, Facebook Credits, already available for purchase in the physical world at Best Buy and Wal-Mart, to be the "camel's nose under the tent" for this 500 million strong user community. Could Facebook Credits become a global currency someday? Ponder that, New World Order conspiracy theorists!

Facebook founder, Mark Zuckerberg was named *Time* magazine's "Person of the Year" for 2010 for "creating a new system of exchanging information" and "changing how we all live our lives." Facebook will continue to evolve in 2011, changing your bank in the process.

Challenge Question: Is your bank prepared to take its social media strategy to the next level?

Prediction #6 – IT Risk Management Expands and Becomes More Complex
Banks that have been squeaking by with a very basic IT audit or a simple vulnerability scan will be required to have annual, full-scope IT Audits and Network Vulnerability Assessments that include penetration testing, internal and external vulnerability scanning, and social engineering tests. Examiners will demand more thorough reporting from firms performing these audits and assessments. Out-of-work website designers and computer jockeys masquerading as IT auditors and network security specialists will be exposed. Additionally, firms that only assess network security and do not audit banking applications such as wire transfer, ACH, online banking, core processing, imaging systems, and other key business functions will be required to up their games.

Expect Enterprise Risk Assessments to be the next regulatory mandate. Testing of the risk assessment's mitigating controls, by the bank's internal and external auditors, will be required.

Challenge Question: Is your bank getting a full-scope IT Audit and Network Vulnerability Assessment, or just a quick and dirty review?

Prediction #7 – Websites Undergo Extreme Makeovers

Bank websites, many stuck in the 1990's, will be revamped to be more interactive and functional. Superfluous stock photos of families holding hands while running through fields of daisies will be replaced by truly useful online forms, videos, and relevant information. Taking advantage of smartphone screen real estate, banks will develop mobile-optimized websites that render properly on smartphones and offer a clean interface to bank information.

Bankers will also take a harder look at their Web site hosting providers, demanding to know where their sites are really hosted and proof of adequate security, for the website and the website host. Many bankers will be surprised by the answers which will motivate more to move website hosting in-house or to more capable and secure providers.

Challenge Question: Where is your website hosted; is it secure; and do you control your content?

Prediction #8 – Bankers Get to Know Their Technology Providers

"I KEEP six honest serving-men (They taught me all I knew); Their names are What and Why and When And How and Where and Who. I send them over land and sea, I send them east and west; But after they have worked for me, I give them all a rest."

– Rudyard Kipling

Bank technology providers won't get much rest as vendor management moves beyond the question, "Do you have a SAS 70?" for outsourced providers, and requires more due diligence, documentation, and oversight. According to the latest ICBA Community Bank Technology Survey, 50 percent of banks have in-house core processing and 50 percent are outsourced. 80 percent have been on the same core provider for five years or more. Accordingly, core provider M&A activity will slow in 2011 as the major providers take stock of their redundant offerings and begin to sunset the weaker, older, less profitable systems. System selection due diligence becomes more critical for bankers not wanting to buy a system that might be on death row.

Wise bankers will ask their providers: ***What*** services do you provide for our bank (are they critical and do you store customer information or process customer transactions)? ***Why*** should we do business with you (what value do you provide)? ***When*** does our contract expire (so it doesn't renew automatically without us reviewing our options and giving proper notification)? ***How*** do you fit into our technology strategy and how

financially stable are you (can we count on you to support our strategic goals and be around long enough to see them attained)? ***Where*** are you located (P.O. Box or physical address)? ***Who*** are you (we want to meet your owners/managers, especially if they are not evident on your website)?

At the same time, banks will increase collaboration with trusted providers, demanding value but recognizing quality and rewarding loyalty.

Challenge Question: How well do you really know your technology providers?

Prediction #9 - Networks Transform Yet Become More Cost-Effective and Useful
As noted in past year's predictions, cloud computing, virtualization, wireless, and remote backup will all continue to play a strong role in banks' network design plans. Instead of blindly buying more servers and stringing more cable, network administrators will be challenged by more IT-savvy executive management to find better ways to accomplish the same goals.

Private, public, or hybrid, cloud computing will find a niche with banks where the business case is made through proper due diligence and planning. Reasonable assurance of customer information security will be required before bankers make the leap to the cloud.

Voice and data networks have been converging for years. In 2011, who needs a physical telephone system? Services like Skype and Grasshopper combine to give one a virtual phone system. With a wireless headset or USB-attached speakerphone, one can have all the functionality of a physical telephone system without the overhead. Currently, this might only be feasible for very small organizations but as we all grow accustomed to such communications, the old desktop telephone set will go the way of the 8-track tape player.

E-mail is passé to the younger generation as they move to other methods of communication such as texting. Adults who text send and receive about 10 texts and five voice calls each day. But, teens who text send and receive about 50 texts each day. Services like GroupMe will allow people to send group texts and reach many people at once.

For 2011, successful bankers will take a fresh look at their networks' correlation to productivity and profitability.

Challenge Question: Is your network ready to be re-designed?

Prediction #10 – Bank Failures Plateau Leading to Increased IT Spending
Despite pessimistic prognosticators' predictions of another significant wave of bank failures, we believe bank failures reached a plateau in 2010 and brighter days lie ahead. The FDIC will turn its focus to implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Regulators and bankers will collaborate to save troubled

institutions through structured acquisitions. Clearly, some struggling banks will fail in 2011 but not at the rate we saw in 2009 and 2010, and nowhere close to the number of failures in the late 80's and early 90's which peaked at 531 failed banks in 1989 and represented a greater cost to taxpayers than the most recent crisis.

The FDIC's Corporate Operating Budget for 2011 actually represents a slight decrease from the previous year. The Troubled Asset Relief Program (TARP) is now expected to cost only a fraction of original estimates, with most of that cost associated with the bailout of AIG, the auto industry, and grant programs to help avoid foreclosures. Other transactions in the program yielded a net gain of $20 billion for taxpayers…more signs that the banking industry is moving in the right direction.

A more optimistic outlook will lead to increased IT spending in the areas of compliance, security, network infrastructure, risk management, and mobile banking to name the top five budget categories (Source: ICBA).

Challenge Question: Has your bank addressed all past regulatory examination findings and recommendations?

Summary

Many organizations live in the past, spending more time reminiscing than planning; more time wallowing in past failures or boasting of past success than thinking of future innovation. What is the culture at your bank? Which is stronger? Your memories or your dreams? After a few years of nightmares in the banking industry, it's time to dream again. We wish you a 2011 of dreams fulfilled.

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.* To learn more, visit www.sawyersjacobs.com, call 901.487.2575, or email jsawyers@sawyersjacobs.com .


Jeanne Capachin & Michael Versace
IDC Financial Insights

IFRS, Dodd-Frank, and the Road to Enterprise Financial Management

Looking ahead to upcoming accounting changes and regulatory conditions, IDC Financial Insights recommends that financial institutions start assessing their information architectures, data models, reporting systems, and technical platforms and begin to plan for a more cohesive strategy that integrates enterprise finance and risk functions.

As we enter 2011, financial institutions will continue to invest in siloed, business-directed solutions that sacrifice enterprise transparency and integration for process-related feature and function. This focus on purpose-built, best of breed solutions reinforces a business-line centric, rather than enterprise-wide financial management culture. With accounting and regulatory change on the near horizon, financial institutions have an opportunity to make strategic change, rather than just focus tactically on becoming compliant with the latest requirements.

The typical efficient, well managed tier one North American institution uses a hundred or so best-in-class software applications to run its business. A tier one institution that has not aggressively consolidated or sun-setted applications, that has grown by acquisition without a well executed application portfolio management strategy, and with business-led IT decision-making, may have more than a thousand software applications or instances supporting the business. This approach to technology reflects the organizational dynamics and business needs of financial institutions pre-financial crisis. As we exit the crisis and require more controls, more transparency, and more flexibility, this type of infrastructure becomes an impediment.

Driven largely by external factors and the need to continue to innovate and reduce complexity in IT systems, there's a great opportunity to modernize and consider enterprise financial management and a strategy to integrate across platforms the functions of traditional financial management, financial performance and control, risk management, and compliance reporting. Institutions must achieve enterprise-wide financial management to effectively adapt to upcoming changes - including IFRS, convergence of US GAAP financial reporting, a dozen or so FASB proposals, the Dodd-Frank bill, and an intense focus on risk management improvement.

The big idea behind enterprise financial management is the notion of “compliance-centric design” – where business processes, data models, application functions, and policies are designed with accounting, control, and risk requirements built in at the transaction level. For example, opening a new line of credit can spur new accounting entries, changes to counter-party and credit risk calculations, and reports to regulators. In a compliance-centric design a single set of data, policies, and rules are used to trigger financial, risk, and management reporting, along with the financial entries and indicators that demonstrate the use of required control procedures.

Enterprise financial management, as a shared service, has four primary pillars:

- A center of excellence that works with business units, product groups, corporate administration, IT, and operations to advocate a set of policies, technologies, business processes for finance and risk management.
- An integrated data model, with a single “golden source” of finance and risk data used for analytics and reporting
- A unified, multi-layered business architecture supporting the data model for transaction and data integration, analytics, end-user collaboration, and enterprise reporting.
- A standard set of metrics and measurements

Financial institutions have adopted a shared services approach in other operational areas, and most would agree that it reaps benefits in efficiency/cost control, knowledge management, standardization, compliance and more accurate reporting. Where financial institutions need to focus their efforts now is in the 2nd, 3rd, and 4th pillars – unified architectures, common data models, metrics, and the flexibility to adapt to change, known or unknown. Most institutions would agree that these are unmet needs and an improved approach would generate additional value in terms of operating efficiency and risk avoidance.

Looking specifically at accounting changes, there are broad differences between US GAAP and IFRS which will be resolved – either with a big bang replacement, or more likely, by gradual convergence of standards. Regardless of the process, change is underway, and it is a matter of intense interest by U.S. financial institutions. This will be a large undertaking for financial institutions, who can either focus tactically on finance, risk and compliance adjustments, or take the opportunity to transform their operations. According to SEC estimates, an average company can expect to spend 0.125 – 0.13 percent of revenue just to achieve IFRS compliance. IDC Financial Insights believes that this estimate is much lower than what most financial institutions will spend. When European financial institutions converted to IFRS they had a narrower compliance time line requiring most to focus on just getting to compliance, rather than any financial transformation projects. Even with this narrow focus, most found they underestimated the effort – both in terms of cost and time. For example, it was typical to create initial financial statements post-conversion with manual work-around. This is similar to everyone's recent experience with Sarbanes-Oxley – a much smaller effort than we are facing now, but actual spending turned out to be about three times higher than initial estimates.

A closer analogy for the type of effort required to adapt either US GAAP convergence or full IFRS adoption is the recent effort by large banks to comply with Basel II. IDC Financial Insights estimates that North American banks spent about $2B per year over five years on Basel-related IT investments, with smaller investments continuing into the present as planning continues to support Basel III recommendations. For some institutions, these investments to achieve Basel II compliance will provide a foundation to build upon for upcoming accounting and regulatory change.

To embrace financial transformation and achieve enterprise financial management, there are natural allies within the institution. There are also projects already underway that can provide a foundation for enterprise financial management. Projects that can be leveraged to support enterprise financial management include Basel II (and Solvency II) data warehouse projects, Dodd-Frank compliance initiatives, data architecture designs, and the continued investment in service architectures.

The CFO's most important organizational ally in the drive toward enterprise financial management is the chief risk officer (CRO) who is probably already beating the drum for investment to support enterprise risk management.

Enterprise risk and financial management are completely complementary disciplines– but require that the CFO and CRO agree to a common approach supported by a single set of enterprise data. This single truth of data is not a clear mandate yet from regulators, but it is certainly the end game that they are steering institutions toward. The second important ally, and the one that can deliver the architecture and solutions needed by the CFO, CRO, and regulators, is the CTO or CIO. Beleaguered IT organizations have been implementing and maintaining business-led IT projects, but were the first to recognize that transparency, consistency, and controls have been sacrificed along the way.

However, many CIOs have failed to focus on core principles of data and information management. As such, many institutions are information landfills, with duplicative, redundant data spread out across official and unofficial data repositories in multiple business units.

While many IT organizations have led efforts to adopt service-oriented architecture, employ rules engines, and develop consistent data models to bridge common requirements across siloed operations, many organizations are still left with disparate, disconnected systems and workflows. As such, CIOs are an ally that CFOs can count on as they move toward enterprise financial management and develop an approach that can meet the needs of all their constituents.

As institutions weigh the pros and cons of financial transformation and a coordinated approach to financial, risk, and regulatory change – the following benefit should be kept top of mind. There are simultaneous and similar activities within large institutions to adapt to change – coordinating these activities will achieve better results. An enterprise-wide approach may seem daunting, but without internal consistency, large, complex

institutions are impossible to manage. Enterprise financial management will expand the scope of any of the projects underway now, but will provide a stronger foundation for financial performance, risk, and management reporting across the institution going forward.

Michael Croal
Cornerstone Advisors

Bank Spend Trends in 2011 and Beyond: Document Imaging and Payment Cards

As banks look to squeeze every nickel of efficiency out of their operations and recover revenue lost from Reg E overdraft rules and Sen. Richard Durbin (D-Ill.), two areas may be ripe for picking.

DOCUMENT IMAGING
Internally, leveraging the enterprise content management ("ECM" or document imaging) platform and migrating processes to image-enabled processes is time and money well spent for a bank's long term health. Although typically fraught with upheaval, gnashing of teeth and general hand-wringing, it is well worth the effort. Getting into a position to grow and not add staff is a good place to be. Sure, there might be some opportunities for headcount reductions, but that is not the long term benefit.

Most banks have already invested in some type of document imaging technology for checks and signature cards. A good many are using the system to also store images of loan files. But the move to image-enabled processes, especially lending processes, is severely lacking.

Here are a few reasons document imaging and image-enabled workflows are so painful, especially with lending:

- Existing processes must be reviewed, and tough questions asked, like, "Why the heck do we do that?"
    - Just this exercise alone will cause hackles to rise faster than a new immigration law.
    - "We've always done it that way" or "Remember that one time when… " are not acceptable reasons to continue unwise and/or duplicative steps.
- As decision points that are manual start to be automated, jobs will be threatened.
    - No one likes to feel his or her function can be replaced by a machine, although often it can.
- Processes often cross departmental lines, and turf battles will ensue.
    - When a group that is expecting paper is told they will be receiving images, it better not be the day before go-live.

- Being able to electronically manage production throughput will shine a bright light on under-performers.
    - Managers will ask supervisors why they did not see this before.

The truth is that most departments would welcome a paperless operating environment. But once they understand the process changes that have to occur, the pushback begins.

PUSHBACK POINT #1 – Ancient engrained and trained processes will absolutely change…finally

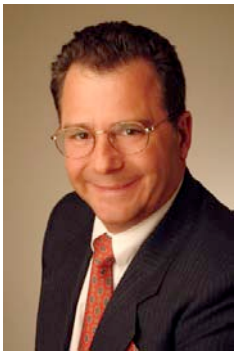
This is that process re-engineering project you always thought you needed but never had a reason to implement. A creative process designer will be able to configure the best of the bank's existing process to be smooth and automated and help toss out redundant or wasteful touches.

PUSHBACK POINT #2 – Resistance to change
Even once the new, image-enabled, automated process is built, tested, piloted, trained and rolled out, there will be the curmudgeon that refuses to adapt. At this point management must step in and evaluate if the profit contribution of said curmudgeon warrants a process detour or some extra help to conform to the standard.

PUSHBACK POINT #3 – Foreseeable rollout glitches are fear-mongered into the new norm
Any time a technology change as major as automated, image-enabled processes are introduced to replace manual, paper-based processes, there will be hiccups. Nothing insurmountable, but the noisemakers and rabble-rousers will cry, "The sky is falling!" Pay them no heed.

PAYMENTS
With the new, proposed Federal Reserve rule that caps debit interchange at 12 cents, issuers greater than $10B in assets certainly have a high hurdle to get back to even. One item the Fed did not address was the lift for enhanced debit fraud technology. But if we can assume there will be some lift, say 3-4 cents per transaction, it is 25%-33% more interchange per transaction for investing in enhanced fraud technology. This may be the push needed for U.S. issuers to adopt the EMV (short for Europay, MasterCard, Visa) chip and PIN standard, assuming that is what Congress and the Fed intend to deem "enhanced."

So a possible spend area in 2011 and 2012 would be for plastics that support EMV. This will be significant for banks that want to do instant issue of EMV; a little less so for issuers that go through their current plastics provider. And it goes beyond just the embossing technology. Systems will need to be upgraded to take advantage of the advanced security offered by these cards.



Richard K. Crone
Crone Consulting LLC

U.S. Banks Racing to Catch Mobile Wave

To match the progress of Europe and Asia and get a bigger piece of the transaction pie – the United States must act now.

In Europe, some 12 million people use their cell phones for financial self-service functions, compared to only 10 million in the United States. And that gap is expected to increase. Of the estimated 200 million customers worldwide that will use mobile banking by next year, Japan, South Korea, and-soon-China will have the most (41%), followed by Western Europe (22%) and North America (12%), according to Juniper Research ("Mobile Banking: Strategies, Applications & Markets" reports for 2008-2013 and 2010-2015).

Moreover, in technologically sophisticated countries such as Japan, mobile technology has transformed the service experience. For example, NTT DoCoMo's FeliCa service enables more than six million Japanese consumers to use the near field communications (NFC) technology equipped in their phones to activate purchases at retail stores, train stations and many other points of sale. NFC technology in the United States faces a number of challenges, from the hardware upgrades required on phones and the point of sale, to the coordination of numerous competing/collaborating entities. But banks need not wait on NFC to implement a market-moving mobile strategy.

Three Waves in Mobile Financial Services

To achieve mobile market share-and revenues-financial institutions need to pursue strategies that target the three waves in mobile financial services: mobile self-service, mobile payments, and mobile marketing.

Mobile self-service describes a continuum from reducing the cost of doing business to relationship building to creating new lines of business and is used to build the bank's enrolled base of customers. It is the basic requirement for mobile payment and mobile marketing. Mobile payments could include NFC "tap and go" technology, perishable codes from text messages, expedited remittances to a service provider, or a host of disruptive new technologies. Mobile marketing, or really mobile self-marketing, is personalized opt-in communication such as location-specific offers, electronic coupons, alerts, or loyalty program updates.

To capitalize on these three waves, banks and financial institutions must:
1. Re-engineer information delivery wherever possible
2. Build and strengthen their enrolled customer base
3. Integrate payments with merchants' retail mobile applications, ideally without deploying new hardware or other requirements.

Mobile Information Delivery
The need for mobile self-service is most evident at the contact center, where the volume of customer calls has increased despite increased use of company Web sites to share information. Financial institutions must analyze why customers call, and then re-engineer the information delivery for the five to 10 most frequent queries, harnessing the unique two-way communications channels of mobile: voice, text, mobile browser, apps and more.

Because debit cards are now used in more transactions than either cash or credit cards, customers are increasingly calling their banks to learn their balance. Getting the agent out of these transactions is important for financial institutions. The cost for a person handling a call is $3 to $15, but an automated system costs only three to thirty cents per call. A proactive alerting functionality can satisfy most customers' needs before they make the phone call at all. Bank of America, for example, realized an annual savings of $110 million by deflecting calls to the various mobile self-service channels. And that's just one part of the Return on Investment (ROI).

ROI is built on call-deflection initially, but the real ROI will come from enabling mobile payments and self-marketing at the physical point of sale. That's the single largest market opportunity in mobile commerce, namely the $6.2 trillion dollars spent at the physical point of sale (POS) in the U.S. And up to 80 percent of banks' noninterest income comes from card-based payment services. This is the market banks need to extend, protect, and grow.

The One Who Enrolls is the One Who Controls
The essential requirement for mobile payment and self-marketing is enrolling customers' cell phone numbers. And so far, banks have been slow to move, sometimes not even prompting for mobile credentials in new account applications or other customer service interactions. Automatic capture is not routine, and many new account application forms don't yet have a field for the mobile number. This is the case even though one-third of households across all demographic profiles no longer have landlines and college dormitories don't have plugs for landlines. Some banks, even if they collect customers' cell phone numbers, can't record them as such in their central information files or CRM systems.

If banks want to have a serious mobile strategy, they need to turn on their automatic number identification, or ANI, system, then confirm the customer's mobile number and offer incentives for the customer to opt in when they field calls at their contact centers. If they don't, other companies are eager to own that relationship. Right now, for example,

only the wireless carriers have a cell phone number for every customer – and thus, wireless carriers pose the biggest threat as well as opportunity to banks for implementing mobile payments.

These steps – capturing customers' cell phone numbers, verifying them, and persuading customers to opt in – are critical for the future of mobile commerce, because "the one who enrolls is the one who controls." Simply put, the company that enrolls the customer, gets the business: controlling the interaction, the transaction, and the upside potential.

Some big U.S. banks are moving aggressively now – Bank of America, for example is enrolling 150,000 new mobile customers per month. Chase is heavily promoting its mobile Remote Deposit Capture function in nationalized television commercials. And the basic equipment is in place. Unlike popular adoption of the Internet, where modems, phone lines, and computers had to be acquired, cell phones are already in customers' hands with autofocus cameras and many other capabilities that can be harnessed for mobile payment. By the end of next year, there will be more smartphones in use than non-Internet-ready feature phones.

While banks may be tempted to wait for NFC deployment for mobile payments, they should be aware that retailers will fight to protect their "friendly tenders" and will be reluctant to bear the cost of NFC hardware at the point of sale. It is likely that disruptive new technologies, slated for release in 2011, could make NFC obsolete. Banks seeking a role in the unfolding mobile commerce ecosystem must deploy solutions that leverage the computing power and full capabilities of the smartphones that are already in the hands of their customers. Solutions are available today that require no new hardware for merchant participation, enable strong authentication and create a closer bond between bank and customer. Banks who stand on the sidelines risk disintermediation by new entrants to the payments system; not only the wireless carriers but Google, Facebook and PayPal.

Richard K. Crone is the Chief Executive Officer and founder of Crone Consulting, LLC, an advisory firm for financial institutions, banks, merchants, billers, processors, and investors on channel optimization, electronic payment and mobile customer self-service strategies. Located in San Carlos, California, Crone Consulting LLC has done an exhaustive review of more than 100 companies both domestic and abroad, and detailed due diligence many of the largest investments, mergers and acquisitions in the mobile commerce space. Crone can be reached at 650-740-5239 or email at rcrone@croneconsulting.com.