

The Top 10 Companies and Technologies of 2009

Innovators 2009

mFoundry

Starbucks Card Mobile

Bank Technology News | December 2009

One of the most significant recent innovations in mobile payments was announced in September when [mFoundry](#) teamed up with [Starbucks](#) to introduce an iPhone app called Starbucks Card Mobile. The Starbucks program, which is being field tested at 16 Starbucks locations in Seattle and Northern California, utilizes a 2D bar code system from mFoundry which enables latte drinkers and other customers of the Seattle-based chain to pay for their orders using mobile phones at the point of sale.

Starbucks customers are testing the application using [Apple Inc.](#)'s iPhones and iPod Touch devices to pay for items using a checkerboard square image on their screens. The images perform like standard bar codes and work with all Starbucks prepaid cards. Starbucks customers can reload cards and check balances while standing in line.

The Starbucks partnership "is very relevant to banks because it shows an ability to leverage this technology into other vertical markets," says [Drew Sievers](#), co-founder and CEO of Larkspur, CA-based mFoundry, which also counts [Citigroup](#), [BB&T](#), [PNC Bank](#) and [Zions Bank](#) as customers.

[Sievers](#) says the Starbucks deal represents the first national deployment of a mobile gift card that delivers real-time balance inquiries, real-time transaction histories, the ability to consolidate multiple gift cards from the same merchant, reload and auto-reload functionality and pay at the point of sale capability. mFoundry's elegantly simple 2D technology also winnows down the multiple participants needed to execute a typical near-field communications transaction to just mFoundry and the merchant, Sievers adds. He says the Starbucks deal is the first of other merchant agreements mFoundry plans to land by the end of the first quarter.

"One of the things I like about the company is that they're finding ways to exploit going beyond mobile banking to mobile payments," says [Mark Schwanhausser](#), an analyst at Javelin Strategy & Research in Pleasanton, CA. "Many banks see the big payoff from mobile banking to mobile payments. The bigger picture plays are going to be in mobile payments."

IBM

ZTIC

Bank Technology News | December 2009

There seems to be no online banking security regimen that's completely impervious to penetration by fraudsters, with attacks on business accounts and ACH fraud the latest vector to fall prey to massive compromise. IBM's ZTIC (Zone Trusted Information Channel) hardware security device offers respite from the type of man-in-the-middle and man-in-the-browser attacks that are currently plaguing business banking accounts.

The ZTIC plugs into a computer's USB port, requiring no driver installation. When the user opens a Web browser to connect to online banking, ZTIC creates a pass-through proxy connection to the bank's pre-configured Website. From this point on, any data sent by the user to the bank passes through the ZTIC and is displayed on its small screen. Users are prompted to "OK" or "Cancel" transactions by pressing a button on the ZTIC. The SSL session is protected because the keys are maintained on the ZTIC, rendering any PC malware ineffective.

"The only apparent drawbacks are the high cost per client of the device, and the fact that ZTIC does not prevent operating system attacks, like kernel or BIOS attacks," says [Dominic van den Ende](#), whose research paper, "Online Banking: Attacks and Defenses" examined products and strategies to combat online banking fraud. ZTIC gets a bit of a break, since kernel and BIOS attacks are relatively hard to create, van den Ende says.

IBM unveiled a prototype of the invention about a year ago, and says its lead customer is nearing deployment. "My perception recently is that the interest is growing in a fairly strong way, there is more and more pressure," says [Doug Dykeman](#), manager of the secure systems group at IBM's research lab in Zurich.

While the device does require investment on behalf of banks for purchase and distribution, there's a strong business case for banks to consider deployment of ZTIC. Businesses are losing billions of dollars each year to fraudsters - a trend that's getting worse according to most accounts. And there's also a growing number of lawsuits that could result in banks bearing some responsibility for these losses.

PNC

Virtual Wallet

Bank Technology News | December 2009

It's not often that a new banking product changes the way consumers talk about money. But it's even rarer that an offering changes the way banks talk about money.

That's what [PNC](#) Financial Services Corp. did with its Virtual Wallet and Virtual Wallet Student online personal financial management tools. The money management platform, initially introduced in August 2008, helps consumers to oversee their various accounts with the bank, schedule payments, track spending, hit savings targets, receive alerts if their checking account drops below a certain threshold, and file reimbursement requests. (The student-oriented version came out in June 2009.)

Along with changing the model for personal financial management, according to [Mark Schwanhauser](#), analyst at Javelin Strategy & Research, PNC's Virtual Wallet has set itself apart by "changing the language" - reflecting a more natural and consumer-oriented bent. Case in point: Instead of a budget the Wallet discusses spending; in place of financial goals, it contains a 'wish list' much like an online shopper would set for themselves at a retail site like [Amazon.com](#).

"We really think we have aligned online banking with the way people think about their money," says [Mike Ley](#), vp for PNC.

[Ley](#) says that his team not only worked on making the language more colloquial, but making the look and feel of Virtual Wallet more "interactive and visual" to match up with today's online customers. Aimed at engaging the much sought-after emerging generation of banking customers, Virtual Wallet positions itself as more streamlined alternative to traditional PFM software from firms like [Quicken](#).

The Pittsburgh-based bank has quadrupled its growth among this segment since the release of Virtual Wallet and 80 percent of the users who sign on to it are new to the bank. The bank did not release the exact number of users, but is currently signing up more than 2,500 Virtual Wallet users per week.

Conexus

REO Optimizer

Bank Technology News | December 2009

The one-two punch of economic crisis coupled with housing slump has burdened banks with a larger responsibility for managing the distressed properties that are quickly starting to crowd their books. With REO Optimizer, Conexus hopes to alleviate some of the burden.

Released publicly in July, this document management product helps mortgage lenders capture key documents related to their distressed holdings electronically and stores them in an online searchable platform, enabling prospective buyers and investors to easily search properties. In turn, this helps speed up decision making and, according to the bank that's been using it, increases the ultimate value of the sale. "We recognized this problem [of managing distressed property documentation] was getting bigger, not smaller [18 months ago]," says [Bruce Dearing](#), svp at the [Bank of North Georgia](#), the first lender to use REO Optimizer.

The problem isn't just getting bigger for the Bank of North Georgia. As of June 30, 2009, there were 300 U.S. banks with more than \$100 million in distressed properties.

Although it seems prescient, [Jeff Reibel](#), founder and CEO of the [Louisville, Ky.](#) process automation software company, says that when the idea emerged for this new product the commercial real estate market was already showing signs of weakness. By incorporating critical property data - which may include surveys, construction plans, zoning and septic information - with more than 15 search filters, banks are able to give interested investors a clearer picture of what's on the table. "[Investors] can find assets they like faster, the pricing is better and they go under contract sooner," says [Joe Sumner](#), the Bank of North Georgia's vp of residential assets. The disposition time for selling these properties has shortened from more than 120 days to 30 to 45 days, according to [Sumner](#). And, in addition, investors are paying higher prices because they are receiving more accurate information on what they're getting, he adds.

ClairMail

Triple Play Integration

Bank Technology News | December 2009

ClairMail has pioneered the mobile banking triple play by offering messaging, mobile Web and client applications on an integrated platform. Using the latest Smartphone technologies, the Novato, CA-based company fuses all three modes into a single, intuitive 'smart client' interface which provides mobile banking customers with an integrated user experience. The key benefit for end users is that they don't have to jump between modes, unlike with other bank payment and notification systems. Banks gain from using ClairMail's triple play convergence technologies since it simplifies installations and minimizes update requirements, thus lowering support costs for financial institutions.

The ability for retail banking customers to receive mobile alerts about overdrafts, transaction approvals and bill payments through a range of notification platforms such as e-mail, SMS or Push API helps customers "to feel more secure, more engaged," says **Joe Salesky**, ClairMail's founder, chairman and chief strategy officer.

ClairMail's thin-client approach is making a major impact. The company has recently landed more than 45 banking customers, including **PNC Bank** and **BB&T Corp.** "They've got some products and services that are quite compelling," says **Mark Schwanhausser**, an analyst at Javelin Strategy & Research. **Schwanhausser** believes that a partnership between ClairMail and **Visa** that's slated to produce mobile banking services between the two organizations beginning in early 2010 could help set ClairMail apart from its competitors.

ClairMail specializes in two-way actionable alerts, and **Salesky** is also avidly preaching the impending arrival of an age where banks can send consumers merchant-specific offers and discounts precisely when consumers are inclined to make a purchase. ClairMail's increasing customer success comes at a time when former competitors have faltered, or at least seem to be standing still. Rival mShift recently lost its deal to provide mobile banking services to **Digital Insight** clients and Firethorn has struggled with its carrier-inclusive business model.

Oracle

Reveleus Market Risk

Bank Technology News | December 2009

One lesson from the financial crisis is that risk - in all its guises - is terribly difficult to grasp fully but the consequences for not doing so can be severe. At large financial institutions in particular it's vital to have a holistic view of all kinds of risk across different operational units and different geographies in order to remain within internally set risk parameters and to comply with stepped up regulatory rules.

In the wake of these market pressures, [Oracle](#) launched its latest version of Reveleus Market [Risk](#) in January, part of [Oracle Financial Services](#) Analytical Applications. The product helps financial institutions centrally manage all of their internal and regulatory market risk requirements - from risk measure estimation to stress testing to model validation and customized reporting. "We can combine different kinds of risks and stress it all together," says S. Ramkrishnan, CEO of [Oracle Reveleus](#) and Mantas products, [Oracle Financial Services Software](#). "By breaking down the silos, we can bring fresh insight as well as flexibility and agility to address internal pressures and external pressures."

[Dana Wiklund](#), a research director for the [Financial Insights' Risk Management Advisory Service](#), says: "The key is the efficient use of data, looking across the enterprise and looking across the data to create a single truth of information from different sources of information. So this is a breakthrough over having a bunch of disparate solutions looking at different sets of data across the enterprise."

One of the most progressive users of Oracle Reveleus Market Risk is [Bank of Montreal](#), which choose the solution to meet impending Basel II regulatory requirements. Using Oracle Reveleus, BMO standardized risk management across all lines of business and improved risk-profile management enterprise wide in nine months. The bank can now meet regulatory requirements, including Basel II, across different jurisdictions and has improved BMO's agility to adapt to new risk management strategies.

Fundtech

Global Payplus-Services Platform

Bank Technology News | December 2009

[Bank of America](#) wants to bring the same customer service that [FedEx](#) offers for packages - tracking, pricing options, delivery choices, alerts, and online signatures - to the world of payments. It's no small aspiration. At most banks the payments data necessary for this level of customer interaction are trapped in the back office and can't be pushed out to where customers can use it. To change that, [BofA](#) has tapped [Fundtech's](#) Global PAYplus-Services Platform.

By breaking down the silos between the front and back office, the Global PAYplus-Services Platform creates a payments hub that integrates full payments functionality into corporate customers' online experience, enhancing self-service, streamlining workflows and increasing straight-through processing. "The vision is to use payment as a differentiator, to add services that wouldn't otherwise be possible," says [Michael Sgroe](#), president and COO of Fundtech. "The principal goal is to become an indispensable element in the life of the business partner."

[Milton Santiago](#), Bank of America's portal strategy and treasury eCommerce solutions executive, describes the Fundtech product as "very innovative, very leading edge." He says the RFP process was a massive undertaking; Fundtech impressed by being "the only one with code in a truly service oriented model."

Using FedEx as an example of how to mine back office data, [Sgroe](#) points out that back office shipping data had little value until it was made available to the end user; then it became a core part of the competitive offering. In the case of payments, there are various ways a bank can settle a payment and various costs associated with each of those options. With Global PAYplus-Services Platform corporate clients can make routing and pricing decisions for themselves.

"SOA allows for more nimble and agile tools. All these interactions and features are pushed upstream into the hands of clients," Sgroe says. And with clients more closely involved with the payment transactions, there are fewer exceptions and lower costs.

CECA

Firma Digitalizada

Bank Technology News | December 2009

Paper is expensive to handle and banks have long hoped for its elimination. But for many reasons - legal uncertainties, lack of technology standards, and mistrust by consumers - the "wet" signature has persisted, holding back the migration of paper documents to electronic form. However, the logjam may soon end. The Confederacion Espanola de Cajas de Ahorros (CECA, or The [Spanish Confederation of Savings Banks](#)) has rolled out its "Firma Digitalizada" project, a.k.a. Digitalized Signature for Financial Sector Branches, which is quickly exceeding its goals for 2009.

CECA is the national association of 45 major Spanish savings banks, which represent more than 50 percent of the Spanish banking market. [Santiago Uriel Arias](#), CIO of CECA, says the digital signature program was developed at the request of members, which funded the project. By mid-November the technology had been deployed at 17 banks across 3,200 branches and involved 12 million transactions.

Bank customers can choose to sign a document with either a biometric handwritten signature or Smartcard. The documents then have the electronic signature embedded and stored, ready for verification at any time. The switch to digital signature saves 3 euro cents per document, Arias estimates, and a medium-sized savings bank should see ROI in eight to 10 months.

CECA's success suggests barriers to digital-signature adoption are falling. First, consumers are more comfortable with digital signatures due to retail use. Second, CECA spent time and money to develop legal opinions defending digital signatures. Finally, CECA's large membership gives its digital signature technology momentum to becoming a common standard.

According to [Gartner](#), "Participation levels have been high and beyond expectation. The solution is being sold to institutions outside the CECA membership, with a number of other major banking groups in the Spanish market, as well as a number of nonbanking institutions, such as telecom companies, retailers and government agencies, committing to the service."

Fiserv

UChoose Rewards

Bank Technology News | December 2009

Fiserv's UChoose Rewards program lets small financial institutions punch above their weight and compete with the large national banks in an area of growing importance to consumers: debit and credit card loyalty programs.

By pooling the account volumes of many financial institutions these smaller companies can access a network of national, local and online merchants; in some cases, they can offer better reward rates and redemption terms than national banks. According to Fiserv, more than 50 percent of the UChoose Rewards online merchant offerings exceed those of big banks.

"We realized a lot of our clients did not have enough scale to do a merchant-funded program, and we saw this as an opportunity to compete with the big banks," says [Andy Brown](#), Fiserv's vp of loyalty solutions.

A year after launching the program in November of 2008, more than 230 banks had signed up and seen concrete results. After registration, the average number of transactions per card jumped 17 to 53 percent, and the average spending per card jump 16 to 39 percent, Fiserv reports. Besides the steppe-up transaction and spending volume among current card holders, another sign of the program's success is that some older customers who never bothered to get a debit card are now asking for them.

[Patricia Hewitt](#), director of debit advisory services for [Mercator Advisory Group](#), says "The nice thing about UChoose is it allows small financial institutions to deliver a customized program for their target demographic - points, cash back, merchant funded discount - and put it together in a single package. So they can craft programs without crafting multiple relationships."

The UChoose Rewards program also builds brand by driving consumers to the banks' Web sites. Many banks update their rewards offerings throughout the month, prompting some customers to check in frequently. It's typical to see an additional five-to-eight visits per month, [Brown](#) says, and those extra brand impressions help build and reinforce customer loyalty.

Bling Nation

Bank Technology News | December 2009

[Bling Nation](#) Ltd. has a simple yet elegant way for community banks and credit unions to process retail merchant transactions. Instead of pushing retail debit or credit processing out to Visa or [MasterCard](#) networks to process purchases made at a restaurant or a clothing store, Bling Nation offers a wireless payment system where consumers can use their cell phones as secured mobile wallets. The service is cost effective for banks since they can process the payments within their own footprint without generating interchange processing fees through a credit card network, says Bling Nation Co-Founder and Co-CEO [Wences Casares](#).

A consumer's bank account information is contained in a radio-frequency-identification chip on a postage stamp-sized sticker that's attached to a user's mobile phone or Blackberry device. The sticker, or 'BlingTag,' is scanned by a wireless reader at the merchant location. The embedded RFID chip sends account and transaction information over an encrypted cell phone network to the bank to approve the transaction. Once the transaction has been approved, the system sends a text message to a customer's mobile device with the merchant's name, the size of the purchase, their account balance and the rewards earned/rewards balance.

The wireless payment service allows Bling Nation "to offer big bank services out in the hinterlands," says [Ellen Carney](#), an analyst at [Forrester Research](#).

Bling Nation is targeting communities with 10,000 to 100,000 residents, says [Casares](#), who co-founded the company with Meyer Malka. After launching Banco Lemon, a Brazilian retail bank which grew to 7,000 branches and 15 million customers in just over six years, Casares and Malka set their sights on the U.S. bank payments market. As of mid-November, Bling Nation had signed up two Colorado banks as customers - [The State Bank of La Junta](#) and Park [State Bank](#) and Trust. Since it began utilizing the service in May, The State Bank of La Junta has enrolled 50 percent of its debit card customers, says [Brad Rose](#), vp of information technology and security.