TECH BIZ

The Innovation Quandary

Credit unions cannot afford sluggish, money-sucking machines that slow operations and ultimately detract from the member experience. While software integrations are essential to successful operations, focus is on cost and the best-in-breed hardware. Unfortunately a one-size-fits-all approach is not applicable. ***By W.B. King***

When approaching technological innovation, it is important to agree on a baseline premise, a standard guideline that, at its core, informs all related decisions moving forward.

For this purpose, let's turn our attention to the following quote by Bill Gates. "The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency," Gates said. "The second is that automation applied to an inefficient operation will magnify the inefficiency."

When it comes down to adopting technology, whether hardware or software, credit unions, time and time again, are faced with a quandary: streamlining automation while managing the bottom line.

All financial institutions are faced with cross-industry technology innovation and in some cases, saturation. Take, for example, smart phones. Only a few years ago, remote capture was considered a leading technology. And while it still is an advanced service offering today, the banking public can handle this task with a cell phone "app" while juggling multiple tasks on the go. Will all members embrace this technology? The answer is no. However, more and more will expect such ease of use moving forward.

Recently, Harris Interactive released a study concluding that one in four cellular phone users with mobile Internet access use their devices to buy goods and services online with a credit card; one in five said they would like to use cell phones as a "mobile wallet" someday. The study also concluded that mobile phone users are increasingly comfortable making purchase and banking transactions in transit. In fact, 16 percent of mobile phone subscribers already use mobile banking services, with 60 percent of these people using the services at least once a week. Many others, who do not currently bank-and-buy on the go, have expressed interest in mobile banking, with 35 percent open to the idea of checking bank account balances and transferring funds via their mobile devices.

"Financial institutions are actively pursuing strong revenue performance processes, developing online customer retention processes, increasing deposit generation activities and determining how to best integrate an online banking platform with call centers and mobile phone banking," says Sabeh Samaha, chief executive officer of Samaha Associates, a technology and e-commerce consulting firm.

Since a teller won't be using an iPhone to capture member check images (although they could in a pinch), there are countless providers of hardware check scanners. Models range from single-feed scanners that are used on occasion to scanners that handle millions of images. The majority of medium-sized credit unions, for example, will use what are known as individual or teller-level scanners.

Depending on the model, Canon has a solid reputation thus far; scanners will vary in terms of size, speed and capacity. Additionally, certain companies provide a universal language (software integration) while other companies have specific processing software that may cause integration issues.

While software integration is essential to successful operations, the focus here is the best-in-breed hardware. This is a broad topic to be sure, but there are market indicators. Credit unions that investigate research and adopt appropriate innovations will exceed member expectations. And that, after all, is the goal.

Often when considering new hardware applications, an audit

of existing hardware is required. The cost of running antiquated machines such as PCs, servers and printers can be prohibitively high.

Thus, it is prudent to compare costs of running older equipment versus the benefits realized from purchasing newer, energy efficient machines. The last thing a credit union wants are sluggish, money-sucking machines that slow operations and ultimately detract from the member experience.

Changing Demographics

Often, a credit union must look to outside market indicators to determine how its internal operations can be improved. The Cambridge, Mass.-based Forrester Research Inc. projects that by 2011, 76 percent of wired households will bank online, 73 percent of baby boomers and 44 percent of online seniors (those born in 1945 or earlier) are expected to be using virtual banking tools. While boomers' use of online banking between the years of 2006 and 2011 is expected to grow by 43 percent, those numbers are overshadowed by those of Gen X (born between 1964 and 1980) and Gen Y (born after 1981) users, at 85 percent each.

"Merely offering online banking applications no longer suffices. In order to compete and keep pace with member expectations, a credit union must take the necessary steps and turn an online banking platform into a versatile virtual branch," says Samaha.

It certainly is not breaking news that online banking is the wave of the future but figuring out what hardware and software to adopt can be tricky, which is why consultants like Samaha are brought into the discussion when critical decisions are on the table. Knowing your member base is essential. This includes extrapolating information to form logical conclusions. For example, with more members seeking ease of use with online banking, it makes sense that they will soon expect other innovations especially if competing credit unions and banks are offering enhancements.

Roger Grant – President, RG2 Solutions, Inc.

For many credit unions, rolling out new hardware-based technologies is difficult. There is a learning curve, not to mention significant costs. Among hardware applications that initially received high marks and assumed high adoption rates was biometric technology.

What looks good on paper doesn't always translate, but that doesn't mean the application is not worthy of a second look.

"Applying fingerprint biometric technology at the member level has been bantered around for a number of years. Adoption at the member (transaction) level has been slow – almost non existent," says Roger Grant, president of RG2 Solutions, Inc.

"I have been advocating that since 2002 and have products available, but not any real success to speak of. I still foresee biometric technology as a viable solution, but geared more internally for the next few years," Grant says. "Using biometrics for system and application access – by replacing passwords with fingerprint scans – will assist and bolster compliance by assuring proper information access, and as a plus, practically eliminates password-based help-desk calls and password resets." The latter, he says, saves money through greater employee efficiency.

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> *– Sabeh Samaha*

Among reasons for the slow adoption rate are cost and rollout. However, as with all technologies, over the last few years, biometric technology has been enhanced and costs are now less prohibitive. "The reality is that the cost is coming down and the ROI is typically 12 to18 months," says Grant. "And that's just from the password administration side. In addition, the cost of compliance is a direct bottom-line expense to the organization that will never see a return. The best thing an organization can then do is find ways to reduce that expense."

Grant explains that RG2 Solutions partnership with Digital Persona, a provider of fingerprint-based authentication solutions,

further enhanced its BioTran member verification system. Put simply, it provides credit unions with the ability to positively verify their members and employees identity using fingerprint verification technology.

While security is significantly enhanced, Grant says savings are realized from eliminating password lockouts and other administration costs.

Now credit unions once slow to this dance are taking interest. As a result, a relatively older technology is gaining speed within the industry. "I have a couple of credit unions currently going through evaluations and another implemented in the last year for internal use. They all love it," says Grant. "It's one of those things that once they have tried it, no one wants to go back."

That is often the case with adopting technologies, especially in this industry. It comes down to when to pull the trigger. Of course, the current economy doesn't help, but with more technological applications available and overall sales slow, credit unions are in a unique position to haggle and hondel their way to lowering costs while maintaining excellent service contracts.

Enhancing Service Offerings

Building on the premise that enhancing internal communications is paramount to establishing excellent member services, credit unions should continually investigate ways in which communication with brick-and-mortar branches can be streamlined. This includes data pipe technologies such as T-1 connections that are implemented to enable video conferencing and video streaming for training.

Determining an organization's computer and telephone (CAT) cabling needs include identifying the difference between CAT5, CATe and CAT6, explains Jason Sharek, CEO of TeleProviders, Inc., a telecommunications firm. In short, the differences are demonstrated by how conveyance media handles network support, cross-talk and bandwidth. Thus, an organization must ascertain its current bandwidth needs, its network environment, and its future expected bandwidth requirements. This approach will also lead to the adoption of new services such as VoIP/Video systems.

"We look at each location to identify and inventory all existing services and audit their associated costs," says Sharek. "This discovery process is intended to create an accurate picture of the current Telco environment."

"Once the audit and inventory is complete, we work with our clients to determine what services are being used and what can be canceled," he says. "We look at what services can be better scaled, what services can be replaced with better ones, and what services can be purchased at lower costs."

More credit unions are looking to capitalize on the approaches Sharek highlighted. With more than 4.8 billion in assets, and wholly-owned and operated by its 205,000 members, San Diego County Credit Union (SDCCU) is the city's largest locally-based financial institution. SDCCU employs Cox Metro Ethernet to transmit transactional and operational data between its 27 locations. In addition, it has complex disaster recovery circuits in place that automatically reroute data during an unexpected outage or crisis, explained Irene Oberbauer, president and CEO of San Diego County Credit Union.

"When 205,000 members trust SDCCU for accurate financial transactions, a communications provider that can ensure business continuity is absolutely necessary," says Oberbauer. "Cox is unique in their ability to deliver reliable communications with a state-of-the-art network infrastructure, coupled with top-notch service from a local team."

Kristine Faulkner, vice president of product development and management, Cox Business, explained that its solution also includes PRI (primary rate interface) advanced voice circuits and dedicated Internet access for SDCCU employees at the corporate headquarters and branch locations. "Cox voice, data and video products are designed with carrier-class reliability to create a high level of trust with our finance customers – something they can confidently pass on to their clients," says Faulkner.

More and more progressive credit unions are incorporating virtualization, which again redefines required onsite hardware. This allows, for example, one physical file server to be essentially turned into many logical servers. These servers share the same physical box but are isolated from each other. Virtualization reduces costs in various departments and allows for streamlined SAN (super-fast, high-capacity) storage for all public and private data including member account data, says Samaha.

While there are continual innovations that assist credit unions with certain hardware capacities, such as cloud computing applications, which is currently a major trend, IT departments that are green-lit to purchase new hardware must shop smart. When investigating servers and storage devices, for example, it is not only prudent to determine how it will improve the existing onsite data center, but

also the power it uses and the physical space it assumes. Scalable, module, energy-efficient data centers are the way of the future.

Security and disaster recovery issues remain ever present on the minds of senior-level executives. To this end, credit unions have to be diligent. "Credit unions must have in place a proven and tested disaster recovery plan so that the credit unions' operations continue to function regardless of the severity of the situation," says Samaha.

Annual simulation testing is encouraged. Samaha says a checklist should include:

- Mobile office units equipped with power, communications, computer equipment and workspaces.
- Deliverable mobile branch units with teller counter, lobby area, check counter, management office and customer service desks.
- Satellite voice and Internet access.
- Power generators.
- Computer hardware and technology – pre-configured to the credit union's requirements.
- Emergency help desk – available 24/7/365.

The Wallet of the Future?

As noted above, new hardware devices as simple as smart phones are being tagged as a mobile wallet, recently patented technology from Tyfone, Inc. has a new tag: the electronic wallet.

It is a new twist on the memory card. Using time-varying magnetic fields, the card is transformed into an electronic wallet, which simply means the card facilitates the secure transmission of financial information. This technology is used in the company's u4ia (euphoria) Mobile Financial Services platform, which completed successful beta testing in June of this year, explained Dr. Siva Narendra, chief technology officer at Tyfone.

Narendra says that within the growing contactless payment marketplace, u4ia's secure memory card platform enabled by a Trusted Service Manager (TSM) brings scale and enables existing market-deployed handsets to become NFC ready. This is a plus for credit unions that can adopt the innovation without incurring significant costs to enable it.

"Enabling near field communications without requiring design changes to the handset is the fastest way to proliferate contactless applications," says Patrick Gauthier, chief executive officer of SMC Advisors, a management consulting firm focused on emerging payments, mobile and e-commerce businesses. "Tyfone's technology is critical to jump start NFC by providing a packaging that is familiar to the consumers, delivering a neutral secure element that is appropriate for banks and service providers, and enabling a new class of use cases that can drive revenue for operators."

A quick overview finds that the solution allows a TSM to securely manage different consumer credit, debit, transportation and pre-paid accounts for use in a wide range of payment and other secure transactions. By using SideTap™, members can conduct a contactless payment transaction. Using SideTap, consumers purchase goods at point of sale simply by tapping their mobile device at point of sale.

"This patent is the culmination of tireless work developing a neutral solution not only as a viable implementation of NFC that can be broadly used today, but also as a truly game-changing technology," says Narendra. "This newly patented technology brings us one step closer to a ubiquitous contactless payment reality. Tyfone's secure memory card technology is out of the R&D lab, has been tried and tested, and is ready for the next stage in evolving the stakeholders' existing business models into new revenue opportunities."

Moving Forward

Gates has it right when he says, "Automation applied to an inefficient operation will magnify the inefficiency."

Adopting best practices is not a one-size-fits-all approach. "Credit unions must have in place a proven and tested disaster recovery plan so that the credit unions' operations continue to function regardless of the severity of the situation," says Samaha. Integrating new hardware technologies might prove beneficial in the short run for certain credit unions depending on demographics and region, while others might be better served to wait.

Understanding the mind-sets of members often helps senior executives steer the ship, or in some cases, right a ship that's off-course.

To this end, internal marketing and survey strategies always help to shed needed light on next steps. Even with gathered actionable intelligence, a credit union will only be known as a trailblazer if it has the fortitude to pull the trigger and magnify its efficiency.

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