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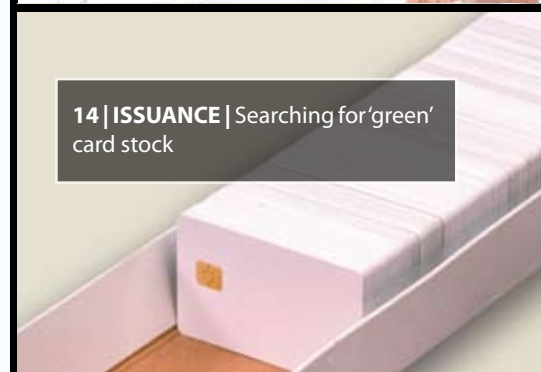
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Contactless coming to campus

Zack Martin

Editor, AVISIAN Publications

Contactless smart card technology isn't new. Some campuses have been using it for physical access control for years, but its use for other applications has been few and far between.

This is starting to change. As highlighted in this issue's cover story contactless is expanding its reach on campus. Readers are being deployed for dining services, laundry, vending, copying, printing and even off-campus payments.

Use of the technology on campus makes sense. Mag stripes are a storage technology not a security technology. They can be easily copied and fraudulently duplicated. They can be erased, scratched or otherwise damaged requiring replacement.

It makes a difference for the readers too. Mag stripe readers require cleaning and, at times, replacement because of the constant, ongoing swiping of cards. These readers can also be targets of vandals on campus, with coins or other foreign materials stuck in the swipe or damaging the read heads.

All the major campus card providers have a contactless offering. CBORD offers HID Global's iCLASS, Blackboard is offering Sony's FeliCa and Heartland has NXP's Mifare.

And while it's true these technologies are different, they're also the same. Yes, an iCLASS card won't work with a FeliCa or Mifare reader and vice versa but campuses are closed-loop environments with little need to date for cross-issuance acceptance.

Does this mean a campus should scrap its current system and run out and get

contactless? No, but if the time has come to refresh the system or reissue cards in mass it would seem foolish not to evaluate the new technology.

Contactless cards are more expensive than mag stripe cards but there are ancillary benefits including longer card life, reduced reader maintenance, better overall security and the ability to add multiple applications to the card itself. In most cases they are comparable to or lower cost than prox cards.

Another interesting development on campus is the use of Near Field Communication. A pilot at BYU is enabling students and faculty to make purchases at the bookstore with phones that have microSD cards.

NFC could be ideal for campuses as students always have a mobile device on them and it would be a great venue to test the viability of the technology.

Banks and mobile phone carriers still haven't settled on a business model that enables each to make money off NFC transactions, but the lack of a business case isn't as significant an issue on college campuses because of the closed loop nature (there's also not too many handsets that are NFC capable, but that's something else entirely). And once the business model evolves, applications could be added to the devices for use outside of campus.

As you will read in this issue, some predict we will see the end of the campus card as we know it in the next decade.

Hold on tight, it's just starting to get interesting!

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CR80News is available for the annual rate of \$29 for U.S. addresses and \$59 for non-U.S. addresses. Visit www.CR80News.com for subscription information. No subscription agency is authorized to solicit or take orders for subscriptions. To manage an existing subscription or address, visit <http://subscriptions.avisian.com> and enter the Customer Code printed on your mailing label. Postmaster: Send address changes to AVISIAN Inc., 315 E. Georgia Street, Tallahassee, Florida 32301.

ABOUT CR80News

CR80News is published twice a year by AVISIAN Inc., 315 E. Georgia Street, Tallahassee, Florida 32301. Chris Corum, President and CEO. Circulation records are maintained at AVISIAN Inc., 315 E. Georgia Street, Tallahassee, Florida 32301.

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Blackboard Transact meets new PCI standards



Blackboard Inc., a provider of education technology, has released version 3.5 of Blackboard Transact that strengthens data and application security for

campus commerce and card programs and enables institutions to process credit card transactions while meeting new industry standards.

Blackboard Transact is used by colleges and universities to support campus commerce and security management. The company's newest release complies with the Payment Application Data Security Standard both in application architecture and written operating procedures. Release 3.5 received validation from Trustwave, a top security assessor company, and acceptance from the Payment Card Industry Security Standards Council.

With 3.5, institutions can host the application and process credit card transactions that complies with the PCI Data Security Standard well ahead of the July 2010 deadline for institutions to only use Payment Application-compliant applications in their payment environments.

The new release also introduces new capabilities to support enterprise-wide compliance policies and risk management and adds a range of new capabilities including improved database audit logging, user account and password features including forced complex passwords, limited repeat access attempts, account deactivation after 90 days of no use and completely re-written user documentation.

"Payment application security compliance is a very important initiative for our university," said Stacie Gomm, associate vice president for Information Technology at Utah State University. "Our controller's office is driving this initiative to ensure that all of our financial systems and processes are PCI compliant. The enhanced security features of the Blackboard

Transact platform are an important step towards compliance for our campus-wide ID card solution."

CBORD presents Excellence Awards at User Group Conference



Two universities and a hospital are the recipients of CBORD's Excellence Awards, presented recently at the campus card provider's 30th annual User Group

Conference in Baltimore. This year's winners were recognized for innovative uses of CBORD solutions to drive revenue, reduce costs and improve safety and security.

The Visionary Award went to Ohio State University in recognition of its solutions to improve service and reduce costs in campus dining. The university uses CBORD's Foodservice Suite to cut costs through forecasting and central ordering for its many units, as well as online solutions such as Webfood, NetNutrition, and NetCatering.

The Above and Beyond Award went to Jason Rossi, director of One Card and Campus Security Systems at the University of San Francisco, for his service to both his own university and the CBORD user community. Rossi's expertise in campus card and access control management, including implementation of wired, wireless, and offline readers, has been shared with other CBORD users through customer listservs, user group conference presentations, and one-on-one consultations with other universities.

The One CBORD Award went to Texas Health Presbyterian Hospital in Dallas. for its integration of CBORD solutions for food service, nutrition service and cashless purchasing. Texas Health uses the Odyssey PCS cashless system along with Foodservice Suite and Nutrition Service Suite to handle accounting, ordering and inventory management that has resulted in improvements in productivity, lower expenses, increased revenue, and improved employee and patient safety.

CPI releases new version of Card Designer

CPI Card Group has released Card Designer 2.5. This latest version of the online software includes new and updated features.

Card Designer now has an updated online tool, enabling customers to get their cards to market faster. These upgraded features include a design checklist, pre-set templates and the ability to design not only the front but also the back of a card. Selecting a card background, placing graphical logos, text and network bugs will complete the design and make an image that is truly worth a thousand words.

The newest version of Card Designer also features the ability to upload high resolution artwork for card production. Requesting an order or pricing is a easy with updated forms that are more comprehensive, saving time as the customer places requests.

U.S. bank adds banking services to campus cards at six colleges

Six colleges and universities have chosen Minneapolis-based U.S. Bank to provide enhanced banking services to their students, faculty and staff via each school's campus card. The bank will provide the technology for the banking functionality for each school's identification card, turning the card into an ATM and PIN-based debit card when linked to a U.S. Bank checking account.

For cardholders who choose to open an account at U.S. Bank, these new identification cards will double as their ATM card on and off campus, and can be used as a debit card at merchants in the United States that accept Visa PIN debit.

The six schools are Benedictine University, Lisle, Ill.; Carroll University, Waukesha, Wis.; Chicago State University, Chicago; Johnson County Community College, Overland Park, Kan.; Milwaukee Area Technical College, Milwaukee, Wis. and Waukesha County Technical College, Pewaukee, Wis.

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In addition to these, U.S. Bank partners with more than 40 colleges and universities to provide a campus banking program, including San Diego State University, Iowa State University in Ames, Xavier University, Cincinnati, and Northwestern University, Evanston, Ill.

Web-to-Print is in the cards at Villanova



Villanova University's student ID program, known as Wildcard, can now be used to order print jobs via the Web from the school's two

print centers, which recently adopted Web-CRD from Rochester Software Associates to handle online Web-based job submissions and automated production.

Now, due to a partnership between RSA and Villanova's campus card provider, The CBORD Group, users can pay for print jobs with the same ID card they use throughout the university.

"The integration between WebCRD from RSA and the CS Gold campus card solution from CBORD makes it easy for cardholders to print documents quickly and easily, and helps the university reduce labor and overhead costs," said Read Winkelman, CBORD's vice president of sales for colleges and universities.

"Students wanted to be able to submit their papers and reports, often a mix of color and black-and-white pages, anytime of the day or night and not have to think about the printing process," said Michael George, Villanova's director of central services. "Professors wanted to finish writing exams at home and then submit the exams to be ready for an early morning class."

Students, faculty and staff simply log into their own account on the system and submit their documents in a secure process. Upon production, Villanova faculty and staff orders are hand

delivered, while students pick up their jobs at the print center where most production work takes place.

Seminary, CardSmith launch campus ID card

Southeastern Baptist Theological Seminary based in Wake Forest, N.C., and campus card provider CardSmith have rolled out a new campus ID card program, the Southeastern 1Card, that will provide students, parents, faculty, and staff with access to essential facilities and services on and around campus. The new Card is being issued to all members of the college community this month.

CardSmith's card program management service is replacing the campus's old card system while adding new capabilities and features to the program.

In addition to official identification, the new card features a built-in prepaid spending account—Southeastern 1Card Cash—that provides a way to purchase food on campus, clothing and other items at The Locker, copies at the Library Copy Center, and goods and services at selected off-campus merchants. Students, parents and others have Web-based access to their accounts. The site features program information and an on-line value transfer service making it easy for cardholders, parents, or others to transfer funds to 1Card Cash from a debit or credit card.

Cardholders can also view transactions, manage preferences, suspend or reactivate a card, and more. Students, parents and others have access to a toll-free customer support center dedicated to the program and managed for Southeastern by CardSmith.

"We will be providing a significantly expanded and upgraded service, and actually spending less money than if we had stayed with the system we had," said Wayne Jenks, director of Information Technologies at the seminary. "The web account center and value transfer service is going to be very popular."

New Schlage electronic locks protect access control investment



Ingersoll Rand Security Technologies has rolled out a new electronic lock that can be upgraded without ever taking it off the door. The Schlage AD-Series locks will be introduced at the Door &

Hardware Institute Exposition Sept. 16-17 in Kissimmee, Fla., and at the ASIS Exposition in Anaheim, Calif., Sept. 21-23.

The modular design of the Schlage AD-Series lets users adapt to new technologies easily, whether changing credential technologies or networking capabilities. Without replacing the lock, users can upgrade readers and network modules to go from an offline to networked solution, change the credentials they are using at any time and use future innovative technologies as they emerge. With its open architecture platform, the AD-Series integrates with Schlage or third-party software and is able to leverage the existing network infrastructure.

Users can customize door openings with options such as credential reader type, networking, finish and levers. As their business needs change, so can their access control solution. Upgrades can be as simple as interchanging a module, said Karen Keating, Schlage electronic locking portfolio marketing manager.

Components that have been traditionally located around the door are now integrated into the lock itself. From large buildings to a small office with only a few openings, AD-Series locks can be configured to create a custom fit right at the lock. For instance, the locks provide multiple, interchangeable credential reader modules as well as interchangeable offline, wired and wireless networking modules so that access control can now be installed at doors previously deemed unfeasible.

Another advantage with the AD-Series is there is now no need to outfit the entire facility at once. Users can start small and add more openings as budgets permit.

Ulink introduces Oyster card-style system to Bristol



Ulink, the bus service operated by the University of West England and Wessex Connect and originally established for students, introduced this month an Oyster-style card for passengers to make their travels across Bristol easier.

Now in its second year, Ulink became the first bus service in Bristol to successfully launch the new smart card system. Modeled after London's Oyster card, students and Bristol's bus users can avoid the hassle of long lines and scrambling for change by taking advantage of this new scheme.

"The idea is that you get on the bus and instead of having to find the right cash to buy a ticket, you put your smart card onto the ticket machine as payment," said Steve Ward, UWE's travel planner. "The machine still gives you a ticket but the time wasted at the stop is reduced."

Ward hopes Bristol's City Council will consider installing the smart card system on Bristol's other bus services. "It's cheaper, more convenient and you don't have to worry about having the right money. When the balance on the smart card gets low, you can just pay the driver to top it up."

Single card allows room scheduling, building access at university

The University of Tennessee at Knoxville has deployed a room reservation system that's integrated with its building access control system so that one card can be used to both reserve rooms for classroom use or presentations and to enter buildings on campus.

NetSimplicity, an Austin, Tex. provider of room and resource scheduling software, has installed its Meeting Room Manager that brings together technology from Gallagher Security Management Systems, to create an end-to-end room reservation system at the new James A. Haslam II Business building.

The school needed a way for students to reserve rooms and get access without a phone call, without having to carry a second student ID card, and without having to manage another account, while also integrating with multiple campus systems.

When the James A. Haslam II Business Building opened its doors, the ultimate goal was to help with the effective management and security of a building that included 75 offices, 34 classrooms, 35 team rooms, 4 conference rooms, 4 special event spaces, a collaboration center, and an investment learning center. The college envisioned extending its use of Meeting Room Manager, initially piloted in its Center for Executive Education, by integrating it with its Cardax door access system from Gallagher.

When a user logs onto Meeting Room Manager, the Cardax and Meeting Room Manager databases perform as if they were one. The system is used to manage rooms in several buildings but can also accommodate room scheduling and access control for additional parts of the campus as needed.

Program enables students to use Rensselaer ID for purchases at local businesses

Rensselaer Polytechnic Institute, Troy, N.Y., has implemented a new off-campus dining program that will enable students to use their ID card to enjoy nine restaurants in downtown Troy with participation from other merchants possible in the future.

The new community program builds off the Rensselaer Advantage Dollar program, a campus declining balance account using the Rensselaer ID card and coincides with the opening of a new student residential facility in downtown Troy.



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"With the opening of the Howard N. Blitman, P.E. 50 Residence Commons in downtown Troy, we are increasing the mutually beneficial interaction between our students, faculty, and staff and the community that we call home," said Rensselaer President Shirley Ann Jackson.

In addition to the select Troy businesses, RAD can also be used on campus at dining locations, the Houston Field House box office, and vending machines. There are no setup fees or recurring fees, and the balance rolls forward from year to year. Students do not need to carry personal cash, and they or their parents can add additional funds to the card online. The same is true for all Rensselaer faculty and staff.

This fall, the pilot program for Troy merchants will include only purchases at restaurants or cafés. The program could be expanded in coming semesters to include other types of merchants such as convenience stores, supermarkets, or retail businesses. Certain purchases, such as alcohol and tobacco, are prohibited on the card.

New campus cards await Vandy students

Vanderbilt's student ID card has a new look. But more importantly, its Commodore Card is no longer coded with the student's Social Security number, but instead uses a randomly generated number to identify the student.

Students had until Oct. 12 to replace their existing card with the new one. The card is free as long as the student turns in his old card. If not, he'll be charged a \$20 lost card fee.

A spokesperson for the Nashville, Tenn. university said the card was in need of a redesign since it has had the same look for 12 years. But this also gave the school the opportunity to make the card more secure by ditching the SSN on the card.

Emergency text messaging service available at two more universities



Two more universities have signed up with TipNow, the San Jose, Calif.-based text messaging service designed to increase campus

safety by allowing students to anonymously notify campus security personnel regarding non-emergency suspicious activity.

California Polytechnic State University in San Luis Obispo and Quinnipiac University, Hamden, Conn., are now offering the new service from Resilience, Inc., which is looking to deploy the system with other universities, city police departments and corporate campuses.

TipNow is a tip collection and management system for anonymous tips originating from electronic mail and cell phone/personal digital assistant SMS or text messages. TipNow encrypts the reporter's cell phone number or email ID, guaranteeing anonymity.

It is offered in the software as a service model which means it does not require any hardware installation or servicing by the user. TipNow also allows campus safety personnel to anonymously interact with the reporter.

Most campuses have emergency plans in place, survey finds

The 2008 National Campus Safety and Security Project survey found that most colleges have campus-wide emergency plans that meet minimum standards but warned that just 30% of campuses have a "business continuity plan" detailing what they should do if a calamity seriously disrupts campus operations.

The survey also pointed out that those schools least likely to field their own police departments (such as independents and two-year

colleges) were also less likely to have "mutual aid agreements" with local law enforcement or other agencies to share resources in the case of an emergency.

However, survey sponsors cautioned that due to a low response rate to the survey—just 16%—the results should be considered "more exploratory" than definitive.

Card issuers won't bombard college students with offers

While the new credit card law doesn't take effect until February, many card issuers are already gearing up to comply with the new regulations. That means there will be fewer freebies to convince students to sign up for a new credit card. More importantly, those students under 21 will find they're no longer eligible for a card.

The only way underage students will be able to obtain a credit card is if they can prove they have the capability of repaying the debit or if a parent or other person over 21 co-signs for them. Kiplinger reports that the average credit card debt for college students is \$3,173.

In addition, Illinois has joined other states that have adopted laws restricting on-campus credit card marketing. This law, which takes effect Jan. 1, prevents companies from offering freebies to students in exchange for signing up for a credit card. If colleges decide to allow companies to market on campus, the schools will be required to offer some form of consumer finance education to freshmen. It also bars private and public colleges in Illinois from selling student names and contact information to credit card companies.

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Is the future of campus cards contactless?

New programs are expanding its use beyond access into the full array of campus card functions



Zack Martin

Editor, AVISIAN Publications

As campuses switch to contactless smart cards for student IDs and move more applications to the chip are the mag stripes' days numbered? Greater security, increased convenience and reduced wear and tear on cards and readers are just a few of the reasons leading some campuses to make the switch to contactless technology.

In the next ten years the time will come when there's no need for a card at all, says Nirmal Palliyaguru, director ACCESS and conferences at Santa Clara University in California. "The next time we re-card there won't be a card," he says. "It might be on your cell phone, we'll have a docking station, and people will upload the card to their cell phone or PDA."

Santa Clara is deploying Blackboard's contactless smart card offering for a range of applications on campus. Blackboard partnered with Sony to bring the electronics industry giant's FeliCa contactless technology to the U.S. market. FeliCa is widely deployed in Japan and other Asian countries with more than 350 million cards and readers used for payment, access and transit solutions, says Jeff Staples, vice president of marketing and business development at Blackboard.

Morehead State University in Kentucky also has fully embraced contactless technology with the help of its campus card vendor, the CBORD Group. Morehead's new EagleCards include HID Global's iCLASS contactless technology and enable access, payment and privilege control applications.

According to Mark Doi, director of education market strategies at HID, the drive for increased functionality is encouraging campuses to look at contactless. "We are seeing campuses migrate away from legacy technologies and upgrade their infrastructure over time (with contactless technology), because of the ability to add more applications beyond just opening the door."

"The education market as a whole has embraced iCLASS as they see the value in comparison to older technologies such as proximity and mag stripe," adds Doi. In Fall 2008, Doi told CR80News that more than 100 campuses were using or were in the process of migrating to iCLASS.

Clearly contactless has emerged as the premier technology of access control but as Santa Clara and Morehead are proving, it can also benefit other applications as well. Both universities are in the process of implementing the cards not only for physical access but for payments and more.

Time to re-card

It had been ten years since Santa Clara had refreshed its campus card system, Palliyaguru says. The institution was in the process of getting rid of Social Security numbers associated with student IDs and started looking at different technologies that could better protect the information on the card.

In his travels around Southeast Asia, Palliyaguru saw the FeliCa technology in use and he remembered a presentation Blackboard had given on the technology during a NACCU Conference. "This is clearly the next generation and I thought this was the route for us to go," he says.

Santa Clara is doing a slow rollout of the contactless cards on campus. Incoming freshman and first year law students received the cards first, Palliyaguru says. Anyone needing a replacement card is also receiving one.

Contactless readers from Blackboard are being deployed around campus and will be used at the various points-of sale, as well as vending, laundry and copier locations. The physical access readers are also being converted to accept contactless. The card still has a mag stripe, adds Palliyaguru, so it can be used where the new readers have not yet been deployed.

One of the biggest advantages of contactless on campus is its ability to facilitate transactions, Staples says. "For us the biggest difference is going to be in the high volume, high access areas like dining point-of-sales, door access and other areas," he says. "We're able to

offer speed, security, and high performance readers that will ultimately impact customer satisfaction. We're focused on the user experience and want it to be faster."

It will likely be summer 2010 before the system is completely implemented at Santa Clara, Palliyaguru says. Eventually the campus will issue around 10,000 new cards. Administrators are taking it slow to make sure to troubleshoot any problems as they arise. "The technology hasn't been used in this field before," Palliyaguru says. "We don't know what pitfalls we'll find."

While Santa Clara is taking time and care to deploy the new system, Palliyaguru is also focused on the future. He sees a wide range of other applications the card will enable, suggesting that they will "increase the touch points ... ticketing, events, fundraising, anything can be done."

Full deployment at Morehead

Morehead State is moving all of its campus card applications to contactless with the help of system provider CBORD and HID Global's iCLASS contactless technology. It also has a

mag stripe that is used for banking functions and for some of the remaining doors that haven't switched to contactless, says Doug Snedegar, Morehead's EagleCard coordinator.

The iCLASS cards are being used with Morehead's existing Odyssey PCS campus card system from CBORD. To date Morehead has issued 13,500 contactless cards to students and employees, Snedegar says.

The university is no stranger to smart card technology. Since 2001 the Morehead ID has used a contact smart card for beverage, snack, laundry and copiers purchases while the mag stripe was used for physical access.

Payments first

Traditionally when an institution decides to switch to contactless, the first application on the list is physical access. Morehead took a different route rolling out payments first, Snedegar says. The university has 220 contactless readers deployed across campus, but only a handful of these are being used for physical access. The rest are used for dining services, snack/beverage vending, copying and printing and laundry payment.



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The contactless readers have proven to be revenue drivers. Vending sales, previously managed with a contact smart chip in the EagleCard, required students to maintain separate accounts for vending purchases. With contactless readers managing purchases across campus, the university now offers students a multi-use account known as Beaker-Bucks, making it easy to spend and manage EagleCard funds. Eagle-Card-based vending sales have increased nearly 10% since the change was made, Snedegar says.

Switching to the contactless readers has been a relatively painless process and not too expensive, Snedegar says. The readers deployed at the bookstore, print station and dining services cost less than \$250 each.

Deploying contactless at Morehead has given the university unlimited potential for the card, Snedegar says. There are plans underway to extend the contactless infrastructure to Morehead's regional campuses in Ashland, Prestonburg, West Liberty, Jackson and Mount Sterling. The university is also exploring the use of the card for logical access.

"The sky is the limit," Snedegar says. "It's a work in process and our goal is to eventually be contactless everywhere on campus."

Is this the end of the mag stripe?

At Morehead we discussed whether the stripe would be a thing of the past, Snedegar says. But since the card can be connected to a U.S. Bank account, the mag stripe was necessary for debit purchases and ATM transactions.


Campus card business consultant Bob Huber agrees noting that mag stripes won't be going away anytime soon. "I think they'll be around for another 20 years," he says. "You need to have a mag stripe on the card for merchant acceptance."

But Huber says contactless on campus may see significant increases in the coming years. Wear and tear on readers and cards is less with contactless than mag stripe and campuses can see a significant cost reduction on that alone, Huber says.

Traditional magnetic stripe readers should have a life of five to eight years, while contactless readers should have an expected life of 15 years or more. Add in the cost of labor for trouble-shooting and service fees for maintenance and repair and contactless provides a total cost of ownership half that of magnetic stripe readers, says Huber.

The reliability of contactless is also on par with mag stripe, suggests Huber adding, "the problem with defective cards is about the same as with mag stripe."

Read Winkelman, vice president of sales for colleges and universities at CBORD, says interest in contactless on campus is growing. The interest started out of the convenience factor but is growing because of the better security. "As security concerns in general increase, campuses are looking for anything that is more secure, that's part of what's driving the interest in contactless," Winkelman says.



Pennsylvania campus replaces offline doorlocks with WiFi solution

Lehigh Career & Technical Institute (LCTI) in Schnecksville, Pennsylvania wanted to upgrade its offline door locks to increase security and ease system management. "We wanted to establish online access control on doorways throughout the facility and not just the main entrances," says Dan Kotran, the facility manager at LCTI. But it was deemed cost prohibitive to install wiring to each access point.

The facility did, however, have an extensive WiFi network in place. "When we learned ASSA ABLOY offered an online lockset that could tap into our WiFi infrastructure," explains Kotran, "we jumped at the opportunity." LCTI installed 22 SARGENT v.S2 WiFi-enabled locksets with embedded 125 kHz HID proximity capability.

The v.S2 works with any open-architecture access control system so the campus was able to add the new locks into both the existing wireless network and the existing physical access control system.

Each lockset can store 2,000 unique credentials and 10,000 events enabling access decisions to be made at the door. Thus, the locks can continue to function, even if the wireless network is unavailable. LCTI personnel now establish, manage and monitor all access functions from a central point.

Six AA batteries power each lockset. To ease the challenges with battery replacement, the lock transmits a warning to the system when batteries get low.

"Installing the locks couldn't have been easier," says Kotran. "There were no wires to run and, since the locks do not require any proprietary wireless infrastructure, they instantly worked with our WiFi network."

"This new locking system has given us greater control of our facility security," he concludes. "We are now able to interrogate the locks from a central location and monitor who accessed the opening and at what time."

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Searching for 'green' card stock

Sustainable options are still a ways off

Ed McKinley

Contributing Editor, AVISIAN Publications

[This is an abridged version of a larger article that is available online at CR80News.com, Keyword="Green card stock"]

Polyvinyl chloride – or PVC for short – dominates the nation's plastic-card market despite efforts to find more ecologically friendly materials. Cards made of 100% PVC account for perhaps 90% of all the plastic cards made in North America, according to card-industry executives. Most of the other 10% are composite cards with polyester cores sandwiched between layers of PVC.

Low price makes PVC the material of choice for most cards. It sells for a dollar a pound, yielding cards that cost about four cents each, much less than cards made from other materials, says Shane Cunningham, marketing communications manager for Digital Identification Solutions LLC, which provides printers and software for creating secure credentials.

Card makers can laminate, hot stamp and die cut PVC, it accepts dye from a variety of printers, Cunningham says.

But 100% PVC cards don't last as long as cards made with some other materials, says David Ogonowski, an estimator who handles product development for Denver-based CPI Card Group. That's why manufacturers make composite cards with polyester cores and PVC on the outside, he says.

Depending upon how the public uses cards, 100% PVC versions last two to four years, and composite polyester and PVC cards last four to six years, says Mark Degan, corporate marketing manager for Cornelius, N.C.-based ColorID LLC.

Composite PVC and polyester cards also withstand heat and cold better than 100% PVC cards, says Crawford. Putting photos and birthdates on driver licenses and ID cards with desktop printers can require heat, so those users often choose composite cards, he continues. Credit cards don't require personalization

via desktop printers, so 100% PVC works well for them, he notes.

PVC is good for cards, but some say bad for the environment

Still, not everybody loves PVC. While winning the trust of the card industry, PVC has earned the ire of environmentalists. "PVC is the single most environmentally damaging of all plastics," says the Web site of Washington-based environmental group Greenpeace. The organization advocates phasing out PVC because producing it creates the deadly poison dioxin as a by-product. Burning PVC also can release dioxin into the air, Greenpeace says.

Environmentalists also point out that PVC is not biodegradable. In other words, it will not break down in landfills, making it an objectionable material, they say.

Replacing petroleum with renewable sources for card materials

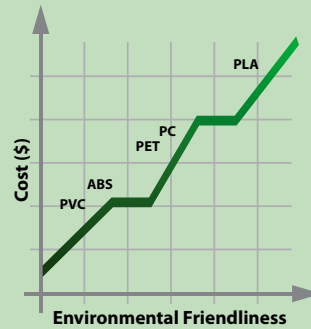
The search for renewable materials has led to cards made from polylactide acid – or PLA – mostly from corn in the United States and from sugar cane elsewhere.

PLA advocates, including Brian Glasbrenner, business director, films and cards, for NatureWorks LLC, a Minnetonka, Minn.-based provider of PLA, say the material has the potential to seriously reduce environmental problems.

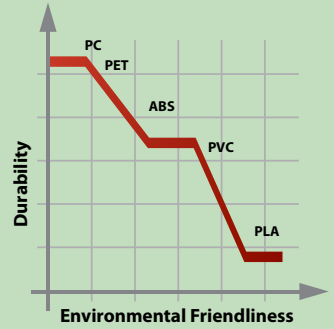
"The environmental attributes can be really significant when considering something as large as the transaction card industry – which produces something like 19 billion cards each year, says Glasbrenner.

PLA cards need a PVC surface to work in dye-sublimation printers, adds Cunningham. Gluing a magnetic stripe to PLA can present chal-

The price of a card tends to increase as the environmental friendliness of its construction increases.



The durability of a card tends to decrease as the environmental friendliness of its construction increases.



lenges, Crawford adds. Inconsistency plagues PLA cards, according to another industry executive.

Cost is also an issue as PLA cards cost about 14 cents each, compared with four cents for a PVC card, Cunningham says, noting the difference can add up for issuers ordering hundreds of thousands of cards. "We're still a very cost conscious society, especially now during a recession," he says. "Everybody is going green if doesn't cost more."

ABS, PET and others challenge PVC

One plastic, called acrylonitrile butadiene styrene, or ABS, may someday undercut PVC on price in North America, says Cunningham. ABS costs less than PVC in Europe, but U.S. manufacturers don't make ABS because of their focus on PVC, he says.

Adding the transportation costs from Europe or Asia makes ABS more expensive here than PVC, he continues. Although ABS is more durable than PVC, it can't withstand direct-to-card printers and instead requires retransfer printing, says Cunningham.

Meanwhile, some card industry executives are turning their attention to polyethylene terephthalate, or PET, as a card material because Americans recycle so many milk containers made with PET or with amorphous polyethylene terephthalate, called APET, and oriented polyethylene terephthalate, called

OPET. All offer more strength than PVC but present personalization challenges and cost more than PVC, Crawford says.

Europeans and Asians also have taken to polycarbonate, or PC, which incinerates to water and also offers durability, resists heat and accepts laser imaging.

While most of the industry explores the world of plastics for card materials, some manufacturers have turned to wood, sometimes with the grain intact. "Fundamentally, cards can be made from anything," notes Thor Engineering's Paulson.

Jim Collieran, project manager, global support, for Irvine, Calif.-based HID Global, summarizes his company's experience with green cards this way: "We're seeing a lot of questions but very little real demand. That part of the market is really young."



Card recycling yet to take off

Recycling can provide a selling point for cards, but reclaimed plastic often comes in less-than-pure shades of white that can drive away card-industry decision makers. "It definitely makes the whites look ugly," says Bill Crawford, vice president of sales and marketing for Franklin, Ohio-based Waytek Corp., a materials and coatings supplier to card manufacturers, and a board member of the Princeton Junction, N.J.-based International Card Manufacturers Association.

"Everybody likes to print on gorgeous virgin white stock and when you start to use recycled PVC in your stock it will look gray and streaky," Crawford maintains. "Are you OK with your logo on streaky gray stock?"

Other than color, recycled polyvinyl chloride – or PVC for short – performs almost exactly the same as virgin PVC in card manufacturing and processing, industry executives agree.

Recycled PVC has yet to establish a significant share of the market but could increase in popularity as consumers become more environmentally conscious.

Crawford acknowledges that recycling could provide a selling point in some markets, such as gift cards, and suggests that marketers could capitalize on the discoloration as a mark of recycling authenticity. "There are some specialty applications where green is important and looks are not," he says.

In such cases, a company marketing department could justify the expense of recycled PVC, which costs more than virgin PVC, Crawford says. Even when demand exists for cards made of recycled plastic, recycling the cards themselves might not make sense, according to Crawford. Driving two blocks to recycle a card would cause greater environmental harm than throwing away the card, he says.


Crawford suggests the alternative of making cards from PVC used to make plumbing pipes or house siding. The use of PVC in building materials far outstrips the amount of PVC used in cards, he says.

In fact, he questions the need to recycle cards because of their relatively small amount of PVC. "The card industry use of PVC is insignificant compared to the packaging industry, the construction plastic – those markets are huge compared to the small amount of plastic you're carrying in your wallet," says Crawford.



Plastics

commonly used in ID cards



PVC – Polyvinyl chloride

Most common material used in North America for ID cards. **OTHER APPLICATIONS:** pipes for construction industry, cling films, juice bottles and food packaging, etc. Plastic Identification Code 3.




PET (or Polyester) – Polyethylene terephthalate

Used in combination with other materials such as PVC to add strength to plastic cards. There are various forms of the plastic resin or polyester as it is called in the textile industry. **OTHER APPLICATIONS:** beverage bottles, flexible food packaging, thermal insulation, textiles and boat sails. Plastic Identification Code 1.



Composite (also called Poly-Composite)

Plastic cards labeled composite most often consist of PET at the core with PVC outer layers. PET increases the card's durability while PVC keeps it low cost and easy to print on via standard dye sublimation card printers.



ABS – Acrylonitrile butadiene styrene

Most common material used in Europe for ID cards. **OTHER APPLICATIONS:** pipes for construction industry, automotive parts, golf club heads and toy Lego bricks. Plastic Identification Code 7 (shared with PC and others).

PC – Polycarbonate

Commonly used in ID cards that are personalized via laser engraving techniques. There are numerous types of PCs that are used frequently for injection molding processes. **OTHER APPLICATIONS:** single use and reusable drinking bottles, CD/DVDs, tubing and Apple computers. Plastic Identification Code 7 (shared with ABS and others).

PLA – Polylactide acid

Biodegradable polyester made from renewable sources such as corn and sugar cane. Marketed for plastic card use under the name corn cards but only nominal use to date. **OTHER APPLICATIONS:** medical sutures, stents, plastic cups and food packaging.

Campus card providers offer cost reduction, revenue-generating tips

With most states slashing budgets, cash-strapped institutions have had to make tough choices. Some have chosen to freeze salaries, others have laid-off people and many have put construction and other campus projects on hold. Operating a campus card program is a significant expense so CR80News sought the assistance of campus card providers to build a list of cost savings tips.

The following ideas were presented by Brian Adoff, Sales Manager, NuVision Networks; Fred Emery, VP Heartland Campus Solutions; Taran Lent, Vice President, CardSmith; and Read Winkelman, VP of Sales, The CBORD Group.

Operations

Simplify campus card account plans to reduce administrative and financial reconciliation overhead. Eliminate meal and account plans that have less than 5% participation.

Taran Lent, CardSmith

Use the reporting capabilities of your POS system to get a better handle on finances. For example, you can use the menu item sales report to compare items sold with actual production to determine potential waste. You can also analyze sales versus production over time to avoid under production that translates to lost sales.

Read Winkelman, CBORD

Review annual maintenance contracts to determine the ongoing costs to maintain your system. Campuses may be able to install a cost-effective system for the same amount of money it would cost to maintain a pricier system for one year and then begin realizing cost savings the following year.

Fred Emery, Heartland

Be sure to pass costs to vendors. For example, campuses should be recovering fees charged by software providers to connect to bookstore or dining POS systems.

Taran Lent, CardSmith

New technology

Reduce or eliminate paper waste by enabling cardholders to purchase tickets for events using their debit or e-purse account tied to their card. Cardholders would then swipe their card at the event to gain entry. This eliminates printing and distribution of paper tickets. It also increases security for events by letting organizers know who is going in and out and at what time.

Brian Adoff, NuVision

Implement card-based electronic access control over key-based mechanical with a payback of less than two years. On a campus with mechanical keys when the semester ends students leave and the campus needs to lock them out. Some students will still have their keys so the university has to physically visit every exterior door and switch out the lock core. A schedule-based lockout via an online electronic access control system enables locks to be changed from one location.

Additionally, a mechanical lock system will have a master key or a set of master and sub-masters. Loss of one of those keys represents a huge liability and a cost to re-core all affected locks. Lost cards can be turned off immediately via an online electronic access control system.

Read Winkelman, CBORD Group

An Internet protocol (IP) public address system can supplement an emergency notification system and can be more effective and less costly than text messaging. The quickest path to the brain is through the ear and there is no per message or per student cost with a public address system.

Read Winkelman, CBORD Group

Use virtual card readers where feasible. The purchase of a card reader is not necessary in some areas of campus. If a location that needs a card reader already has a desktop computer in place the school can use a virtual reader in place of a physical one for a fraction of the cost.

A virtual reader has the same functionality as a physical card reader except that it runs on a computer and uses a keyboard with a card swipe. Bryn Mawr College in Pennsylvania currently uses five virtual readers in places like the catering center, mailroom and copy center. By opting for virtual as opposed to physical readers, Bryn Mawr saved almost \$7,000 in purchasing costs.

Brian Adoff, NuVision

Payment processing

Evaluate your current merchant services statement to ensure that your effective credit card rate (total fees for the month divided by total sales volume) does not exceed 2.1%.

Taran Lent, CardSmith

Request interchange plus pricing from your merchant service provider. Not all transactions are priced the same. For example, check card transactions cost about 10% less than credit card transactions. Deals structured this way give you the best rate on every transaction.

Taran Lent, CardSmith

For in office payments, swipe cards to get card present (vs. card not present) rates that are about 10% lower.

Taran Lent, CardSmith

Re-evaluate the payment processor, making sure the school is not being charged "hidden" or "junk" fees. Some processors include fees that the merchant (or in this case, colleges) don't know about, such as bill-backs or various card type fees. Sometimes processors will not disclose fees if a merchant does not batch out by a certain time. These add up.

Fred Emery, Heartland

Marketing

Collaborate with other card programs to negotiate bulk prices on print materials such as brochures, pre-printed card stock and "accepted here" stickers. Larger orders are easier for printers to manage and reduce the set-up/ fixed costs for everyone. Also, cross-market

and cost share with other on-campus departments/groups, especially dining services, first-year student orientation and campus tours.

Taran Lent, CardSmith

Carding a new incoming class is hard work and expensive. Carding events can cost \$5,000 or more when you account for card stock, print ribbons, and labor. Turn this high student traffic into a valuable sponsorship event. For example, let a local community merchant or third-party partner sponsor carding events for incoming students.

Taran Lent, CardSmith

IT and system architecture

Explore professionally hosted, managed IT and software as a service (SaaS) transaction processing models. Also consider outsourcing the campus card program to a managed solution provider.

Taran Lent, CardSmith

Use a comprehensive system from a single source to cut down on gateway/integration charges commonly incurred when trying to integrate multiple third-party systems as a primary solution.

Fred Emery, Heartland

Implement an online self-service account center to reduce phone calls and walk-in traffic. Done right, this can also automate value transfer to the campus card discretionary account.

Taran Lent, CardSmith

Use open source community-based software such as Linux (operating system), MySQL (database), JasperReports (reporting).

Taran Lent, CardSmith

Partner and collaborate with neighboring schools to share and centralize IT infrastructure costs.

Taran Lent, CardSmith

Potential revenue generators

Off-campus merchant payment processing: This revenue sharing program could generate revenue for the campus and provide collaboration with the local merchants. And it doesn't cost the school anything to implement.

When campuses want to take the card program off-campus they have startup costs--buying readers, phone lines, marketing to merchants, negotiating merchant agreements. Ongoing they have the costs of cutting checks to merchants for the purchases made in their store (minus whatever transaction fee they extract), reporting to merchants and terminal support.

When a program like this is outsourced to a provider that works in a revenue sharing model, the startup and ongoing costs can be eliminated. Instead, the outsourced provider handles all of the infrastructure, marketing, support, and payment to the merchant. The transaction fee paid by the merchant is shared by the university and outsourced provider.

Read Winkelman, CBORD

Gain revenue through off-campus card use. For example, with Heartland's Give Something Back Network, schools receive a portion of the purchase price from every off-campus transaction when cardholders use their OneCards.

Fred Emery, Heartland

Off-campus student discount programs offer special discounts from national and local merchants, such as Target.com, American Airlines, Amtrak, among others. Students pay a fee to participate in the program and access the discounts negotiated by the discount program provider. Discount program providers will often pay the university a commission for each student membership that the university is active in signing up. Card offices can offer student discount memberships and generate revenue through commissions with no initial costs.

Read Winkelman, CBORD

Adding card-based payments to vending, copying, laundry environments can increase sales volume and revenues. A modest 15% increase in volume would return your hardware investment costs in less than three years. Many institutions experience much higher lifts. State University of New York at Fredonia saw a 97% increase in vending sales as a result of implementing online card-based vending while Plymouth State University in New Hampshire saw a 93% increase.

Read Winkelman, CBORD

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From managing the comings and goings at an event like the Academy Awards to making sure high school students are where they're supposed to be, ID management systems have come a long way this decade. ID systems now are being used to monitor individuals at events, attendance at high schools or colleges, at construction sites or even at the scene of a disaster.

One company that has made ID management its core business is Jupiter, Fla.-based Vision Database Systems. Emil Bonaduce, Vision's founder and president, says a portable device equipped with his PockeTracker software can identify an individual in seconds.

The Academy of Motion Picture Arts and Sciences, which hands out the Oscars each year, is venue that one may not immediately associate with security concerns. Yet, it was looking to avoid a situation that happened a year ago when someone was able to gain access with a compromised credential, says Bonaduce. "They wanted a way to detect this, a discreet way to ID the status for a particular individual, that last little bit of security."

So the Academy turned to Vision's ID software, specifically PockeTracker, which, as its name suggests, is designed for handheld PDAs. The system "functioned very well in the place of a dedicated card reader. It gave them the flexibility to change traffic patterns during the event and still monitor security," says Bonaduce.

The security wasn't for the attendees, but for the workers putting on the Academy Awards, including security people, cooks and everyone involved, says Bonaduce. It was used at two key ungated checkpoints and backstage by a roaming watch commander, says Bonaduce.

Green, you're in

PockeTracker was also used recently to track admission to this year's the Indian Wells, Calif. professional tennis tournament. "We had eight PockeTrackers used in a wireless environment over 10 days, that scanned 18,000 bar-coded tickets," says Bonaduce.

This particular PockeTracker software is what Bonaduce calls "red-green." If the badge or ticket that's scanned is unacceptable, the screen turns red. Otherwise, it turns green. "It's the least intrusive way of scanning an ID card."

PockeTracker is compatible with several models of handhelds and that's one of the major reasons Indian Wells chose it, says Heni Watson, director of special events at Indian Wells.

"We decided to go with PockeTracker because it was compatible with our credential software (Polaroid ID Cardmaker), the portable units were durable and they had the ability to display a photo," she says. Bottom line, PockeTracker worked "very well considering how short a time period we had to learn the system and train our volunteers to use the units."

Probably the best compliment someone can make about a product is if they'll continue to use it. In Watson's case, that's an unqualified yes. "We may also use them for other special events held at our venue," she adds. "We are already working with Vision Database to make next year even more successful."

While Academy Awards and tennis tournaments are unusual uses for PockeTracker, the company's bread and butter is still K-12 schools and college campuses, which are continually looking for ways "to increase security," says Bonaduce.

The company developed the PockeTracker software about ten years ago when it was asked to look at solving the problem of handling tardiness in high schools. The software has since undergone at least three iterations and now does discipline and positive reinforcement, as well. For example, one school in Brooklyn gives out positive points for students who do their homework," says Bonaduce.

Schools take to PockeTracker

The company's PockeTracker K12, is used in middle and high schools in Florida, California, Texas and Rhode Island. "Say there's a bunch of students in the cafeteria. If a student doesn't look like he belongs, you can scan his ID badge, look up his schedule to see where he's supposed to be, check if he has had a history of past violations and you can even print a receipt or a pass to allow him to get back to class," says Bonaduce.

Colleges are also targets for ID management software to handle security and, like the tennis tournament, admission to events. "I don't think security on campus even today is as good as it needs to be," says Bonaduce. "I think our educational establishment should work a lot harder towards allocating funding for safety on their campuses."

However, it wasn't a need for greater security that led Wichita State University in Kansas to PockeTracker. The school was more interested in using the software to keep track of attendance information, says David Kidd, the university's manager of Information Systems.

Tracking classroom attendance

"Our largest event each year is Business Week involving 25 sessions over a five-day period. This is a week-long series of events where we take attendance at each session using our trackers." It's important to know who attends because students can earn extra credit. This attendance information is then later sent to the business school so proper academic credit can be applied.

"One year," says Kidd, "we even included time stamps so that the faculty knew if the student showed up late for a session."

The school has used PockeTracker at nearly 100 events, says Kidd. "We have four trackers that we allow various campus departments to use free of charge. They do have to reserve them in advance and I provide the tracking data along with whatever additional data I have available to the department," Kidd adds.

The university also has used PockeTracker to authenticate admissions to an event. "This was for a picnic hosted by one of the colleges on campus," says Kidd. "It was open only to their students, but since it was outside they needed a way to know who to let in. I programmed the trackers to check which college the student was enrolled in. If they weren't in the right college, the tracker showed the operator a red screen to let them know they shouldn't be admitted."

As for any problems, they've mostly been due to outside factors, such as loss of wireless connectivity or with bad ID cards that won't scan, says Kidd.

PockeTracker is designed to work both online and off. "In wireless mode, you can pull the information up that's on the card you're scanning," says Bonaduce. "In offline mode you can hold a large number of cards and photos in your hand, like all the card information for an entire college."

Keep those batteries charged

One "lesson learned," says Kidd, "is to not let the batteries go dead. When that happens, you have to reconfigure the software including re-licensing. Vision Database support was a great help in getting us back up and going after this happened the first and last time. Fortunately, our trackers stay busy enough now that they always keep a full charge."

PockeTracker can also be used to give a quick count, "the ability to immediately see who's in the room. It answers the question who's on the bus who's off the bus, so it can be used for field trips for children," he says.

For construction sites, you can see when a vendor arrived and how long he was at the site so when you get his bill you'll know if it's valid. "We're finding new uses in the construction field. We're looking at producing ID cards which have the credentials of the person embedded in the card. With our product, which we'll be releasing in the near future, you'll be able to check that person before he goes to that piece of equipment to make sure he's qualified to operate it," says Bonaduce.

Vision is looking at further expanding its reach and giving its customers more choices. "We are working on an application in Europe for club access," he says. "We are also branching out in other markets, such as hospitals, even the military."

The company is also looking at including a built-in fingerprint reader. Right now, a fingerprint reader needs to be attached to the handheld that's running PockeTracker. "We're being asked more and more for fingerprint technology with a handheld for areas which are highly secure," he adds.

Bringing campus banking to community colleges

Community colleges haven't always been considered ideal candidates for campus banking services. That's changing. Partnerships between banks and the two-year schools through their student ID cards, are out there and brick and mortar facilities are showing up on campus as well.

CR80News' 2008 campus card banking partners survey identified at least 10 partnerships between banks and ID programs at community colleges or community college districts.

Still, community colleges and their bank partners face challenges.

Since many community colleges don't require a student to obtain an ID card, banks and colleges have to come up with ways to make the card attractive to students. Linking it to a bank is one of those ways because it means additional services, such as ATM and debit card capability.

Another challenge is that since community college students are typically older than those attending four-year schools, many students are already tethered to a bank and are reluctant to change.

Johnson County Community College, Overland Park, Kan., only recently added banking services to its campus card. "We wanted to offer as many services to the students as we could related to the card," said Susan W. Rider, manager of the Business Office Services at Johnson County. "Many students are commuters which means they often do business off campus for things like food and supplies. Having the card as a debit card lets the students receive their financial aid and refunds direct deposited and have the ability to use those funds off campus quickly."

Rider feels that a banking relationship "is an excellent way for young adults or un-bankable students to get a free checking account through U.S. Bank. This allows students to use our direct deposit service to receive funds into their checking account quickly."

"Offer the ID card at a community college may not perform as many functions as a four-year school's ID card," she says. "Since there's normally no on-campus housing and limited meal plans many students may not see the ID card at a community college as a necessity."

That's why, she adds, banks "have to do a better job promoting all aspects of the ID card at a community college, not just the banking functions, so students see the value in having and using the card."

Since most community college students don't live on campus, they don't spend as much time there as they would at a four-year school. "They may not see the traditional marketing pieces, such as flyers, posters and banners that we use to promote an ID card program," says Bright. "Therefore, we are also using more electronic media to market to the community college students, e-mail, Web site announcements, etc."

The atypical CC student

There's also the issue of timing. Many community colleges don't have typical summer or fall orientations. "If they don't have a traditional orientation, we are scheduling regular tabling events through out the year to get the word out and open accounts for students," adds Bright.

A bank can't use all the same marketing tactics it utilizes at a four-year school. There are some major differences, says Whitney Bright, vice president and general manager for campus banking at U.S. Bank.

Freebies

Free services can help a banking partnership take. Among the free services at Johnson Community College, are Internet banking, the first box of checks, U.S. Bank Internet bill pay, four non-U.S. Bank ATM transactions per month and free U.S. Bank ATM transactions, says Rider.

The partnership with U.S. Bank is still new. "We completed the RFP process and started the partnership and implementation late last year," says Rider. "We went live with the card and debit capability in May of this year."

Already 3,500 students of the school's 19,000 students have signed up, Laura Radke, systems specialist for Johnson Community College, expects a rush of new card applications this fall as the students return for the new year. "Technically we do not require every student to have (a student ID), but whenever possible we highly encourage our students and staff to get their new ID card," says Radke. "I believe most of our students will be getting their cards in the fall after the fall payment deadline."

As to the program's success, Radke says it is off to a great start. "Both students and staff have easily converted over to the new Johnson Community College ID card with minimal issues. This is something the students have been wanting, and now that we have the baseline functionality in place, we will be working to build-up the card program to offer new functionality and services to best meet the needs of our student/staff population."

Help for the bottom line

Wells Fargo currently supports Campus Card services at several community colleges, as well.

"We began working with community colleges in 2005 because we were able to provide an important and valued service for students, faculty and staff," says Richele Messick, Wells Fargo Corporate Communications.

The bank has an on-campus presence at one of the community colleges it services, Riverside Community College in California, including three ATMs, one on each of its campuses. "We do not have stores (branch banks) or ATMs at the other two community colleges. Each school relationship as well as the needs of the school is different," adds Messick. "We work with our customers to determine how we can best serve their financial services needs."

The free checking with no monthly minimum balance and ATMs on campus were also additions to Riverside Community College in California, says Linda Lacy, vice chancellor of student services and operations. The college has been with Wells Fargo for more about two and a half years. With a branch bank on site, it means Wells Fargo staff are always visible, says Lacy.

As with any banking partnership, there's also its effects on the college's bottom line. "The Wells Fargo program provides royalty payments to the college which funds the cost of providing the card and administrative fees involved in this process," says Lacy. "The card serves as the students library card, access to labs, provides identification for the GO PASS program which allows RCC students to ride Riverside Transit Authority buses free and discount programs with local businesses."

The ID card program at Riverside is also voluntary. Still, thanks to extensive promotions by both the college and Wells Fargo—information tables, press releases to the student newspaper, ads in the summer class schedule and in the student handbook—Lacy estimates that nearly 90% of the college's 37,000 students have received their ID cards.

One bank leaves, another enters

Things worked a little differently for Milwaukee Area Technical College, another U.S. Bank partner school. For one, it wasn't a matter of starting a new program. It was replacing one bank with another.

Brenda Saugstad, coordinator of campus card programs and services for Milwaukee Area Technical College, sought out another bank after its partnership of four years was terminated by TCF Bank, which told her it was losing money on the deal.

"We tried our best to make it work," says Jason Korstange, TCF's director of corporate communications. "It was not something we could see working out on a long term basis."

"U.S. Bank is in our area and has branches in our surrounding areas to meet the needs of students at each of our campuses," says Saugstad. The center has four campuses in the Milwaukee area serving some 50,000 students, all commuters. The average age of its students is 28.

The school's former bank had a brick and mortar facility at one of the campuses which U.S. Bank will be taking over, says Saugstad.

The first major chore, she says, will be recarding all students starting this fall. U.S. Bank will pay the re-

carding expenses and will promote the changeover in an effort to get students to open up accounts, says Saugstad.

Free services are similar to those offered at Johnson County and while an ID card isn't mandatory, about three fourths of the students do have one, says Saugstad. However, the percentage is less than 50% on the number of students who had accounts with the school's former bank.

"The advantages (of a banking relationship) are wonderful," says Saugstad. "Students can do banking right here while at school. They don't have to worry about having to get to a bank to make deposits or finding the transportation to get there," she says.

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How the Cougars got their cards

The tale of Washington State University banking partnership and ID card

When Washington State University in Pullman went looking for a banking partner a couple years ago, administrators had some strong ideas of what the program needed to offer.

"WSU was approached by a number of institutions who wanted to provide banking services for our CougarCard holders," says Craig Howard, director of WSU's Administrative Services Information Systems. "However, the offerings always fell short in one way or another."

"We had always known that a program would need to meet some fairly stringent criteria before we would seriously entertain a banking relationship for the CougarCard," says Howard. "The program would need to provide an instantly issued Visa or MasterCard logo debit card, no two week wait period, and we wanted the program to be opt in with a brick and mortar presence," adds Howard.

After the requests for proposals went out, Howard says the university brought in two banks for final discussions, one which was U.S. Bank.

"The instant issuance was pretty tough criteria but U.S. Bank told us they'd be doing instant issuance in the next few months," says Howard. The other bank had no plans to do instant issuance.

"WSU awarded the bid to U.S. Bank and we were able to scrunch up a little space, 650 square feet next to our card office." One door literally separates the bank from the card office.

The university started issuing its PIN-based debit cards in 2007, Howard says. To do so it had to make some changes to how data was encoded on the CougarCard. The card would still be used for meal plans, the school's declining balance program Cougar CASH, facility access, sports passes for athletic events with the added PIN debit functionality. The university had negotiated for the card to be used at 32 off-campus merchants.

The CougarCard comes in two choices, the standard card has just one red mag stripe on the back. Everyone, the school's 18,000 students and 5,000 faculty and staff, receive the standard card. But if they choose the CougarCard Maxx, which involves opening an account with U.S. Bank, they get an enhanced version with a second mag stripe, says Howard. U.S. Bank started offering this card in January, says Howard.

WSU and U.S. Bank made several changes to the program including:

- Moved the Maxx card printer and software into the on-campus U.S. Bank branch adjacent to the CougarCard Center.

- Developed a "flat," non-embossed Maxx card.
- Added a second, black magnetic stripe to the CougarCard Maxx to eliminate the need to populate any banking information into the CougarCard System.

The black mag stripe is used with the banking account as a normal debit card and the red mag stripe is for everything on campus, the resident dining account, Cougar Cash, which works in vending machines, door access for residence halls, admission to football games or admission to the recreation center, says Howard.

"We also redesigned the standard CougarCard to provide a complementary format for the CougarCard Maxx. All of these changes and innovations have caused us to change our marketing and internal procedures to keep up with the evolution of the CougarCard program. We're in the final stages of those changes now as we're working with our local merchants to shrink our Cougar CASH program to only include on-campus merchant locations for the next academic year."

Off-campus program reduced

What he couldn't have anticipated was the disappointment by some students, of losing 22 of 32 off-campus businesses that could accept the new card. The reason for the move was Visa's non-compete clause that meant the school's standard campus card account couldn't compete with Visa for off-campus business.

The school was able to negotiate the definition of "off-campus," and was able to include some merchants in close proximity to the university, says Howard.

One of the key reasons the university agreed to the new contract, he adds, was that the school is just eight miles from a major shopping area that most students utilize. The problem? That shopping area is in Moscow, Idaho, and the CougarCard couldn't be used across state lines without the university having to comply with banking laws.

There were other issues as well. Challenges started to crop up and the cost to the university started increasing. "Although it was a nice program for students it didn't yield any margin for us," says Howard. "As we analyzed

it, the program was becoming less viable. We had also started seeing off-campus sales decline. Last year for the first time it was becoming harder and harder to answer the question that 'my student has a debit card, why put money into Cougar Cash?'"

Adds Howard: "It didn't make sense to be a competitor of Visa."

Cards obtained quickly

"Students have their photos taken in the card center and the bank prints out the CougarCard Maxx. If they don't have a bank account, or if they're not interested in a CougarCard Maxx we print the standard CougarCard and give it to them," says Howard.

Going into the summer, WSU issued some 700 Maxx cards. "Now we're going through orientation, and we've issued about a thousand. It will probably be close to 2,000 students carrying the Maxx card by the time school starts," he says.

More importantly, the program is optional. "Students don't have to get a Maxx card or bank with U.S. Bank unless they choose to."

Do you want prox with that, too?

Now, the university is taking the Maxx card a step further. It has begun a pilot program to include a prox chip on the card for those students, faculty or staff who need access to the school's more secure areas, such as computer

labs or server rooms. The pilot began the first week of July.

"The goal is to avoid issuing two cards or making people carry two cards," says Angela Ralston, operations manager for U.S. Bank Campus Banking. "With our Maxx card replacing their ID card, we needed to be able to replace it wholly, performing all the functions the standard campus card did."

"The mag stripe on my CougarCard Maxx has gotten me through the back door of the building and my office door but to get into the server room, I need a prox card. Now with the prox chip on my Maxx card, I have one card that really does do everything," says Howard.

The card will be distributed to other students and staff who need access to buildings like the university's main server facility. "We also only have prox access for the cashier areas, the vault rooms and certain labs," says Howard.

Why prox at all? Mostly it's for convenience because Howard doesn't think the card is that much more secure. "Often times it's just easier to get through the door without doing anything with your hands. For example, you might be loaded down with books and "as long as you can get the card close to the reader" you can get in, says Howard.

Right now, just a hand-full of students have need of a prox card. And again, it doesn't matter whether you have a Maxx card or CougarCard not tied to a U.S. Bank account, you can still get a card with the prox chip if you need one with that capability, says Howard.

One stumbling block for the prox cards is that they're more expensive than one with just a mag stripe. "We pay about \$4 for a duo HID prox card with mag-stripe and 42 cents for a preprinted magnetic stripe card," says Howard.

He anticipates issuing 20 to 30 prox cards in the next six months. "It's a small group because they only have certain facilities that require prox but that makes it an attractive place to do a small pilot," says Ralston.

"We plan to make this available at other universities once the pilot has proven successful," adds Ralston.

"One of the reasons we chose to do this pilot is a demand from the schools. If they offer prox technology on their standard cards, they want the bank card to be backward compatible. They want to be able to offer everything else on one card. That's what drove us," says Ralston.



The CougarCard Maxx differs from the original CougarCard with an added mag stripe and Visa capabilities.



Shut down your card program?

Tips to re-position your card system as an enterprise-level solution

If you want to know just how important your campus card system is to your university, shut it down for one day. After you've quelled the riots and handled the nasty phone calls from students, faculty and staff, who want to know why they can't access their building, eat in the cafeteria, or make copies or check out library books, or do any one of a myriad of other things that campus cards allow, you'll have your answer.

That, in essence, is the mantra of campus card guru Tom Bell, vice president of strategic consulting for Blackboard's Transact system. He spoke to CR80News recently on positioning a campus card program.

"What you've got is an enterprise system, highly functional, that's more important than the student information system," says Bell. "If the student information system went down for a day, that would be okay. But if you took your campus transaction system down, then you'd have to figure out different ways to eat, to get into buildings...Imagine the attention you'd get if you turned your system off and went on vacation."

This is what happened at Tulane University in Louisiana, but it wasn't a vacation rather the rampages of Hurricane Katrina that caused the shutdown. "They couldn't open up their college until they had the campus card system up and running," says Bell.

Many administrators don't realize that the school's transaction system is running 24/7 and is critical to a college. "When campus se-

nior managers understand that, they begin to understand the importance of it," adds Bell.

Bell, one of the founders of NACCU, has been in the campus card business a long time. While he's a Blackboard employee, he says he also considers himself an industry consultant and he travels extensively, lending his expertise to colleges who request it. "When I came to Blackboard, they told me they needed a campus card evangelist," he says.

Bell thinks campus card offices aren't doing a good enough selling job. One of his goals when visiting campuses is to help them be a little more politically savvy. "Tell people what you're doing, create an annual report that describes what's happening in this card office, the amount of money flowing through the office and the ubiquity of those readers," he says. "You have to be thinking about how to present this card to your university. The campus card system is so important that everyone needs to understand what's behind it. Right now, they take the card for granted. Yet, if the card doesn't work, you have a wallet without money."

Bell recommends that a college establish a campus card task force that meets once a semester to talk about where the campus card is going and then produce a report that goes to senior officials.

"We've done a good job at creating a system that works behind the scenes, but you need to get other people involved," says Bell. "The campus card system has been supporting

the mission of the university and no one talks about that."

He says the question many people ask him has to do with maximizing revenue. "This gives me the opportunity to do a deep dive on what's happening on campus and to come away with ideas that can blend leading practices to get the most value out of their investment," says Bell.

Campuses are always looking for money and other opportunities to use their systems. They're now taking campus card systems as a tool to branch off into other areas to provide other services.

"It's not about selling a specific product, it's about looking at what campuses are doing and how they're deploying their systems."

It's also about coming up with out-of-the-box solutions. He cites the example of a campus that recently placed a card reader at a career counseling office. "The college uses the POS touch screen and a swipe of the student card to record that session. When campuses are evaluating operations they can see a record of how many people came in for career counseling."

Over the years is the campus card landscape has changed. "It was primarily developed to take care of board plans, but we're now at second and third generation," Bell says.

Campuses are also looking at new technology and applications for cards, even though the mag stripe will persevere. "I see campuses exploring other kinds of technologies, such as with mass transit. I predicted a long time ago that mag stripes would be a thing of the past. I was clearly wrong. You need to worry less about the card and more about how it's deployed," Bell adds.

Bottom line? "What we have is a system that has an incredible number of functions, processing millions of transactions. It's getting to be more and more of a reporting tool for campuses. They want to know how they're doing, how many door accesses they've had, how many people are attending one of their events. It truly is well beyond what it started out to be."

Trends in campus security

Every year half of all organizations suffer a security breach, said Michael Peele, associate engineer for facility and security systems at Georgetown University in Washington D.C. "Of those, 99% had both firewalls and anti-virus protection in place," he adds. "There has been a shift from glory motivated vandals to those seeking financial gain," he told attendees at a National association of Campus Card Users sponsored webinar on campus security trends.

One of the goals in implementing a security system is to reduce your vulnerabilities. "Threats are everywhere. You should remove data from where it doesn't need to be." The simple cure, he adds, is to physically secure, encrypt and firewall everything and use a separate network for security related data, such as CCTV, VoIP and access control files.

Still, having the best computer security means nothing if campuses don't have physical security protecting facilities. "Which is why you need card readers on your doors," says Peele

Still, no matter how sophisticated or state-of-the-art your campus security system is, if your staff hasn't been properly vetted, the money spent on security could be wasted. He suggests background checks on everyone who might be able to access your computer servers. "Your staff is your number one weak point. Perform background checks on all security staff, executives, management, auditors."

No security system should be installed without a plan. "You should plan any security system in excruciating detail," said Peele. "Start out by creating a model security facility without regard to budget or technology. Look at the existing structure and your model and prioritize with an eye towards closing the gap."

Features of an integrated security management system include alarm management, access control and video surveillance. Integration and convergence of all these pieces includes monitoring, alarm management, computer aided dispatch and emergency response.

While video surveillance on campus has become increasingly popular, it's most often used as a forensic tool after the fact, said Peele. Even if someone is watching, a guard can only monitor about eight screens at a time. After just 12 minutes of monitoring, he will miss 45% of activity. "After only 22 minutes the operator will miss 95%. Don't assume someone is watching the screen," he adds.

He suggests employing a video analytics system which analyzes activity and notifies security if there is something out of the ordinary. "You tell it what to look for, for example someone hopping a fence or someone going in a certain direction," said Peele. "When the event the software is monitoring occurs, an alarm will sound."

The analytics software could work for pedestrian safety, jaywalkers, running red lights, long lines in the cafeteria or bookstores, even students sneaking into the cafeteria, he added. Video analytics can be used with what he calls "dark screen monitoring. All the screens can be dark until you have actionable intelligence." When the event occurs, the screen comes to life, showing the video of that event, said Peele.

He also suggested colleges be aware of Homeland Security Presidential Directive 12 and Federal Information Processing Standard 201. Both involve identification credentials being issued to federal employees and many of the new products in the market reference these initiatives.

"(FIPS 201) is an excellent resource for best practices," said Peele. "These standards cover everything, including how to do background checks, the format of your ID card, whether bar code, mag strip, or contactless, the placement of the chip, etc."



ITC Systems' campus micropayment solutions continue to evolve as technology changes

ITC Systems represents itself as the source for "transaction control solutions for tomorrow." The company designs, manufactures and implements card-based solutions to campuses for their micropayment transaction needs. Additionally the company maintains a healthy channel partner relationship with key resellers to the higher education market.

ITC Systems started in 1989 through the acquisition of a card systems group owned by Hudson's Bay Vending in Toronto. From the beginning the company's focus was on the campus market. "I saw an opportunity with regard to card systems in general and specifically for those applications that accepted coins for the small purchases," says Cam Richardson, ITC's president and CEO. As the company gained traction in the Canadian higher education and library markets, it began to design and manufacture its own products, both terminals and software.

In 1994 ITC opened a U.S. subsidiary in Atlanta, targeting the same market that it had gained a reputation for in Canada. "The market was

somewhat fragmented and we were ready to expand," says Richardson. "We continued to develop our products including one of the first photo ID programs in DOS for a Fargo Electronics printer. Fargo is now part of HID Global, and continues to be an ITC Systems partner."

In 2001 ITC Systems acquired Access Control Technologies, the St. Louis-based stored value card reader manufacturing company that had been ITC's primary supplier for this type of technology. The acquisition brought ITC one step closer to vertical integration, explains Richardson, as it now had the ability to produce in house almost everything it supplied its clients.

ITC Systems became a major supplier of smart card terminals to international transaction companies such as Smart City and Mondex. One of its clients was the campus card provider Cybermark (a Smart City reseller). In 2002 ITC worked with the owners to provide a transition for the university clients during the wind down of Cybermark. After the Cybermark assets were distributed, ITC reached out to the former Cybermark customers and took a greater role in the campus card market.

"Cybermark brought us the ability to reach out and touch other schools that we hadn't previously had an opportunity to meet, thereby expanding our ability to serve this market in the U.S.," says Richardson.

Today ITC provides products and services for many higher education campuses worldwide. "Our largest installed base is in Canada where we started out," says Richardson. "For instance, in Toronto all of the colleges, universities and public libraries employ our solution in one form or another." He estimates that ITC has manufactured more than 60,000 terminals, sold more than 25

million cards and enabled more than one billion transactions.

The company's first one card university client was Laurentian University in Sudbury, Ontario. It had 10,000 students in 1989 when ITC implemented a single card for copy, print, laundry, vending and food service. The campus continues to work with ITC Systems 20-years later.

"Our largest campus account is the University of Toronto with an enrollment of 65,000 students, each with a chip-based ID card," says Richardson. ITC has worked with Toronto since 1989 when it started with a copier solution for the library. Today the card is used across the campus for applications including food service, vending, copy, print, laundry and back end reconciliation and settlement software.

ITC's first product was a stored value magnetic card solution. In the mid-1990s the company moved to chip-based stored value, and now the offering includes online TCP/IP based



"The key to success in this environment lies in listening to your marketplace and understanding technology."

**Cam Richardson,
President & CEO, ITC**



products. All of the traditional applications found in a micropayment environment are supported by the online products.

Card types accepted by the readers include standard ABA encoded mag stripes, barcoded media, HID prox, HID iClass, and MiFare contactless cards. Richardson sees the industry moving towards contactless technology. "It makes sense in our fast paced world. It's great for security and convenient for the user."

"Our product research and development cycle is primarily based on input received from our customers and their desires," says Richardson. "The key to success in this environment lies in listening to your marketplace and understanding technology."

Kennesaw State University in Atlanta, with a student enrollment of 22,000, initially implemented ITC's online solution with a mag stripe card for administrative copy and print tracking as well as student pay for print/copy functions. "After a year of running the copy/print program they came to us inquiring about add-

ing food service to the mix," says Richardson. "We then implemented cash register stations at their food outlets linked via TCP/IP, online to their account-based back end."

Adds Gary Dalton, Kennesaw's associate director for auxiliary services: "We wanted to receive payment on a per impression basis and we needed a management system that involved swiping the card and paying for copies used. Since the solution put in by our copier contractor included ITC Systems' Multiplan back end database product, we were able to add retail food management and our bookstore to the system."

"Each card has an account, even guest cards," adds Dalton. "You can put money on those accounts or have charge privileges. Every KSU ID card issued is managed by Multiplan."

At the new dining hall, ITC integrated biometric hand scanners to the system with turnstile access. "We needed a way to insure, that for the unlimited plan only the individual card holder is the one eating," says Dalton. "We found that

parents wanted to know that their child was being fed so the card matching with the hand scan ensured this occurred and that the card was not being given to or used by another."

Value can be added to debit accounts at any of the seven K-Cash Loaders located at strategic locations on campus. KSU is expanding the applications to include the vending machines and parking.

"We use a lot of what ITC offers," Dalton adds. "We continually interact with them and I know that if we need to have a report or a feature added, they'll put it in. They build the products we need, for a reasonable price and if there are any problems or issues they'll fix it. What more do you need from a vendor?"

That type of praise is what keeps the team at ITC Systems going after more than two decades in the campus card business. "One of our claims to fame is that we supply cost recovery solutions that won't leave you recovering your costs," concludes Richardson. "We listen to our customers and our mandate is theirs."



The advertisement features a large image of the Evolis Pebble4 card printer on the right, which is white with red accents. On the left, there is a red box containing the Evolis logo and product details. Below this box, the text 'Reliability has a new ID' is written in large white letters on a red background. At the bottom, there is a white box with black text providing contact information and a list of use cases.

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BYU students take first crack at replacing ID card with mobile phone

Pilot project enabled bookstore payments via microSD equipped handset

At Brigham Young University's Rexburg, Idaho campus, 120 students and faculty members are using their cell phones to make payments in the campus bookstore. The mobile technology startup, RFinity, developed the secure solution using microSD cards with Near Field Communication capabilities to enable contactless payments with the devices.

"The RFinity pilot at BYU-I will be one of the first mobile contactless deployments that focuses on securing transactions in a way that reduces the risks associated with legacy payment systems," says Aaron Turner, RFinity co-founder and CEO.

The company went after BYU in part because of its convenience. The company is located just 20 minutes away from the 12,000 student Rexburg campus, says Wally McPheters, RFinity product manager in charge of the BYU pilot.

For the pilot RFinity supplied participating students with a new cell phone—either a Palm Treo or the Ozone phone from Taiwan-based HTC Corp. "It was easier for us to prepare for the first pilot by providing them with phones," says McPheters.

The phones serve as a replacement or option to the campus' mag-stripe ID card known as the I-Cards.

For the first stage of the pilot, which lasts through fall semester, the phones can only be used in the campus bookstore and are pre-loaded with scholarships and money to pay for books and it also includes a declining balance account.

"BYU said the university store was the best arena for this pilot," says McPheters. "It's a full-scale store and is the center of all activities. The store sells clothing, textbooks, technology, convenience store items, in other words a number of product lines other than educational."

The goal of the pilot is simple, says McPheters. "We want to prove the technology works and then improve it. It allows us to show financial transactions at POS and give us valuable feedback. We also expect to generate ideas for additional applications."

No personal data on phone

Andy Cargal, BYU University communications, says each microSD contains the RFinity technology and a unique number that correlates to the student's account numbers in the BYU database leaving no personal information on the phone.

The pilot is being coordinated with the university store management team, while the outcomes are overseen by the university's Presidents Council, says Cargal.

Turner anticipates there could be an increase in sales just due to the novelty factor. So far, purchases have ranged from a nickel for gum, up to \$1,700 for a MacBook, he says.

Students were chosen for the pilot following several surveys that determined what's important to them and how they buy, says McPheters. "We wanted a cross section of people who frequent the university store and those who don't, so we could see how often the phones get used."



The microSD card in the phone uses RF communication to transmit data at point of sale. It sends a unique number that correlates to the student's account number in the BYU database.

The company surveyed 1,500 students. “We looked for those attributes that would help us ID different types of shoppers, such as single under classmen, single upper classmen and married students,” says McPheters. “These three buy a little differently. That narrowed us right down to about 120. We then reconnected with them all to see if they were still interested and would be here this fall, and what kind of phone they carry.”

Cargal says following the surveys there were more than 500 students who expressed interest in participating in the pilot. He says those who didn't make the first cut are still on the list when the pilot expands to more students, likely in January.

Students control payment process

Steve McCown, RFinity's chief technology officer, says the technology can handle two payment modes. Quickpay, for transaction less than \$25, requires the user to press a button on the phone to transmit the necessary information to the reader. RFinity requires the user

to actively initiate every transaction by pressing the button to protect the information from being accessed fraudulently or inadvertently.

For amounts of more than \$25 the user must authorize the transaction by entering a PIN. If a student is standing in line and getting ready to pay for \$300 worth of books, he can preauthorize his next transaction by entering the PIN, thus saving time at the POS. Then when he gets to the register, he simply holds down the button to activate quickpay, says McCown.

While \$25 is the default amount each participant can adjust it to meet their personal security needs. Some students have insisted on a zero threshold, which means they have to enter a PIN for every transaction, Turner adds.

Input from Giesecke & Devrient

The system uses a microSD card from Giesecke & Devrient called the Mobile Security Card CL (for contactless). The security feature in the Mobile Security Card CL is provided by a cryptography controller integrated in the card

along with the flash memory. The card can be used in mobile phones, smart phones, netbooks and even in USB tokens, says McCown.

If a phone is lost or stolen the student can call RFinity and shut down the key, says McPheters.

The second stage of the pilot is likely to include more applications and as many as 1,600 participants. McPheters would not elaborate what those apps would be, but he hinted it could include adding the ability to read from a person's bank or debit account and expand beyond financial transactions.

“This will be a way for a student to take his student ID card with him virtually. From the student's perspective, all they'd need is a cell phone,” says McCown.

The project is going well, says Turner. “The thing students told us is that they like not having to carry a wallet into the bookstore, they love the convenience factor. And they like the fact they can control their own security.”

Social networking and your campus card program

If you aren't using Facebook, YouTube, MySpace or some of the other so-called social networking sites, you may be missing out on a prime opportunity to market your campus card or other university program.

The University of Minnesota uses Facebook, YouTube and sometimes Twitter to keep its students in the know and coming soon will be an ambitious video about the day in the life of a U Card user, said Alison Bloomster, marketing and operations manager, U Card Office, at the university. "This is where your students are, and this is where you need to be," she said.

"Social media is a huge evolving topic which you can use to augment your current marketing plan. It's a great way to get in touch with students as well as faculty," said Bloomster. More importantly, today's students, sometimes labeled millennials, or Gen Y, expect this, she said.

Non-traditional channels

The choices available for marketing are infinite, she said. "You have the Web, email, blogs, instant messaging, picture sharing and VoIP." None of these choices existed even a few years ago. "I really believe that social media fits best with promotion. It gives you another way to be visible on campus," said Bloomster.

"What makes social media different is that it's interactive. You don't have to know html to post pictures anymore. It's a way for people and for you to connect to your customers, your cardholders. When you're moving into the realm of interactivity, you're creating channels of social media, where you and other users are connecting with each other," she explained.

Still Bloomster views social sites as simply an extension of a university's overall marketing and promotion program.

"Social Media the noun can refer to all the Internet and mobile-based channels and applications that people use for sharing and interacting around text, photo and video based information," she added. "It's a channel of communication in which the audience can participate by adding comments, instant messaging, or editing the story themselves."

The university has its own Facebook site. You have to be a member to view the pages which means you're either a university employee or a student. "We decided to use Facebook because it's very user friendly. We've uploaded photos, we do wall postings, and we have used Facebook for promotions." MySpace attracts more adults.

Another site used by the university is a popular video-sharing site. "YouTube is amazing," she said. "You can create your own channels. We have a channel there and we'll be posting our video blog (a day in the life of a U Card) there once it's finished."

Regardless of the social media you're using, don't be afraid to experiment, she suggested. That's the only way you'll learn what will work best for your institution. "There is no magic bullet here. Some will make sense, like wall postings on Facebook."

The university also started using Twitter, sending out, in Twitter parlance, "tweets," little messages your Internet-capable phone can capture or you view on your computer.

This works really well during peak enrollment periods or recarding. "You could check to see, hey there's an hour wait right now," said Bloomster. A tweet is limited to 140 characters and it's not used "so much by students, but it is by staff and faculty," she added.

The media, at least for now, is free and paperless, which also makes it environmentally friendly.

"Think about all that we know about the millennial generation, all the workshops we've been to and apply that to using social media," she said.

Tips for campus card programs using social media:

- Keep it fresh
- Be consistent in your postings
- Be creative, inventive
- Play into the tastes of your audience
- Invite students to participate
- Cross promote to build usage
- Use contemporary type faces, colors
- Post a link to your Facebook site at the bottom of your emails
- Solicit questions on your site
- Post customer stories and testimonials
- Keep postings current and relevant
- Inform, don't advertise
- Use caution when using txt spk

Remember that interaction is key. "Information should be interesting and useful. Play into the tastes of your audience, the millennial generation and their parents," she said.

Promote your social media, whether it's your Facebook page or Web site, via email. "Millennials are content providers and will want to post their comments on your site, such as their experiences with the campus card," said Bloomster.

To millennials social media is a life style. "It's really important you recognize that," she added.



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