ANNUAL TECHNOLOGY ISSUE

ISO & AGENT

September/October 2014

HENRY HELGESON, CEO, Merchant Warehouse

BUNDLED SERVICES HAVE TAKEN POS SYSTEMS WELL BEYOND PAYMENT ACCEPTANCE. WILL ISOS RISE TO THE CHALLENGE?

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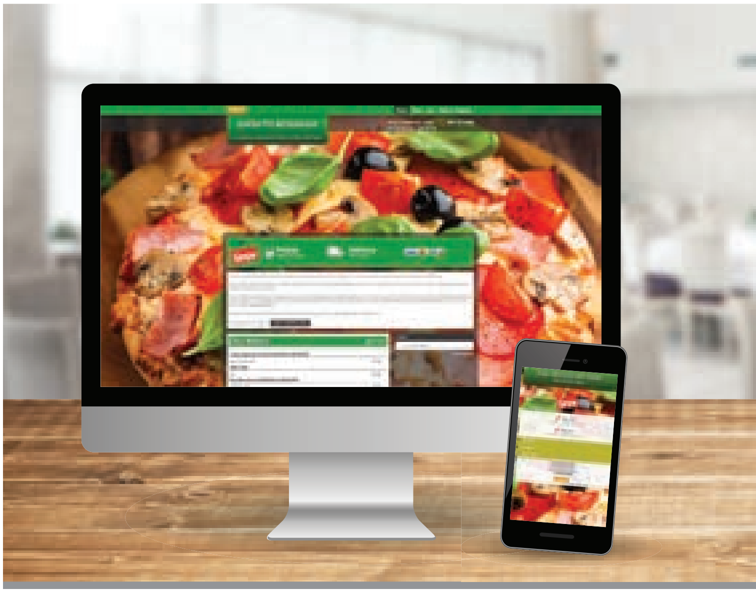

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Editor's Letter

ED McKINLEY
Editor

Preparing For A New Era

EVERYBODY TALKS ABOUT THE IMPORTANCE of integrated point of sale, but some big companies are actually doing something about it. They're readying themselves for the new era through acquisitions.

What new era? Well, the one where even small merchants manage their businesses through multifaceted POS systems that can do everything from track inventory to cultivate customer relationships. It's quite a bit different from the old acquiring model of simply selling or leasing terminals that accept payments.

Over the past two years, processors have invested at least $5 billion in the new paradigm, according to a report called "Agents of Change: The Next Agent Channel and Why You Need It." It's the first report from Double Diamond Payments Research, which is part of the established consulting company known as Double Diamond Group.

The report listed First Data's acquisition of Clover in December 2012 for $56.1 million, Heartland's $20 million investment in Leaf in September of 2013, Visa's April 2011 investment in Square, and Total Merchant Services' acquisition of Fanminder in January 2013 and its purchase of Registroid in January of this year.

It also recapped the Global Payments acquisitions of Accelerated Payment Technologies in August 2012 for $413 million and its purchase of PayPros in January of this year for $420 million. Meanwhile, Merchant Warehouse launched the Genius platform, and Stripe raised funds on a valuation of $1.75 billion.

PayPal bought Braintree in September 2013 for $800 million. Vantiv acquired Element Payment Services in July 2013 for $163 million and bought Mercury Payment Systems in May for $1.65 billion. VeriFone picked up Point for $1 billion in November 2011, and Visa launched the Accelerated Connection platform.

"This activity clearly represents a strategic shift where payments players are migrating away from the ISO/agent model and towards the integrated payments (and independent software vendors) model," analyst Rick Oglesby wrote in the report. "Those that lie within the traditional merchant acquiring distribution layer must adapt or face significant retraction in their businesses."

For more on the report, see page 48 of this issue. **ISO**

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Perspectives FROM OUR ADVISORY BOARD

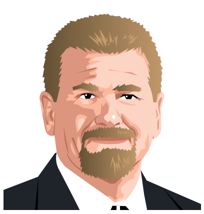
A year ago, the board advised ISOs to postpone action on Bitcoin. Is that still a good a good idea?

Linda S. Perry
Consultant and cofounder of the Global Acquiring Conference

Bitcoin is moving into a new phase of its lifecycle. If Bitcoin processors like BitPay and Coinbase can succeed at mainstreaming acceptance by making integration easy, keeping costs low and mitigating risk, they will find ISOs and acquirers to offer the product to their merchants. What we need to know is who owns the currency and what they want to buy with it. Consumer trust and a ready market helped Paypal in the early days, and it is not much different for Bitcoin. Merchants want to serve their customers and until we can understand the purchasing mind of Bitcoin owners, like we do cardholders, acceptance will be for merchants that want publicity or want to capture the early adopters. I'm an acquirer in my heart, but the consumer drives our business.

Don Singer
EZCheck

Yes, it still makes sense for 2014 and 2015 as well. But the industry is considering what was mentioned recently in Forbes magazine: 1. Bitcoin is an open system with no need for third-party systems to validate, move or secure payments. 2. New companies are bringing to market systems to allow trade in such long-term stalwarts as stock and bonds using this technology. 3. Banks are looking at ways to use this technology—at least internally. So what does that mean for payments? Nobody really knows but this is looking more like the same path most new industries and technologies follow. Given time and investment, digital currency's chance of survival seems greater and greater. Look no further than Square for a recent example.



Tim Munto
TSYS Acquiring Solutions

We believe it is still "wait and see" regarding Bitcoin. While we have seen some movement with a few large retailers toward accepting Bitcoin for domestic, and now international, transactions, most of the acceptance is with smaller, fringe merchants. Additionally, consumer acceptance has stalled. Many consumers still don't know about, let alone understand, Bitcoin. Certainly, the idea of virtual currencies has the potential to reshape the value exchange landscape, but we are not currently experiencing demand for its acceptance from our constituency. We are keeping abreast of developments around Bitcoin and other virtual currencies with a watchful eye, and we encourage ISOs and agents to do the same.

Paul Coppinger
Consultant

Historically, most currencies have been based on physical commodities, such as gold or silver. However, the invention of "fiat money" created a new kind of legal tender based on the relationship between supply and demand. There have been 786 such fiat currencies, of which only 177 remain in existence. Bitcoin is also a fiat currency whose primary innovation is that it eliminates the paper (script) that has been part of the equation since 1694 when the Bank of England introduced paper money. Eliminating the paper is an innovation that is clearly necessary and a logical next step. I contend, however, that in all other respects Bitcoin is subject to the same risk factors that have doomed 78% of the other fiat currencies. Will Bitcoin be one of the survivors? Maybe, but it depends on how well it is managed. Will Bitcoin be the only, or dominant, e-currency? History would not support such a proposition. So, be wary and hyper-realistic about supporting any e-currency. Simply eliminating paper isn't all that great a value proposition in this day and age. To be a survivor requires more.

Right Time, Right Place

Digital loyalty schemes are becoming affordable even for small merchants. Now's the time to differentiate with points, coupons and data-collection, observers say. **BY ELIZABETH WHALEN**

As loyalty programs advance beyond buy-ten-get-one-free-style punch cards, opportunities are opening up for ISOs and agents to differentiate and add value. But reaping those benefits requires ongoing effort, industry observers say.

While loyalty programs have proliferated at large and multi-location retailers, only a few small chains and single-location merchants are successfully using them in a way that exceeds simple punch cards, said Lou Honick, CEO of Host Merchant Services, an ISO based in Newark, Del. He cites the programs' costs, complexity and technological requirements for that low level of use but sees those obstacles subsiding.

"We're really at an inflection point in the market where those things are starting to turn in favor of small businesses," he said. "Right now, in the ISO space, loyalty is where the opportunity is to acquire new customers."

That's why Host Merchant Services is developing a system that will enable its merchants to manage their loyalty programs through their point-of-sale devices. The system is built not just on rewarding customers but also on gathering customer data that can increase revenue, Honick said.

"Even if you can make a very small difference in merchants' business, it can be dramatic, especially in an industry where frequently your value proposition is, 'I can save you 30 basis points,' " he said.

ISOs that can increase merchants' gross sales by just 1% to 2% can stand out in a crowded marketplace, Honick maintained.

Data generated from loyalty programs can provide insight into customer behavior that can drive those increases. For example, one of Host Merchant Services' restaurant clients tracks customer data on when and how often loyalty program members visit. If a customer regularly dines on Friday evenings but suddenly stops, the restaurant sends that customer an offer by email and tracks the customer's response.

However, many merchants fail to reach that level of targeted efficiency, in part because they fail to realize that loyalty programs require consistent

effort, says Donna Embry, senior vice president, strategic development, for Payment Alliance International, an ISO based in Louisville, Ky. That, in turn, makes programs appear less effective and less attractive to smaller merchants.

The programs don't require merchants to do too much, Embry said. "They just require them to do something. And in many cases, it's not their core competency. They don't think about it."

To succeed with their loyalty programs, merchants should first shift their mindset: it's best if they think of loyalty programs as a type of advertising, which is something they do nearly everyday, she says. It's simply advertising that is especially efficient at targeting existing and repeat customers, she said.

For example, a convenience store owner may place an ad in the newspaper or issue a coupon for a discount on a two-liter bottle of soda with a $10 purchase, an offer that may draw new customers who are unlikely to return.

> "We're at an inflection point where loyalty is starting to turn in favor of small businesses."
>
> - Lou Honick, Host Merchant Services, on loyalty programs

The store may be better off giving the discount to regular customers instead, Embry said.

"They'll see the benefit if they can keep repeat customers and it's more loyalty as opposed to couponing," she said. "These are some of the same retailers who probably pay small fortunes for advertising."

Promoting Loyalty Programs

The next step is to promote the programs, said Scott Anderson, CEO of OMEGA Processing Solutions, an ISO based in Fort Thomas, Ky., and ISOs can help with that task. OMEGA works with its merchants to develop customer mailings and will suggest merchants give out gift cards at local events.

"Sprinkle the things like fairy dust," Anderson said. "Put a small value on the cards and put them out there in the hands of customers. The cards never have an opportunity to come in if they're all sitting in your desk."

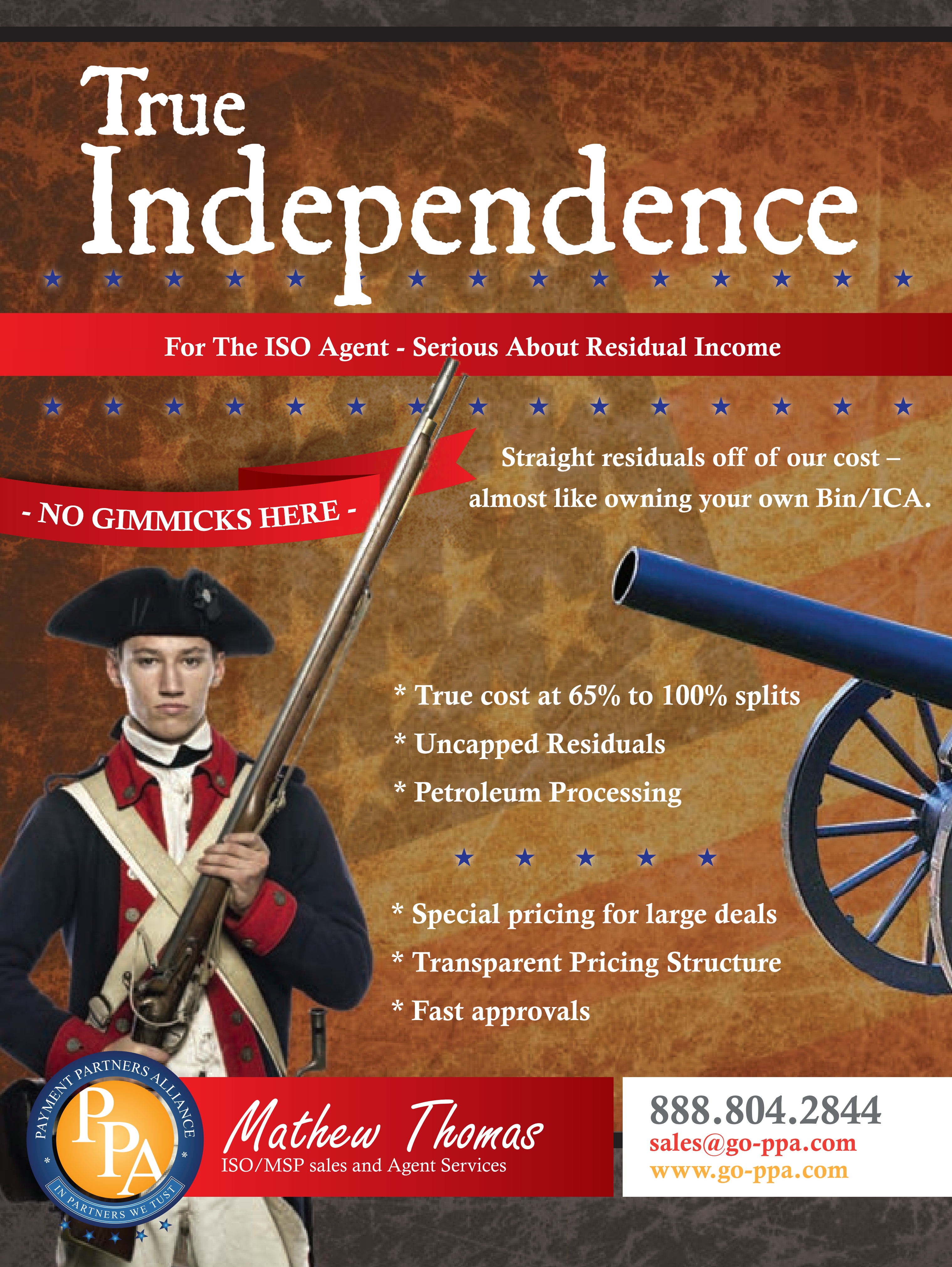
When consumers redeem the gift cards, the merchant converts the cards into loyalty cards and can credit the customer for the product or service purchased that day.

OMEGA's marketing department sends reminders to its merchants with suggestions for promotions, which Anderson said reinforces the value of the program and gives merchants an opportunity to ask for suggestions on how to run their programs. Anderson also advocates reminding merchants they have customers who qualify for rewards. For an automotive service shop client, OMEGA may suggest it calls customers who have earned a free tire rotation and suggest they come in for an oil change at the same time.

OMEGA doesn't view gift and loyalty programs as revenue streams, Anderson noted. Instead, the ISO charges clients at or below cost for the programs and packages them with other services to acquire the merchants' bankcard business. The biggest benefit OMEGA has enjoyed from the offerings is reduced attrition.

"Merchants see value in the new traffic, and they see savings, in part because we keep our cost way down on the gift and loyalty program," he said.

ISOs that take the time to review their merchants' reports and remind the merchants of their results are more likely to reduce their attrition rates, said Tessa Burg, vice president, product and program management, for Cleveland-based SparkBase Inc., a provider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of loyalty and gift card software. They can also use those results as a selling point when meeting with prospects.

Quantifying results is not an easy task, though, said Thad Peterson, senior analyst at Boston-based consultancy Aite Group. It's impossible to measure the customers who behave as though they're in the loyalty program without joining and earning the rewards, and it's impossible to determine how many of the loyalty program members would maintain their behavior without the program.

Another challenge is the growing number of loyalty programs, he says. He estimates that in 2012, there were 2.6 billion memberships in U.S. loyalty programs and that 44% of those memberships were considered active; that is, members had engaged with the program in the preceding twelve months. The number of loyalty programs is increasing each year, and the share of active memberships is declining, he said. Still, the programs can provide value.

"Generally, well designed, well managed long-term loyalty programs do increase retention and do increase customer spend," Peterson said. "The reason they exist is that they work."

Offer Simple-To-Manage Programs

ISOs should provide merchants with programs that are simple to manage, easy to integrate into their point-of-sale systems and flexible enough to accommodate coming changes, such as the switch to Europay-MasterCard-Visa (EMV) chip-based cards, Embry said.

Matching the reward program to the merchant's industry and pricing structure is also important, said Burg.

"For businesses that have similar average ticket prices, punch card and dvisit programs work really well, so customers get credit every time they buy an ice cream or a haircut," she says.

Punch cards remain attractive for another reason, said Peterson, "They're simple. They're customer administered. The retailer doesn't have to do too much about it."

As a result, they may be a good fallback option for retailers who demonstrate their unwillingness to work consistently at a more sophisticated program, he said.

"Spend programs work really well for businesses with diverse menus, like a jewelry shop or restaurant," Burg said.

Some programs with rewards that require a long period of time or a large amount of spend to earn a reward can frustrate consumers, Peterson said. So, it's best to build in smaller rewards that consumers can earn in shorter time periods or with lower spending while also working toward big rewards.

Rewards don't always have to take the form of discounts or free products, Burg noted. They can take include exclusive sneak peaks at new products or other events relevant to customers.

The growing opportunity for ISOs with respect to loyalty is part of a larger trend in which payment service providers are becoming one-stop-shops for their merchants, said both Burg and Peterson.

Capitalizing on that opportunity requires understanding merchant needs, which goes beyond understanding what type of terminal they want, Peterson said. Some retailers won't specifically articulate the need for a loyalty program, but sales agents who focus on building relationships with their merchants are better-positioned to spot the need for one.

> "Sprkinkle gift cards like fairy dust. Change them into loyalty cards when they're redeemed."
>
> - Scott Anderson, OMEGA Processing Solutions, on promotions

Retailers Should Understand Data

To achieve results rivaling those of large chains, small merchants should understand the data their programs generate and how to use it.

"It's one thing to have great data and insight into your customer base," says Honick. "It's another to act on it and take the right steps from that data to improve your business."

Many merchants will not be able to comprehend the data or be able to determine what to do with it, Peterson said, which is motivating the development of dashboards and other data-packaging tools that provide context for merchants.

Honick foresees opportunity for ISOs to offer analytics-related services to their merchants, either by developing systems themselves or by partnering with vendors, and acting in a consultative role.

Understanding customer behavior through data also helps merchants design more targeted promotions that can counteract offer overload, said Anderson. Already, some of OMEGA's customers are sending offers to specific groups based on program use.

"They're not sending as many promotions out, and they're adding maybe a little more value to the promotions they are sending out to try and gain some traffic," he said. **ISO**

> "Long-term loyalty programs do increase retention and do increase customer spend."
>
> - Thad Peterson, Aite Group, on well-designed, well-managed programs

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Consumer spending is 46% higher with companies that offer loyalty programs. *Loyalty Monitor Study by Total Research Corporation*

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A Society Responds

In the wake of painful data breaches last holiday season, America's payments and retailing industries are taking security seriously. BY DAVID HEUN

Tokenization technology has been available to keep payment card and personal data safer for several years, but it's never before attracted the attention it's receiving now.

It's moving into top-of-mind status for everyone in the payments industry who's growing weary of a never-ending series of data breaches and ongoing reports about new malware strains designed to attack retailers' point of sale systems.

But merchants, especially smaller ones, haven't necessarily caught on to the hacking threat or learned how tools like tokenization limit exposure.

That places ISOs in an important part of the security mix–getting the word out to merchants about the need for tokenization and, more importantly, explaining what it is.

"The biggest challenge ISOs are seeing is this lack of awareness of these threats that are impacting that business sector," said Paul Kleinschnitz, general manager and senior vice president of cyber security solutions at First Data Corp.

"Data breaches are happening at small businesses, and even if merchants get past the point of accepting that they are at risk, they have no clue what to do next," Kleinschnitz said.

Teaching Tokenization 101

Tokenization converts payment card account numbers into a series of unique identification symbols for data at storage or for transactions through specific payment mechanisms such as mobile wallets.

But it's a complex technology, one that not enough ISOs have understand, even though it represents a potential revenue-producer.

Add the fact that the industry as a whole has some confusion over tokenization standards and how they will be deployed and governed, and it becomes apparent that ISOs who serve merchants in need of this extra layer of security need to become well-versed fairly quickly.

For the past year, First Data has been teaching its ISOs and merchants about security threats and the options for combating them, Kleinschnitz says.

"We are bringing solutions to the market that have encryption, tokenization, EMV and PCI compliance, breach protection and other data security products in a single solution," Kleinschnitz

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High Risk Acquirer Sees High Returns

For acquirers who are willing to venture into the high risk arena, the profits can be astronomical. That's what Michael Foy found out over 15 years ago when he founded International Merchant Processing Solutions in Belize. IMPS is a company created to fill a void left by the US acquiring banks who refused to give merchant accounts to certain online industries. His portfolio includes everything from adult content to nutraceuticals to online gambling out of his banks in Europe.

"Many businesses rack up $500,000 to $1 million in volume each month," Foy says. "It would take 1,000 pizza shops to get to the level of even one high-risk merchant."

"I didn't wake up one day and say, 'I'm going to be in high risk.' It usually starts because something comes through your office that you can't place in the U.S." Foy says.

That's exactly how Foy discovered the high risk world. At the time he was the national ISO director for American Spirit Processing and servicing cab companies in Boston.

"One of the taxi company owners approached me to find help getting a processor for a business he knew in the online adult entertainment industry," Foy says.

"Not knowing much about it, I did the research and found a US - based bank that would do it."

> "It would take 1,000 pizza shops to get to the level of even one high-risk merchant."
>
> Michael Foy
> International Merchant Processing Solutions

"The bank started processing the business right away, and in one week, my residuals literally multiplied 100 times. That really piqued my interest," he says.

However, when the merchant had been processing for 3 months, doing over $1,000,000 per week, Foy heard from the acquiring bank that the account was being shut down with no reason. A new processor needed to be found within 24 hours.

That's when he found a solution in the offshore banking world where acquiring banks were willing to take on merchants that were considered high risk in the US.

The first bank he found that accepted these merchant categories was in Belize. It was there that International Merchant Processing Solutions was established and it's headquaters have remained since.

From these beginnings IMPS has grown exponentially.

Foy travels the world setting up direct acquiring agreements worldwide. IMPS is presently in 15 different jurisdictions and expanding.

"While ISOs generally make about 10 basis points on the average merchant transaction, they can make 1% to 3% on a high-risk merchant. Simply 1% of $1 million is $10,000 in residuals each month - from one account," he says.

The first consideration at IMPS is to protect banks from unscrupulous merchants . "It is always a balancing act between chargebacks and fraudulent merchants," Foy says. For those who can do that, the opportunities and profits in the high-risk world are endless.

Contact: Michael Foy, mfoy@impsgroup.com, USA #: 954-471-1475

said. "Our ISOs are going to be able to sell that to their merchants."

ISOs presenting tokenization to their merchant clients should echo what security experts and the Payment Card Industry Security Council generally say about the technology—that it is a necessary layer of security to complement the coming EMV chip-based smart cards in the U.S.

The EMV cards take care of the card-present counterfeit fraud problem, while tokenization serves as a major deterrent to hackers who might pilfer data from a payment network database.

Target Breach As Reference Point

The key case that most point to is the Target data breach during the 2013 holiday shopping season. If Target's card data had been tokenized, it would have been worthless to the criminals who stole it.

Tokens wouldn't have stopped the malware from gaining access to the database, but it would have been as though criminals breaking into a bank vault found, instead of piles of cash, poker chips that only an authorized user could cash in at a specific bank.

> "Even if merchants accept that they are at risk, they have no clue what to do next."
>
> \- Paul Kleinschnitz, First Data Corp., on data breaches

A database full of tokens has no value to criminals on the black market, which reduces risk for merchants, Kleinschnitz said.

"Unfortunately, the small merchants have not accepted the idea, or the reality and fact, that there is malware attacking their point of sale and they are being exposed," he maintained.

ISOs Can Help Fill A Critical Need

ISOs should be able to determine the need for tokenization in their markets, says industry analyst Todd Ablowitz, president of Centennial, Colo.-based Double Diamond Group LLC.

"It is always the responsibility of those who are interacting with the merchant to have the knowledge for the market segment they are in," Ablowitz said. "If you are selling to dry cleaners, you probably don't need to know much about tokenization. But if you are selling to recurring billing or e-commerce merchants, you probably need a lot more knowledge about it."

Tokenization is critical for some applications in payments, he said. "Any sort of recurring billing that stores card information should be leveraging some form of tokenization.

"There are lots of companies offering that today and many ISOs leveraging that technology," Ablowitz noted.

Whether the revenue stream comes directly from the tokenization or it is bundled into the overall payment acceptance product is not the main point, he said.

"The point is that it's an important value to the merchant to be able to tokenize the card number in recurring billing," Ablowitz said.

Confusion About Tokenization

Any ISOs selling tokenization products does so against a confusing backdrop of standards developed for different forms of tokenization.

Card brand-owned EMVCo, which establishes guidelines for EMV chip-based smart card use, and The Clearing House, which establishes payment systems for financial institutions, are working together on standards for "payment" tokenization.

Both entities were working on separate standards until The Clearing House

joined EMVCo's tokenization working group to determine similarities and to see if one standard can be produced that covers the needs of banks and merchants.

Payment tokenization replaces the card data with a token for e-commerce transactions initiated through a mobile device, or mobile wallet. Payment tokenization creates limited-use card numbers so that a hacker compromising a mobile wallet would not be able to compromise the base credit card numbers in that wallet.

On the other hand, the Accredited Standards Committee X9 Inc. is working on "security" tokenization, or a process in which card data stored on a merchant or processor network is replaced by zero-value tokens. Those tokens are kept in storage to match up with the original card data if needed again for chargebacks or other questions that may arise. They cannot be used to initiate transactions again.

"A major concern at this point is the overloading of the term tokenization, because that term is currently used to describe both payment and security tokens," said Steve Stevens, interim director of X9, which is directed by the American National Standards Institute to develop standards for the U.S. financial services industry.

Adopting payment tokenization as a security measure for mobile wallets will change the payments business, but it does not remove the need for general security tokenization, Stevens said.

"There are still going to be primary account numbers (PANs) in the system, and as long as that is the case, there will be demand for security tokenization as a method for reducing risk and limiting compliance scope and cost," he said.

Uneasiness Haunts Tokenization

ISOs selling enterprise tokenization services may encounter reluctant merchants who are uneasy about standards being developed by EMVCo and its owners—America Express, Discover, JCB, MasterCard, UnionPay and Visa. They generally fear that a proprietary standard may leave some networks out and translate to higher costs for merchants.

"Any sort of recurring billing that stores card information should be leveraging tokenization."

- Todd Ablowitz, Double Diamond Group LLC

The National Retail Federation, Merchant Advisory Group and other retail associations are calling for an open standard that could offer a common application interface. That would enable tokens used by independent networks or provided through enterprise vendors to ride along any card brand rails.

"There is a very high degree of concern about it in all of the associations I have spoken to, if tokenization becomes the domain of just one or two networks," says Mark Horwedel, CEO of the Merchant Advisory Group.

As the payments industry switches from the open ISO (International Standards Organization) message formats into an EMV world, it essentially finds itself moving "from an open world into a proprietary world owned by EMVCo owners," Horwedel said.

The Secure Remote Payment Council, a group of independent networks emphasizing e-commerce security, is asking for the same thing as the retailers.

For its part, EMVCo insists it is open to differing opinion about the framework of its standards and intends to establish guidelines that conform to compliance and technology regulations.

Regardless of the standards established for mobile transactions or data at rest, ISOs will probably always have enterprise tokenization offerings, such as TransArmor through First Data and others, to provide as a service to merchants.

How the tokenization systems will overlap with card brand or industry standards remains to be seen.

"From an ISO perspective, there is value there, and where there is value there is an opportunity to generate revenue without taking advantage of anyone," First Data's Kleinschnitz said.

Collaborating For Common Good

ISOs are part of an important educational process when they're deploying tokenization products in merchant networks. That's who ISOs should deliver a clear message to merchants, Kleinschnitz said.

"Part of the education process is that merchants are susceptible within their own environment, and we are trying to push products down to help them," he said.

"Security is a business for a reason. We need to stop letting the merchants tell us that this is not their problem."

Criminals take notice when the payments networks, ISOs or merchants let their security guard down. That, basically, is what has fueled the mounting number of data breaches.

"Criminals are doing a good job of collaborating against us, and we need to do a better job of collaborating in return," Kleinschnitz said.

Echoing that spirit, X9's Stevens said all of the various tokenization methods and standards ultimately could work together. And that's another message ISOs can embrace.

"There is nothing that says you can't have a standard for payments tokens and a standard for security tokens," Stevens says. "The world is going to have both of them one way or another." **ISO**

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Guest Column BY MATTHEW KATZ

Retaining More Customers By Reducing Card Declines

CHURN IS ALWAYS A THREAT AND DECLINES can happen at any time–not just when customers are up for renewal.

Merchants became painfully aware of that after last year's retail mega-breaches compromised millions of payment cards, resulting in a large number of declines from account information that hadn't been updated.

Churn–calculated as the proportion of customers who leave a business during a given time period–poses a problem for any company with a recurring billing model where profitability relies on receiving timely, recurring payments.


Katz

A change of 1% can mean a difference in millions of dollars to the bottom line, according to Donna Fluss, president of DMG Consulting in New York.

Cards decline for three primary reasons, all of which can be prevented:

1) Expired card accounts have not been updated
2) Problems with the timing of the authorization
3) Processing errors and billing logic and available intelligence

ISOs and agents who understand card declines and their impact on customer retention can teach their merchant customers how unnecessary churn can affect their businesses.

Then, merchants can take steps to minimize declines, maximize retention and improve revenue.

Most payment card brands, including Visa and MasterCard, offer tools to improve authorizations, prevent declines and protect card not present (CNP) revenue.

Account Updater–Both Visa and MasterCard offer this tool to help merchants avoid declined transactions or interruptions to recurring billing due to invalid customer data by enabling issuers, acquirers and merchants to exchange the most up-to-date customer data.

Recurring Payment Indicator–RPI is a scoring method that VISA requires for all authorization and clearing records. The RPI allows for the identification of recurring transactions as well as more accurate decision-making by issuers. Because recurring transactions tend to be lower-risk transactions as compared to single-occurrence CNP transactions, they should be approved as long as the account is in good standing.

Verified by Visa–This service provides verification and validation of a cardholder's ownership of an account in real time by prompting customers to enter a password that confirms the cardholder's identity by the issuer.

MasterCard SecureCode–This service provides verification and validation of a cardholder's ownership of an account by allowing cardholders to choose a personal SecureCode and prompting them to enter the code when they make purchases online, confirming the cardholder's identity.

Canceled Recurring Payment Transaction–This MasterCard service helps acquirers, issuers and merchants avoid costly chargebacks by allowing issuers to block erroneous recurring transactions in the MasterCard authorization system, eliminating the charges from cardholder billing statements.

Cards decline for a variety of reasons, including communication errors, merchant errors, fraud prevention declines, soft declines and hard declines. Soft and hard declines occur frequently, and by following correct procedure merchants can optimize authorizations.

Most hard declines require action on behalf of the issuing bank or cardholder before the outstanding issue will be resolved, making subsequent authorization attempts unlikely to succeed. Reasons for hard declines include "card stolen," "invalid card" or "account closed."

Soft declines are transactions that may be successful with a subsequent attempt.

Reasons for soft declines include "insufficient funds," "processor declined," or "voice authorization required."

A common practice has been to resubmit one to four times over a period of weeks.

Hard declines should not be retried because the reason for the decline is not temporary as in a soft decline; this type of decline is not likely to be successful with subsequent retries.

Understanding the types of declines and the different implications between them enables merchants to operate within an acceptable decline ratio.

Authorization decline response codes should come from a payment gateway and may offer insight into why a transaction declined.

Payment gateways should provide an error code along with a directory of error codes for merchants to reference as supplemental information to error responses.

Those insights can provide the basis for modifying sales materials to boost

authorizations.

Also, soft and hard declines occur frequently and may require a merchant to ask the customer for an alternative form of payment.

Maximizing credit card acceptance for a CNP merchant is vital to profitability and longevity of the customer relationship, especially in recurring models. Negative churn can cost a merchant millions of dollars. The most forward-thinking marketing and customer service tactics are useless if ISOs and agents are not minimizing erroneous and unnecessary declines.

According to Gartner Group, just 20% of customers are responsible for 80% of future profits. CNP merchants with recurring payment business models see higher frequency of declined transactions-up to 25-30% more, says MasterCard-and many merchants find their current decline recovery process is not up to the challenge.

> Maximizing credit card acceptance for your card-not-present merchants can help build long-lasting relationships.

Sometimes, a comprehensive process for decline recovery requires expertise or in-depth intelligence that may not be available in-house. In-house processes can be limited because merchants base them only on the insights derived from their own data. They can also fall short or become too time-consuming for merchants to handle alone.

The reality for CNP merchants is that declines happen; however, they are manageable and using the best tools can aid in preventing lost revenue as well as freeing up time and resources and streamlining the billing process. **ISO**

Matthew Katz is CEO of Verifi. Reach the company at info@verifi.com.

A Question Of When

Americans will pay with phones or chip cards soon, according to many industry observers. But when? Not many care to name the date. **BY AUTUMN CAFIERO GIUSTI**

There's a consensus in the acquiring industry that long-awaited changes in payments technology are bound to take place. Consumers will pay with mobile devices and chip cards. Merchants will possess all of the tools to accept those payments and potentially a host of other payment types.

But how and when will those changes occur? What will the results will look like? Where will ISOs and agents fit in?

"Everybody's certain that change is going to happen. But I haven't heard a great deal of certainty about how all of this is going to take place at the point of sale," says industry consultant Mary Winingham, CEO of Delvan, Wis.-based Mirror Consulting.

ISOs are living in a time when widespread use of certain technologies seem imminent one day and on death watch the next.

Tech observers who predicted the demise of NFC contactless payments changed their tune this past year when Google's latest version of Android began supporting Host Card Emulation (HCE), which enables mobile devices to emulate a secure NFC transaction through the cloud.

Meanwhile, there's growing confidence that widespread EMV chip card acceptance is a foregone conclusion, with deadlines approaching for merchants to comply with the new standard by October 2015.

At the same time, ISOs and other players are mapping out strategies to decide how to leverage new technology to gain revenue and market share. Industry members have held their breath while tech behemoths such as Apple and Google size up the payments space.

Winingham believes the industry will face two main challenges — first, to determine which technology will win, and second to deliver that technology to every merchant in the U.S. "That is not an easy task," she says.

The question that remains is whether that task will be left to the ISOs.

EMV Making Progress, But Slowly

Industry observers have come to expect that EMV chip card technology will become the norm at the point of sale. Adoption deadlines set by the card brands could help ensure that EMV won't suffer the same chicken-and-egg scenario that has plagued other payments types.

As of Oct. 1, 2015, merchants who do

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> "I haven't heard much certainty about how all this change is going to take place at the POS."
>
> - Mary Winingham, Mirror Consulting, on when new tech will proliferate

not accept credit cards via EMV-enabled transactions will be automatically liable for chargebacks. The liability will shift from the credit card companies to the merchants. "That will move adoption a lot faster," says Simon Lobanov, CEO of Red Payments Inc. in New York.

That's not to say widespread adoption will be easy or quick. As the head of an ISO operating in both the U.S. and Canada, Lobanov experienced the Canadian EMV transition a few years ago. The U.S. is much larger than Canada and, in terms of data technology, that could create setbacks during the transition, he said.

"It took Canada a good six years to move to EMV, so I imagine it's going to be a very painful and longer process in the U.S.," Lobanov says.

EMV is designed to shield merchants from the counterfeit card market, but there's awareness that EMV won't serve as a silver bullet for protecting payments.

George Peabody, a partner with Glenbrook Partners LLC, a payments consulting firm based in Menlo Park, Calif., predicts the industry will have to learn to accommodate multiple payment methods, and that each one will need to have unique characteristics with respect to security. He suspects it will take eight to 10 years to have a solid EMV perimeter. "It's a step in the right direction, but it's not sufficient," he says.

A Second Chance For NFC?

NFC has wavered between acceptability and irrelevance for a long time, as infrastructure to support the technology has been limited. But doubts about NFC are lifting now that HCE technology has gained traction this past year. Whereas NFC would require a physical secure element in the smartphone, HCE eliminates that requirement by routing data securely through the cloud.

Last year, the Android 4.4 software, known as KitKat, included HCE technology, which enables the devices to talk to contactless payment terminals. A few months later, Google Wallet stopped supporting its NFC tap-and-pay function in favor of HCE technology.

MasterCard and Visa have also announced support for HCE payments, as have BlackBerry and several international banks.

NFC still hasn't broken through to the mainstream, though. Peabody points out that NFC still has several short-term challenges, and its future is closely tied to what Apple does. Apple does not support NFC in any of its phones, although there are reports that Apple might use the technology as part of an upcoming service in China.

Peabody suggests that Apple's newly forged alliance with IBM to develop business apps for the iPhone and iPad could result in a platform that doesn't need NFC. One of the struggles of NFC is that merchants don't want to invest in technology that appeals to only a small percentage of the population, he said.

"Long term, if it gets really inexpensive, NFC could have legs. But short term, it still has plenty of headwinds," Peabody said.

Apple might not be making any moves toward NFC, but it has shown interest in Bluetooth Low Energy (BLE) technology, which enables merchants to place Bluetooth-enabled beacon devices throughout their stores and offers a longer signal range than NFC. The beacons can send signals to customers'

mobile devices as they enter and deliver targeted ads and promotions to those customers. The beacons also enable customers to pay with a smartphone at checkout.

Apple has been testing the technology through what it calls the iBeacon, and PayPal is putting together the PayPal Beacon. Android, Microsoft and also BlackBerry support BLE.

"It took Canada six years to move to EMV. It's going to be a painful and longer process in the U.S."

- Simon Lobanov, CEO of Red Payments Inc., on the chip-card transition

Waiting For The Giants To Speak

Technology giants like Apple and Google are eyeing the payments industry, and many of those with a stake in the business are anxiously waiting for Apple in particular to make its next big move.

Apple has about 800 million iTunes accounts with registered credit cards on file. And now, they have an enterprise-grade partner in IBM. "What they could do in payments is significant, and I think everybody in the payments industry realizes that," Peabody said.

There's been speculation that Apple could approach Visa and MasterCard to create its own Apple-to-Apple payments network. "With the amount of liquidity Apple has and the number of customers they have, it could be a big danger zone," Lobanov said.

At the same time, Visa and MasterCard have the highest penetration in the world, so trying to compete with them would only create chaos, he said.

Apple doesn't have a monopoly, though. The other half of the mobile space is running Androids, and Google might have its own ideas about how to shape payments. "Apple and Google will have to shake hands, and I don't think that's ever going to happen," Lobanov said.

Peabody believes that the next few years will bring a great deal of experimentation with no clear winner. "Apple is the big wildcard. But I think in three years many of the same players will be there. They'll just be shifting their roles," he said.

A Future For Plastic Cards

Even with payments technology changing rapidly, chances are there will still be a place for cards for quite some time.

Peabody scoffs at rumors that Visa and MasterCard are under a great deal of pressure, or are becoming irrelevant altogether.

"That's functionally not true," he said. Even though mobile payments are becoming more prevalent and consumers might initiate those payments with a QR code instead of a card, Visa or MasterCard generally provides the funding mechanism because there's a card on file being used.

Even as technology is pushing mobile payments closer to the mainstream, paying with a smartphone is not necessarily the best answer, Peabody said.

"Cards aren't fundamentally broken," he noted.

While smartphones are attractive from a technological point of view, at least a quarter of the population doesn't have them and probably never will because there's too much complexity involved, Peabody said.

Still, cards have their advantages, he maintained. "They're really convenient, they don't require batteries and they're available to everyone."

The bottom line, Peabody said, is the industry will have to adjust to several methods of payments as technology continues to change. "We're entering a big period of experimentation to try to understand what works," he said. Determining and delivering that technology remain the goals. **ISO**

WHO OWNS THE DATA THAT LOYALTY PROGRAMS CAN GATHER?

BIG DATA IS ONE OF THE NEXT FRONTIERS the payments industry is exploring to add more value for merchants. The idea is that merchants would be willing to pay more for consumer data, such as buying habits and demographics, so that they can target their customers and increase revenues.

Big Data is translating into big business, and industry consultant Mary Winingham predicts that the next big court case isn't going to be about a data breach or a patent fight.

"It's going to be about who owns the data. Because depending on whom you talk to, they own the data–whoever 'they' is," said Winingham, CEO of Delvan, Wis.-based Mirror Consulting.

Because there's been a great deal of headway with data analytics and demographics being sold to merchants, new companies are emerging to help merchants leverage consumer data. Much of the progress in the Big Data realm has taken place in the past year.

"There's an awful lot of data in this whole food chain of transaction processing. And a lot of companies are looking at ways to monetize that," Winingham says.

Data analytics presents a tremendous opportunity, Winingham says, but at some point the question will arise as to who has the right to make a product out of it – whether that's the processor, the ISO, the merchant or the card brands. "And we're already hearing conversations asking: Who owns that data?" Winingham says.

Heartbleed Causes Heartbreak

A hospital chain's data breach shows problems with Heartbleed haven't ended. BY PENNY CROSMAN

Heartbleed has resurfaced, and it may give the acquiring industry another case of heartburn.

The high-profile website problem with the cool logo that made headlines this spring has led to a major data breach.

Researchers have confirmed that hackers who stole 4.5 million patient records from Community Health Systems of Franklin, Tenn., broke into the company's network through a hole that Heartbleed created.

That matters in two ways: One, the stolen records include everything needed for identity theft—customer names, addresses, birth dates, and telephone and Social Security numbers—and thus thieves could use it for financial fraud across the country. Two, it illustrates the danger Heartbleed still presents to financial institutions as it lingers unnoticed on network devices in most companies.

"Community Health has lost Social Security numbers, addresses, birth dates, phone numbers."

- John Zurawski, Athenticity, on a hospital cyberattack

The case provides a warning sign to check all computing devices connected to networks for vulnerability to Heartbleed and to renew diligence in monitoring customer accounts for signs of fraud.

Community Health Systems runs 206 hospitals and hundreds of satellite doctors' offices in 29 states. The breach at the company is potentially worse than the one at Target Stores that compromised 110 million customer account records last year, according to John Zurawski, vice president of security software company Authentify.

"Target lost credit card information, but Community Health has lost Social Security numbers, addresses, birth dates, phone numbers—everything a fraudster needs to capitalize on the individual's credit rating and more," he said. "Hackers are patient and they are persistent."

Personal information on 4.5 million people could be of tremendous value to cybercriminals, agreed Sam Visner, senior vice president and general manager at ICF International, a security consulting firm in Washington.

"Cybercriminals could make a lot of money from that information conceivably, and why would they not attempt to?" Visner asked.

Other security experts seem less alarmed about the fraud implications of the breach, pointing to investigators' belief that the attack originated in China.

"There has not been any recent indication that Chinese hackers are actively targeting [personally identifiable information] for resale through underground forums, which actually makes this event pretty unique," said Al Pascual, practice leader for fraud and security at Javelin Strategy & Research.

Chinese hackers typically attack U.S. organizations in support of Chinese government and business initiatives, he said.

Heartbleed is essentially a coding mistake in OpenSSL, a free piece of code many web servers use to secure interactions with other computers. In some versions of OpenSSL, a component called a "heartbeat"—because its job is to ping the communicating server to keep a web session alive—contains a coding error that cybercriminals could use to steal small amounts (64 kilobytes)

of data from a web session.

In the wake of the Heartbleed discovery last spring, it turned out that most banks didn't use the vulnerable version of OpenSSL on their websites. But like most companies, they do tend to have network-connected devices that use it.

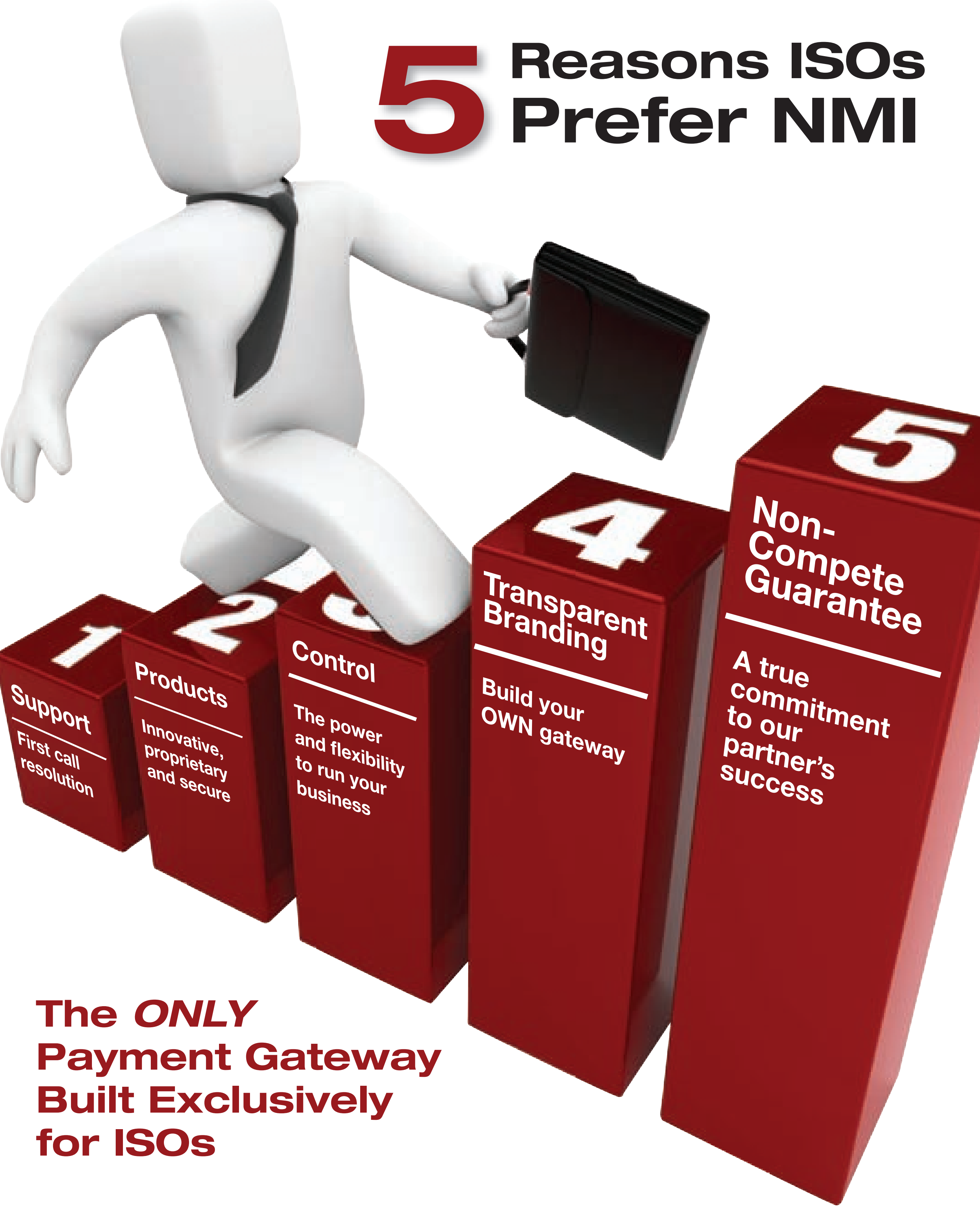
According to a blog posted by security consulting firm TrustedSec, hackers broke into a Juniper network device, exploiting Heartbleed, and stole user credentials from the device's memory.

They then used those credentials to log in to the company's network through a virtual private network and worked their way around the network until they found a large database from which they stole the 4.5 million patient records.

> "It's time for companies to step up their games to protect their consumers."
>
> \- Rick Dakin, Coalfire, on defending data against hackers

"The Community Health Systems breach is just the latest indication that companies are not adequately protecting the information of the consumers they serve," said Rick Dakin, CEO and chief security strategist at Coalfire, an IT audit and compliance firm based in Denver.

"According to media reports, Chinese hackers were still stealing records in June, even though the Heartbleed bug that gave them a way in had been reported in April," Dakin said. "It's time for companies to step up their games to protect their consumers. And it's time for consumers to demand that companies protect the information that they've shared." **ISO**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No Time To Back Off

Here's how the Backoff virus works and how some financial institutions defend against it. **BY PENNY CROSMAN**

Beware of Backoff.

The Department of Homeland Security sounded an alarm lrecently about this young strain of malicious software. The agency directed its warning mainly at retailers, but banks are also vulnerable to Backoff and should use defensive mechanisms.

One of millions of malware mutations out there, Backoff tries to break into point-of-sale networks and steal credit card data; 600 retailers have reportedly been hit.

"It's not necessarily that this one is nastier than the others," said Chris Camejo, director of assessment at the security consulting firm NTT Com Security. "The real motivation is they're seeing it used in the wild more than others. Somebody decided this will be their go-to tool."

The concerns about Backoff surface as cyber-attacks against financial institutions and retailers are growing more frequent, more sophisticated, and more widespread. Many banks have recently fallen victim to "masquerading," a combination of social engineering and confidence scam that uses high-tech tools and generally results in wire-transfer fraud. And Backoff-like malware is said to have been behind several recent high-profile retailer breaches, including those at Target, P.F. Chang's, Neiman Marcus, Sally Beauty Supply and Goodwill Industries.

Backoff trolls the internet looking for computers running remote desktop tools, which allow a user to connect to one machine from another across cyberspace. Examples include Microsoft's Remote Desktop, Apple Remote Desktop, Chrome Remote Desktop and LogMEIn. When Backoff finds a computer running such a tool, it or an accomplice piece of malware tries to break in. They do this typically through phishing—sending an email message prompting the user to click on a link that downloads the malware—or by "drive-by download," in which a user browsing the Internet happens onto a compromised site that downloads malware to her computer.

"With the rise of remote employees, there will be security issues," warned Jerome Segura, senior security researcher at Malwarebytes Labs, the research arm of the anti-malware company. "You're in a situation where you have too many

people who have too many privileges, and there's not much control of these peoples' computers and devices. They're not always well-protected with antivirus and antimalware software. That's opening up a can of worms for any organization that allows remote workers."

Remote desktop tools are designed to be used within a network, not across the Internet, noted Camejo. Some have security settings that can be turned on to provide encryption and authentication, but more often than not these settings are not turned on. In an assessment, if NTT technicians see a remote desktop that's exposed to the Internet, they flag it.

"If you compromise a desktop, you now own a computer within your target organization. You've got the screen, the keyboard and the mouse and you're sitting there inside someone else's office," Camejo said. "The consequences of one of these things getting breached are really nasty."

A key issue here is managing networks properly. "You never want to have an infrastructure component be publicly accessible," said Joe Schumacher, senior security consultant at Neohapsis, a security and risk management consulting company. "You want to have a VPN that your employees log into with two-factor authentication, and then from there access the remote desktop. That's the ideal world."

Once it's made its way inside a computer, Backoff tries to guess the password for the Remote Desktop tool by running through passwords in a dictionary until it stumbles onto one that works—a tactic called brute force login. From there, it will attempt to access a point-of-sale terminal.

POS machines are often exposed to the Internet because their owners don't want the extra cost and management overhead of VPN software, Schumacher said.

Once inside the POS terminal, Backoff can not only capture the "track" data stored on the magnetic stripes of cards as shoppers swipe them, but also the keystrokes they use (for example, debit card PINs). That information is all sent to a central command-and-control center owned by the perpetrators, who then sell the information or use it to make their own credit cards. Visa and MasterCard typically make banks eat the losses from such fraud; the banks then have to try to recoup the money from the merchant that was breached.

Backoff's ability to record keystrokes could also be used to break into a commercial bank account.

"You find somebody who's in accounts payable, you wait until they go to the bank's website and you punch in the user name and password and wire some money out," Camejo said. "Once that money's gone, it's gone," he said.

The malware could also start hunting for other valuable stuff to steal.

"Once a machine is infected, it is a resource and can be used for multiple purposes," said Segura. "In addition to trying to harvest passwords, Backoff might put the machine into a botnet so it could in turn generate more spam or help launch distributed denial of service attacks."

The top measure to protect from Backoff is to find and place behind a firewall any remote desktop services in use, Camejo said.

Next is to use a virtual private network and two-factor authentication.

"Some employees are supposed to be working from home but might be working at Starbucks," Segura pointed out. "Public wifi is a big issue."

Requiring strong passwords would be helpful to deflect brute force attacks.

Monitoring outbound network traffic is also important, Segura said. "Outbound traffic is where you'll see data exfiltration."

But antimalware software, the obvious antidote to malware, is fairly ineffective, Camejo said, noting that it didn't pick up on the first wave of Backoff. ISO

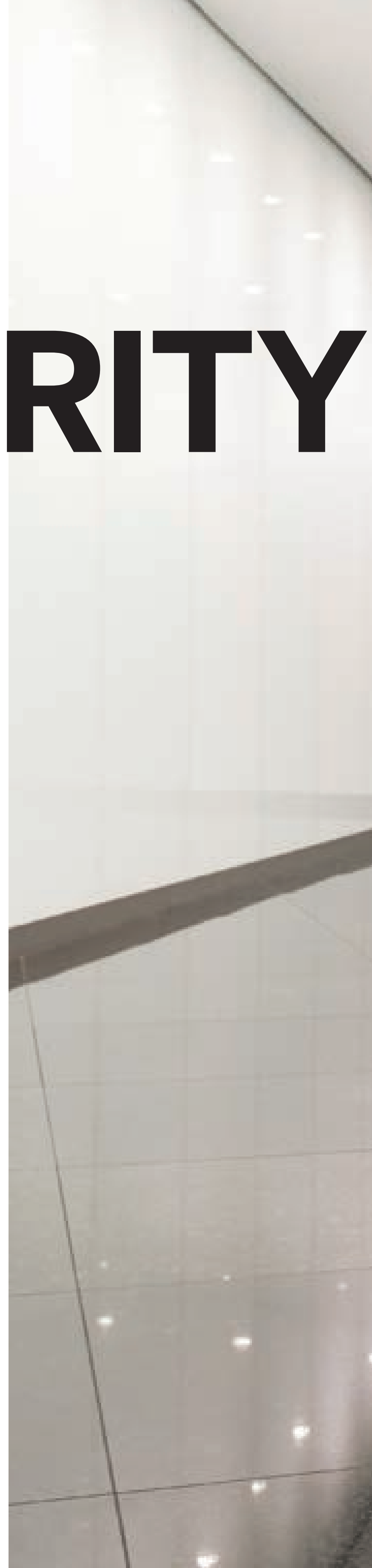
THE SINGULARITY

The many are becoming one as point of sale systems begin to handle tasks ranging from payments acceptance to inventory management. ISOs and agents can get involved or risk irrelevance.

Just as consumers have come to expect more from their mobile devices than just the ability to make phone calls, a growing number of brick-and-mortar merchants want more from their point of sale systems than just basic payment processing.

Henry Helgeson, CEO of Merchant Warehouse in Boston, says almost all of the storefront businesses his super ISO works with are moving toward integrated payments. Instead of a basic terminal, merchants are adding systems with software applications that enable them to manage their entire business on the same device they use to accept payments. With hardware and software costs dropping, more merchants can afford systems with software applications that help them manage inventory, accounting and customer

BY AUTUMN CAFIERO GIUSTI



Shawn Henry

relationships in a single place.

"It's very rare now that I'll walk into a business and not see some sort of integrated POS system," Helgeson said.

When Merchant Warehouse came on the scene 16 years ago, integrated payments meant integrating a terminal with a printer, he said. Most small to midsize merchants were still on dial-up terminals.

Today, integrated POS systems account for Merchant Warehouse's primary driver of business. A few years ago, only about 5% of Merchant Warehouse's 350-person staff held technology-oriented positions. Today, more than 100 of the company's employees are technologists.

> "It's rare that I'll walk into a business and not see an integrated POS system."
>
> - Henry Helgeson, Merchant Warehouse

"That's almost exclusively driven by the integrated POS space," Helgeson said.

A number of factors are driving the surge in integrated payments. Hardware costs are coming down, especially since the introduction of tablet systems. At the same time, tablet technology is making integrated POS systems more readily available to merchants who couldn't afford a sophisticated system in the past.

There's also been a huge software development boom around retail. Software exists for just about every retail segment now, from dry cleaners to hair salons.

And both merchants and consumers are acquiring more advanced skills. "Everybody knows how to use a computer. Fifteen years ago, that wasn't the case," Helgeson said.

Features that used to seem high-end are starting to filter down to the less expensive software packages.

At the same time, many of the simpler POS systems are starting to adopt software features that used to be considered high end. Things like loyalty, customer tracking and analytics are starting to appear in affordable software packages, Helgeson said.

Tablets Drive Interest

It used to be that an integrated point-of-sale terminal loaded up with features was too complex, expensive and excessive for the small merchant. Now with the advent of tablet-based systems, the integrated POS is becoming much more approachable, more affordable and more relevant.

"We're seeing more and more of a proliferation of integrated payments," says Shelley Plomske, vice president of product at Total Merchant Services, a Woodland, Calif.-based super ISO.

That's true even among smaller merchants. Plomske points out that 2 million merchants have standalone terminals, and 3 million more have cash registers. Those merchants are looking more and more toward tablet-based systems, she said. Whereas in the past POS systems would cost tens of thousands of dollars, an integrated system today might set back a merchant by about $50 a month.

"Merchants aren't so scared anymore. They don't have to buy a $50,000 Micros system," she said.

> "Tying the front office to the back office is good. Being able to engage customers is really compelling.
>
> - Dan Dufault, UP Solution, commenting on tablet POS

Total Merchant Services' target market consists of smaller merchants–owner-operator merchants with $10,000 to $15,000 in monthly transactions–the kinds of businesses that don't have their own in-house experts to pore over sales records.

"What tablet-based technology is doing is giving them visibility into what they're selling in a way that's very easy to consume. They don't have to be analysts or controllers to really understand what's selling," Plomske says.

This past year UP Solution, the POS arm of United Merchant Services in Hackensack, N.J., extended its reach into tablet-based POS systems with its UP Tab product line. For some of the merchants UP Solution sees, upgrading from a cash register to a tablet-based POS is all about creating a countertop aesthetic and a more interactive payment experience for the consumer, says Dan Dufault, vice president of sales and marketing for UP Solution.

"Tying the front to the back office is good. But being able to engage customers is what's really compelling," he says.

Merchant Type Dictates Features

Exactly which features merchants want at the point of sale depends a lot on merchant type. For restaurants, it's all about turning tables. That's why many of them rely on integrated systems and can't afford to live without them, says Jared Isaacman, CEO and founder of Harbortouch, the POS division of United Bankcard Inc., a super ISO based in Hampton, N.J.

The system helps restaurants assure a more accurate and timely order. Then, it gets customers out so that someone else can come in and sit down.

"If you go to a restaurant or bar that doesn't have a POS, you can watch the waiter or waitress have to add everything up with a calculator. It eats up time. And revenues correspond to the number of people going in and out of a table in a night," Isaacman says.

For retailers, it's all about inventory management first and foremost, fol-

Helgeson Maintains Leadership Role In The Acquiring Industry

When *ISO&Agent* spoke with acquiring industry experts about integrated point of sale systems, one of the first people the editors thought of interviewing was Henry Helgeson.

Helgeson, the CEO and a co-founder of Merchant Warehouse, a Boston-based super ISO, has helped lead the industry from almost the beginning of his career.

He got his start selling terminals and printers door-to-door for United Processing Corp. But he soon realized the products he was selling cost so much they were out of reach for most merchants.

So finding a way to offer a lower-cost alternative became a defining principle for Merchant Warehouse, the company Helgeson started in 1998 with Scott Zdanis.

To that end, they created what many consider the first website for low-cost card processing hardware and software.

Selling online eliminated the need to pay a big commission to an agent for selling or leasing a terminal. Instead, Merchant Warehouse made money through high transaction volume.

Merchant Warehouse went on to create products that included Transport, BinSMART and MerchantWARE Mobile.

In 2012, the company introduced the Genius customer-engagement platform, which it described as the first acceptance service designed to handle all present and future payment types, along with any vendor's value-added gift, loyalty and promotional schemes.

(This sidebar article and the similar shorter piece on page 46 were excerpted from an extensive Q&A with Helgeson in the July-August 2012 issue of *ISO&Agent*.)

— Ed McKinley

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lowed by customer loyalty. Retailers have a finite amount of available capital. So if they're going to have a product that sits on a shelf for a long time, or gets stolen, they need to account for it, Isaacman says. For instance, if a liquor store sees that Budweiser didn't sell well on the Fourth of July, they'll want to adjust their inventory accordingly the following year.

Value Sways Merchants

Not all merchants are sold on integration, and smaller businesses in particular prefer just the basics from their POS. Industry experts said these merchants are still looking for a compelling reason to invest in an integrated system.

Helgeson points out that most merchants fall into the small to midsize category, and that means a good number of merchants mainly want their payments system to work properly, and to be efficient and low in cost. As long as these merchants are plodding along successfully day by day, many of them insist they can do without all the bells and whistles of integrated systems, and someone will have to convince them why they should pay more for any features beyond that.

> "If you go to to a restaurant that does't have a POS, you watch the staff add everything up. It eats up time."
>
> - Jared Isaacman, Harbortouch

Merchants are willing to pay only for the value they perceive in a POS system. Some merchant types might be willing to pay more for a suite of features that they believe will help their business make more money.

"From a merchant's perspective today, the first thing that comes to mind is interchange, and that 2% of my revenue is going here," says Raul Mutha, CEO and founder of Boston-based POS vendor Aurus Inc.

Charles Hogan, CEO of Westlake Village, Calif.-based Tranzlogic, argues that because processing is a commoditized product, a change needs to take place for the payments industry to lead the charge toward adopting integrated payments. That might mean a third party should come in to effect change, he maintained.

"The challenge has been that the payments industry so far really hasn't done a good job of selling value," Hogan said.

Big Data could become the X factor that helps change merchants' minds. Hogan suspects that it will become harder for merchants to live without the ability to understand who their customers are and what motivates their purchases. Tranzlogic is a company that helps ISOs gather and analyze data for merchants.

"So it's the 'What's in it for me?' storyline. And I think that is going to be driven in large part by data," Hogan said.

Helgeson said the key is helping merchants see the value in their POS systems. "We find that the middle-tier merchants are less price sensitive if you can deliver value," he said. And at least in Merchant Warehouse's experience, once a merchant puts in a system equipped with value-added features, the business starts to see the value in those features and feels more compelled to pay for them. **ISO**

The End Of Payment Terminals Has Been A Long Time In The Making

Soon after Henry Helgeson got into the acquiring business in the '90s, he could see that card processing terminals would someday go the way of the typewriter.

Point of sale hardware was becoming cheaper and the software to power it was becoming more powerful, he recalled.

But that doesn't mean it suddenly became easy to switch from promoting terminals to offering multifaceted POS systems, noted Helgeson, who's chief executive of Merchant Warehouse, a Boston-based super ISO.

To thrive in the new world of integrated POS, ISOs have to hire technical experts, increase the number of support people on the staff and develop their own technology, Helgeson said.

Those relatively new requirements have created barriers to entering the acquiring business.

But companies that have been around for a while and managed to get an early start on the transition to integrated POS should continue to prosper, observers agree.

At merchant Warehouse, Helegeson and his colleagues began hiring software developers more than a decade ago.

At first, the company's tech people worked on internal systems.

By 2007, Merchant Warehouse began to concentrate on payments innovation more than on its traditional sales model.

Soon, the company began releasing tech products for its merchants.

Eventually, Merchant Warehouse could take over all its transaction processors, eliminating the need to work with third-party processing companies, Helgeson said.

At the same time, though, he acknowledged the role of large processing companies and the value and stability that they bring to the acquiring business.

Looking to the future, Helgeson believes that mobile payments and mobile commerce will proliferate

— Ed McKinley

More Important Than Ever

Finding and keeping top independent sales agents can make or break an ISO in today's rapidly changing market, a new study indicates. BY ED MCKINLEY

As the acquiring business becomes increasingly complex, it's more important than ever for ISOs to recruit, nurture and retain the best independent sales agents, a new study shows.

"That's how ISOs can see success," said Rick Oglesby, who conducted the study as head of Double Diamond Payments Research LLC, a new enterprise that's associated with the established Double Diamond Group consulting firm. "The ones that don't figure that out are going to be left holding the bag."

The "Agents of Change" survey—which centered on independent agents who run their own businesses and do not work as regular ISO employees—indicated ISOs can't afford to squander time on nonperforming salespeople, Oglesby said.

"If you go with the basic mass-market strategy—come one, come all—you'll end up with a lot of nonperforming agents," he maintained. "A lot of effort goes into recruiting agents, and often there's not much return on it."

In fact, one of the study's most surprising findings was how much the top agents outperform average agents, Oglesby said.

ISOs that take a "mass market" approach to hiring independent agents can expect an average of 42.5 new merchants per year per agent, the study showed. Selective ISOs can attract independent agents that sign up 60 to 100 merchants annually, with some independent agents corralling as many as 8,000 to 9,000 merchants yearly.

A selective ISO with 50% average independent agents, 40% strong performers and 10% top achievers should earn about $30,000 a year per agent, three times the earning per agent of a mass market ISO, according to the study.

Moreover, only the best independent agents can handle the changes that are roiling the acdquiring business, Oglesby said.

The changes include the spread of mobile payments and the transition to EMV, combined with the proliferation


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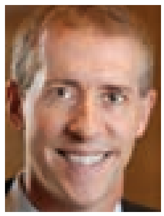
of value-added point-of-sale products intended as competitive differentiators, he contended.

"There is a lot of concern over whether ISOs and agents will be able to make the transition," Oglesby said.



Oglesby

The turmoil is causing turnover of independent agents, forcing ISOs to concentrate on recruiting a new type of agent capable of selling products and emphasizing value as opposed to selling on price, he said.

Often, ISOs poach those top-performing independent agents from competitors, Oglesby said.

Recruiting and retaining the top agents requires that ISOs offer effective training, infrastructure and products, a proposition that's becoming increasingly expensive.

"That's really not easy to do," Oglesby said of the costs ISOs face. "It takes a lot of upfront investment in technology."

It's become so capital-intensive that some interviewees discouraged startups from entering the market.

"A lot get into the agent channel with the expectation that it's cost-efficient because you're working with third-party small businesses on a pay-for-performance basis, but the reality is that it's changed," he said.

Double Diamond Research's study, the first undertaken by the firm, focused on interviews with ISOs. Subsequent studies will concentrate on ISOs and online acquisition of merchants for transaction services, he said.

Projecting from the ISO interviews, Oglesby reckons the nation's 5,000 or so agents are responsible for merchant services at 1.1 million merchant locations, about 10% of the nation's total. Merchants in that segment operate an average of 1.2 locations, Oglesby noted.

Those merchants generate about $192 billion in transaction volume annually, accounting for a healthy portion of the business that flows through ISOs.

How much additional business ISOs realize through the sales people that they employ directly should become clear when Double Diamond surveys acquiring banks for the anticipated report on ISOs.

To compile the data, Oglesby interviewed 21 ISOs of all sizes—24% were among the five largest ISOs, another 33% were not in the top five but were from the 10 biggest, 19% came from the biggest 11 to 20, and 24% were from the group smaller than the top 20.

"So we had close to a quarter in each size segment," Oglesby said.

He used three methods of determining the size of the agent channel based on the interviews, and all produced similar estimates.

Sources agree the nation has about 5,000 active agents, defined as those who signed at least one merchant for transaction services each month.

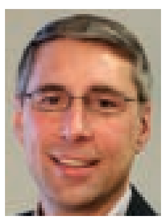
Simple arithmetic would yield the average agent's merchant count and transaction volume, but Oglesby cautioned that 75% of the nation's agents perform below average and 25% above.

Growth in the independent agent channel slowed significantly in 2011 and 2012, but recovered last year, according to the report.

Double Diamond Research is working on "six or seven" more reports but hasn't announced when it will release them. ISO

Five Strategies ISOs Can Employ To Sell Clients Mobile Marketing

THE POSITIVE IMPACT OF MOBILE MARketing is irrefutable in the world of retailing. A mobility-driven retail establishment can be a thing of modern beauty. Untethered clerks freely roam the retail floor, ready to answer questions about merchandise, setting up delivery dates, processing loyalty points, and even performing check-out duties right where they stand, all with the assistance of a mobile device. Retailers benefit by keeping register lines short, foot traffic moving, and customers cool, collected, and yes, satisfied.


Clark

The proliferation of tablets and smartphones, and the general push toward all things mobile, have conspired to turn the promise of mobile commerce and mobile marketing into the reality we are living. So, why are there so many retailers who still haven't made the transition to support mobile commerce?

While m-commerce and mobile marketing services continue to press ahead, it remains a challenge for merchant services providers to clearly delineate and articulate the benefits of this new paradigm to interested—yet still hesitant—merchants. Many acquirers and ISOs are still too unfamiliar and uncomfortable with comparatively new concepts like mobile commerce and mobile marketing to knowingly and confidently sell these services.

Granted, it does call for a new kind of selling, and a new kind of packaging and positioning. It requires the development of a new kind of muscle memory, a process that both merchants and consumers must become more familiar with in order to produce a consistent response. But the ending chapter of the story is as impactful as ever: the result is greater productivity and higher profitability.

Here are five proven strategies that can help acquirers and ISOs take advantage of these compelling opportunities and convince merchants to make the transition to selling mobile commerce and mobile marketing services.

1. Speak Revenue Over Cost

Point-of-Sale card payment processing technologies are traditionally seen as cost centers for merchants, whether the POS is fixed or mobile. Yet, mobile marketing is in an entirely different realm; it's about solving specialized problems, converting opportunity, and generating additional revenue, and above all, adding value to merchant-consumer dynamics. It's about deploying tactics that focus on customer acquisition and retention. Launching time- and geography-relevant promotions. Dispensing real-time location-based and behavior-tracking coupons. Managing customized loyalty programs that provide meaningful rewards. These tactics are all designed to boost traffic and sales, so they should be positioned as business-building tools, not as a necessary expenditure.

2. Focus On Marketing

The typical acquirer or ISO sales presentation commences with a payments transaction conversation. How much are you paying? Can I show you how to shave a few cents off? The problem with that approach is that it isn't differentiated, and your competitors are essentially offering different flavors of the same deal. Worse still, merchants have already heard this pitch and receive it with closed minds. There is far less competition in selling mobile marketing services today, and it's still a fresh, value-based, income-driven story—one that retailers remain eager to entertain.

3. Inquire About Mobility Activity

Begin the conversation with a mobile commerce slant. Ask how are things going with their mobile consumers. Do you feel you're reaching enough of them? Are you drawing them in with special offers? Do they seem to be responding? Are there specific seasons, cycles, or times of the day when business lags and you need a way to build and sustain traffic? Is it possible you're leaving business on the table by not having the means to engage and interact with your mobile customers? Like most retailers, they probably feel they aren't doing as much as they'd like to leverage the mobile side of their business. Mobile marketing services, of course, are tailor-made for connecting with their growing base of mobility-hungry consumers.

4. Talk About Really Using Analytics

On your next sales call, present your merchants with the possibility of cracking the mystery of customer behavior—understanding, anticipating and influencing it. Where are your consumers purchasing? What are they purchasing? How often and from whom? Today, that information is all attainable. Mobile marketing technology has gone far beyond shotgun offers. It's about amassing and aggregating vital demographic, psychographic, and geographic consumer metrics, and transforming that data into valuable business guidance—mission-critical knowledge for creating more relevant acquisition and retention campaigns.

5. Highlight Customization

Print ads and coupons are physically static, limited in distribution and usually present one-size-fits-all offers. There's not much flexibility and customization. The consumer rarely feels special or valued. Mobile marketing programs and campaigns are just the opposite. They can be personalized, deployed on demand, and require very little cycle time to reach a market and take effect. So, if business suddenly lags, a highly customized mobile marketing campaign is just what your merchants need to jump start interest and activity.

The moment has come for acquirers and ISOs to change the sales conversation. Merchants are tired of the same old promise of better bottom lines through shaving decimal point fractions off of every transaction and making it up in volume down the road. The narrative must change. Merchants need to hear about how to derive business intelligence and deploy revenue-building strategy. It's about understanding consumers, anticipating their preferences, and launching personalized campaigns that align with time, geography and need. It's about conducting full-circle seamless interactions with consumers—from outreach to engagement straight through to transaction—using the communication platform they prefer: their mobile device. The right mobile marketing makes it easier than ever to package, sell, deploy and maintain these cloud-based services.

Revenue generation is the true promise of mobile marketing, and that will command the attention of every merchant. It's time for merchant services providers to speak the same language. **ISO**

Bill Clark is chief executive officer of Spindle. Reach him at bclark@spindle.com.

Finding A New Friend?

Here's how Sen. Sherrod Brown might guide the Banking Committee. **BY VICTORIA FINKLE**

Washington—Sen. Sherrod Brown may give the country's biggest banks heartburn, but there are signs he's positioning himself as an industry ally ahead of a potential bid to run the Banking Committee.

In recent months, the liberal Ohio Democrat and vocal "too big to fail" opponent has taken on several efforts that suggest a pragmatic approach to financial services issues. He's worked with several Republican lawmakers to tweak capital requirements for insurance companies under the Dodd-Frank Act and raised concerns that some relatively uncomplicated regional banks are classified as systemically important.

"What he's done extraordinarily well is that he went from being someone the banking industry was probably fearful of, given his populist background, to probably being the preferred Democrat for some banks," said Edward Mills, an analyst at FBR Capital Markets. "He's a strong defender of Dodd-Frank, but also someone who is willing to take an honest look at the potential consequences of the law and to make changes as necessary."

The moves come as the banking panel prepares for new leadership next year, after Chairman Tim Johnson, D-S.D., retires in December. Brown is considered a front-runner to head the committee, despite his relatively junior status, if Democrats manage to hold onto control of the chamber after

Bloomberg News

the November elections.

That's because several lawmakers ahead of him, including Sens. Jack Reed of Rhode Island and Robert Menendez of New Jersey, are said to be intent on running other committees. Sen. Charles Schumer of New York is also a contender to take over the banking panel, though observers have suggested he will likely pass up the opportunity so that he can focus on party leadership.

Brown, who joined the Senate in 2007 after serving 14 years in the House, has been an active member on the Banking Committee. He's chairman of the financial institutions and consumer protection subcommittee, and has indicated he's interested in running the full committee.

A spokesman for the lawmaker declined to comment for this article, but pointed to the senator's work on legislation to raise capital standards at the largest banks and his efforts to push big banks to divest their physical commodities businesses, among other issues.

More recently, Brown has also taken up several causes favorable to the financial services industry, including a fix to the Collins amendment of the Dodd-Frank Act that would make clear that the Federal Reserve does not need to apply bank capital standards to systemically important insurers.

He also recently held a subcommittee hearing on whether the $50 billion threshold for systemically important banks is appropriate, a key issue for regional banks that would like to see that number raised to $100 billion or even higher.

Such efforts could help many see Brown in a more nuanced light ahead of the battle for the chairman's role.

"We have heard some Democrats worry that donors in New York so fear Brown that they are pushing for anyone else to get the job. Fundraising is an important job for anyone is leadership, including a committee chairman. So the worries won't be taken lightly," Jaret Seiberg, an analyst at Guggenheim Securities, wrote in a client note earlier this month. "We think this explains what we believe is a deliberate effort by Brown to clarify that he opposes the mega banks, but is supportive of regional banks and other financial firms."

Analysts said Brown's work on some of these more recent issues suggests a willingness to take another look at the financial reform law, potentially opening up a sought-after discussion around regulatory relief for smaller institutions. That would mark a sharp departure from Johnson's leadership, which has centered on protecting Dodd-Frank from any changes.

"No one in their right mind would question Sherrod Brown's progressive track record, which allows him to be a dealmaker on targeted regulatory relief for Dodd-Frank," said Isaac Boltansky, a policy analyst at Compass Point Research & Trading.

A Good Position With Republicans

Brown would also likely find himself in a good bargaining position with Republicans, who have been much more vocal about making changes to the financial reform law.

"The people that really want changes are the ones who have to compromise, so if his negotiating partners, being Republicans, ask for too much, then he can turn around and walk," said Brian Gardner, an analyst at Keefe, Bruyette & Woods. "If such an effort were to fail, then he can blame Republicans for overreaching and being unreasonable."

Still, it's too early for Wall Street to rest easy over the prospect of a Brown chairmanship. Observers said the Ohio Democrat seems unlikely to abandon his aggressive pressure on the country's megabanks.

Last year, Brown co-sponsored legislation with Sen. David Vitter, R-La., to raise capital standards at the largest banks, and the two continue to warn about the subsidies the big banks receive for their size. Even if he couldn't get legislation passed to censure the largest institutions, he would have the power of the bully pulpit at his disposal.

"Certainly the 'too big to fail' banks would be rather anxious," Gardner said. "I don't think that some of the legislation that Brown has put forward with Vitter on capital rules can pass the Senate, but it would control the hearing agenda. The emphasis would be on more capital, higher capital and breaking up the big banks."

Depending on how membership of the committee shakes out next year, Brown could even find himself with new allies to bolster his cause. Many of the Republican contenders for the Senate hail from more rural states—if some of them end up on the banking panel, they are likely to share Brown's distrust of the largest institutions.

"Some of the new Republicans could be of the same mind on 'too big to fail,'" said Brandon Barford, a partner at Beacon Policy Advisors. "Brown has shown he's comfortable working with conservatives, even if they reach the same conclusion of a need for further reform from a different perspective."

The biggest question mark under a Brown-led panel, meanwhile, remains the fight over housing finance reform. A bipartisan group of lawmakers on the Banking Committee crafted a landmark bill this term to unwind Fannie Mae and Freddie Mac while preserving a government guarantee for the housing system. The measure failed to advance to the full Senate, and Brown was one of a handful of Democrats who ultimately voted against the legislation.

Room To Maneuver On Housing

Still, he has been relatively quiet on the issue of housing reform, which could give him more latitude if he takes the gavel.

In Brown's most detailed critique of the bill he warned that the proposal was too complex, failed to require enough capital and didn't provide crucial affordable housing protections.

More likely than not, Brown would focus on holding hearings about the issue, and would perhaps look to expand credit for borrowers and further stabilize the housing system. **ISO**

The Next Big Thing

A desert shop with an open-minded owner and great foot traffic has become a laboratory for what's new in payments. BY BAILEY REUTZEL

Almare Gelato Italiano accepts many alternative payment methods, and hasn't paid a dime for them because its vendors want a taste of the foot traffic at the store's prime location in downtown Berkeley, Calif.

Companies are regularly testing their products in downtown Berkeley because of its large population of high school and college students. Plus there are several transit systems, including the BART, bringing in lots of customer traffic.

"I like technology so if [a company] comes in with a new thing that I don't have to pay for, I like to test it…to attract more customers and to show customers that we care to give them different options," said Simone Arpaio, principal at the creamery.

Almare Gelato accepts all credit card types as well as Slyde, a beacon-enabled mobile app developed by SK Planet Inc.; Moocho, a mobile payment app for students; and Marqeta, a multi-account prepaid card that rewards consumers who commit to paying in advance.

"If you make the payment somehow fun or easier or different, maybe you can make people forget they're giving you money," Arpaio said.

The shop has accepted Slyde since the payment option was launched in early July. When customers walk into the store, a Bluetooth beacon detects an app running on their phones, allowing them to pay with just a tap of a button at the point of sale. SK Planet worked with DoubleBeam, a mobile technology provider, and gave Almare Gelato a DoubleBeam Gopago point of sale terminal to accept sales.

"Berkeley…has the perfect population of early adopters in young professionals and students, and a large number of forward-looking merchants," said Navneet Singh, vice president of product at SK Planet. "Almare Gelato…is a perfect example of a merchant looking to innovate in the way it operates and interacts with its clientele."

Outside of Almare Gelato and other places around town, Slyde's marketing team is signing up customers to the app by offering them a $10 coupon. Almare Gelato is also running a campaign that sends a notification to a customer's phone, offering a 50% discount when they are near the store.

Three or four times the system has lured people into the store, said Arpaio. Any money Almare loses from the discount is repaid by SK Planet.

"I think this is the future of advertisement…to see things popping up depending on where you are," said Arpaio.

While some alternative payment systems run in the cloud and require only a simple integration for setup, other providers, like SK Planet, use additional hardware.

Moocho gave Almare Gelato an iPad mini to accept payments, although the system doesn't get much use anymore, Arpaio said.

"Moocho doesn't do enough marketing so people stopped using it," he said. "All of these systems are really interesting but they only work as much as they market."

The drop-off in marketing is a strategic move by Moocho on account of 80% to 90% of its user base being students.

"During the latter part of spring and in the summer we don't concentrate on any marketing as school is out," said Bom Lee, vice president of national sales and management at Moocho.

The company planned to launch an aggressive marketing campaign this fall as University of California, Berkeley, students came back to school. Moocho intended to hand out flyers on campus and send mailers to the parents of the freshmen and sophomore class because 57% of Moocho accounts are funded directly by parents, Lee said.

> "If a company comes in with a new thing I that don't have to pay for, I like to test it."
>
> - Simone Arpaio, Almare Gelato Italiano, on using new payments tech

Moocho is active on nine campuses around the country, including Ohio State University, the University of Wisconsin and Colorado State University. "On average, we have 33% of the student body at each campus," said Lee.

While vendor marketing is important to adoption and use, Lee said Moocho's model is appealing in itself because users can earn rewards on purchases at one store and use those rewards at any Moocho-accepting merchant and several online retailers.

Almare Gelato will soon start testing YouPlus, a mobile app that gives consumers free merchandise from merchants they like when they watch unrelated advertising.

Arpaio said he finds that app particularly interesting from a merchant standpoint because the advertiser pays for the discounts and freebies consumers receive.

Most of the payment providers take a small percentage of Almare Gelato's transactions, and Arpaio likes that "people come in and are curious about the product, which means they'll feel more engaged to buy things." **ISO**

How Acquirers Can Help Clients Pick The Right Payment Gateway

THE IDEA MAY SEEM SIMPLE. A business provides goods and services for a cost. Customers pay money to that business in exchange for receiving those goods and services.

But, the process is not as simple as it seems. Merchants can operate in many different capacities. They can sell products and services at physical locations or they can sell virtually through online storefronts.

In today's modern society many do both, making it critical for ISOs to provide merchants with a payment gateway to handle and process all types of payment transactions.


Clyne

So, what exactly is a payment gateway and what criteria should ISOs look for when selecting the right one for their merchants?

A payment gateway is a web-based system that enables businesses to take payments and process them anytime, anywhere.

With the right payment gateway, ISOs can increase their value by offering merchants new revenue, reduced costs and improved operational efficiency. However, not all gateways are created equal.

Insist Upon EMV-Readiness

Security is at the forefront of most people's minds. With the recent rash of security breaches, the market is increasingly focused on keeping customer information safe and secure.

Recently, a new technology has come into the picture and in a very big way. The new technology is EMV, which stands for Europay, MasterCard and Visa. It and refers to bank cards—or "chip cards"—that contain an embedded microchip storing encrypted data.

Starting in October 2015, all merchants will be required to take EMV card payments at their point of sale. Fraud liability will also shift for EMV transactions.

Currently, banks and credit card issuers are responsible for paying most of the costs relating to everyday credit card fraud.

In 2015, if a customer uses an EMV-enabled card at a merchant that does not have the ability to process an EMV transaction, the merchant will assume 100% liability for all costs if the transaction turns out to be fraudulent.

To prepare merchants for that mandate, ISOs should provide a payment gateway that's EMV-capable. At the POS, merchants will need EMV-ready terminals that integrate into their payment gateway and fully encrypt all transactions.

When a customer swipes an EMV-enabled card, a merchant's in-store POS terminal must have the technology to process that transaction and communicate the information back to the payment gateway.

ISOs should choose a provider that can supply both a comprehensive payment gateway and fully integrated EMV-ready terminals.

In addition, any selected payment gateway must support two-factor authentication. With two-factor authentication, data stored on the chip of the EMV card is used in combination with a signature, PIN or password from the customer to provide two layers of authorization. That is the future of fraud protection.

To keep up with the market's growing security requirements, ISOs must ensure their chosen payment gateway is EMV-ready and uses the latest technology to give merchants and their customers the highest level of security protection.

Flexibility In A Changing Market

The payment landscape is constantly changing. ISOs should make sure their payment gateway provides true flexibility—both now and in the future.

Merchants want a gateway that can work with their business, not the other way around. Choosing a payment processor-agnostic gateway that does not require merchants to switch from their current processor is critical.

In addition, a payment gateway should have the capacity to adapt to the customer's changing needs. As payments continue to change, merchants need a gateway that can meet new requirements and provide customers with a buying experience that allows them to pay exactly the way they want.

In an age when new payment types appear rapidly, ISOs should select a payment gateway that offers their merchants flexibility and innovation.

Ease Of Integration Combats Fear

Change can create fear and resistance in any business. But, integrating new technology does not have to become a hassle or disrupt day-to-day operations.

For ISOs, it's important to choose a payment gateway that can easily integrate with a merchant's website and provide a single processing interface that works with all major processing platforms.

A payment gateway that uses an open application programming interface (API) simplifies and streamlines the integration. Merchants also require an approach that gives them the ability to integrate their payment gateway with any device that uses internet access, including tablets and mobile devices.

When choosing a system, it is important to supply merchants with a gateway that can seamlessly integrate into their current technology and will not cause a decrease in sales.

> A payments gateway should be flexible, easy and secure. It should increase sales and cut costs.

A System That's All-Inclusive

Each ISO is different, just as each merchant is different. But all businesses share commonalities and requirements that ISOs must consider when choosing a payment gateway. It's important to ensure the gateway is comprehensive. It should be flexible, it should be easy and it should be secure.

Ultimately, it must drive sales up and costs down. ISOs and their merchants demand a gateway that is all inclusive and transparent.

The right payment gateway can successfully grow a brand and provide the tools to help merchants run their business and improve the customer experience, from anywhere in the world. **ISO**

Matt Clyne is president of Direct Connect. Reach him at matt.clyne@udcc.com.

Issuing A Warning

The Consumer Financial Protection Bureau is telling the public that digial currencies have volatile exchange rates, unclear costs and vulnerabilities to hacking. BY RACHEL WITKOWSKI

The Consumer Financial Protection Bureau has issued a warning to consumers about the danger of digital currencies, sparking questions about whether the agency could soon seek to write new rules in that area.

The agency said currencies like Bitcoin and Dogecoin can have volatile exchange rates, unclear costs, and are vulnerable to hacking and scams. The agency simultaneously announced it is accepting complaints on virtual currencies, which is often used as the start to an enforcement investigation or research for rulemaking.

Yet Bitcoin advocates said they were not concerned yet about the CFPB writing sweeping new rules, arguing it's not clear they are needed. They pointed to current federal and state registration laws that treat bitcoin exchanges in the same way as other money transmitters.

"I'm not sure the CFPB would go as far as doing any regulation on bitcoin. The states are already doing the consumer protection piece so the CFPB could look for a gap, if there is a gap," said Jerry Brito, a senior research fellow at the Mercatus Center at George Mason University. "And then that depends on what the complaints might say. But this is a maturing industry and it's a very fast industry so a complaint filed today might be irrelevant by the time any new regulations have kicked in."

Federal regulators, such as the Securities and Exchange Commission and the Financial Crimes Enforcement Network, have issued guidance to curtail bad actors and require registration of exchanges.

Brito said roughly a dozen states also have registration requirements that fall in line with existing rules on money transmitters. New York Superintendent Benjamin Lawsky, for example, has proposed regulations to establish registration specifically for bitcoin exchangers.

CFPB Acting In Self-Defense?

Some observers said the CFPB is wading in primarily because of criticism by the Government Accountability Office. The GAO released a report in June saying the CFPB's efforts with regard to virtual currencies have been "limited." It recommended the CFPB work with other agencies or working groups on the issue.

Several observers said the CFPB used similar language in its warning as the earlier GAO report.

"The language and the timing of the CFPB warning was close to the GAO report but this is just a consumer alert. It's not a guidance, it's not a new regulation, it's not a notice of proposed rulemaking," said Marco Santori, the Regulatory Affairs Committee chair for the Bitcoin Foundation. "And it's the same we've seen from many of the states. The only real difference is a lot of us expected the CFPB to take a more holistic treatment."

In its warning, the CFPB notes that virtual currencies are not backed by any government or central bank, nor are the funds supported by federal deposit insurance. It says digital currencies are still "experimental" and given to rapid price changes.

"In 2013, Bitcoin's price fell as much as 61% in a single day," the CFPB warning says. "In 2014, the one-day price drop has been as big as 80%."

It also says that although Bitcoin kiosks may look like ATMS, they "are not ATMs at all."

"Unlike ATMs that you may associate with your checking and savings accounts, Bitcoin kiosks do not connect to your bank and may lack many of the safeguards you would expect," the CFPB says. "They may also charge high transaction fees—media reports describe transaction fees as high as 7% and exchange rates $50 over rates you could get elsewhere."

But Bitcoin supporters said the CFPB did not recognize any benefit of virtual currencies.

"Bitcoin was created as tool to empower consumers," Santori said. But "all the CFPB released is a long list of risks… Bitcoin is a boon for consumers and it really is one of greatest tools in history for promoting consumer financing."

Advocates said that exchanging such virtual currency uses far less personal information because transactions are typically through a digital "private key" code—though the CFPB cautions about that as well. The costs to transfer bitcoin can sometimes be lower because a third party does not always have to be involved like a typical money remittance provider, according to supporters.

The CFPB's warning "is a very fair assessment. These risks do exist… at same time, it's not the CFPB's job to highlight the benefits," Brito said. "And there are substantial benefits on the other side of these risks."

Critics Dispute CFPB Data

Some also critiqued the CFPB's data. The price drop the agency used is a one-day snapshot as compared to huge gains in bitcoin's value over the past year. The price of a bitcoin on the CoinDesk USD Bitcoin Price Index has remained slightly below $600 for nearly three weeks but that's far higher than the $95.08 price tag on a bitcoin one year ago.

Besides Bitcoin, the CFPB also mentions XRP and Dogecoin as examples of digital currency.

Many observers say they expect other regulators to issue warnings to the public but they don't expect it to stymie the growth or the evolution of digital currencies. Most of the Bitcoin owners to date have been technologically savvy traders who already understand the risks and benefits.

Bitcoin advocates say it will eventually spread to the general public, particularly those needing alternative payment sources like the underbanked and unbanked.

"In the future, not only will we use them [bitcoins] as a payment source but for other things like notary services and using it as way to create commodities," Brito said. "And that is going to involve other regulators in the future." **ISO**

A Long Road Ahead?

Fiserv's New EMV Expert Predicts a Decade-Long Conversion to chip cards. BY DAVID HEUN

Jamie Topolski, the new director of alternative payment strategies for the Output Solutions division of Fiserv, expects that the U.S. transition to EMV will take as many as 10 years to complete.

Topolski comes to the bank technology vendor with many years of experience in banking technology and EMV conversions. EMV-chip cards improve security over magnetic-stripe cards, and are commonly called "chip-and-PIN" cards because they are typically paired with a PIN as a further security measure. In the U.S., many issuers are using a PIN, but others are offering "chip-and-signature" cards instead.


Topolski

Topolski spoke to *ISO&Agent* about the U.S. conversion to EMV with the looming October 2015 timeline set by the card networks, after which most companies handling card payments will face a shift in fraud liability if they are not able to accept EMV payments.

This interview has been edited for length and clarity.

ISO&Agent: *We hear the transition will take three to five years after the liability shift. Will it take that long?*

Topolski: Actually, I think it is going to be an eight to ten-year process. Canada had a pilot program for years that was nationally coordinated before [its 2010 deadline], and that's a country with a small number of large banks and acquirers. Nevertheless, they are still implementing. It's just a long process.

ISO&Agent: *What will delay the industry from being EMV-ready by the October 2015 date and beyond?*

Topolski: On both the acquiring and issuing side, there are some significant challenges. Just the sheer number of acquirers and value-added resellers out there that have to be involved is an issue. ATM owners have been very focused on their migration away from Windows XP, so they haven't had as much time to focus on EMV. … On the issuing side, we have so many banks and credit unions in the U.S. Some of those banks have multiple BINs (bank identification numbers) and, to be honest, each one of those BINs equates to an EMV project.

ISO&Agent: *Any success stories?*

Topolski: At some Walmart locations, we are seeing some EMV ready terminals being turned on. But overall, very few EMV capable terminals out there have been turned on. We are seeing more EMV terminals deployed, so hopefully some of the larger chains will be ready to turn those on in 2015.

ISO&Agent: *What is the U.S. industry overlooking?*

Topolski: The education piece for merchants and consumers is going to have to happen, but it's a question of who does it, or how many different entities will do it. The EMV Migration Forum is trying to provide educational materials and is doing a very good job of developing documentation, but it's not the same as having a national payments type of council overseeing it, like they have had in other countries for this migration.

ISO&Agent: *What happens if the education aspect falls short?*

Topolski: There will be confusion at the point of sale when consumers first start using their cards with the chips. The cards will work in some locations and not others, and the consumers won't know whether to swipe or insert the card. There are so many instances in which we insert our card and remove it quickly. We have to convey to cardholders that they are going to insert the card and leave it there until the transaction is complete.

ISO&Agent: *What about chip-and-PIN versus chip-and-signature and the effect on consumer habits?*

Topolski: There will be some inconsistencies. Some issuers are choosing to support chip and PIN while others support chip and signature. It won't be clear right away.

ISO&Agent: *What would be an effective educational message or method?*

Topolski: What we are recommending to the banks is that education is extremely important. … Those of us in the industry just take for granted that consumers will understand because we are so used to the terminology and the form factor and the interaction of an EMV card with the terminal. We just assume consumers will pick it up very quickly. They won't.

ISO&Agent: *Is there any reason to fear keeping the magnetic stripe on EMV cards?*

Topolski: Mag-stripe is going to be around for quite some time. If nothing else, the presence of a mag stripe opens the door on the ATM, which detects that magnetic device and sucks in your card, if you will. It doesn't need to have any pertinent data on it.

But in working together with the chip, there will be a different code on the mag stripe that lets the terminal know that this card has a chip on it and should be used with the chip, not the mag stripe. If someone goes to an old terminal, it doesn't care about chip code and will do the transaction with mag stripe. But if it is a stolen card being used at an EMV terminal, the terminal will prompt the merchant to go to the EMV chip. If the transaction is somehow pushed through as a swipe transaction, the (point of sale) alerts this may be a fraudulent transaction or stolen card. So the potential impact can be reduced.

ISO&Agent: *Do most issuers, acquirers and merchants understand what the liability shift date means in the U.S.?*

Topolski: The October 2015 date is out there and it is just for a liability shift in the fraud cost burden. It is not a line-in-the-sand deadline for anyone. It's a good date to keep aware of as a target, but not to get into too much panic that the payments world will start blowing up on that date if everyone is not completely ready. Everyone won't be ready. **ISO**

A Famous Name

Underwriters Laboratories assumes a role in the American chip-card transition. BY DAVID HEUN

Underwriters Laboratories has been testing products for safety for more than 100 years, and now it's joining the payments industry at an opportune time.

The safety science company wants to play a prominent role in payments by helping U.S. companies certify systems as EMV ready as the country adopts EMV-chip payment cards.

UL formed its UL Transaction Security division two years ago to mark the company's progression from physical product safety to digital product safety, choosing payments as an area to test the new direction, said Maarten Bron, director of innovations for UL Transaction Security.

Acquisitions Aid The UL's Change

The transformation came about after UL acquired some European companies experienced in EMV chip transition and smart card development, Bron told *ISO&Agent*. The new unit has established its headquarters in San Francisco.

"Right now, we are very active in EMV and [Payment Card Industry] security standard certifications for the card brands," Bron said. "It's not a formal UL certification mark after testing in this case, as we are doing it on behalf of other organizations."

UL's service portfolio is now "fully integrated across the payments industry and we have a lot of experience in EMV certification," Bron noted.

The card networks have set an October 2015 deadline for most companies to be able to handle EMV cards, which improve security over magnetic-stripe cards. Companies that miss that deadline face a shift in fraud liability (fuel merchants have an extra two years).

"We want to help assure that EMV certification is not going to become a bottleneck in October of 2015," Bron said. "With our services, we are not just certifying a merchant, but protecting him against the EMV liability shift."

UL understands why American merchants have some reservations about EMV, a technology that has been available since 1993, and their fears that it is already outdated, Bron said.

But many other countries have already switched to EMV, and "the U.S. has to be very careful about placing itself on an island in terms of payments technology," Bron said.

EMV deployment in the U.S. will be more complex than in other countries because of debit routing mandates and the expectation that both chip-and-PIN and chip-and-signature transactions will be in play, Bron said.

It makes sense for UL to move right into EMV certification because it represents a huge growth area in the U.S., said Avivah Litan, a vice president at Gartner Inc., a Stamford, Conn.-based market research company.

"There is a lot of physical hardware security associated with it, so it seems to be a natural transition for them," Litan said.

UL's Experience Is An Asset

With EMV certification, UL should find it has strong background, Litan said.

"You have to certify that the devices are tamper-proof, that they are intact and not corrupted," she said. "They probably already certify computer chips as part of their jobs, so it would be an easier transition to move into EMV chip certification."

But despite its pedigree, the company has to prove itself in the payments industry.

"We wish there was sort of a Federal Reserve type of a mandate that would say 'thou should go to UL for certification,' but that's not the case," Bron said. ISO

> "We are very active in EMV and PCI security standard certification for the card brands."
>
> - Maarten Bron, Underwriters Laboratories, on what's happened so far

Going Their Own Way

Startups are bypassing social media and instead making their appeals directly to users. BY BAILEY REUTZEL

Social media sites, including Twitter and Facebook, have been enticing but sometimes hostile places for payments innovation. That's why some startups are striving to push past the platform providers and make their appeals directly to their users.

ChangeCoin, a Bitcoin-based micropayments platform, supports payments on Twitter, YouTube, Google+, Reddit, Github and Tumblr through its ChangeTip platform. Other companies, such as Patreon, also prefer to work directly with the sites' users instead of trying to integrate with each platform.

"We're not the first people to build or talk about micropayments online…but Bitcoin actually unlocks [micropayments online] because it has very low transaction fees, can allow people to send very low values…and is a currency neutralizer, meaning you don't have to know whether the person on the other end uses pesos or rupees or other fiat," said Nick Sullivan, founder and CEO of ChangeCoin.

Frictionless Funds Transfers

Sending funds is as frictionless as leaving a comment. For example, on Twitter, a user sends Bitcoin by tweeting the Twitter handle of the person they want to send money to, an amount and adding @changetip.

Companies such as American Express, Amazon.com, Chirpify and Dwolla have used a similar model to support payments via social media. That approach, which requires some degree of setup off Twitter's site, may be designed to work around Twitter's restrictions for handling payments on its platform. Twitter has shut down some efforts to enable payments on its platform, typically for running afoul of its advertising policies that prohibit companies from prompting replies, retweets and other actions.

Twitter is also reportedly developing its own "buy now" button, and it bought CardSpring, a payments infrastructure company, in July.

Even the companies that Twitter permits have in some ways changed or restrained their efforts. After starting as a consumer-focused service on Twitter, Chirpify transformed itself into an advertising platform for larger brands. And Dwolla typically describes its Twitter payment efforts as a social experiment.

"The idea isn't to bet the farm on these applications of the network," said Jordan Lampe, director of communications at Dwolla. "Our experiments are assuredly rare, but to be able to see the general public engage, discuss and play with the digital manifestation of an idea—one that couldn't exist, physically or digitally, without Dwolla—is pretty inspiring."

Facebook has also set rules on how its users can accept payments. Facebook once required developers to use its own virtual currency, Facebook Credits, but eventually phased out the concept.

But cryptocurrency such as Bitcoin could be a better way to enable social media payments, since those currencies do not rely on the legacy infrastructure to enable payments. The Bitcoin protocol enables payments by instead relying on people called miners, who authenticate the transactions, which are then recorded to a public ledger.

Stand-ins For Bitcoin Addresses

ChangeCoin's approach uses Twitter handles as stand-ins for Bitcoin wallet addresses.

"Consumers don't want to [be redirected] to enter credit card information," Sullivan said. "Our experience is in-flow," meaning funds can be moved without leaving the social media site.

Several other cryptocurrency companies are using social media in a similar way.

In December, TipperCoin launched a Twitter bot that enables users to send Bitcoin. Another company, QuickCoin, is using Facebook's programming tools to enable users to comment on a post to send Bitcoin.

Dogecoin, the cryptocurrency based on an Internet meme, attributes its popularity to its ease of use on social media sites through tip bots.

"The Doge-community has done wonders for mass consumer adoption of cryptocurrency," said Sullivan. They're "building a community and getting people excited…and aligning a bigger initiative behind cryptocurrency," he said. ISO

Giving Charities A Boost

Shoppers can donate digitally to their favorite causes while they shop. BY JOHN ADAMS

The Medical research nonprofit Enduring Hearts got a quick boost from a mobile payments engine that enables consumers to donate while making purchases at a network of retailers.

"Digital donations represent the future of fundraising for nonprofits, and we recognize how critical both the online and mobile channels will be to further driving our fundraising," said Sean McCall, president of Enduring Hearts, a Marietta, Ga.-based firm that funds research to increase the longevity of organ transplants, with a priority placed on pediatric transplant recipients.

In the first days of the technology's launch, several Enduring Hearts supporters used it to spend over $1,000 each, McCall said.

Enduring Hearts is using Shop2Give, a nonprofit payment app developed by mobile marketing company Sionic Mobile and Ching, an Atlanta-based technology company that serves nonprofits.

"Mobile is top of mind if it's in someone's hand, which makes it a good donation tool," said Ron Herman, CEO of Sionic Mobile. "Everything can happen with a couple of taps."

Sionic Provides Programs

Sionic Mobile, which is also based in Atlanta, provides mobile marketing, gifting, in-app payments and rewards programs. Sionic's technology supports a number of payment methods, such as cards, Google Wallet, Dwolla and E-Check payments at a network of about 28,000 merchant locations that use Sionic, including Bass Pro Shop, Lowe's, GameStop, Papa Johns and Staples.

Following each checkout, the app rewards consumers with Sionic's virtual currency, called IONs. The currency, which is part of Sionic's rewards program, can be spent at other Sionic merchants or it can be used to make donations to nonprofit organizations.

"It's a tool for making an instant donation, kind of like that donation box near a point of sale terminal," Herman said. IONs can also be given as gifts.

Both Ching and Sionic Mobile donate an average of 2% to 3% to nonprofits from mobile purchases through Sionic's retailer network. The funds come from the commissions the retailers pay for the marketing referral, which defrays extra costs for consumers.

"[As a consumer], you pay as you would normally do, there is no extra cost," said Herman. "For the user it's pretty seamless."

Shop2Give, which is free for nonprofit organizations, includes social and marketing tools that nonprofits can leverage to communicate with supporters, provide incentives for repeat donors, and enable direct donations at any time.

Mobile commerce is a more convenient channel than Enduring Hearts' traditional methods of seeking donations at events or on the web, McCall said. "Sionic opens up a robust and easy mobile channel where supporters can donate to our cause with ease and convenience."

Broadening Nonprofits' Reach

Using mobile payment for donations is more about extending sourcing than it is an appeal to usability, said Thad Peterson, a senior analyst at Aite Group.

"Nonprofits are continually seeking new opportunities to drive revenue, so I don't think that mobile and online fundraising is necessarily the elimination of a pain point, as much as it is an attempt to broaden reach and increase incremental contributions," he said.

Other nonprofits using Shop2Give include the Atlanta Ronald McDonald House Charities, Camp Sunshine, C.H.O.I.C.E.S for Kids and Smith Center for the Healing Arts.

Mobile payments are becoming a popular way to enable donations. PayPal supports donations through a partnership with Church Office Online, while SCVNGR's LevelUp got an early boost from its own support of mobile donations. Shopkick, a mobile rewards provider, started out as the charity-focused Causeworld.

Blackbaud has developed a smartphone attachment tailored for nonprofit collections at events, industry observers said. And Danal provides its BilltoMobile payment software to the mGive Foundation to accept donations through text messages. ISO

Amazon's Mobile-Pay Pricing Constitutes a Large Gamble

AMAZON'S SQUARE-LIKE CARD READER comes at a very un-Square-like price, undercutting Amazon's competitor by a full 1% per swipe. But that promotion will eventually go away—and when it does, Amazon's merchants might go with it.

If price is Amazon's only advantage over its rivals, Amazon risks repeating what Google went through with Google Checkout, an online payment service that originally offered free processing to merchants who also purchased advertising through Google's AdWords. When Google eliminated the free processing option, many merchants grew impatient with the service's rough edges and threatened to walk away.

One merchant told me in 2009 — three years after Google Checkout's launch — that the technology still felt like "a beta-mode product." The free processing was its main attraction, and when Google brought its fees in line with competitors, Google Checkout looked a lot less appealing. Google eventually shut down Google Checkout and moved its users to the newer Google Wallet.

In its early marketing push Amazon is working to convince merchants that its card reader, called Amazon Local Register is user-friendly. In its announcement, Amazon emphasized that its reader comes with business-tracking tools, works with various cash drawers and receipt printers (also for sale on Amazon.com) and provides access to year-round 24-hour customer support, including the Mayday video-chat support service.

But Amazon needs to ask itself: Even with all of these perks, will its merchants stay when its fees come closer to those of Square and PayPal?

Based on early merchant feedback, Amazon has a lot of work to do before its promotional pricing expires. As of August 19, less than a week after the product's launch, Local Register has an average review score of two out of five stars on its product page. Sixty-two percent of the product's 89 reviews rate it at just one star.

"I always go with the company that gives me the best deal," Amazon customer frannie2 wrote in a one-star review. "However, I want the DEAL to work as it is stated."

The Local Register app would not recognize frannie2's Internet connection, but Square's device had no problem with it. "I had to pull out the [Amazon] reader and insert the square and BAM!!! it worked, what a miracle."

Many other reviews, including the product's featured three-star review by Johnny Saigon, complain that users are not able to accept payments with their existing Amazon.com consumer accounts, even if they convert those to business accounts.

The review also states that "the app still feels like it's in beta form. It is slow and clunky, definitely not as quick, easy and simple as the Square app." However, Saigon notes that the card reader itself feels sturdier than Square's.

A Square user named Jason Q. stated in a comment that he was eager to switch to Amazon's new reader simply because the Amazon brand looks better, but the brand image and price advantage didn't make up for the need to maintain a separate Amazon.com merchant account. The reviewer is willing to pay Square's higher fees to avoid Amazon Local Register's growing pains.

"I am gonna wait for Amazon to address this issue," Jason Q. wrote. "Competing only on rates doesn't make Amazon stand out." **ISO**

Daniel Wolfe is editor-in-chief of PaymentsSource and a contributing editor at American Banker.

ISO Praises First Data's Shift

A VETERAN ACQUIRING EXECUTIVE DE-scribes recent changes at First Data Corp. as "the awakening of a sleeping giant."

One of those changes is a renewed emphasis on ISOs and agents, says Jerell Olive, general partner at Cary, N.C.-based Applied Merchant Group LLC, which does business as Bankcard Source.

"I'm very enthused about the change in outlook," Olive says. "They're very ISO-centered. They want to help us grow."

He came away from a recent First Data meeting convinced that the processor's new top management believes in strengthening the company's focus on ISOs. For a little over a year, Frank Bisignano has served as CEO, adding the role of chairman in March.

"I am very keen on the principle that all rises and falls on leadership," says Olive. "When I see the new leadership, I see their enthusiasm–I like to call it the fire–filtering down through First Data."

The leadership and commitment to ISOs also impresses, OB Rawls, First Data senior vice president and general manager of its national and ISO portfolio.

He says the company wants to become "the greatest place in the U.S. for ISOs to do business." **ISO**

Getting The Timing Right

Square and PayPal are contemplating an EMV option, but offering it too soon would leave them with no audience. Bringing it out too late wouldn't work, either. BY BAILER REUTZEL

Mobile card readers like Square and PayPal Here must inevitably offer an EMV-chip card option to U.S. merchants, but how soon is too soon? And what are the consequences of arriving too late?

Square will offer an EMV version of its plug-in mobile card reader next year, but has not specified a launch date or price. PayPal offers an EMV version of its own card reader in the U.K. and Australia, but has not revealed its plans for bringing the device to the U.S.

Too Soon Could Mean No Demand

If Square, PayPal and others release an EMV card reader too soon, there may not be a demand for the technology. But if they wait too long and larger merchants put the technology in place first, the micro-merchants that rely on mobile devices may become targets for fraud, said Thad Peterson, senior analyst with Boston-based Aite Group.

"It's important for [Square] to be positioned to offer an EMV product before the liability shift because there is a real significant risk that once EMV becomes accepted at larger merchants, fraud will very quickly migrate to… smaller merchants," Peterson said. "If [Square] is going to be viable going forward they need an EMV offering."

But neither company is a first mover. Ingenico's Roam, for example, launched an EMV chip-and-PIN mobile card reader in the U.S. in February 2013, followed by a chip-and-signature version in April 2013. Roam's chip-and-signature devices cost about twice as much as a magstripe reader, and the chip-and-PIN version costs about five times as much as a magstripe reader (the company would not disclose its actual pricing).

"Although the U.S. has not yet migrated to EMV, we decided to launch both our chip-and-sign and chip-and-pin [mobile point of sale] solutions to not only meet the immediate demand of our international customers, but also to help our U.S. customers begin making a more seamless migration to EMV," said Scott Holt, vice president of Roam, in an emailed statement.

The card networks have set a deadline of October 2015 for companies handling card payments to adopt EMV-chip technology. Those who miss this deadline face a shift in fraud liability (gas stations have an extra two years).

Some larger merchants are on track to adopt EMV ahead of that deadline. Target, for example, fast-tracked its EMV transition in the wake of its holiday-season data breach.

Square's upcoming device requires users to "dip" the short end of a payment card to read the EMV chip, instead of swiping the longer end as is typically done for swiped card payments. Square's device also supports magnetic-stripe payments.

The card reader will also come at a cost, unlike the magstripe version which is free to merchants that order it by mail and $10 in stores with a $10 rebate when merchants activate their account. Square wouldn't yet disclose the actual price for its EMV device.

"It seems to me that Square's business strategy would be to get as much penetration as quickly as possible" to get ahead of the competition, Peterson said. "But the cost could be more of a barrier than a revenue stream in this case."

Retailers that don't understand specifically the distinction between magstripe and EMV card readers might be confused and agitated to pay more for one device, he said.

Square did not respond to questions by deadline.

Getting Rid Of Plastic Cards

PayPal has been focused on removing the plastic card from the in-store payments experience altogether, said Anuj Nayar, senior director of global initiatives at PayPal. Some retailers let shoppers spend from a PayPal account by typing a phone number and PIN at the point of sale; others support PayPal through a magstripe card.

"Technology has been moving at such a rapid pace that when retailers start looking at ripping and replacing those terminals…they'll look at all the technologies out there and we think we're in a really interesting place," said Nayar. ISO

Industry Divided On Whether Mobile Fights Or Aids Fraud

DO MOBILE DEVICES FIGHT OR ENABLE Payments Fraud?

Since Google announced support for host card emulation (HCE) in Android KitKat 4.4 last year, the industry has been divided.

Many recognize the value and opportunity that this brings to banks, mobile network operators (MNOs) and service providers for the deployment of mobile services—like payments, transit and loyalty—while others have sought to focus on security concerns that apparently limit the technology's potential.

While some may consider the use of HCE less secure as there is no physical secure element (SE) involved, it is really a matter of perspective. Instead of storing the card data in the SE, tokens are downloaded to the device and used to complete the transaction at the point of sale. Any breach of security would expose only one or a limited number of tokens (typically associated with a low transaction value), not the account itself. The limited gain available to hackers in return for the considerable investment of effort and time seems likely to make them focus on more attractive targets.

Many issuers therefore see this as an acceptable balance of risk and reward. With the value of the token so low, it's questionable whether the highest level of security is required. As a comparison, your house is less secure than a bank vault, but the same level of protection isn't required because of the value of the contents.

Security is important, and to mitigate the risk caused by the absence of hardware security, a number of additional security layers can be added to HCE-based mobile payments. They include white box cryptography, obfuscation of key data, use of a TrustZone and further securing the communication channels between the device and the server such as (layered) encryption, mutual authentication and use of dual channels.

Overall, the benefits that HCE can bring include the simplification of the business model, increased processing power and speed, greater storage capacity and further control over projects. Some observers may consider that the strongest security concerns have come from those with the biggest vested interest in maintaining the SIM as an essential component. Many of these concerned parties followed the Google announcement last October by asserting that the card schemes would never certify such approaches. That fear proved groundless with the subsequent statements from Visa and MasterCard in February, detailing their plans to support cloud payments.

The opportunity that host card emulation presents more than outweighs the risk it brings.

I'm not arguing that security is not important, but simply that it should be balanced and proportionate. Focusing too much on security limits functionality, which limits consumer uptake.

In general, the more security measures that are used, the less user-friendly it becomes. An issuer should consider that something as simple as requiring an additional Cardholder Verification Method (CVM) such as a PIN for each contactless payment transaction, could cause a usability nightmare. That could mean that a user has to enter a PIN to open the phone, enter a PIN/Passcode to open the Banking/Payment App, enter a PIN to allow the transaction and if the POS happens to be an old one, they may be asked to type a PIN on the POS. That's far from the 'tap and go' experience the user is expecting, and this does not even consider the fact that all of those PIN codes may have different values!

Issuers should therefore find a balance between security, acceptable risk and user friendliness that works for them and their customers.

For issuers that still consider HCE "too insecure," there may ultimately be a role for what Bell ID has called the "hybrid solution," combining the benefits of the cloud with a physical SE on the device.

Overall, many banks have already recognized that the opportunity that HCE offers more than outweighs the risks that it presents, especially since so many of banks are already happy with the limited risk associated with contactless payments. This debate is certainly one to watch over the coming months as we see more service providers make their moves. **ISO**

Robert Wessels is a technical sales consultant for Bell ID, a Netherlands-based chip company.

Amazon Threatens Square

The online marketplace is introducing a card reader and undercutting Square on rates. What's more, the enire acquiring industry could feel the pressure. BY JOHN ADAMS

Square, which has been scrambling to add fee-based services to pad the revenue it earns from mobile payments, faces a formidable new challenge in Amazon's launch of a rival mobile card reader.

Amazon launched its Amazon Local Register card reader with a low introductory swipe fee of 1.75% that lasts through the end of 2015. Even after that, its 2.5% rate comes in below Square's 2.75%—and Square has already tried, and failed, to support an alternate fee structure.

All Acquirers Could Feel The Heat

"Square faces margin pressure and will have to respond to this," said Richard Crone, a payments consultant. "Amazon has 220 million registered users and it already has their payment credentials."

Square's options include repackaging its pricing, lowering its transaction fees, or adding even more fee-generating services, Crone said. And Amazon's move is a threat to more than just Square. "It places pressure on literally everybody in the merchant processing and acquiring space," he said.

Earlier, Square attempted to attack its own fees by introducing an optional flat monthly rate. Merchants could pay $275 a month instead of 2.75% per swipe, but that came with restrictions on the transaction volume merchants could accept through Square. Merchants didn't like that, so the company eliminated the flat-rate option early this year.

Since then, Square has added a number of revenue-generating products, including appointment-scheduling service, small-business lending and interactive receipts. It also plans to release a chip-and-signature version of its card reader in 2015 to accommodate the EMV transition in the U.S.

In an email message, a Square spokesman reiterated the company's focus on providing services to local merchants but did not say what, if anything, it would change to address Amazon's product launch. Amazon did not return a request for comment by deadline.

"In the aftermath of the Amazon Local Register launch, Square's diversification beyond point of sale payment acceptance looks incredibly forward-thinking," said Jordan McKee, a senior analyst at 451 Research. "The vendor has uniquely positioned itself as a commerce-enabled hub by offering a full suite of services for small to medium-sized businesses. It's also done a nice job of embedding itself into its clients' businesses, helping to transform it into a difficult-to-replace commerce lynchpin."

Still, Amazon's entry into mobile acceptance will be troubling for Square, McKee said. "As expected, the e-commerce giant has wielded price as its competitive differentiator, and that's sure to spell some payment processing revenue erosion for Square."

But Amazon will be quick to follow these moves as well. It already offers many services that allow consumers to make purchases at other merchant sites, and could use the same strategy at the retail point of sale, McKee said.

"The point of sale is Amazon's entry point into bricks-and-mortar stores, but a suite of commerce-related services will likely follow in the near to midterm," McKee said.

How Amazon Holds Down Prices

Amazon can keep its pricing low because many of its customers have preregistered their bank account numbers for ACH transactions, which are less expensive than credit cards, Crone said.

"Even if the percentage of [Amazon ACH registrations] is less than 10%, they can use that advantage to lower their costs," Crone said. Square would be challenged to do the same because it typically does not require consumers to register credentials in advance to make a payment. "People generally don't carry their checkbooks with them," he said.

Square does have advantages it can rely on—its ancillary offerings will help it compete, said Rick Oglesby, a senior analyst and consultant at Double Diamond Payments Research. And Amazon's promotional offer carries some limits—the $10 credit to cover the cost of the mobile attachment and the temporary 1.75% rate are tied to the merchant agreeing to deposit the funds into an Amazon Payments account. ISO

Future-Proofing Merchants For EMV Cards And Beyond

THE EMV LIABILITY SHIFT IS A LITTLE OVER a year away, yet many merchants remain unprepared for chip card acceptance. Recent data breaches have increased consumer awareness of card security issues. And while consumers may not understand the technology, when they hear about EMV chip cards, they consider them "very important" in helping to protect against fraud. Even if a merchant doesn't perceive a significant security risk with his or her own payment acceptance, shoppers are learning about chip cards and the increased security that comes with them.

In the next couple years, most cardholders will be receiving chip cards from their issuers, and they will expect to be able to use them with the same ease that they use their current magnetic stripe cards today. It will take time, but chip card acceptance will eventually become an expected and normal part of doing business. Within a few years, chip cards will no longer seem mysterious to consumers or merchants.

But we cannot wait a few years to help merchants move seamlessly to chip card acceptance. We have to provide solutions now.

Future-proofing merchants isn't just about the shift to EMV. This is a dynamic period of change in the payments industry. The pace of innovation and experimentation is breathtaking—NFC, wallets, virtual currencies, QR codes, host card emulation. It is difficult to anticipate which technologies will catch on, which will fall by the wayside and what innovations will emerge. There are other emerging security features to address, including tokenization and P2P encryption. The list goes on. We can't foresee exactly what payments will look like in a few years, but we can prepare merchants by providing them with equipment that can be easily modified to accommodate future requirements.

EMV is inevitable, and we need to be ready and able to help merchants make the transition to chip card acceptance.

What we need are future-proof, agile, EMV-ready solutions that can dynamically adapt as the industry evolves. Merchant acquirers have long faced a significant problem with keeping the software on their merchants' terminals current. Updating, distributing and supporting distinct applications for multiple terminal lines has been very costly, time-consuming, and cumbersome. It's dreaded by all parties involved. That often results in terminals not getting updated for many years, causing them to be out of compliance and generally behind the times.

In today's fast-paced payments world, we can no longer afford the "fire and forget" model of terminal management, where we send a terminal to a merchant and largely forget about it unless the merchant proactively calls for support. We need to enable providers to future-proof their merchant terminals quickly and easily for the forthcoming transitions, including chip cards. We believe approaches should include a thin-client application that runs on multiple terminal families simultaneously. They should include an integrated terminal management system that enables merchant acquirers to update a merchant's terminal automatically, with no disruption to daily business practices. Because the application behaves the same way on all terminal families, ISOs can standardize their merchant documentation, marketing collateral and helpdesk support, significantly decreasing operational costs.

There is no disputing that the U.S. has been slow to adopt EMV—and the landscape is still changing as the industry comes to grip with this massive transition. But EMV is inevitable, and we need to be ready and able to help all merchants make the transition to chip card acceptance. Innovation is also inevitable and will continue to drive changes in payments. We need to provide products and services that can adapt as the market evolves. **ISO**

Bill Robertson is director of core solutions at Apriva. Reach him at brobertson@apriva.com.

Taking Another Step

Bitcoin moves closer to success as Global Payments begins accepting Bitpay transactions. **BY BAILEY REUTZEL**

Global Payments Inc., which provides transaction services to more than one million merchants, has agreed to enable its clients to accept digital currency in a move that may attract more international shoppers to brick-and-mortar merchants.

The processor's deal with Bitpay, a Bitcoin service provider, enables merchants to accept payments from mobile Bitcoin wallets as an alternative to requiring travelers to obtain local currency or pay a fee to convert their funds when swiping a card.

"A lot of consumers are using Bitcoin on their mobile phone now; when you start to use Bitcoin on your mobile phone you can use that anywhere in the world," said Tony Gallippi, CEO of Atlanta, Ga.-based BitPay. "Businesses that cater to international travelers would love to accept Bitcoin."

Bitcoin For Hotels And Eateries

Hotels and restaurants are the two biggest industries that BitPay expects to become early adopters of the digital currency through the Global Payments agreement.

For example, Gallippi was recently in Brazil for the World Cup. Most major hotels would accept his U.S. credit card, but many restaurants would not. Brazil is a cash-based economy and also uses Boleto Bancario, a local payment method similar to a wire transfer, but the latter is difficult for foreigners to use, said Gallippi. But as a global currency, Bitcoin could bridge the gap, he said.

Global Payments is based in Atlanta, and has 12% of the U.S. processing business by merchant acquiring revenue, according to a company report. It also has 25% of the Asia-Pacific market by the same metric. In Europe, it has 20% of the market in the U.K., 24% of Spain, 29% of Russia and 50% of the Czech Republic by transaction volume, according to the same report.

"It is important for us as to provide our partners, our merchants and our customers with the ability to accept any payment, anytime, anywhere and that means they have to be provided the choice," said Amy Corn, senior vice president of marketing and corporate communications at Global Payments. "In addition to providing the ability for our merchants to easily accept Bitcoin payments, other examples of value-added products offered by Global Payments include accepting PayPal or a tablet form of acceptance like ShopKeep."

Global Payments received specific requests about Bitcoin acceptance from its merchant customers, according to Gallippi.

"Some of the things merchants are asking them for are, 'What can you do about my interchange fees?' and 'How can you help me reduce fraud?' and 'How can I get more customers?'" said Gallippi. Global Payments "understands the value of the technology...and how it can solve the pain points their customers are complaining about," he said.

Working Together On Marketing

As part of the agreement, BitPay will work with Global Payments' account managers on marketing campaigns to get merchants to accept the digital currency.

The processor also services e-commerce merchants, which have been an essential target for Bitcoin adoption. BitPay also works with Newegg and TigerDirect, both online technology retailers; Wordpress, an online publishing platform; and Gyft, a mobile gift card provider which is being acquired by First Data (Gyft indirectly helps merchants accept Bitcoin by accepting the currency as payment for its digital gift cards).

"Global Payments is one of the biggest payment processors in the world and has enormous reach that will now be available to BitPay," said Gil Luria, an analyst with Wedbush Securities. "This could help create a step function for merchant acceptance over the next couple of years. Combined with the acquisition of Gyft by First Data—an even bigger processor—we are seeing a major move for mainstreaming bitcoin acceptance." **ISO**

Going Beyond Payments

Square is attempting to augment its transaction revenue by offering fee-based products. Now, one of the doesn't require using Square to accept payments. BY JOHN ADAMS

Square Appointments, the company's latest fee-based product, is the first in its lineup that can be used by merchants who do not also use Square to accept payments.

The new service joins small-business lending, interactive receipts and other services that Square has begun piling onto its primary offering of payment acceptance. Typically, users of the services must also use Square to accept payments at 2.75% per card swipe.

"In the past we were known as a mobile payment company, but based on all of these new products it's expanding to much more than that," said Semonti Stephens, a Square spokesperson.

Appointment-Booking Service

Square Appointments enables consumers to book appointments through a merchant's website and receive email or text-message reminders. It is the only Square-branded product that merchants can use without a payments relationship, Stephens said. (Square also obtained some unrelated services through acquisition, such as the Caviar food delivery service; the company also offers a P2P service called Square Cash that is separate from its merchant offering.)

The appointment-booking service is free the first month, and afterwards costs $30 per month for sole proprietors, $50 per month for businesses with two to five employees and $90 per month for unlimited staff. Each employee uses separate login credentials.

"What we hear from [business owners] is when they are on the phone taking appointments, they are losing sales," said Stephens. The product is aimed at all businesses, though Stephens mentioned hair salons as a specific category that could benefit from the appointment service.

Square used technology from BookFresh, a booking company it acquired in February, as the foundation for Square Appointments. A test that followed the acquisition was a success, Square said, noting 72% of users said the product helped generate added revenue, 64% said they saved more than 30 minutes each day and 54% said they got at least 10% more appointments per week than before.

"This also gives businesses the ability to run a full online scheduling system for 24 hours each day, rather than just when the store is open," Stephens said.

While Square's not deemphasizing payments, its product line has become more horizontal. Square has added services such as pickup, delivery, customer feedback, capital for businesses, invoices, a pending chip-and-signature reader, and the Square Stand point of sale hardware. Square also recently redesigned its free magstripe card reader to improve its reliability.

Square's ancillary services, which typically have their own fees, broaden Square's sales pitch to merchants while nudging Square's model more toward that of a point of sale company.

"I can see appointments working on some level," said Gareth Lodge, a senior analyst at Celent, noting the service distinguishes Square among the other mobile point of sale players. "It's about moving upstream in the process. At the same time, try typing 'online appointment manager' into Google. There are thousands of hits out there."

Heavy Competition For Booking

Just like the mobile point of sale market, online appointment-booking has lots of competitors—StyleSeat and Vagaro target the salon industry, while Groupon Scheduler, Schedulicity and Genbook serve a more general audience.

Square differentiates itself through its integrated payments and other offerings, as well as the ease of navigation for users, Stephens said.

"We're building the most complete register and integrating these products into the point of sale system," Stephens said.

In addition, Square Inc. has purchased food delivery company Caviar.

Caviar is an alternative to an in-house delivery service enabling consumers to have food delivered from restaurants that do not generally offer the service. The acquisition was first rumored in July.

The service could complement the new Square Order app, which enables consumers to order and pay ahead of a visit to a Square merchant. ISO

Persistant Weakness

Despite repeated warnings, merchants continue to rely on eaisily compromised passwords. BY DAVID HEUN

Merchants are still using pedestrian passwords that crooks can easily break, Chicago-based security company Trustwave has found.

Of the nearly 630,000 stored passwords that Trustwave obtained during penetration tests in the past two years, its technicians were able to crack more than half in just a few minutes and 92% within 31 days.

Even though adding new information about weak passwords or ongoing malware investigations "gets frustrating" because the same problems facing the financial and payments industries persist, it does not surprise Trustwave researchers, said Karl Sigler, threat intelligence manager for Trustwave.

"For a lot of software or hardware developers, their main concern is availability of the service," Sigler said. "They want to make sure their POS is available and running to accept credit cards, often at the cost of a lot of security controls. It is difficult to implement security and to do it correctly."

'Password1' Is Favorite Password

As in past research, Trustwave found the most popular password to be "password1" for entry onto a business network site, followed by "Hello123" or simply "password."

Trustwave recommends longer passwords with more characters, rather than shorter ones with letters and numbers. "A longer password that is a phrase not easily figured out is better than a shorter, complex password," Sigler said.

These findings have been added to an online version of the 2014 Trustwave Global Security Report. To accommodate the fast-changing nature of security threats, Trustwave is regularly updating its research and making the information available to consumers and the payments industry on the company's site.

"The criminals stealing data are a constantly moving target," Sigler said. "It no longer made sense for those interested in our research to have to wait a year to see new statistics."

Having access to updated security reporting should help merchants, said Al Pascual, senior analyst and fraud expert for Javelin Strategy & Research.

"They can see how trends are tracking over time, instead of constantly having to go online to see what is relevant to them, or rely on the trade groups to keep them informed," Pascual said. "This provides one switch to keep them in the know, so there is some value there and it's a smart move on Trustwave's part."

Because the new Payment Card Industry security requirements call for embedding security measures in software development lifecycles, there is "some utility" in Trustwave's new approach to sharing research information, said Julie Conroy, senior analyst with Boston-based Aite Group.

"The question will be: Is it going to just be more of the same folks who always read that report going online and using it as a resource?" Conroy asked. "Or will Trustwave be able to actually bring in some of those who still don't realize that data security is a problem for all of us?"

New Family Of Malware

In other news, Trustwave researchers have identified a new family of point of sale malware that has infected nearly 600 businesses nationwide.

In other data in the report, Trustwave said the trend of businesses detecting breaches continues to rise, with 29% of businesses doing it in 2013 compared to only 9% in 2009. Trustwave compiled that data from 691 post-breach forensics investigations conducted in 2013.

The report also indicated e-commerce breaches are increasing, with 54% of all breaches targeting e-commerce sites in 2013, compared to only 9% in 2010. More regions, including the U.S., are in various stages of converting to EMV chip-based cards for card-present transactions fuels the criminals' shift to e-commerce fraud, Trustwave said.

Trustwave is also working on four investigations related to the 600 attacks on businesses in which criminals broke into point of sale systems by using stolen credentials with remote-access software.

The malware, called Backoff, sits on a POS system, gathers card numbers, encrypts the data and sends it to servers owned by the fraudsters. ISO

POS TERMINAL MANAGEMENT:

THE TRENDS OF TODAY

Visionaries and Q&A in POS

A SUPPLEMENT TO
ISO&AGENT

PRODUCED BY SOURCEMEDIA MARKETING SOLUTIONS GROUP

Paul Rasori
EVP, Product & Marketing

Powa Technologies is an international commerce specialist that creates technologies enabling commerce online via PowaWeb, offline via PowaPOS and everywhere else, via PowaTag. PowaPOS, the physical retail component of the company's omni-channel product line, features an industry-first and multiple patent pending all-in-one tablet-based POS system, along with the world's smallest EMV-ready card acceptance device, universal tablet OS support, and an advanced POS Software Developer Program.

Mobile continues to disrupt the payments industry at a rapid pace. What are the biggest challenges facing ISOs in meeting merchant demands for mobile POS?

As the front line resource for merchant customers, ISOs have a tremendous opportunity in the move to mPOS. The challenge ISOs are poised to overcome is being able to position themselves as more than just a provider of payment acceptance solutions, but rather a true partner for their customers' business operations.

The mobile disruption is creating an environment where merchants are more open to POS changes than at any other time in the recent past. ISOs can use the disruption to deepen their existing relationships with customers by bringing their experience and knowledge to the table and create a value-added solution; then providing the support needed to implement and maintain it.

What factors should ISOs consider when determining what type of mobile POS system is right for a merchant's needs: tablet, smartphone, or both?

One of the legacies of the traditional fixed POS system is that it was hard to replace – significant capital investments and proprietary software combined to make it extremely difficult for merchants to change or upgrade as the payments industry matured. As ISOs work with merchants to transition them to mobile, the most important factor to consider is first, whether the solution is future-proofed for forthcoming transitions.

Additional factors to consider include the sales process, and if the current process is the most efficient. What operations could be improved through back-office and marketing software integrations? These questions will help to determine whether the merchant needs a truly mobile solution, or a tablet-based countertop solution.

Given the tremendous interest in tablet-based POS, what does this mean for the future of fixed POS terminals?

Traditional, fixed POS systems have endured for so long simply because, A) they are reliable; and B) they are easy to sell, set-up and deploy. With these systems, an MLS knows that once the sale is made, the payment terminal will be quickly shipped and arrive fully configured at the merchant location. Plug it into the wall and you're done. However, ISOs who continue down this path today are doing so at their own peril, as a wave of new entrants - and forward-leaning incumbents - are now using tablet-based POS as a way to attract merchants to their portfolio.

At Powa, we like to say that while tablets were not designed for POS, with the introduction of fully integrated solutions like our T25, point of sale is now officially designed for tablets. With a next generation solution like this, tablet-based POS provides the same reliability and simplicity as a fixed terminal.

As POS software providers rapidly adapt solutions that consolidate processing, marketing, HR and others functions, what should resellers look for in a POS partner?

With so many POS solutions providers now in the field, the selection of one or more POS partners can be daunting, but the criteria really is simple: can the POS partner provide a solution that easily meets current needs; does the partner have the experience for both current and future security requirements; and is it flexible enough to adapt to changing business environments?

The best partner will provide a turnkey, agile solution. For instance, when developing our SDK, we created an out-of-scope environment that eases compliance burdens, along with a single API for all peripherals and all operating systems. With this type of flexibility, ISOs aren't then hindered by limitations that could affect their software choice, and can create a solution that incorporates whatever the merchant needs.

Merchants have just over a year until the EMV Fraud Liability Shift milestone, but many are still not prepared, or planning for, EMV conversion. What can ISOs be doing now to accelerate preparedness?

EMV migration is much more than just a card upgrade – it's a complete transition for consumers, merchants and card issuers; one that will help to curb card fraud as well as bring us in line with the rest of the world. But even now, many merchants remain unaware what the liability shift means to them. In the case of fraud, if a merchant is the one with the "weakest" technology, he or she will be liable. They also risk becoming an easier target for fraudsters. In this scenario, the potential for financial damage is apparent. So the most significant step ISOs can take now is to educate their customers and make sure they clearly understand what the shift can mean to them.

What can the US learn from other countries to make EMV transition easier?

One of primary motivators in getting merchants to adopt EMV has been the fraud liability shift. Another key in the U.K. was a focused approach to widespread consumer education. In Canada, experts assign success in large part to the coordination between banks and the transactions providers in creating and operating a national PIN-debit network.

The U.S. is on the right path, with the formation of the Payments Security Task Force. But as the liability shift gets closer, it will be incumbent on all of us - POS providers, ISOs, and others – to work more closely on education for merchants and consumers. ■

POINT OF SALE REDEFINED

Terminal management is undergoing significant change, and the transformation is creating opportunities for ISOs of all sizes.

Continued on page A10

PAX is the third largest POS terminal manufacturer with over 3 million terminals deployed in over 70 countries. PAX offers a complete line of products with competitive pricing and quality assurance backed by a 2-year warranty, enabling PAX to have a strong advantage in the marketplace.

Andy Chau
CEO

What are the latest POS terminal products and why are they better than previous versions?

MPOS solutions are definitely the talk of industry. This is opening up some channels where there haven't been credit card and debit payments before. MPOS offers some great advantages to merchants, but the payment still needs to be secured and ready for EMV and NFC transactions. Make sure you choose a trusted payment partner, like PAX, who specializes in MPOS integrations and EMV and NFC payments to be paired with the MPOS solutions. With a good payment terminal like the D200 tied to the Mobile POS, merchants can have the best of both worlds, flexible and interactive payment software while still securing the payment transactions.

How are merchants and consumers using payment terminals differently?

Payment terminals are changing to not only be devices to help accept Credit, Debit, EBT/Food Stamp, Gift and Loyalty payments, but to also help protect the merchants from the fraudulent activity and the expense that comes with taking credit card payments. With the many breaches that have taken place in recent months, protecting the payment has never been more important. The introduction of EMV will shift the financial liability of this fraudulent activity to the merchants and they now look to PCI and EMV certified payment terminals to help them secure these transactions. Preparing for EMV with PAX EMV ready terminals should be the top priority for all merchants.

Anyone with a cellphone can use it as a payment terminal, signaling a shift in moving the payment terminal off of the countertop. What opportunities does this move off the countertop present for merchants and consumers? How can an ISO continue to make money?

Utilizing Smartphone and tablets for payments have provided very creative ways to expand payment options away from the counters. These solutions are great to utilize as long as they still keep the payment secure. With the PAX D200, ISOs can offer both EMV and the encrypted MSR security built in with this award winning PIN Pad while protecting the phone or tablet from being hacked. When thinking of mobile consumer payments, ISOs should be using payment devices that are secure and ready for EMV.

A merchant needs a mobile terminal, but is a cell-phone-based solution or terminal-based solution better for him and the ISO?

Mobile Smartphone and tablet payments have opened up another avenue for business owners to easily be able to accept credit card payments. I don't believe it has affected the channel in a negative way as this is creating a new sales opportunity. However, with the introduction of all the different types of mobile Smartphone payments and with EMV being inevitable and around the corner, the industry has raised questions about the security of mobile payments coming from a Smartphone device or tablet. Your best solution is to offer a fully PCI and EMV certified payment terminal, like the PAX D200, integrated to the Smartphone or tablet solution for any merchant that wants to accept all payment types. ■

Scott Agatep,
VP Product Marketing, POS Portal

Founded in 2000, **POS Portal** is a leading distributor of Countertop Terminals and mPOS hardware solutions, providing value-added fulfillment and leasing solutions for merchants and channel partners. POS Portal is also the industry-leading innovator in cloud-based CRM software designed specifically for payment channel ISOs. From large scale deployment and equipment sales, to merchant acquiring CRM software along with mPOS hardware leasing options and merchant-direct shipping, POS Portal has always pioneered innovations that have a meaningful effect on our partners' bottom line. For more information, visit POSPortal.com

What new POS technologies are you seeing in the marketplace?

A whole lot of SMB change is going to be enabled with the convergence of cloud, tablet, and payments. This opens up new possibilities such as a restaurant owner monitoring the temperature of his walk-in refrigerators with the same tools he uses to manage his inventory. New solutions will appear that we haven't yet thought about. The payment transaction will be used to measure the effectiveness of a marketing campaign. Merchants will connect with their customers via the customer's mobile device. There's no doubt that all kinds of innovation is already happening. But what we need to remember is that all that value has to be distributed to merchants.

We think that there will be a battle between open and closed platforms. Merchants need choice. And as innovation accelerates it will necessarily be more and more segment specific. SMBs ultimately need to find a solution that fits their individual needs. For example, there's a specific could-based mPOS app for dry cleaners. Think of all the other business types that want segment specific functionality. Products that are one-size-fits all will have a tough time keeping up.

How do you see the distribution models changing to support the innovation that's happening?

SMBs will be able to opt in to additional business services that specifically fit their needs, just as easily as you and I install an app on our smartphone.

Apps that handle inventory, orders, loyalty, marketing automation, and analytics will become more and more relevant. But merchants need to become aware of what's possible. While these products will be available through channels other than payments, ultimately merchants will need a trusted advisor to help them determine what products and services are the best fit.

Of course, the trusted advisor will need to sell on value, but they'll also need to help the merchant get up and running on the products. That could mean getting hardware (terminals, mPOS solutions, and emerging products such as beacons) to the merchant location. Setting up an installation appointment. Letting the merchant know where they'll get customer service for the various products they're using. Ultimately the seller will be bundling together products and services many different vendors and they'll need a frictionless way to deliver it to their merchant.

All of this represents a new and growing opportunity for Agents and ISOs to bring these solutions to their merchants. The challenge is for the sellers in the market place to keep pace.

What's driving merchant expectations?

Merchants are consumers and they expect the process of adopting new and emerging technology to mirror their purchasing experiences at the consumer level. Software providers who are selling directly to merchants are setting new expectations on how merchants get new products and services. There's a push towards simplicity, speed, and support. This is true for the product pitch, the value proposition, the pricing, the process of signing up, and the speed at which a merchant goes from "Yes I want it" to being able to actually use it. Any barrier in the sales and boarding processes is friction that will get in the way of success.

Are countertop terminals dead?

Not at POS Portal, we continue to ship countertop terminals at a steady rate and expect to do so in the coming years. While mPOS has started gain a foothold, many solutions do not currently address EMV and other payments compliance aspects. Countertop terminals have a deep connection to secure funding in the mind of SMBs. With a multitude of recent security breaches and the significantly heightened awareness of impending liability, many merchants will look to countertop terminals alongside mPOS solutions as the best way to minimize risk. POS Portal will be selling, renting, and supporting countertop terminals for many years to come.

How do you see the retail environment changing at the SMB level?

The current push of tablet solutions into merchant locations is just the beginning. While historically emerging technology has been out of reach for the SMB merchant, because it was too expensive and difficult to acquire, that's all changing. In fact, we see much of the technology innovation aimed directly at the SMB. As merchants adopt new technology and as platforms for developers mature, the pace of innovation for SMBs will continue to grow. ■

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Bill Robertson
Director,
Core Solutions

Since our founding in 1999 **Apriva** has been an innovator in shaping the payments industry that we live in today. Apriva brings secure communications to an insecure world, delivering a variety of payment solutions for merchants, including mobile and unattended payment offerings, as well as merchant terminals. As a result, Apriva is more than just payments, we are the leader in secure wireless communications and mobile commerce and have considerable expertise in deploying new and enhanced applications.

Today, we believe the industry is entering a new stage in its evolution – one that has been influenced by market innovations and industry initiatives targeting cardholder data security.

There has been a lot in the trade press about the need for integrated terminal management solutions. What does that mean exactly?

In a typical environment today, the merchant's terminal was set up by downloading their system from a proprietary terminal manufacturer's download center operated by the ISO, merchant acquirer or deployment house. The terminal has probably not been updated for some time – maybe years. If a merchant needs to update their terminal configuration for any reason – to perform a software update, enable a new entitlement such as gift cards or even just to modify receipt headers – the merchant must initiate the download directly from the terminal, likely with the assistance of the help desk. This type of software download often takes an hour or more over dial-up connections which still dominate the market today.

Integrated terminal management systems enable merchant acquirers or ISOs to incorporate the configuration of terminals within their merchant management systems, rather than through a completely separate proprietary download center. This integration can take many forms, but the common objective is to reduce the friction involved in updating merchant terminals. In a good integrated terminal management system the terminal configuration parameters can routinely be updated without any merchant involvement or disruption. In the best cases, terminal software can be updated painlessly and quickly.

What forces are driving the need for integrated terminal management today?

The payments industry is in a period of rapid change and shows no sign of slowing down. Of course, everyone is aware of the looming EMV migration, spurred by the merchant liability shift next year. In addition, there are a host of significant new developments that may impact the merchant, including contactless payments, P2P encryption, tokenization, alternative payments and NFC to name a few. This dynamic market makes it very difficult to see clearly years into the future, but it will have a continuing impact on merchant terminals.

Why should terminal management matter to ISOs? Can't they wait and see what happens?

ISO's are often reluctant to attempt updates to their merchants' terminals or to suggest replacement of a terminal. They are understandably hesitant to interrupt their merchants' operations and/or run the risk that they will lose the merchant to a competitor. Unfortunately the reality is that this way of operating is simply no longer viable.

Change is coming and will not just be a "one-and-done" conversion to EMV – it will be a continuing challenge.

Multiple factors are driving terminal replacements today. Merchants need EMV solutions; they need 3G terminals to replace 2G; they need replacements for terminals with expired PCI PTS certifications. The merchant – and ISO – will not want to be disrupted multiples times and will want to limit capital expenditures. Adopting a strategy that includes integrated terminal management so their merchant's terminal solutions can evolve without disruptions would be wise for ISO's and merchant acquirers. If they wait, others will capitalize by wooing their merchants with a solution that promises to adapt as conditions require.

ISOs and merchant acquirers can no longer just deploy a terminal solution and forget about it. Change is coming and will not just be a "one-and-done" conversion to EMV – it will be a continuing challenge.

What should an ISO look for in an integrated terminal management system?

An ISO or merchant acquirer should look for a solution that enables them to update their terminal base seamlessly. The best solutions will make it painless for the merchant to not only benefit from a consistently up-to-date terminal, but also make it easy to add new functionality anytime as new functions or payment methods are adopted in the future.

The Apriva POS™ Universal Application, in conjunction with the Apriva Smart Terminal Management System (SmartTM), provides just such an integrated terminal management solution for ISOs and merchant acquirers. The Universal Application enables these providers to automatically update their merchant's terminals remotely. Following the daily settlement process, the terminal "phones home" and downloads any pending software or parameter updates, typically in less than five minutes. This "thin client" application is a fraction of the size of traditional proprietary applications.

The Universal Application provides a common application that runs on multiple terminal families, supporting dial, IP and wireless connectivity, effectively replacing proprietary software on terminals. Software and parameter updates are handled automatically, and since the application behaves identically on all terminals, the merchant acquirer can standardize documentation and reduce the demands on their call center, significantly reducing operational and training costs. The Apriva POS Universal Application is also EMV-ready, enabling the provider to future-proof their merchant terminals. ■

...Continued from page A4

In fact, the point-of-sale is being redefined, says Todd Ablowitz, Double Diamond Group founder and president. While the micro trend is a transition to the more sophisticated points of sale, the macro trend is toward omni-channel commerce. Each one has an impact on ISOs.

"The readership [of *ISO&Agent*] is in the midst of dealing with the changes of what the point-of-sale means," Ablowitz asserts. "In the small way, which is how the point-of-sale is transferring from terminals to cloud-based and other integrated points-of-sale. But also the larger way, which is the redefinition of the point-of-sale—which is starting to wander around the store, starting to exist on the phone while shopping—through omni-channel types of commerce."

Thad Peterson, a senior analyst with Aité Group, believes the payment processing space right now is in a greater state of flux than it's ever been. He identifies two primary factors.

"The first one obviously is the migration to EMV and the need for re-terminalization across the retail sector in the United States," he says. "Clearly that's a major driver for retailers, it's a major driver for processors and acquirers, and certainly it's a major driver for ISOs."

The second major trend, he notes, is the delivery of integrated payment processing technologies. "You've got payment gateways and physical POS being combined into a payment-service-processor kind of capability and PSP model so that all of a merchant's payments are aggregated and integrated with one delivery, one provider," he says.

Tsunami Brewing

Peterson forecasts a tsunami with EMV. While it's peaceful now, a storm is brewing.

According to recent Aité Group research, 60 percent of small retailers are unaware of the need to move to EMV-compliant terminals. They lack understanding of the fraud-loss liability shift that's coming in October 2015 if they fail to switch to EMV-compliant terminals.

According to recent Aité Group research, 60 percent of small retailers are unaware of the need to move to EMV-compliant terminals.

Peterson believes it's incumbent upon ISOs to educate their merchants on this important shift. The reality for most small retailers is that payments is a small percentage of what they care about and selling is their priority.

In this case, what merchants don't know puts them at significant risk. Ultimately, fraud will shift to the weak: those without EMV.

Ablowitz's notes that a liability shift in 2015 does not by itself determine it will happen. "It highly depends on how many chips are rolled out," he says. "The issuing side of the house drives the bus. What the issuers roll out will dictate things."

He notes that in the U.S., "We don't have a chip-and-PIN infrastructure yet and I think there's substantial question regarding how EMV will ultimately roll out. The truth is, EMV complicates the trend dramatically. Chip-and-PIN implementation of EMV requires a substantial security in the PIN-pad device, which has extended the life of the standalone terminal or at least the integrated PIN pad."

But there are many other technologies that are happening right now, he says. "It's a complicated time at point of sale. You've got the Squareds of the world changing the nature of the point-of-sale. You've got Visa with the Visa Checkout, with these new ways to check out much easier."

"Chip-and-PIN implementation of EMV requires a substantial security in the PIN-pad device, which has extended the life of the standalone terminal or at least the integrated PIN pad."

– Todd Ablowitz, Double Diamond Group

He points out that all these technologies are cognizant of the consumer having a smart phone.

"So many things are happening and are active, I don't think anyone can predict with any certainty how these things will come together," says Ablowitz.

Mass Specialization

Ablowitz's advice to ISOs: Become experts in a vertical (e.g., schools, non-profits, ski resorts). Pick one that is the appropriate size for your enterprise, that has enough opportunity available, and that has some unmet needs. Depending on your size, build, partner, or buy software that is highly specific to your target vertical. Focus on integrated software and a seamless, frictionless onboarding experience, and attack each market for what that market needs for the foreseeable future. Don't go on an adventure because a technology company has you excited.

Focus on integrated software and a seamless, frictionless onboarding experience, and attack each market for what that market needs for the foreseeable future.

"I would advocate that in today's day and age, you shouldn't just advocate for what they should get," he says. "You should have it all packaged up, integrated with software, and delivered in one solution that they can only get from you. I don't think being the expert and pointing them in the right direction works any more. I think that's five years ago. Packaged up and seamless in software as a service. This is almost 100% required in this day and age." ■

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Seeking An 'Aha' Moment

NetSpend's outgoing CEO Dan Henry may leave the prepaid business. **BY DAVID HEUN**

Dan Henry, who became NetSpend's CEO in 2008 and was scheduled to leave this summer, plans to look beyond the prepaid world after his final day on the job.

"So much is going on in payments that I am not clued in on, whether it is mobile or Bitcoin," Henry said. "I'll probably make a few calls, attend a few conferences and see if I want to go back to work or not."


Henry

Henry wants to find the same type of "aha" moment that transformed NetSpend into a provider of prepaid services for millions of consumers stuck in a cash-based economy. (NetSpend became part of TSYS last year; Henry was scheduled to leave the same day TSYS CEO Philip W. Tomlinson planned to retire).

"When I first looked at NetSpend, they were chasing pretty much everything that was prepaid, but when I spoke to the founder of the company he explained that there was a large underbanked population in the U.S. that a prepaid product could serve," Henry said. Because he had spent 13 years at Euronet Worldwide, a company he co-founded, Henry said he wasn't aware that 30 million to 40 million Americans "were literally trapped in a cash-based economy because banks were not designed nor willing to serve the low-income consumer."

One of his first moves was to take the risk of exiting the gift card business to sharpen the company's focus on general-purpose prepaid cards, which were a better fit for the underbanked.

"To see the growth that NetSpend accomplished by serving a consumer that had been overlooked and neglected for decades was very satisfying," Henry said.

But the prepaid world wasn't a joy ride. NetSpend lost several check-cashing distributors in 2011, and litigation-related losses cast a cloud over its earnings for much of 2012.

NetSpend repaired its distribution channel by working with mainstream retail chains, including those that used to offer cards only from its rival Green Dot. NetSpend continues to rely on partnerships with well-known brands to put its products in front of consumers.

The litigation expenses stemmed from a Texas jury's determination that NetSpend violated patents of Alexsam Inc. related to technology that activates a prepaid card reload. The parties settled the case in November 2012, with NetSpend paying $24 million for a license under the Alexsam patents.

NetSpend also had to face regulators and consumer advocates who took issue with the business model of the prepaid card market, including the way cards disclose their fees.

"Those good intentions are getting to the point where they are becoming very damaging and stifling to the industry, and ultimately to the consumer," Henry said.

Throughout his time leading NetSpend, Henry has insisted consumers are capable of guiding the market on their own.

Perhaps the clearest example of a consumer-led shakeup is the Kardashian Kard, which required a year's worth of its monthly fees up front. Only 16 of the cards were sold, and the product was discontinued within weeks of its launch. It was not a NetSpend product, though Henry was one of the Kard's few buyers.

"The Kardashian Kard didn't go away because of regulators or advocates; it went away because consumers didn't want the product," Henry said. "Consumers shut them down in a blink of an eye."

Meanwhile, companies like NetSpend and Green Dot remain in the prepaid game, and many banks have introduced products based on their models.

"That's the free market at work," Henry said. "The price of prepaid products has dropped dramatically in the last five years, not because of regulators or advocates, but because of competition in the market."

The flood of new prepaid offerings is partly why Henry has decided to leave NetSpend. "I look at Walmart and the others offering prepaid cards and I can see that the task of serving this underserved consumer is being taken care of now."

And he has confidence in his successor. "Chuck Harris is a great leader and great salesman; he has the whole package," Henry said. **ISO**

Wallet For A Digital World

The MasterPass digital wallet is making its debut in additional countries. BY DAVID HEUN

MasterCard's digital wallet is available in 10 markets, and the company plans to add four more countries this year in a push to strengthen the card network's capabilities in an increasingly digital world.

MasterPass demonstrates the Purchase, N.Y.-based company's commitment to technology and innovation, said Ajay Banga, president and CEO of MasterCard, during the company's recent earnings conference call.

"It is more than a wallet," Banga said. "It is a platform for payments. It is live in more countries than other wallets, and we have tens of thousands of merchants signed up for accepting it."

The company is about to deploy in-application payment capabilities for MasterPass, which allows companies like Starbucks to include a MasterCard prepaid card in its mobile payment and loyalty application in the Australian market, Banga said. Shaw Theatres in Singapore also supports the MasterPass in-app purchasing feature.

The updates to MasterPass come as the rival card network Visa is revamping its own digital payment strategy under the new Visa Checkout brand.

MasterCard's net income rose 10%, to $931 million, from the same period a year earlier. Net revenue rose 13%, to $2.4 billion.

MasterCard also reported an increase in processed transactions of 12%, to 10.6 billion, and an increase in cross-border volumes of 16%.

MasterCard is showing strength in many sectors, but it may be too early to declare MasterPass the gold standard of digital wallets, said Gil Luria, an analyst with Los Angeles-based Wedbush Securities.

"MasterCard has an entry with MasterPass but the company focuses on supporting their bank members more so than having their own proprietary brand," Luria said. "The real test is how many banks deploy a MasterPass and how many have success gaining merchant acceptance and consumer adoption."

> "It is more than a wallet. It is a platform for payments.
>
> - Ajay Banga, MasterCard, on the MasterPass wallet

In another development, Banga touted the announcement that MasterCard will provide BJ's Wholesale Club, a retail warehouse chain, with EMV chip-based cards in 2015. BJ's currently offers Visa cards issued by Barclaycard.

Banga also discussed the situation in Russia, where the card networks had to stop processing payments for some entities targeted by U.S. sanctions. Russia is also setting new rules that the card networks would have to obey to continue operating in the country.

Future business in Russia is hard to forecast, Banga said.

While fulfilling its obligations to the U.S., Banga said MasterCard continues to comply with Russia's rules as well by establishing partners to operate payment processing technology in the nation.

"The processing center we currently have in Russia, we believe, gives us the basis to build our own on-site switching capabilities, and we are exploring options to leverage that as well," Banga said

While difficult to measure, MasterCard estimates its revenue in Russia is likely to fall off by "something less $50 million" in the calendar year.

"Despite the challenges, our business continues to move forward in Russia," Banga said, citing a business renewal with Alfa Bank to expand merchant relationships and introduce more contactless technology in the region.

Ultimately, MasterCard showed that its diversity across the globe is helping it overcome problems in single markets, Luria said. "Even though Russia may be a bit of an issue, it is more than offset by MasterCard's growth in the other regions," he noted. "This quarter was particularly strong." ISO

Combatting Turbulence

Companies are working to ease the payment hassles that can vex international travelers. **BY BAILEY REUTZEL**

As consumers extend their spending across the globe, the hurdles they face are becoming targets of innovation.

Travelers are confronted with many different currencies and payment options, but they have few ways to cope with these varying systems other than to plan ahead with a wallet full of different types of cash and other payment instruments that may be unique to each of their destinations.

"The travel industry has always been a little bit behind in payment acceptance," said Sander Maartens, travel expert at Adyen, a global payment services provider. "The legacy systems built in the '60s, '70s or '80s were never meant to be used in the fast moving e-commerce environment."

Online Commerce Suffers, Too

The situation is no friendlier with e-commerce, as more consumers consider buying from merchants in other countries. Adyen supports nearly 300 payment methods, many of them in Asia where it serves local merchants wanting to sell in North America.

In the past couple of years, Adyen has begun working with about 20 airline clients, including Air Berlin and KLM.

"Airlines are operating on extremely thin margins; any time they can book customers on their own site, that's the cheapest way," said Maartens. But "customers are moving to these third-party systems like Expedia because they offer more payment methods."

Adyen has helped KLM develop its social media customer service. KLM is active on social media, answering customers within an hour. Most of the time, a customer asks about re-booking, which carries an additional fee. Customers didn't want to send payment credentials over Facebook or Twitter, so Adyen built KLM a tool that opens a pop-up payment box when consumers click a link, Maartens said.

American merchants sometimes forget that their magnetic-stripe cards are in the minority in other parts of the world, said Kamran Zaki, president of North America at Adyen.

For example, in Canada the majority of debit cards are chip-and-PIN enabled, meaning they can't be used to pay online because most checkout systems don't take the PIN into account, Zaki said.

Travelers often favor repaid cards. In August 2013, MasterCard Inc. began working with Travelex Currency Services to build a multi-currency, multi-purse prepaid card for U.S.-based travelers. It was one of the first chip-and-PIN cards obtainable in the U.S.

Adyen also works with hotels, such as citizenM, a chain expanding into Europe and North America. The chain needs to take online bookings, accept in-person bookings and sustain a call center. To take local payments, the company used to work with third parties for both the web and the physical POS.

With five to 10 payment providers, the bookkeeping and reconciliation becomes a hassle, said Zaki. Adyen steps in as the client's single relationship, handling any partnerships needed to accept payments in different regions and channels. This lowers costs because "you don't need an army of employees to manage all those partners," Zaki said.

Digital Currency Can Also Help

While Adyen and other payment services providers are removing barriers to purchasing across borders with traditional payment methods, other companies are experimenting with digital currencies, such as Bitcoin as an option for consumers who do not have credit cards.

"Many airlines, hotels and car rental agencies will not book anyone without a credit card," said Alan Safahi, CEO of ZipZap, a company that's building a global money transfer network by working with retail locations to enable consumers to deposit cash for bitcoins.

ZipZap recently expanded its cash-to-bitcoin services into several Latin-American countries. The company just raised $1.1 million in investment and added former Wells Fargo executive Jim Griffin as its senior vice president of currency and foreign exchange.

ZipZap plans to work with ATM providers in airports where consumers can convert bitcoins to a local currency. **ISO**

PayPal Learns To Say New Lines As It Takes Role Of Incumbent

PAYPAL, WHICH DOMINATED THE E-COMmerce storyline a decade ago, now finds itself fighting to stay relevant as consumers shift their focus to the emerging mobile channel.

The eBay subsidiary today is in the more established role as payment incumbent, facing increased competition from younger start-ups. The payments landscape is filled with innovative start-ups aiming to solve problems while siphoning a portion of the payment transaction fees from more established players such as PayPal.


Evans

The core component of PayPal's strategy still hinges on an online platform that dates back to its roots. Today, that platform enables its 150 million registered users to send money in 26 currencies to over 200 countries and territories. Over time, PayPal has also moved into other aspects of financial services, including consumer credit, mobile card acceptance and even card issuance.

When PayPal was launched in 1999, online card payments were still a challenge for many merchants. PayPal's great breakthrough was determining how individuals and businesses could more easily accept money over the web. PayPal's founders figured out early on that it could make a decent profit in this low-margin business of processing transactions if it could encourage enough users to fund PayPal payments via bank accounts rather than financial cards.

In time, it was speed, convenience and security that made PayPal's online platform popular, especially among eBay's small-time sellers. PayPal went public in 2002, and immediately its market value skyrocketed. Within a year, eBay, which once dominated the e-commerce market, bought the start-up for $1.5 billion, as it realized PayPal was squeezing out its own in-house payment option.

As it faces the future, PayPal's current growth strategy has four major components.

The company strides to be at the center of the next innovation. The pioneer of the e-commerce space is now attempting to make inroads in other aspects, including both mobile and in-store payments. PayPal competes in virtually every corner of payments, from its popular online platform to plug-in devices that enable first-time card payments to the relatively new beacon technology that has the potential to revolutionise the shopping experience. Not many companies in payments have the breadth and depth of PayPal's offerings. Payments is changing fast, and PayPal has a product to compete with all of the emerging payments options on the market.

Secondly, PayPal is bridging digital and physical commerce. It also aspires to be at the center of virtually every payment transaction, whether it unfolds online when the consumer is sitting in front a computer screen, via a mobile device when the consumer is on the go or in a physical retail store. It wants the consumer to opt for PayPal no matter the scenario. To do so, PayPal aims to build an agnostic platform that will allow retailers or software developers to leverage PayPal's network programs and hardware to create products to capture those on-the-go payments. PayPal envisions consumers using a PayPal-enabled wallet for all transactions, regardless of where they occur.

PayPal is also evolving from digital wallet to mobile wallet to "no wallet." For PayPal, it is not just about the shift from the leather wallet to the digital wallet on a mobile phone. In many cases, it is about no wallet at all. For PayPal, mobile payments or payments on the move are often not about the ability of the mobile phone to conduct a payment, but about the ability for consumers to make payments without having to rely on cash or plastic cards while mobile themselves. PayPal's head of global communications went so far as to ask in autumn 2012 that the media not refer to PayPal as a "mobile payments or mobile wallet company, but just PayPal." PayPal wants to be known simply as a commerce company. For PayPal, mobile payments or payments on the move is about the ability to make a payments without having to rely on cash or plastic card payments while mobile themselves.

PayPal is also reimagining the consumer shopping experience. Part of PayPal's biggest bet is on creating an in-store experience in which frictionless payments become the cornerstone. PayPal hopes that experience will be a major selling point for consumers who are still undecided about executing payments through these new channels. Together, its revamped mobile wallet and the introduction of PayPal Beacon in autumn 2013 gave users insight into PayPal's vision for the future. PayPal hopes that in time merchants and consumers will recognise the value of its product line because of its ability to create a differentiated and frictionless experience in all channels, with all devices and with all methods of payment. **ISO**

Michelle Evans is a senior analyst covering the financial cards and payments industry at Euromonitor International. Follow her on Twitter @mevans14.

Ready For Anything

Visa is preparing for a surge in traffic as card transactions and digital payments grow. **BY DAVID HEUN**

Nearly 20 years ago, Visa executives celebrated a milestone for the card brand's global VisaNet payments network. The system could finally handle 1,000 transaction messages per second.

"That was a staggering number back then," Manny Trillo, Visa's senior vice president of network processing. said in an interview with *ISO&Agent*. "It was a big milestone for us."

Ten years ago, VisaNet's peak message rate was 5,546 transactions per second, with a system capacity of 8,187 transactions per second.

The latest peak message rate Visa documented was 13,236 transaction messages per second during a one hour-period in the late morning Pacific time on December 23, 2013.

But the company's technology is built to handle much higher loads.

Much More Transaction Volume

Last month, VisaNet recorded 56,582 transaction messages per second during the company's annual network stress test, which acts as a trial run for the upcoming holiday season.

During last year's test, it reached a peak of about 47,000.

Visa has conducted annual tests since 1992, seeking to validate system hardware and assure all business applications and system connections can handle heavy transaction loads during the busiest shopping time of the year during the holiday season

"We push VisaNet to the limits so that we understand the processing profile beyond what we would actually do at these peak times," Trillo said.

Such aggressive measures allow Visa to get a clear picture of where bottlenecks might occur or anticipate any trouble in storage peripherals or connectivity between systems.

The surge in card payments is in line with a steady shift away from cash and checks.

Credit, debit and prepaid cards accounted for two thirds of noncash payments in the U.S. in 2012, up from one third in 2000, according to the 2013 Federal Reserve Payments Study.

In the same period, the number of check payments declined by more than 50%.

Visa is responding to this change in payment habits, but it must also test its systems to determine the effect of the many updates it makes to business applications each year, Trillo added.

"We really endeavor to understand our choke points," Trillo said. The stress test includes simulated system failures that allow Visa to establish procedures if any link in payment processing is suddenly cut off, he said.

The new level of transaction capacity illustrates the power and advancement that Visa has made over the years in developing a reliable network, said Paul Martaus, a merchant acquirer consultant and industry researcher.

"It's a self-fulfilling prophecy of sorts for Visa in addressing all of the requirements over the years that have demanded that the system be faster and faster," Martaus said.

The evolution of Visa's network also points to the card brand's success in marketing, Martaus added.

"They have spent billions of dollars in marketing campaigns to get consumers to use their Visa cards for everything," Martaus said. "Their old ad campaign of Visa being 'everywhere you want it to be' spoke to that concept eloquently."

The growing e-commerce and mobile payment landscapes will only add to the transaction rates in the future, Martaus said.

Preparing For The Best And Worst

Visa also tests the system at much higher-than-expected capacities because the network serves as a backup and gateway in case other payment networks encounter failures.

In addition, having far more capacity than one expects sets Visa up to avoid any surprises in the fickle world of consumer spending.

"What if we are wildly successful and have far more transactions?" Trillo asked. "We have to build in some capacity for the fact we can't completely predict consumer behavior." **ISO**

A New Way Of Life

Merchants and acquirers should nurture a culture of data protection instead of making it a once-a-year event, experts say. **BY DAVID HEUN**

Card data security has to become a 24-hour priority for businesses, not just when PCI compliance assessors come around for annual checkups, according to the Payment Card Industry Security Standards Council.

The council, which establishes and maintains the PCI data security standards, is providing a new guidance document outlining the best practices for incorporating security measures into daily business processes.

Research has shown that business owners and managers tend to get lazy about complying with data security standards throughout the year, said Troy Leach, chief technology officer for the council.

One In 10 Merchants Backslides

Verizon's recent PCI-DSS report indicated that when a qualified security assessor returned to a merchant that complied with PCI the year before, only one in 10 merchants actually met all of the requirements on the following visit, Leach said.

"Once they are audited and the assessment is done, the merchant will put security on the backburner and wait until there is another obligation to demonstrate security," Leach said.

Such practices mean card data will be less secure, but they also indicate inefficiencies in security policies, Leach maintained.

Companies that conduct multiple security checkups during the year actually save money, Leach said. "It's about 55% overall on their compliance expenditures, because things were less likely to go off path," he said.

The guidance focuses on security and risk assessments, while promoting continuous monitoring of systems. It encourages merchants to become proactive in looking at new emerging threats.

"Most importantly, they should be measuring the effectiveness of those security controls," Leach said. "You can only improve and show the value of security inside of a business when we have demonstrative evidence that what we are doing is working."

Merchants are slowly but increasingly learning more about their security obligations, mainly because each week seems to bring news of a new merchant breach, said Julie Conroy, senior analyst and fraud expert with Boston-based Aite Group.

"It's certainly catching on with the bigger merchants, but our big challenge is still the small and midsize merchants who don't make the headlines," Conroy said. "Many of them think this is still the big guys' problem."

The recent PCI 3.0 standards acknowledge that most breaches were not sophisticated attacks, but intrusions made possible from neglect of simple security measures, Conroy said. "They were attacks in which they are picking up the low-hanging fruit."

Processes Can Become Boring

The new PCI guidance focuses on "people and processes," which tend to become the weak points in any security system, Leach said.

"Security is a process, and unfortunately a process is boring, routine and institutional, and that makes it a challenge to stay diligent," Leach noted. "It has to be a daily exercise, but it can fall by the wayside."

When a company faces a change in personnel, equipment or technology, it should conduct a full risk assessment to determine the effects of those changes, he said.

"Too many say they will do the risk assessment when the QSA comes in the door and tells them what those risks are," Leach asserted. **ISO**

> "Once merchants are audited, they put security on the backburner for the next year."
>
> - Troy Leach, Payment Card Industry Security Standards Council

Do Mobile Devices Deter Or Aid Computer Hacking And Fraud?

FOR SOME TIME NOW, I've been using the mobile alerting capabilities offered by my bank and card issuers. The reassurance from knowing that I'll be notified via text message of typical and not-so-typical transactions puts my mind at ease and gives me a sense of playing a part in the fraud prevention game.

And it looks like others globally are willing to put some "skin in the game" when it comes to the fight against fraud, a good move as mobile devices become a target for fraudsters.

According to the ACI Worldwide global consumer fraud survey data reported in the recent Aite Group research report, Global Consumers: Concerned and Willing to Engage in the Battle Against Fraud, more than three quarters (77%) of global consumers are "very interested" in being contacted about suspicious activity on their cards or accounts via a phone call, email or text message, and nearly three quarters (73%) of global consumers prefer that their bank not post transactions to their card until they respond to a fraud alert.

These numbers tell me that the consumer thinks about the impact of fraud and is willing to work with their bank or issuer when it comes to protecting their information and money.

Consumers are learning about the consequences of fraud and are willing to help their banks and card issuers prevent data-breach attacks, according to research conducted by ACI Worldwide.

Mobile alerts let me know when typical and not-so-typical transactions flow through my accounts.

The survey also explored consumer adoption of mobile wallets–typically associated as an app of sorts that contains banking, payment and/or customer loyalty information like rewards programs. With more banks and retailers offering mobile wallets, adoption rates vary widely by geography.

According to the survey, mobile wallet adoption rates top out at 72% and 44% in China and Russia respectively, however more than a third of respondents in China (34%) and Russia (43%) don't have confidence in the protocols invoked to protect account information on a mobile device.

When thinking about those contrasting data points, do those who maintain banking and/or payment data in their mobile devices do so for the sake of convenience regardless of the potential security implications? As those countries exhibit high mobile growth rates, one might assume so.

Conversely, respondents from Canada have the lowest mobile wallet adoption rates at 4%, with Germany, the U.K. and the U.S. tied at 6%. While they aren't necessarily embracing mobile wallets, consumer trust in the banks' ability to protect personal data on the mobile device in these countries is mixed.

Canadians with complete trust has declined from 55% in 2012 to 45% in 2014, while trust has grown in the U.S. from 32% to 44%, the U.K. from 25% to 44% and Germany 24% to 37%. It's worth noting that the U.S. is the only country where 100% of the consumer respondents think data on mobile devices is "somewhat secure." All other 19 countries in the survey have some number of consumers who were either unsure or did not feel mobile devices were secure.

Consumer perception of fraud risks varied greatly as well. "Using my phone or tablet to shop and pay bills" ranked on the lower end of the risk spectrum at only 5%, while "theft by a computer hacker" presented the highest fraud risk at 31%. I guess consumers don't see a correlation between hackers and malware and browsers and apps on a phone. While not a pervasive fraud issue today, the mobile channel remains ripe for fraudsters, who have ways to get into your handheld computers, eh, I mean mobile devices. And given the amount of personal and financial data contained on a device today, why wouldn't they be a target?

Maybe it's time to start looking into fraud alerting capabilities at your bank or issuer. **ISO**

Michael Grillo is senior product marketing manager at ACI Worldwide.

Financial Services Meets Politics

Here's an FAQ on what the midterm Congressional elections may mean for the industry. **BY VICTORIA FINKLE**

Washington—The battle for the U.S. Senate this fall has important implications across the financial services spectrum.

Candidates with influence on banking policy issues are locked in tight races, while the larger contest for which party controls the Senate could also affect legislative efforts relevant to the industry.

With campaigning likely to intensify in the weeks leading up to the November elections, here are some frequently asked questions about what the races mean for financial services.

What are the most significant races for the industry?

While House races hold less significance for the industry, several elections in the Senate could affect the makeup of the Banking Committee and will involve candidates focused on industry issues.

Perhaps the two most relevant races for banks are Sen. Kay Hagan's bid to hold onto her seat in North Carolina, and the election for West Virginia's open Senate seat involving Rep. Shelley Moore Capito.

Hagan, a Democrat, is deadlocked in a battle with Thom Tillis, the GOP House speaker in the state legislature. First elected to the Senate in 2009, Hagan is a relatively junior member of the banking panel, but is seen as a key vote on issues important to bankers. She also brings industry experience to Washington after having been an employee at North Carolina National Bank, which is now Bank of America, for 10 years.

"The single most interesting race for bankers is Hagan's—she's on the committee and North Carolina is an important state for banks. It's also where many of the mortgage insurers are based," said Mark Calabria, director of financial regulation studies at the Cato Institute.

In fact, the state is such a center for banking that, if Hagan were to lose, the industry would likely push for Tillis or North Carolina's other U.S. senator—Republican Richard Burr—to take her spot on the committee.

"It would be hard not to have Tillis on the committee if he wins, because North Carolina regularly has a member—it's the second biggest place for banking outside of New York," said Brandon Barford, a partner at Beacon Policy Advisors.

Meanwhile, Capito, who has been in the House since 2001, would also be a key voice for the industry in the Senate. Currently chairing the Financial Services Committee's financial institutions and consumer credit subcommittee, the senior Republican has been an advocate for community banks.

If she wins the seat now held by Democrat Jay Rockefeller, who is retiring, Capito would be a prime candidate to join the Senate Banking Committee. Polls show her well in front of West Virginia Secretary of State Natalie Tennant, a Democrat, in the race. According to Real Clear Politics, Capito is 12 points ahead in an average of polls taken since May. The University of Virginia's Center for Politics rates the state's race as "likely Republican."

"Out of all the" candidates running for the Senate, "she is clearly the most capable and qualified of the potential incoming class of 2014 to join the Senate Banking Committee," Isaac Boltansky, an analyst at Compass Point Research & Trading, said of Capito.

Even if Capito does not sit on the Banking Committee, she would still be a strong voice in support of small banks and regulatory relief proposals.

"Whether she's on the committee or not, she's going to be an ardent force and a consistent, supportive voice for community banks," Boltansky said. "If she's on the committee, she could help advance a regulatory relief bill—she has experience following these issues in the House, consistently supporting the banks, and she brings new blood to the panel."

Why should I care about the balance of power in the Senate?

Beyond individual Senate races, a key question for the financial services industry remains which party will control the chamber next year. That will determine whether the Democrats or Republicans run the Banking Committee. The outcome could be a key factor in setting the agenda for financial services legislation, with a GOP victory likely spurring more efforts to roll back substantial pieces of Dodd-Frank.

Regardless of which party wins, the committee is expected to get new leadership. The current chairman, Sen. Tim Johnson, D-S.D., will retire at the end of the year. Sen. Sherrod Brown, D-Ohio, currently a frontrunner to take over if Democrats hold onto the Senate, has supported legislation to rein in the industry. If Republicans take the Senate, Sen. Richard Shelby, R-Ala., is poised to serve the last two years of his term as the chairman, where he could pursue changes to the Consumer Financial Protection Bureau or a conservative plan to unwind Fannie Mae and Freddie Mac.

"It's all about control of the Senate," said one banking lobbyist, who spoke on the condition of anonymity. "The attention is going to be paid to who is in control of the agenda and whether you have Shelby or Brown as chair of the Banking Committee."

The University of Virginia's Center for Politics, which tracks elections data, predicts Republicans will pick up four to eight seats, and lists five elections as toss-ups: Alaska, Arkansas, Iowa, Louisiana and North Carolina. The results of those five and a handful of others will likely go a long way to determining which party captures a slim Senate majority.

Do other individual races matter?

Yes. Some of the closest races in the Senate could also prove significant for the industry in other ways.

Sen. Mary Landrieu, D-La., while not a member of the Banking Committee, has supported banker-friendly measures, including changes to the flood insurance law passed earlier this year. She's in a tight contest against Republican Rep. Bill Cassidy, who also backed the flood insurance provision.

Meanwhile, GOP Rep. Tom Cotton of Arkansas and Democratic Rep. Gary Peters of Michigan, both running for Senate seats in competitive races, are members of the House Financial Services Committee.

Friends of Traditional Banking, a SuperPAC formed before the 2012 elections, has recently narrowed its races to watch list to four Senate elections. In all of them, the group is supporting the Republican candidate, including Cotton.

The group is backing Peters' opponent, Terri Lynn Land, a former secretary of the state in Michigan, noting that Peters "voted for Dodd-Frank three times and is proud of that."

Two of the group's endorsements are for candidates running against supporters of the credit union industry, which battles banks on a number of fronts. They include Rep. Cory Gardner, R-Colo., who is running in a tight race against Democratic Sen. Mark Udall, and Joni Ernst, a Republican state senator in Iowa, who is running for an open Senate seat against Democratic Rep. Bruce Braley.

What other changes are possible on the Banking Committee?

The Banking Committee is poised for a shakeup when the new Congress begins in January, regardless of the outcome of November's elections. Members of the committee set to retire at the end of the year include Johnson and Sens. Mike Johanns, R-Neb., and Tom Coburn, R-Okla. It is possible other members could leave the committee to fill seats on other panels.

"There could be four or five or six new members on the Banking Committee," said Calabria. "It's not uncommon that some members leave as slots open up on other panels, like appropriations and finance."

None of the current Republicans on the committee that plan to stay in Congress are up for reelection, but several Democratic members—including Sens. Jack Reed of Rhode Island, Mark Warner of Virginia and Jeff Merkley of Oregon—are all running to keep their seats. However, all of them are favored to win by fairly strong margins. **ISO**

Just PCI Standards Alone Can't Protect Card Data

ACCORDING TO JAVELIN STRATEGY & RE-search's 2014 Identity Fraud Report, 13.1 million consumers became a victim of identity fraud in 2013—the second highest level on record. This means that 5% of the U.S. population is now being affected by identity fraud every year.

To add to the problem, with essentially every consumer switching his or her financial transactions from paper to digital or online, the opportunity for hackers to acquire a consumer's personal information is greater than ever. So what can be done to stop fraud or at least curtail the increase?

The Payment Card Industry (PCI) Security Standards Council's DSS guidelines, which can be traced to 2004—when American Express, Discover Financial Services, JCB International, MasterCard and Visa formed the council—are a start. Some of the standards include using strong access control measures, regularly monitoring and testing networks and protecting cardholder data.

And several additional steps financial institutions can take could help ensure the security of their customers' private financial information. What follows are recommendations on how issuers can conquer today's biggest data security challenges.

Issuers should become more cognizant of where their business is taking place. Especially with the rise of banking agents, financial institutions are now allowing the owner or the employee of a retail outlet to process their customers' credit card transactions, such as through a pharmacy, a supermarket or a convenience store. With the rise of third-party organizations handling consumers' private banking information, it becomes critical that issuers know exactly how that information is accessed.

Too often, banks think that information accessed on an active machine is the only data that needs protection. That is simply not the case. Financial information stored on laptops is a major component that is frequently overlooked.

Consumers are switching their transactions from paper to digital or online. That means the opportunity for hackers to steal consumers' personal data is becoming greater than ever.

It doesn't matter if a laptop or phone is in the process of accessing one's financial information or not. Hackers can still attain the information stored on the device regardless of that status. Data at-rest should be encrypted when it is at rest so that the physical theft of the devices does not become a concern.

Banks and other issuers should also have the ability to access the path of personally identifiable information, or "PII." Through sniffers or network traffic monitor software, banks can not only determine where certain pieces of information have been, but also if they are being transmitted with or without encryption. They also have the ability to determine which specific network devices are storing PII and make security adjustments based on potential threats.

Banks and other card issuers already have enough tasks to perform; managing their security infrastructure shouldn't become one of them.

If issuers want to be serious about the privacy and security of their consumers' identity information, they should hire a reputable data security partner who can continuously monitor and use the most appropriate security strategies for both current and emerging security threats in real time.

A manageable encryption policy is also important. Financial institutions should set an encryption policy that is mandatory, yet manageable. It should include the use of encryption with 128-bit keys (or stronger) as well as multiple rounds of testing before the policy is put into effect. There should also be an auditing of a sample of systems post-deployment. Role-based controls are another critical component of an encryption policy, where only certain individuals at an organization should have the ability to control or access specific pieces of information. Routine and ongoing audits are of course always suggested as well to ensure that data security and encryption policies are consistently enforced.

The consequences of failing to secure data are long-lasting and painful. When confidential data is lost and not secured many repercussions affect your business, but you can avoid that situation by properly securing the data in the first place. **ISO**

Mark Hickman is chief operating officer of WinMagic, a Toronto-based IT security company.

Revival Of 'Too Big to Fail?'

A government study and shifts in Senate leadership could reinvigorate the debate. BY VICTORIA FINKLE

Washington—The legislative battle over reining in big banks' implicit guarantee is suddenly poised for a comeback.

The issue is expected to reemerge as the Government Accountability Office is finishing a report on whether big banks should receive a subsidy based on their size, and vocal critics of "too big to fail"—including Sen. Sherrod Brown, D-Ohio—stand to hold key leadership slots in next year's Congress.

Brown, who last year co-authored a bill with Republican David Vitter to rein in the big banks, is a contender to chair the Senate Banking Committee if Democrats hold the chamber.

Observers say Brown could find a partner in House Financial Services Committee Chairman Jeb Hensarling, R-Texas.

Meanwhile, GOP Sen. Richard Shelby, who could also be in line for the Senate panel's gavel, has also opposed "too big to fail."

"The big banks should be worried, especially because this process is going to slip well into 2016, and that's prime presidential election season," said Brandon Barford, a partner at Beacon Policy Advisors.

The GAO report, requested by Brown and Vitter, appears likely to become the next catalyst for "too big to fail" opponents.

The study could validate their claims about big banks enjoying a market subsidy and provide estimates on the size of that subsidy.

But the biggest risk for large banks will come after the November midterm elections.

Senate Banking Chairman Tim Johnson, D-S.D., is set to retire at the end of the year, opening up a race to succeed him if Democrats maintain control of the chamber.

Brown Would Oppose Status Quo

If Brown wins the gavel, "too big to fail" is expected to be front and center on his agenda.

He would likely take several months to build up his staff and establish a record on the issue through hearings and other investigations, at which point he could also start reaching across the aisle to like-minded Republicans.

"Brown is motivated to actually change the status quo. He's an idealist, but he knows the limits of what government can do," said Barford. "If Brown doesn't have to go out of his way or overtly compromise on something that's a core principle to change the system and neuter the big banks, I believe he would be willing to work hard to get Republicans comfortable with these types of reforms."

Brown and Vitter's bill would have established a sharp hike in minimum capital levels and imposed other growth limits on big banks. But despite drawing ample attention last year, their proposal ultimately lost traction.

Vitter has announced that he will run for governor in his home state of Louisiana in 2015, leaving Brown to find other lawmakers to co-sponsor a similar bill or with whom to craft alternative legislation aimed at ending "too big to fail."

One possible partner is Shelby. The Alabama Republican, a former chairman of the Senate committee AAand a vocal advocate for higher capital standards, could reclaim leadership of the panel if Republicans win control of the Senate.

> "Hensarling is the darling of the Tea party, and the Tea Party is supposedly against big government."
>
> - Cornelius Hurley, Boston University, on U.S. Rep Jeb Hensarling, R-Texas

"Senator Shelby's position in opposition to 'too big to fail' has been consistent, and he will continue to fight for financial reform that protects taxpayers and puts an end to bailouts," said Torrie Miller, a Shelby spokeswoman.

Brown could also try to work with Hensarling, a particularly dangerous prospect for big banks.

If Brown became chairman of his committee, teaming up with his House counterpart on a bill they both could agree on would significantly increase the likelihood of passage.

Spokesmen for Hensarling and Brown did not respond to requests for comment on this article.

Hensarling has previously raised concerns about "too big to fail" in his own committee, and observers said the issue very much remains on his political radar.

He could even try to use the issue to expand his political support within the Republican caucus should he seek a higher leadership position in the House.

"Jeb Hensarling could step into the shoes of David Vitter," said Cornelius Hurley, a law professor at Boston University. "Hensarling is the darling of the Tea Party, and the Tea Party is supposedly against big government and out-of-control corporations. It wouldn't be an alliance that would require Hensarling to deviate from his philosophy at all."

Still, despite Brown's common ground with Republicans on ending "too big to fail," he and his counterparts across the aisle may come at the issue from different perspectives, which would create hurdles to crafting a joint bill.

"It is significant that they see the same problem," said Mark Calabria, director of financial regulation studies at the Cato Institute. "But the difficulty is that Brown sees the cause of the problem as the banks, and Shelby or Hensarling sees the problem as the government. The solutions to it are where people start to part ways."

Hensarling, for example, would seem unlikely to back legislation to break up the largest institutions, something Brown has pushed for in the past.

Dodd-Frank Fell Short, Some Say

Democrats, such as Brown, may take the position that "Dodd-Frank didn't do enough to punish the banks," said one financial services executive, who downplayed the likelihood of lawmakers finding enough common ground to move legislation.

Republicans are focused on "making sure that taxpayer money is never again on the hook for the failure of a financial institution, small or large," the executive said.

But even in the absence of a grand deal, having the issue higher up on the congressional agenda is still likely to create headaches for major financial institutions.

"They will have to expend a lot of energy and money fighting this issue, especially if you have Brown and Hensarling in positions of power," Barford said. **ISO**

A Big Push For Cards

Banks and credit unions are realizing whopping increases in their credit card portfolios. BY ANDY PETERS

Consumers have a big appetite for credit cards, and the financial services industry seems happy to oblige. Making good on plans from a year ago, banks have introduced new cards or ramped up marketing efforts for stale card programs. The effort has paid off in surging credit card portfolios.

At a time when sources of growth are hard to find, bank executives sound giddy about credit cards' potential.

Credit cards are "one of our biggest opportunities," John Stumpf, the chairman and chief executive of Wells Fargo, said during a conference call this summer. "We are just passionate about helping our retail customers understand the value of having a Wells Fargo card."

Big Increases In Card Balances

It's easy to understand Stumpf's excitement. Several banks reported significant jumps in credit card balances in the second quarter. The M&T Bank in Buffalo, N.Y., said credit cards rose 18% from a year earlier, to $324 million. Credit cards at the SunTrust Banks in Atlanta rose 17%, to $749 million.

Huntington Bancshares, in Columbus, Ohio, began issuing its own cards last year and reported total credit-card loans of $84 million, as of June 30. The Associated Banc-Corp, in Green Bay, Wis., also increased its exposure to the credit-card sector in July, when it acquired $100 million in credit card receivables tied to its customers.

Some banks have seen a marked improvement by ditching referral arrangements and issuing cards themselves.

"We didn't get a lot of financial benefit from that, and we didn't have much say over the program," said Jamie Sweeney, senior project manager in charge of credit cards at $5.8 billion-asset Pinnacle Financial Partners.

Pinnacle launched its own MasterCard program in 2012 and has seen the business soar. Pinnacle's credit-card balance grew 75% to about $2.5 million at the end of the second quarter. Pinnacle's executives have encouraged frontline staff members to push plastic hard.

"The key tactic is to get cards in the hands of clients and encourage clients to use them, which our consumer bankers are all about doing," Harold Carpenter, Pinnacle's chief financial officer, said during a conference call.

The Nashville, Tenn., bank's management previously felt it was too small to manage its own credit cards, Sweeney said. Once it reached a larger asset size, the timing seemed right.

"We do all the underwriting and client servicing," Sweeney said. "It's really hard to get started when you are smaller because you've got to negotiate a contract with the processor, write your own disclosures and build out your own application platform."

More banks are using analytical software to monitor consumers' online behavior to craft better sales pitches to potential customers, said David Wallace, global financial services marketing manager at SAS Institute in Cary, N.C. It's a big improvement over the old "spray-and-pay" system of sending credit-card offers to the mass population through the mail, he said.

"Banks were spending a lot on marketing and not getting a good return," Wallace said. "Now they are targeting the right customers."

Consumers Feel Richer

Much of the growth in credit cards is simply a function of consumers having more money to spend, said Jim Blaine, president of State Employees' Credit Union in Raleigh, N.C. Teachers employed by North Carolina state schools received an average raise of 7% this year, their first raise in several years, he noted.

"Maybe the recession is over and people are starting to feel better" about their job situations, Blaine said.

SECU had been "ultraconservative" in its credit card business for years, Blaine said. In the past year, the $29 billion-asset institution introduced a card with a 7.75% interest rate, and a late fee of $5, to lure customers. The tactic has seemed to work, as SECU's credit card balance grew by 47%, to about $393 million, in the second quarter. ISO

PAYMENT GATEWAY

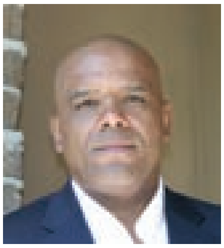
Visionaries and Q&A

A SUPPLEMENT TO

ISO&AGENT

PRODUCED BY SOURCEMEDIA MARKETING SOLUTIONS GROUP

Network Merchants Inc.



NMI provides a Cloud-Based Payment Enablement Platform that allows a broad range of companies to deliver their own branded payment gateway products and services to their merchant customers. With Omni-Channel payments solutions, integrations to all of the popular shopping carts, and over 100 domestic and international processor connections, NMI is the Partner for companies who want to "become the gateway to their customers."

By Roy Banks, CEO, Network Merchants

1. **Where do you think the Payments Industry is heading?**

The Payments Industry is changing. The days are numbered for Merchant Service Providers who offer just a terminal and a customer service line to their customers. Merchants want and need additional payments functionality and technology. NMI is uniquely positioned to help a broad spectrum of companies strengthen their offerings through its Cloud-Based Payments Enablement Technology.

2. **What is Payments Enablement Technology?**

It's NMI's proprietary technology that makes it possible for our Partners to offer their own branded payment gateway services to their customers without having to unnecessarily invest in their own technology. Companies enjoy all of the benefits of being a gateway without the enormous costs of building, operating, maintaining and securing a payment gateway platform. It's the evolution of the traditional gateway reseller model.

3. **How is Payments Enablement different from the traditional payment gateway reseller model?**

When you become a reseller of a traditional payment gateway, you promote someone else's brand. You turn over control of a portion of the customer experience, and you have minimal input into pricing for your customers. What's worse, you often compete with your payment gateway for business because they offer the same services as you. Payments Enablement gives you the ability to build your own brand, totally control your customer experience, enhance customer loyalty, and own the revenue opportunity, without ever competing with your partner.

4. **Aside from branding, what else goes into Payments Enablement?**

Our Partners can setup, organize, and manage an infinite number of "parent-child" relationships using NMI's scalable and flexible multi-tiered hierarchical platform. Partners have complete control over how they organize their hierarchies enabling them to sign up and manage sub-affiliates to resell their gateway and organize and structure sales teams, departments, stores and even products.

And since we support multiple MIDs under a single gateway account, we make it easy for both Partners and Merchants to use the hierarchies to create reporting capabilities that simply aren't achievable with most other gateways.

5. **How does NMI help protect the sensitive cardholder data and information of their Partner's Merchants?**

In the last 12 months, the payments industry has seen an unprecedented number of security and data breaches among merchants. Major retailers as well as small and medium sized merchants continue to be targets and victims of both hackers and criminals breaching their processing environments gaining access to sensitive cardholder data. It's not enough for merchants to achieve PCI Compliance. Merchants need to employ methods to safeguard customer information and sensitive cardholder data in such a way that is protected even when compromised.

NMI has created a comprehensive suite of payment security, encryption and tokenization technologies and services that can be used to eliminate or protect sensitive payment information from a merchant's environment, whether they are processing card present, mail order (MOTO), or eCommerce.

6. **Is it just the payment gateway that can be branded by your Partners, or are all of your value added products and services also able to be branded?**

NMI is the technology behind many of the popular payment brands you see in the market today. In addition to our core payment gateway, we have developed an impressive offering of value added products and services that our Partner's can offer to their merchants such as: recurring billing, account updater, invoicing, fraud detection, QuickBooks integration, encryption, tokenization, vault, mobile POS, etc...

Our Partners are able to present these solutions to their customers under their own brand and can change the names of the payment gateway and each product and service, add logos, and develop any other marketing materials they desire to support their own payment solution.

7. So, does NMI sell payment gateway products and services directly to Merchants?

This is what makes NMI different and a true partner to our customers. We DO NOT SELL our products and services directly to merchants. Unlike other payment gateways, we don't have a team of Inside Sales Representatives taking direct calls from merchants, "cherry picking" the best leads and setting them up directly on our platform.

Simply put, why be a reseller for a payment gateway who is in direct competition with their Partners selling both merchant accounts and payment gateway accounts? NMI has a long-standing "Non-Compete Guarantee" that states we do not compete with our valued partners. We never have, and we never will!

8. Can you give us an idea about how many processors and shopping carts you work with?

We are integrated to all of the popular shopping carts (more than 150) and have over 100 Domestic and International processor integrations. We've found that almost everyone who approaches us has their needs covered, but we are also willing to follow business. If we don't have a feature, a processing connection or integration you need, we are willing discuss the opportunity with you.

9. What is it about NMI that you're most excited about?

First, we are the future and evolution of the payment gateway. Payments Enablement is what ISOs and Agents need to compete in today's market and we provide the payment technology platform that they use to do it.

It's also exciting to see how our Partner's use our payment technology platform to build their business. There are a lot of talented and creative ISOs and Agents out there and when they stop and ask themselves, "If I only had my own payment gateway, what could I do with it?" The things they come up with and the creative go-to-market strategies they employ are mind blowing. It's very satisfying to be a Payment Enablement Technology solution to our partner. ■

IF YOU'D LIKE TO KNOW MORE, PLEASE CONTACT US:
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NMI
Network Merchants, LLC
nmi.com

ePprocessing Network

eProcessing Network (ePN) specializes in secure, real-time transaction processing services, solutions & support for all SMBs. ePN is certified to process electronic payments through all major credit card, check/ACH and gift card/loyalty processors, selling exclusively through the ISO/Reseller sales channels. ePN is PCI/PA-DSS compliant.

By Steve Sotis, President, eProcessing Network

1. **What should a company look for in choosing a Payment Gateway?**
   When choosing a Payment Gateway, it is vital for merchants to find a trusted gateway provider; one that can provide the flexibility and API software integration essential to help the small to mid-sized merchant (SMB) compete and prosper in the eCommerce, mCommerce and Mobile arena. For over 17 years, eProcessing Network (ePN) has partnered with ISO Agents to offer secure, transaction processing solutions at competitive rates. ePN helps merchants realize the potential of unlimited business opportunities and profits with secure, reliable processing services. The eProcessing Network Payment Gateway enables merchants to securely process and control their eCommerce, Mobile, Point-of-Sale (POS), Recurring and other Business Financial Software transactions.

2. **How are transactions kept secure?**
   The protection of credit card details through the use of point-to-point encryption (P2Pe) for sensitive data, such as credit card numbers and account information is fundamental to every merchant, no matter what sized business they operate. Encryption ensures that the information is passed securely between the customer and the merchant all the way through to the payment processors and acquiring banks. In addition, using P2Pe helps keep the merchant out of PCI Scope.

3. **Does a Payment Gateway work for card-present payments?**
   Yes, a payment gateway isn't limited to just an eCommerce solution or card-not-present transactions. Card Present (CP) transactions, via a gateway, allow merchants to accept credit cards and other forms of payment in a secure, real-time environment beyond the website. Merchants can process secure transactions via encrypted USB card readers, or encrypted Mobile card-reader devices or specialized POS software directly from their place of business or remote locations. Real-time authorizations ensure the validity and accuracy of each encrypted transaction. With a payment gateway, you gain the added convenience of allowing multiple users to enter transactions from a variety of locations and devices, all concurrently.

4. **Why use a Payment Gateway?**
   Payment gateways allow merchants to broaden their scope and range of payment acceptance. For example, a single gateway account can manage a multiplicity of merchant transactions, such as in-store POS transactions, on-site or off-site Mobile transactions, or eCommerce transactions from their website(s). Payment gateways provide merchants with the flexibility to process any type of payment as frequently as they choose, at cost-effective rates. Since a gateway solution is in essence the conduit between the customer, the merchant and the processor, the business owner needs only to activate one merchant account with the gateway through their processor to start transacting. And with only managing one account, a merchant has the potential to save on interchange fees and receive volume pricing discounts.

5. **How does a Payment Gateway work?**
   Payment gateways can be integrated with most merchant's websites and shopping carts systems to facilitate online credit card payment processing. Gateways usually provide a virtual or online POS terminal that is accessed via the customers Internet browser. Gateways offer fraud-screening tools to also help protect the merchant. The payment gateway seamlessly captures and encrypts credit card transaction information and securely routes it to a credit card processor and waits for an approval or a decline message. Gateways also perform several key tasks resulting from customer transactions, such as obtaining authorizations, closing transaction batches and submitting them for payment and reporting.

6. **How does a Payment Gateway help a business manage PCI compliance?**
   When looking for a payment gateway solution, it is important to partner with a company that annually certifies their software to meet the rigid data security standards as dictated by the

Payment Card Industry (PCI). Gateway providers that have completed the extensive certification process to ensure that their software is PCI-Data Security Standard (DSS) or Payment Application (PA)-DSS compliant are providers who have the industry experience and the security know-how to offer best-in-class products and services. By ensuring that transaction data is never stored at the merchant level and is securely managed by the gateway, they help keep the merchant out of PCI Scope. The eProcessing Network Payment Gateway, ePNJPOS, POS software for PCs, and ePNPlugIn, an integrated QuickBooks® solution, have each been certified as PCI compliant and continually meet all of the comprehensive requirements as detailed in the Payment Application Data Security Standard (PA-DSS) and enforced by card associations.

7. Does an effective Merchant Account Payment Gateway allow a business to quickly configure automated billing and other value-added services?

A payment gateway can offer significant cost and time-saving advantages to the SMB by supporting a suite of business services and tools that allows them to maximize efficiencies. By offering shopping cart integration, real-time shipping calculations, recurring payment processing services, accounting software plug-ins, invoice and bill presentment, SMS Text Messaging, and online inventory management & reporting that integrate with the gateway solution, Agents have a full suite of products and services to exceed the needs of the merchant. The more products and services the merchant utilizes, the more likely they are to maintain a partnership with the ISO Agent, gateway provider and in turn the processor.

8. What is a Payment Gateway?

A payment gateway works just like it sounds; opening the doors of business to the gateway of opportunity that awaits – retail, mobile, ecommerce – within the industry of choice. A payment gateway is a way to securely process electronic transactions; it facilitates the exchange of customer account and credit card information between the merchant and their payment processor and acquiring bank. If a merchant is interested in setting up a business to take advantage of ecommerce operations, a payment gateway gives them the ability to transact electronically – no matter what type of business they operate – online, traditional brick and mortar store, virtual or mobile.

9. Does a Payment Gateway support a payment processor and shopping cart?

eProcessing Network is integrated with most of the well-known shopping cart software providers in the industry, along with some of the most reputable payment processors such as the First Data Nashville, Omaha and North platforms, Chase Paymentech Solutions Tampa, TSYS Acquiring Solutions, Global Payment Systems East, Elavon, JetPay, Heartland, Sage, NCN, CrossCheck, OptiCard, Payliance, EZ Check and Secure Payment Systems. In addition, merchants or software developers can directly integrate with eProcessing Network's APIs and SDKs. ePN offers specifications, sample code and support at no additional charge. They also provide a free listing as a Compatible Solution within the ePN Reseller Support Center.

10. What if a business needs to cancel?

If a merchant needs to deactivate their gateway account, the ISO Agent can easily utilize the Reseller Support Center on the eProcessing Network website and update their merchant portfolio to reflect the change. No fees are charged for deactivation, especially the seasonal merchant that may activate and deactivate their account according to the season. ■

iTransact

iTransact is a privately held company based in Salt Lake City. Founded in 1994 as RediCheck, we were the first provider of Internet-based check acceptance services. Our proprietary Internet payment gateway and mobile app allows merchants to securely process transactions. iTransact works with resellers to provide gateway services either through our own front-end interface or a private labeled solution.

By Jared Poulson, Managing Partner, The iTransact Group

1. What is a Payment Gateway and how does it work?

A gateway system is software that acts as a secure conduit of transaction information to and from the credit card and check processing networks. A gateway is the equivalent of a physical payment terminal used to swipe cards or read checks at a brick-and-mortar location, but it is designed to communicate through secure Internet connections. A gateway encrypts sensitive information to ensure that the information is passed securely between the merchant and the payment processor. Leading gateways, like iTransact, also provide reporting, anti-fraud features, automated recurring billing, swipe capability, mobile transactions, and the ability to run transactions for previously entered customers without re-entering transaction data.

2. Why Use a Payment Gateway?

If a merchant has a website and wants to accept online payments, they need a gateway. All online transactions require the use of a PCI-compliant gateway to communicate with the processor. Gateways also offer a low-cost alternative to physical swipe machines or expensive POS systems. In addition to the items mentioned above, the iTransact gateway allows for email invoicing, payment file processing, and an online auction payment system.

3. How are Transactions kept secure?

Different gateways use different security methodologies. iTransact's Level 1 PCI-compliant gateway utilizes many security features, including encrypted SSL connections, to help keep data safe. However, iTransact takes advantage of advanced security and additional encryption features including tokenization of card data that keeps our proprietary system on the cutting edge of security. After customer data (credit card number or checking account number) arrives at iTransact's server via SSL, it is re-encrypted, which makes the information unreadable. This information is then pushed to an offline server (not accessible via the Internet) where the information is safely decrypted and the transaction is completed. Credit card and checking account data is never stored or transmitted in plain-text (readable) format.

4. What should a company look for in choosing a Payment Gateway?

Many people would say price, but a better answer is VALUE, taking into consideration price PLUS functionality and ease of use. A good gateway will allow you to run credit cards, but a fantastic one will allow you to run those same cards, manage the data, and pull reports of those transactions through simple-to-use interfaces and customizable tools. A key feature that many businesses are looking for is the ability to securely access existing transaction data to process future transactions, either in a recurring fashion or as needed. It's also important to have various integration methods because nothing is ever one-size-fits-all. Additionally, in this day and age, it's vital that your gateway offers mobile processing through mobile devices - and the fantastic gateways are able to pull all of the transaction data from any of the sources into a single report.

5. Does an effective Merchant Account Payment Gateway allow a business to quickly configure automated billing and other value-added services?

Recurring billing is very important to businesses these days, whether a card is going to be charged a static amount each month or a different amount each time. Many gateways provide the ability to charge on pre-specified days of the month. The iTransact system allows merchants the ability to schedule recurring transactions according to their own unique needs, selecting specified days of the week, days of the month, or other periods of time. The recurring tool also offers a feature that can post data back to a merchant's database server to update information automatically; a feature which is key for businesses that want to automate things like shipments and order statuses.

6. Does a Payment Gateway support a payment processor and shopping cart?

Many gateways are built to interact with only one merchant processor and/or only one shopping cart system. A fantastic gateway should be compatible with lots of different processors, and should be compatible with or able to integrate into many shopping carts. iTransact is compatible with all of the major processing platforms and we are integrated with dozens of shopping cart systems. iTransact can also be integrated in to other websites using our API, or Form Wizard tools.

7. Does a Payment Gateway work for card present payments?

Many gateways support card present transactions and will allow swiping through a peripheral. iTransact offers two card present solutions: a merchant can use a mag stripe card reader connected to their computer via USB, or they can swipe cards through a mobile card reader attached to a smartphone or mobile device. iTransact's mobile apps are fully integrated with the gateway so that whether the transaction was generated in the app or through one of the other gateway submission methods, the transaction data is available in the gateway for reporting and other future interactions.

8. How does a Payment Gateway help a business manage PCI compliance?

Many of the questions on a PCI Self Assessment Questionnaire deal with how data is accepted, processed and if it is stored. Having a Level 1 PCI compliant gateway, and utilizing the features appropriately, helps a merchant to address those questions easily and confidently.

9. How quickly do merchants get paid?

Depending on their merchant service provider, as quickly as the next day, but most providers support 1-2 business day deposits after settlement. Additionally, iTransact's ACH/EFT processing solution allows for rapid deposits for payments from checking or savings accounts, carving days off of the normal waiting period to see if a check payment has cleared. Various deposit schedules can be followed for EFTs, including next-day funding.

10. What if a business needs to cancel?

Unlike other gateway providers, iTransact does not lock users into a contract. They can cancel at any time. We know that we provide the right service at the right price for merchants, but if for some reason they choose to stop using us, we're not going to hold them hostage. Our motto is: "if we can't earn your business, then we don't deserve to have it." ■

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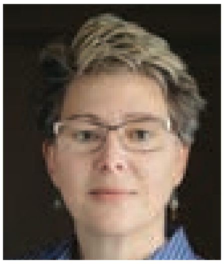
Intrix



Intrix Technology has been in business for 25 years. The Intrix Payment Gateway is a leading provider of advanced processing, security and features, and was one of the first gateways to offer tokenization. Intrix is also recognized for its excellent customer service and is ranked #2 among gateway providers by the independent review company Top Credit Card Processors. Intrix delivers generous compensation, direct ISO/Agent support, an assortment of influential sales tools and training to help the sales channel succeed.

By Suzanne Coleman, Chief Technology Officer at Intrix Technology

1. What does a gateway do?

Internet Payment Gateways originally started out to enable the emergence of online business. Over time, though, gateways have evolved to be a vital component of the payment processing ecosystem for all types of commerce, from brick and mortar retail POS systems to hotel and back to ecommerce. Payment gateways provide several simple interfaces, aimed at people and software. They remove the need for integrations and certifications with processors. Payment gateways provide transaction storage and management capabilities. They also provide functionality that processors may not. The Intrix Payment Gateway provides recurring payments, an invoicing product, tokenization and more.

2. Why would I sell a gateway account to my merchants?

There are many reasons it may be a good idea to offer your merchants gateway services in addition to the more traditional merchant services. A few of those reasons include:

1) By providing both the merchant services and the gateway to your merchants, you provide a single point of contact for servicing your merchant. This can be a significant source of improved customer satisfaction for merchants.

2) The combined offering can decrease costs for your customer, while increasing stickiness.

3) Providing a single point of contact to your merchants and decreasing costs in the process can be a compelling differentiator versus other ISO's.

3. How do I choose a gateway, and why would I choose Intrix?

Choosing the right gateway for your business is critical, and there are a number of factors to consider. Intrix Technology provides knowledgeable staff to answer your customers' support questions. We can tailor solutions to meet your customers' specific needs. We can provide that extra added assistance if your customer needs a little more help setting things up. Intrix has been in business for 25 years, and has built a track record of successful solutions backed by committed staff. Intrix consistently ranks at the top for customer satisfaction with our Customer Service, has an industry-low attrition rate, and is ranked #2 by the independent review company Top Credit Card Processors. Our industry leading Integration Tools mean setting up a web site or integrating an application can be completed in just a day or two.

4. What functions does a gateway perform for an application developer?

Gateways enable application developers to implement within their application the acceptance of multiple forms of payment (credit card, ACH, pin debit, gift, and others) while only implementing to one place for transaction processing. The gateway provides a single interface for all of these different transactions, and manages the business of routing and message formatting to the various processors. The gateway can then also provide integrated reporting on all of these various transaction types. In addition, the application developer that integrates to a gateway, rather than directly to a processor, can offer a wide spectrum of processor choices to their customers, without having to code and certify to multiple processor specifications.

5. What types of interfaces do gateways offer?

Gateways almost always offer a Virtual Terminal to enable a merchant to accept card (and other) payments without purchasing a traditional terminal. Some gateways stop there. Gateways that offer full service solutions, like Intrix, also offer a number of additional interfaces, like an easy-to-use API for programmatic processing, hosted payment pages that can perform the collection of card data from a merchant web site or application, recurring payments and invoicing interfaces, file exchange interfaces, and more.

6. **Why should my merchants be interested in Level III processing?**
   Level III processing involves 2 main factors – a Business Card (purchase card, corporate card, etc) and the details of the items purchased. If the customer uses a business card, and the merchant provides the details required to qualify the transaction for Level III processing during settlement, interchange rates charged to the merchant can decline significantly. But not all gateways are capable of processing Level III transactions. This type of processing requires the collection and storage of line item details, which are then transmitted on to the processor. The Intrix Payment Gateway is able to process Level III transactions with multiple processors.

7. **What is a Hosted Payment Page, and how can it reduce risk for merchants?**
   When a web site or application uses a Hosted Payment Page (HPP) product, they are actually offloading the burden of collection of payment instrument details to the gateway. The result of this is that the merchant does not collect, store or transmit sensitive data. The Intrix Payment Gateway HPPs can be served by a merchant via an iFrame, meaning that the merchant can embed the frame inside the merchant's larger web page. The Intrix HPP collects the card info, and can run a transaction or return a token, which the merchant can store and use for transactions at a later date.

8. **How easy is tokenization? How safe is it?**
   The answer to this depends on the gateway. The Intrix Payment Gateway makes tokenization quite easy and safe. Tokens can be used in the place of card numbers to perform authorizations. Intrix offers tokens for both Credit Cards and ACH. Intrix tokens are entirely safe to store, as they cannot be turned back into a card (or ACH) outside of the Intrix Payment Gateway. Intrix enables token creation via all major interfaces, including the SOAP API and the Hosted Payment Pages.

9. **What is a shopping cart?**
   Shopping carts are application structures which can be added to a web site to manage the ordering and tracking of products. Some shopping carts offer all the functionality that a web site needs, so it becomes the entire web site. Shopping carts often then integrate to payment gateways to process the acceptance of payments for the orders received online. Web sites can take orders and process payments without having a shopping cart, but if a company has an entire suite of products to be sold online, a shopping cart can be an excellent enabling technology.

10. **What's involved in integrating an application to a gateway?**
    Integrating a web site or application to a gateway is typically a major undertaking, requiring many months and many resources. At Intrix, we offer one of the best integration programs available in the marketplace. We host a comprehensive integration site (https://integration.intrix.com) which offers integration guides and demos. Our easy-to-read integration guides make it easy to figure out what commands to use and how to use them. The Intrix Integration Site also has a Demo environment, aimed at developers, that demonstrates the typical commands to use when integrating and how those commands work. The sample code can be copied and passed into an application, dramatically speeding up the process. These tools enable rapid and affordable integrations. ■

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INTRIX

PAYMENT GATEWAYS More Frequently Appearing AT TRADITIONAL POS

Unbeknownst to many retailers, payment gateways are playing a growing role in their business. The term itself holds little value to those outside the ecommerce arena, yet the technology is starting to support checkout counters everywhere.

"Something I hear over and over again in the industry is, 'I'm a payment gateway,' or 'I have a payment gateway,'" says Rick Oglesby. "While that's terrific, a gateway is just a door." When you buy a house, he notes, it's not about the door.

"When you sell outside of the ecommerce world, you've got to sell it differently," Oglesby says.

The Double Diamond Payments Research senior analyst, based in Phoenix, says it's unimportant for ISOs to highlight "payment gateway" since the terms has low recognition. Instead, they should embed gateways into their product offerings and highlight the resulting features that help make merchants' business easy and seamless.

"The concept 'gateway' is a generic term," he notes. "If you're trying to sell the term, you're going to struggle. The gateway aspect isn't the important aspect, it's really the value you're delivering to the merchant."

Traditional POS Presence

The major gateways in the business are all developing a presence at the traditional point-of-sale in one form or another, according to Oglesby.

It's happening both through mobile serving as POS devices in the form of mobile phones and tablets, and through gateways backing traditional terminals and POS hardware. There is one important distinction between the two: Any sort of mobile-based POS device requires a gateway; a traditional terminal does not, but there's significant value-add once a gateway is in place.

Value-Added Features

There are various ways payment gateways deliver added value at the point-of-sale, some with large-merchant value propositions and some with small-merchant value propositions. One feature garnering a lot of attention is enhanced security through encryption and tokenization, which can be provided by working with a gateway.

Another value-added feature relates to multichannel commerce, whereby retailers are able to aggregate data across all their different channels

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Aurus Inc.

Aurus Inc. is a global leader in payment solutions. The Company provides a patented security solution, value-added services, customized development, and expertise relating to payments transacted through POS, e-commerce, and mobile solutions for the financial, petroleum, retail, hospitality, and healthcare markets. From Fortune 500 customers to innovative start-ups, Aurus's payment solutions are designed to meet the needs of merchants, processors, POS developers, and acquirers around the world. Aurus is headquartered in Boston, Massachusetts, with a Development Center in Pune, India.

By Rahul Mutha, Chief Executive Officer, Aurus, Inc.

• What is a Payment Gate Way?

Payment gateways, such as AurusPay, are designed to facilitate payment transactions from the POS to a payment processor. Gateways are uniquely positioned to address the complexity of payment processing without requiring substantial and expensive technology investments on behalf of the merchant's POS and the processors. Introduction of new payment products can require major changes in both the POS and the processor's platform. The adoption of these changes can be more rapidly and inexpensively implemented by leveraging a gateway's technology.

• How does a Payment Gateway work?

Payment gateways need to be able to facilitate the authorization and settlement of branded cards, branded gift cards, private label cards, and new payment products.

To provide this service, the gateway needs to integrate and certify with one or more payment processors to accept a myriad of card products. Some gateways, like AurusPay, integrate with many processors around the globe, allowing global merchants to aggregate their payment transactions to provide better financial control, lower development costs, and improved customer experience. AurusPay, like other gateways also facilitate the introduction of new requirements such as EMV and mobile wallets.

The merchant also needs to integrate their POS and e-commerce shopping cart with the gateway. AurusPay is able to provide an easy API integration, which minimizes POS development efforts, even if the POS is developed with vintage and/or highly customized software. AurusPay provides flexibility in selection of required peripheral card terminal hardware and components including mobile devices. Some gateways limit the Merchant or POS provider to a specific manufacturer.

• How are transactions kept secure?

Security over transactions and card data is critical attribute of each payment gateway. Unfortunately many payment gateways do not address security risks that plagues a POS platform. Data encryption and EMV tactics still leave the store's POS vulnerable to cyber attacks. Cyber criminals have breached thousands of businesses by installing malware known as "Backoff" on the POS, which is difficult to detect. Aurus has designed a Patented Solution, which eliminates the risk of this malware by isolating the card payment process from the POS, taking the "POS out of PCI scope". Other gateways may make similar claims but only AurusPay has a Patented Security Process! Aurus is passionate about staying ahead of cyber criminals, by investing in new solutions, and seamlessly delivering them to AurusPay customers.

• What should a company look for when choosing a gateway?

In selecting the right gateway a company needs to consider which platform will help their business expand to new markets; enhance the customer experience at the "point-of-payment"; keep pace with payment product innovation; while providing security over sensitive payment data. At AurusPay, we address a company's needs by providing rapid implementation, minimal development, customization, and a cost effective solution, which is future focused.

• How does a Payment Gateway help a business manage PCI compliance?

Most gateways provide minimal security measures required to comply with PCI standards. However they do not eliminate the need to perform comprehensive PCI reviews and audits. At AurusPay, a merchant's compliance procedures are reduced to a quarterly security scan and a self-assessment questionnaire. For POS solution providers, Aurus is able take the "POS out of PCI Scope", accelerating development and eliminating costly PCI code audits. ■

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-- whether online or traditional point-of-sale -- and put it together in one place. This consolidated view of their business can help merchants make more informed decisions and more effectively run their operations.

Additionally, alternative payments, mobile commerce, digital coupons, digital loyalty programs, and all those types of things are far more easily managed through a cloud-based infrastructure or gateway-type solution.

Payment gateways also can set the foundation for solutions that help merchants go global. Capabilities include international fraud detection, acceptance of international payment products, and support for a variety of international shipping capabilities.

Developer-Centric

Oglesby says another major trend impacting the point-of-sale is the developer's elevated importance in terms of whom payment gateway providers cater to.

"The developer is everything now," he says. "It's about developers focused on seamless integration and developing a website in the most seamless, quickest, and easiest way possible."

The fastest growth engines in the payment gateway space are ones that are developer-centric and that are focused on helping merchants deliver the easiest and quickest checkout experience and making it easy for developers to deploy that. That's also one of the big crossovers when you look at what's going on at the point of sale: the developer-centric POS gateway is growing rapidly.

Evidence of this trend, says Oglesby: "Mercury payments was recently acquired by Vanta to the tune of $1.7 billion. At the risk of oversimplifying, the core of Mercury's value proposition is really a gateway solution that is developer-centric for the point-of-sale for developers."

Advanced POS

"The world of product in payments is evolving quickly," notes Oglesby. "People are looking at more advanced POS systems whether through mobile devices or more traditional devices. It's not really about the device as much as about the cloud-based software and the accessibility of it all. Gateways are a core component of that."

Large ISOs often have their own proprietary gateway offerings. Smaller ones frequently will partner with gateway providers and set up referral agreements or white-labeling agreements, where the gateway provides all the services from a technology standpoint but they do it all under the ISOs' brand and the ISOs' billing.

Oglesby's advice: ISOs should be creating their own suite of POS products and using the right gateway to make their products work. Whether they're using third parties or actually building their own POS products, they should be looking to partner with gateways as technology providers.

"They should be creating this whole product bundle and going out there and making compelling product offerings to their merchants," Oglesby says. ■

"Something I hear over and over again in the industry is, 'I'm a payment gateway,' or 'I have a payment gateway.' While that's terrific, a gateway is just a door."

Rick Oglesby

1stPayGateway

1stPayGateway caters to Independent Software Vendors (ISVs) and Developers by simplifying the integration of payments. ISOs and Agents rely on 1stPayGateway for ease of integration, payment innovations, PCI expertise, and technical sales support. 1stPayGateway offers a wide range of services to meet the needs of merchants, ISOs and ISVs to simplify today's complex payment environment.

By Ray Kenney, Vice President, 1stPayGateway.Net

- **How ISOs can compete in today's disruptive marketplace?**
  ISOs and Agents' primary focus is selling merchant account services and are generally not well-positioned to handle the complexities of integrated payments technology. 1stPayGateway serves as ISOs' single, value-added resource for the ISV ecosystem. ISOs have a competitive advantage by partnering with 1stPayGateway for its technology, excellent customer service and sales support.

- **What are the opportunities for the ISO and Agent?**
  There is significant growth in the SaaS (Software as a Service) ISV model which is affordable and feature-rich, resulting in a more attractive value proposition for SMBs. Since 2010, over 30% of ISVs have integrated payments into their software systems. 1stPayGateway understands the ISV and SaaS markets and provides ISOs and Agents the integration technology and support for success.

An ISV Case Study

An ISO partner of 1stPayGateway built a relationship with an ISV who desired to integrate secure payment processing for their customers. The ISO relied on 1stPayGateway for the technical sales support, payment integration technology, PCI expertise, and ongoing ISV support.

The ISO initiated a conference with the ISV and 1stPayGateway to discuss requirements. 1stPayGateway requested the ISV to share their strategy and goals as part of a needs analysis.

Three primary goals were identified:

1. Integrate Credit Card Processing
2. Integrate ACH Processing
3. Reduce their Scope of PCI Compliance

Based on the needs analysis, the 1stPayGateway team collaborated with the ISV developers to deliver:

1. A Dedicated Technical Resource
2. Appropriate Documentation
3. Sample Code
4. Sandbox Test Environment
5. Developer Account Credentials
6. Project Management Communications
7. Technical Support
8. PCI Scope Reduction Analysis

The ISV was delighted how easy it was to work with 1stPayGateway and integrate payment processing into their software, achieve significant savings in development time, and reduce their PCI scope.

Benefits to the ISO

The ISO provides significant value to the ISV and their customers. Each time the ISV sells their software to customers requiring payment processing, the ISO acquires a qualified merchant account prospect. The ISO representatives contact the qualified prospect to provide merchant services. This paradigm shift allows the ISO to deliver increased value to the merchant and the ISV. Partnering with 1stPayGateway unlocks opportunities for ISO growth in this new disruptive landscape.

Why partner with 1stPayGateway?

- Skills and Experience working with ISOs, Agents and ISVs
- Ease of Integration
- Dedicated Channel Specialist
- Mobile Payments Solutions
- Multi-MID/Multi-Location Management
- Configurable Batch Times
- Omni gateway for eCommerce, Card Present, MOTO, Mobile, and ACH
- Tokenization
- Transparent Redirect
- Point-to-point encryption technology
- Robust Enterprise Reporting
- QuickBooks integration
- Automated Recurring Billing
- Debit Only Processing
- Emerging Markets
- Unlimited Sales and Tech Support
- Unlimited custom data fields
- Hosted Payment pages ■

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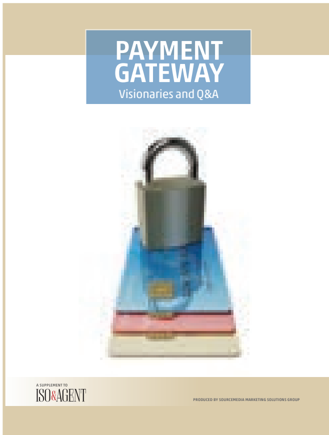

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Technology And Competition Are Reshaping the MPOS Scene

Mobile point of sale providers claim to serve the merchants that are too small for card acceptance: the gardeners, the babysitters, the flea market sellers.

But this image is quickly fading as vendors pursue larger merchants, making the upstart mPOS players resemble incumbents.

At first, it seemed like everyone was racing to match the simplicity of the original Square reader, and the biggest differentiator was shapes (the PayPal Triangle, the Roam Semicircle, the VeriFone Apostrophe).

But as the market became more crowded, vendors sought other ways to set themselves apart from their competitors.

The competition added complexity and potential cost, making these products a better fit for brick-and-mortar stores than for the micromerchants that were the original target.

Throughout it all, Square has maintained its small plug-in card reader as a free option for the smallest business owners even as it introduced pricier versions, such as the $99 Square Stand and the short-lived $299 Business in a Box.

But even this free option may eventually go away; Square has indicated it will charge for the recently unveiled chip-and-signature version of its card reader, and with EMV-chip cards preparing to overtake magstripe in the U.S. in the coming years, the market for a magstripe-only reader—even if it's free—may shrink fast.

Ultimately, the face of the mobile point of sale market will look a lot like the traditional point of sale market before companies like Square got involved.

Merchants don't need to look to a startup for smartphone-based payments anymore; big banks and small banks offer their own Square-like readers.

Even ISOs and agents, the sellers of conventional payment terminals, offer mobile card readers from a variety of vendors.

Mobile card readers have sprouted so many features and become so complex that they're outgrowing their original intended audience of gardeners and babysitters.
-Daniel Wolfe

At this point, alternative payment technology is no longer alternative. It's offered through the same mainstream channels that companies like Square and Groupon once sought they would disrupt.

So what does this mean for the micromerchants these vendors initially targeted?

They can still use mobile card readers without paying for the extra features, or they can simply do away with the need to add the extra hardware that's becoming available.

Some companies offer systems that scan card details using a phone's camera, while others remove the card entirely from the equation by offering their customers software-based mobile wallets.

Since Square's debut, its rivals have been wondering if it's is possible to sustain a business by focusing on micromerchants.

Square's recent additions of fee-based services like remote ordering and interactive receipts demonstrate that even the company that established this market needs to branch out, some observers say.

But even if the mobile point of sale market evolves beyond recognition, it's not going away.

There's no shortage of companies eager to displace Square, so micromerchants will continue to have a way to accept card payments from a smartphone or tablet.

Even if I'm wrong, there's always P2P. **ISO**

Daniel Wolfe is editor-in-chief of PaymentsSource *and a contributing editor to* American Banker.

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