

# Online PIN Debit Gains Traction

Software pilots and hardware development ignite optimism among many industry insiders

## KEY NOTES

- ▶▶ Online debit as a whole may be an easier “sell” to merchants because they are guaranteed funds once the transaction is authorized, and because they may get a boost in sales.
- ▶▶ ACCEL/Exchange expects PIN debit to provide “significant benefits to merchants that sell goods or services online, while giving consumers the opportunity to use a payment option they know is safe and already prefer.”
- ▶▶ Focused on smaller and mid-sized retailers, hardware solution Safe-T-PIN is positioned as affording merchants and consumers “the ability to conduct a transaction that is more secure than any they could do in a card-not-present environment.”
- ▶▶ Some observers have expressed concern about newer types of threats, such as SSL vulnerabilities, worms, trojans, and malware that spies on browser events, exports passwords, and steals Web cookies.

By Julie Ritzer Ross

**T**he question of when—and if—online PIN debit will come to fruition has long been a subject of industry debate. Solutions first surfaced in the mid-1990s, only to be stymied by the need for expensive desktop hardware and adoption hurdles. Over the years, stringent card-not-present transaction rules rendered it difficult, if not impossible, for EFT networks to move ahead with online PIN debit. But now, new online PIN debit software pilots, along with development on the hardware front, are bringing online PIN debit closer to reality.



## Trial Runs

PaySecure, a solution from Atlanta-based Aculynk, is being tested by three ATM/POS networks: ACCEL/Exchange from Fiserv, NYCE, and PULSE. PaySecure does not involve registration by consumer end users. Rather, consumers making online purchases are presented with a graphical keypad that “floats” across their computer screens and “scrambles” PIN numbers as they are entered in the same manner as at a traditional point-of-sale counter. PINs are then encrypted and processed, along with card information, across the appropriate network, says PaySecure President Nandan Sheth.

This spring, ACCEL/Exchange was involved in a soft launch of the service, using bank and network employees and a handful of issuers, according to Michael Kelly, general manager. General availability is slated for sometime during the summer or fall. Both NYCE, a unit of Milwaukee-based processor Metavante, and PULSE were still preparing to kick off their pilots and were looking at launch dates in the second or early third quarters. The network’s test will run for three to six months and include selected banks that issue PULSE cards and merchants that accept PULSE. A small number of merchants and issuers will participate as well.

For its part, ACCEL/Exchange expects PIN debit to provide “significant benefits to merchants that sell goods or services online, while giving consumers the opportunity to use a payment option they know is safe and already prefer,” Kelly says. “This is (also) an opportunity for issuers to differentiate their payment offerings and to realize a new source of income-generating transactions.”

MSPs are getting on board as well. Last March, Chase Paymentech announced its decision to test PaySecure with select merchants, and both Elavon and Merchant e-solutions have agreed to recruit merchants to conduct pilots. ShoppersChoice.com, an online retailer of luxury cooking and outdoor living products in Baton Rouge, Louisiana, recently became the first of four Chase Paymentech merchant

customers to begin testing PaySecure. Three unnamed merchants are expected to follow suit later this year, and 20 percent of Internet 500 retailers have expressed interest pending results of the pilot, according to Bahl.

On the hardware side, HomeATM ePayment Solutions, based in Montreal, has rolled out Safe-T-PIN, a pocket-sized USB device that plugs into a consumer's home computer and functions as a card reader, working with any operating system or Web browser. It also is compliant with Europay, Visa Inc., and MasterCard Worldwide, enabling it to accommodate smart cards, magnetic stripes, and/or chip-and-PIN technology. Under a recent agreement, Safe-T-PIN's application programming interface has been integrated into CardinalCommerce Corp.'s Centinel processing platform, which supports an array of alternative payment methods for e-commerce, including PayPal and Bill Me Later.

HomeATM is positioning Safe-T-PIN as affording "everyone—merchants and consumers alike—the ability to conduct a transaction that is more secure than any they could do in a card-not-present environment, including debit and credit card transactions and person-to-person money transfers in real time," notes Mitchell Cobrin, the company's COO. "Consumers swipe their cards, enter their password for a PIN debit, and it goes through the EFT network in the same amount of time as a brick-and-mortar transaction."

HomeATM also is promoting Safe-T-PIN as a cost-effective solution for smaller and mid-sized e-retailers. Mobile merchants that process electronic payments offsite are being targeted as well, with the bulk of sales merchants occurring via an ISO distribution model.

### Cheaper Solution

Proponents of online PIN debit view reduced costs as the primary benefit to the industry, and lower interchange rates constitute a prime example. In the brick-and-mortar space, acquirers pay issuers 20 cents to 60 cents in interchange for each PIN debit transaction, versus 1.6 percent of the sale plus 10 cents per signature

debit transaction. So a \$40 transaction may cost a merchant 45 cents in interchange if handled in PIN mode, versus 74 cents if executed in signature mode. EFT networks charge brick-and-mortar merchants that accept PIN debit transactions 35 percent to 40 percent less in interchange for PIN debit transactions compared with credit cards.

For ShoppersChoice.com, the interchange rate for online PIN debit is 20 percent to 30 percent less than for signature debit transactions, says COO Corey Tisdale, adding that online PIN debit also offers helps to attract consumers trying to avoid adding to their credit card bills when shopping online, or who may not have any credit left and hesitate to make

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 online purchases with signature debit cards because they offer less security than their credit card counterparts. By the same token, HomeATM charges true PIN debit interchange on debit cards.

Online debit as a whole may also be an easier "sell" to merchants because they are both guaranteed funds once the transaction is authorized, and because they may get a boost in sales. The latter is especially true "since 14 percent of debit cards are 'ATM only,'—i.e., they don't have a MasterCard or Visa logo on them and thus can't be used for general e-commerce transactions," according to Mike Strada, a product manager at Chase Paymentech. Strada predicts online debit will be the most widely used payment mechanism on the Web by 2012. Other merchant "perks" encompass significantly reduced chargebacks—as much as 75 percent, according to Acculynk—compared to credit and signature debit cards,

stemming from the positive cardholder authentication provided by PIN entry.

### Consumer Adoption

Consumer acceptance will be the key, driving just how much merchants pressure ISOs to offer appropriate transaction processing solutions. While executives of ATM/debit networks engaged in the pilot programs say it's too soon to reveal cardholder feedback, some point to other evidence of success.

"Internet-based PIN debit has tremendous potential value for consumers," given how much they "enjoy the convenience" of debit cards as well as overall heightened acceptance of PIN authentication, says Judith McGuire, senior vice president of product management at PULSE. Among debit users, 56 percent who have a preference prefer PIN authentication over signature, according to the 2008 Consumer Payment Preferences Study conducted by the Bank Administration Institute (BAI) and Dallas-based Hitachi Consulting, says McGuire.

Debit payment methods that "increase perceived security will be preferred (and accepted) by more consumers," especially in light of the current economic environment, agrees James Van Dyke, founder and president of Javelin Strategy & Research in Pleasanton, California. In fact, among 550 individuals who had purchased items online within the past year and employed PaySecure to complete a mock online purchase, 93 percent characterized the product as easy to use, and 80 percent said they would utilize it as a payment method when presented by a trusted merchant, according to a study Javelin conducted for Acculynk and PULSE to evaluate debit cardholder perceptions and attitudes about PaySecure. Additionally, 79 percent of participants reported feeling more secure using their debit card online with a PIN than without a PIN, and 63 percent would rather pay for online purchases using PaySecure than via PayPal.

But other experts suggest potential problems with software-based online PIN debit solutions will make consumers wary and will limit adoption. However, Accu-

lynk has configured PaySecure so that it is impervious to unlawful “screen scraping” of cardholders’ PIN numbers as they are input online, as well as to prevent hackers from “key-logging” users’ keystrokes when the floating PIN pad appears on a computer screen, according to the company. Additionally, networks with which it is working have undertaken third-party evaluations of the solution to certify its safety.

Still, some observers have expressed concern about newer types of threats, such as secure socket layer (SSL) vulnerabilities; trojans; worms; and malware that spies on browser events, exports passwords from protected storage, networks, and dial-up connections, as well as steals Web cookies and certificates to access data. The absence of magnetic stripe data normally captured in PIN debit transactions conducted at brick-and-mortar stores—including discretionary field data considered by many issuers to be crucial for security—could be an impediment as well.

“I would highly recommend not entering a PIN anywhere on the Internet unless (a solution is) hardware-based,” asserts Avivah Litan, vice president and distinguished analyst in the Potomac, Maryland, office of research firm Gartner Inc. “I’m not convinced that the code is not breakable.”

Litan and other observers believe Safe-T-PIN will gain traction among both consumers and merchants because it has achieved PCI DSS PED 2.0 certification and offers end-to-end encryption. The fact that it provides secure two-factor authentication for online banking sites and reads Track 2 magnetic stripe data will work in its favor, say experts. But supporters of the software approach say they doubt consumers will ever be entirely comfortable with attaching devices to their computers in order to shop online.

The question of how online PIN debit will shake out from a “software versus hardware” standpoint is anyone’s guess. But the path toward adoption is already being cleared and followed. **TT**

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## Protecting your data with PCI compensating controls

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