



# Speeding Up Slow EMV Transactions

Skepticism clouds ballyhooed 'quick-dip' card payment enhancement

by M.V. GREENE

**S**econds count when retailers are trying to move customers through checkout lines. Even small delays can quickly add up, especially during busy times like the upcoming holiday season. The ultimate risk is that frustrated shoppers will set aside their purchases and leave.

That's why many merchants are steamed that the new EMV chip-and-signature credit cards in use for a year now can take twice as long to process as their magnetic stripe predecessors.

The Europay MasterCard Visa system is not only slower, but has left consumers befuddled, causing further delays. Do they "dip" (insert) the new card into the reader or swipe it? Even if retailers have chip card readers, they might not be working yet because of delays by card companies in certifying installations and giving retailers permission to turn them on. Once the card is inserted, how long must it be left in place?

From newspaper accounts to social media and hyperbole-filled "investigative" reports on local television, word has spread that EMV can be slow and cumbersome. Even *The Wall Street Journal* found that inserting an EMV

card and waiting until it could be removed took an average of 13 seconds, compared with six seconds for swiping and signing with a magnetic stripe card.

Anger among retailers and confusion among consumers quickly rose; by this spring, all four major U.S. credit card brands announced that they would release software updates allowing shoppers to insert and remove chip cards in about two seconds. Visa, American Express and Discover call the new technology Quick Chip; MasterCard calls it M/Chip Fast.

When consumers insert an EMV card, an encrypted code intended to ensure that the card is not counterfeit is generated and sent through a network to the issuer for approval. The issuer responds and approves or denies the transaction.

Without Quick Chip, EMV cards need to remain in the terminal until the transaction is completed. With it, the consumer can insert the card at any point during checkout and remove it immediately, even before the issuer grants approval. That's because the code is temporarily stored in the terminal and sent for approval at the end of checkout.



## FORFEITING SECURITY

"It makes the consumer experience a lot more analogous to what people have been used to with mag stripe," says Stephanie Ericksen, vice president for risk and authentication products with Visa. "Everything is the same. It's just the ability to remove the card rather than leaving it in before the authorization code comes back."

But Annmarie "Mimi" Hart, chairwoman and CEO of card reader manufacturer MagTek, wrote in a recent STORES column that skipping code transmission until after the transaction is over "will denigrate some of the current security features EMV heralded."

The code's authentication of the card as legitimate — the chief security advantage of EMV cards — "will be forfeited," she wrote.

"If the [card] industry is ready to accelerate EMV transactions, it should be done right this time," Hart wrote. Since EMV cards still transmit the card number, expiration date and cardholder's name without encryption just like magnetic stripe cards, the card number should be removed "or at the very least encrypted" in addition to speeding up the process, she wrote.

Despite the quicker transactions, card companies are hearing from retail industry groups and analysts asking why the solution was not available when the mandate for retailers to switch to EMV or face increased liability for counterfeit card transactions took effect one year ago.

"You would have thought the card networks would have realized that an EMV implementation into the largest card market in the world have required special consideration and potentially new solutions," says Michael Moeser, director of payments at Javelin Strategy & Research.

Moeser says transactions will be faster at retailers that have made the software change — but not all have.



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"This response [from the card companies] is late and unfortunately has not been unified, which will create customer confusion. Also, not all of the retailers will have implemented the faster EMV process. It's already confusing enough to determine if you need to swipe or dip at a merchant. Now some will have a faster EMV process than others," he says.

### ADDITIONAL FEES

Another concern is new transaction fees that will be borne by retailers and ultimately passed down to consumers.

"We are very concerned that the card companies put out a flawed product and then came back six months later with a fix that they are expecting retailers to pay for," says J. Craig Shearman, vice president for government affairs public relations with the National Retail Federation.

"It's not believable that they didn't know when they put these cards out that there were going to be delays," he says. "They put out something with a known problem and then they come back with their hand out asking for money to fix the problem."

Visa's Ericksen says "there's no change in pricing." Visa did say when Quick Chip was announced in April that it would provide the technology to card processors for free. But the company said processors would be allowed to charge merchants, and Shearman is dubious that merchants won't be facing higher fees.

"The swipe fees on cards are already outrageously too high," he says. "They need to be working on ways to reduce those fees and making them transparent and competitive. They have no business at this point looking for ways to increase those fees."

Brendan Lazarus, information technology manager at New Leaf Community Markets, the Santa Cruz, Calif., grocery chain where the Visa Quick Chip system was launched in August, says EMV implementation has created heartburn, but that quick-chip processing presents "a nice feature to offer the customer."

Customer interaction with store clerks is encouraged at New Leaf, but Lazarus says it was inhibited by the original EMV system where cards needed to remain in the terminal.

"It really just speeds up [the customer's] interaction with the point of sale, and that's ultimately the great benefit of [quick-chip] technology," Lazarus says. "That's great for our stores in particular because our stores are community-oriented and we really encourage our cashiers to have conversations with the customers. It really frees up the customer right away to jump back into the real world and not have to focus on the technology and the actual payment process." **STORES**

M.V. Greene is an independent writer and editor based in Owings Mills, Md., who covers business, technology and retail.