

What Is EMV — and What Does It Mean to You?

As a merchant that accepts credit and debit cards for payment, you may have heard about EMV, but maybe you aren't sure exactly what it's all about.

EMV—which stands for Europay, MasterCard® and Visa®—is a technical standard designed to ensure that microchip-embedded payment cards are compatible with the terminals of merchants who accept them. Chip-embedded payment cards are nearly impossible to duplicate, and when combined with additional layers of security—such as encryption, tokenization and other strong authentication techniques—EMV significantly reduces opportunities for card payment fraud.

The United States is the last major world economy to migrate to EMV. While some might view this through a bad-news lens, it also means that U.S. processors and merchants are in a favorable position to adopt best practices from other countries that have already implemented EMV, as well as avoid their mistakes.

Readiness Deadlines Are Approaching

With the first EMV readiness deadlines approaching in 2015, now is the time to begin developing strategies for full implementation of EMV. The good news is that the major card networks and various industry groups (including the Secure ID Coalition, Smart Card Alliance and Merchant Advisory Group) are issuing EMV roadmaps to provide merchants with some preliminary implementation guidelines.

It's important to note that EMV technical specifications do not require any form of cardholder identity verification, whether via PIN, signature or anything else. Instead, the issuing bank will specify which cardholder verification services are required for a transaction by placing specific rules on the chip.

Card processors will be able to support all card verification methods, but the industry stresses that the combination of card validation via chip and PIN card authentication (or "Chip and PIN") provides the greatest protection against common consumer-level attacks, including fraudulent use of lost or stolen cards, counterfeit cards and skimming. Chip and PIN is also compatible with security standards that currently exist outside of the U.S.

Chip and PIN offers a number of benefits to both processors and merchants, including the following:

- 1 It provides stronger fraud protection.** The data bears out this fact: In 2008, total fraud losses to all parties on signature-based transactions (per dollar volume) were .13 percent, or 13 basis points. For PIN-based transactions, they were just .035 percent, or 3.5 basis points.¹
- 2 It is the de facto global standard.** Most of the countries that have adopted EMV for chip-based payment cards have adopted PIN-based cardholder verification. In Australia, for example, Visa mandated that PIN be used for verification of all Visa card transactions, while PIN was recently designated as the mandatory verification method for all EMV transactions in Canada. These stronger authentication techniques and unique transaction elements make chip card account data less attractive to steal and reduce counterfeit fraud.²

See back for additional details. >

For more information

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3 It is a proven solution. Some countries that have implemented Chip and PIN have reported very successful results. The United Kingdom, for example, was one of the earliest adopters of Chip and PIN technology based on EMV. While total card purchase volume in the UK grew 32 percent between 2005 and 2010, total card fraud decreased by 17 percent. In addition, lost, stolen and counterfeit card frauds in the UK are now at their lowest levels since the 1990s.³

Shift in Fraud Liability

The major card associations have also announced an upcoming shift in fraud liability for merchants that have not implemented an EMV structure. Beginning in October 2015, the merchant, not the issuing bank, will be liable for counterfeit card transactions if the merchant receives a fraudulent chip card but has not installed an EMV-capable terminal.

This makes it imperative that merchants begin making plans to upgrade their POS terminals to new EMV-capable terminals that are capable of meeting the card associations' EMV requirements. It's not too early to talk to your provider and start devising a plan for upgrading to an EMV-capable terminal, as these terminals will be available to merchants soon.

In the meantime, you should be aware of possible near-term increases in card fraud here in the U.S. due to recent adoptions of Chip and PIN by Canada and Mexico. As some countries in Europe have begun adopting Chip and PIN in recent years, fraud rates in surrounding countries that haven't adopted Chip and PIN have risen as thieves simply move across the border. Criminals may head to the U.S. as their last opportunity for "easy" fraudulent activity – at least until EMV is fully incorporated into the mainstream.

For example, the Netherlands had low card fraud rates prior to 2006, so they were slow to adopt Chip and PIN like many surrounding nations were doing in the mid-2000s. The unfortunate result was that the fraud rate in the Netherlands soared by more than 300 percent in just four years —from 1.5 percent in 2005 to 5 percent in 2009.⁴

It's critical that merchants stay informed about changes in card processing technology in order to plan ahead and be prepared to minimize the impact on their business. Be sure to discuss your business plan for the future with your processing partner.

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1, 3, 4 A First Data White Paper: EMV in the USA: Best Practices and Lessons Learned. © First Data Corporation.

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