

EMV™ in the United States

Hobson's Choice or the Wise Choice?

The Merriam-Webster dictionary defines a “Hobson's Choice” as an apparently free choice that offers no real alternative.

That could describe how many financial services professionals first felt when they were confronted with the August 2011 announcement from Visa regarding plans to accelerate EMV chip migration. Merchants experienced their Hobson's Choice moment a year later when Visa expanded the Technology Innovation Program (TIP) to the U.S., eliminating the requirement for eligible merchants to validate compliance with the Payment Card Industry (PCI) Data Security Standard (DSS) for any year in which 75 percent or more of the merchants' Visa transactions are made at EMV-enabled terminals.

While these announcements were not a government mandate it was now clear that the United States had no choice but to catch up with the rest of the world and migrate to an EMV-based payments infrastructure.



EMV – A quantum leap in payments technology

EMV is built around a chip-based technology. A chip-based payment transaction occurs when a microprocessor, embedded in the plastic card, connects to an EMV-enabled ATM or POS device. The smart chip securely stores information about the payments application and performs cryptographic processing. This provides an additional form of card authentication, validating the legitimacy of the payment type being used.

The longer we hold out, the greater the threat of increased fraud

Both financial institutions and merchants surely understand the business case around EMV as a fraud reduction technology. Some banks and credit unions claim a very low exposure to fraud and that EMV would be an unnecessary cost, but most cost models show the potential reduction in fraud greatly outweighing the cost of adopting EMV. The business case becomes even stronger when they understand the likelihood of more fraud moving to the U.S. as the weakest link for fraudsters due to the vulnerability of the magnetic stripe vs. EMV.

As global EMV migration moves forward and “loopholes” are closed, fraudsters in EMV-mature countries have already begun to look beyond their borders to pursue magnetic stripe cards to counterfeit, both at the POS and the ATM. The very low level of EMV terminal and ATM penetration in the U.S. will increasingly make it an easy target if we don't make the technology migration.

Most retailers are reluctant to adopt new technologies that don't show a quick payback on investment, but many will follow Walmart, an industry leader that has already started the roll-out of EMV terminals at the POS to prepare to accept chip-and-PIN cards. With merchants bearing a share of the multibillion dollar fraud losses in the U.S., the prospect of lower fraud should be a key driver for larger merchants to do their part.

The cost, the cost, the cost!

At first glance the estimated costs for migrating to EMV can be a bit overwhelming.

According to the market research publication The Nilson Report there are an estimated 5 billion magnetic stripe payment cards in use worldwide, with 15 million magnetic stripe POS terminals in the U.S.

What will it take to replace or update 15 million point-of-sale devices, more than 450,000 ATMs, 609.8 million credit cards and 520 million debit cards?

Javelin Research estimated the total cost at \$6.75 billion to replace all the POS terminals, an additional \$1.4 billion to issue smart-chip compliant cards, and about \$500 million for ATM upgrades. All told it could be an \$8 billion dollar proposition to implement EMV.

The U.S. adoption of the EMV chip-based payment standard holds many benefits, but it doesn't come without challenges to be contemplated as well. Issuers, acquirers, and merchants will have decisions, costs and efforts involved in enabling EMV within their systems including:

- chip production
- card issuance
- operating system updates
- consumer education efforts
- and new equipment purchases

Some Silver Lining

Visa's incentive to install EMV POS terminals that accept both contact and contactless payments may offer merchants some relief around the burden of PCI validation. Reduced spending on PCI and the elimination of yearly PCI DSS assessments and validation will offset some of the costs of new POS devices.

The typical cost of a mag-stripe card is 15 cents. Industry experts estimate a chip-based card can cost, on average about \$2. Though this is a considerable difference, banks should see the initial costs of the chip card offset over time by the reduction in fraud and the savings of not having to reissue cards when making application changes.

For ATM operators, many existing ATMs can be retrofitted with the new card reader and a software upgrade, making the transition less costly than complete replacement. Some newly-manufactured ATMs are already EMV capable (though not activated) in anticipation of EMV adoption.

Focus on the Triad of Value – or “Why the U.S. will grow to love EMV”

Since announcing its EMV migration roadmap in August 2011, Visa issuers have shipped out what averages out to over 5,000 new chip-enabled cards in the hands of U.S. cardholders every day. As of March 31, the total number of Visa chip cards in market was at 3.5 million and growing.

EMV lays the foundation for a new payment ecosystem in the United States. As you embark on your EMV technology and infrastructure migration, focus on this “triad of value.”



The bridge to new technologies

EMV enables deployment of further payments and retail innovations, such as contactless and mobile payments, without significant additional investment.

EMV and mobile payments provide the seamless link to the new reality of retailing in both the brick-and-mortar and online environments. EMV and the bridge to mobile will allow cardholders to experience interactive, real-time experiences such as location-based services, online reviews and price comparisons.

EMV contactless will also provide access to new payment types that offer rapid authorization. Examples include vending machines and public transit systems.

Across the board fraud reduction

There is a need to reduce card fraud and increase security in the U.S. market. EMV cards cannot be skimmed at ATMs like magnetic stripe cards, and in today's post-Durbin Amendment environment financial institutions are taking a hard look at their reduced revenues and re-examining their fraud losses and ways to eliminate them.

Increased Operational Efficiency

Finally, EMV will increase efficiency by streamlining card payment chargeback handling and the increased use of PIN versus signature verification.

Now you see why EMV is the "smart choice" and not a Hobson's Choice for the financial services and merchant industries.



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