



## Four myths and truths about EMV payments



## **Introduction**

As with any technology shift, rumors and misconceptions are buzzing around EMV. Our payment experts have analyzed four of the most common myths associated with the migration to EMV chip cards and will let you know the truth about this payment method that will soon be available in the U.S.



## Myth

EMV will never take hold in the U.S.

## Truth

The migration to EMV is well underway, and momentum is growing.

# 90%

**U.S. CARDS THAT WILL HAVE AN EMV CHIP BY 2016**

USA TODAY, 2014

# 5,000

**U.S. VISA EMV CARDS ISSUED DAILY**

VISA, 2013

# 3.5M

**VISA EMV CARDS ISSUED IN THE U.S. FROM AUGUST 2011 TO MAY 2013**

VISA, 2013

This might seem like fundamental knowledge in the payment industry, but many people, especially consumers, do not yet know that EMV has arrived here in the United States and that we are in full swing moving from magnetic stripe to EMV chip-based payment cards.

Millions of EMV cards have been issued over the past few years, and the majority of new POS terminals have EMV capability built in by default. Additionally, all of the major U.S. banks have already begun issuing EMV cards. On the merchant side, leading retailers such as Walmart and McDonald's and countless others are currently upgrading their POS systems to accept EMV payments. This makes the checkout process more convenient for customers and the POS systems more secure.

In addition to cards and terminals, much of the data processing infrastructure has been upgraded to handle the new data generated for every EMV chip transaction. This important milestone means that the U.S. payment infrastructure is ready for EMV.

## MYTH #2

### Myth

It makes sense to jump straight to mobile payments.

### Truth

Cards aren't going away, and we need to secure them. EMV chip cards and mobile payments will both likely be big players in the payment ecosystem for the foreseeable future.



In a recent article published by Forbes, Monique Antonette Lewis and Jessica McHugh reported on the debate about moving to EMV chip payment cards versus moving straight to mobile payments. The truth is, they pointed out, that EMV and mobile payments are complementary technologies, each filling a separate need.

The POS terminals that accept EMV contactless cards also accept NFC mobile payments because they are based on the same technology, so consumers can use the same tap & pay gesture whether paying by card or smartphone. For this reason, many card issuers are offering dual interface cards to their customers – these are cards that can be read by both contact and contactless readers, a very attractive feature to consumers. Merchants also love the contactless option because it greatly increases check-out speed, reducing lines and making customers happy.

Not everyone owns a smart phone or prefers to pay that way. Much of the population remains entrenched in their comfort with credit card technology, and EMV chip cards will provide a more secure option for those customers. Mobile payments together with EMV and contactless cards will provide consumers with a choice of options.

### EMV AND MOBILE GO HAND-IN-HAND

Visa, MasterCard, American Express, and Discover have announced plans to encourage and accelerate adoption of EMV card technology, including incentives for merchants to install EMV-capable POS terminals by October 1, 2015. These payment terminals can accept mobile payments using the same technology: another reason why mobile and EMV go hand-in-hand.

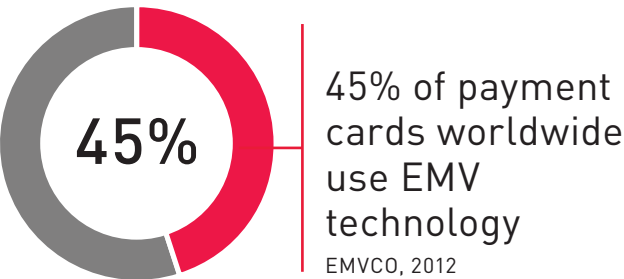
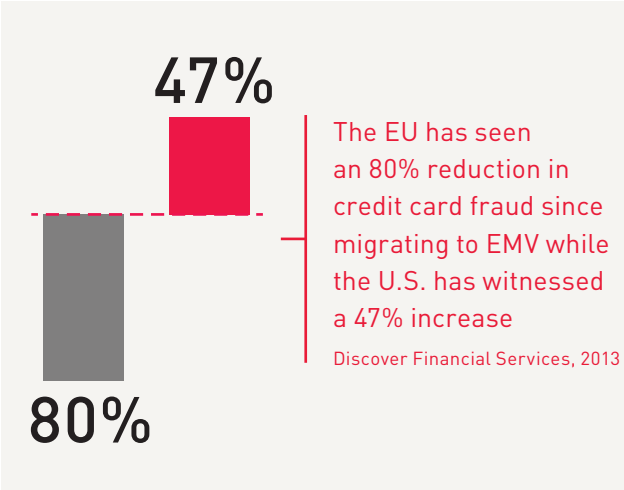
MYTH  
#3

Myth

EMV isn't the right solution because it doesn't address CNP (card-not-present) fraud, leaving ecommerce and online fraud untouched.

Truth

Actually, EMV payment cards enable some of the most successful CNP fraud solutions in the world.



During a CNP transaction, a merchant isn't able to use the same methods as in-store transactions to verify that the card isn't being used by a thief. Currently merchants tackle this problem by asking for the billing address or the 3-digit security code printed on the card, which, most in the industry agree, isn't a very secure tactic. More secure options for card-owner verification will be possible with EMV cards, even for CNP transactions. This is because EMV payment cards enable additional security features designed just for CNP transactions, such as one-time-passwords, on-card PIN codes, and personal card readers. Using an EMV card with one of these authentication tools effectively ensures that both the card owner and the card are present during the transaction.

Of course, it's up to banks and merchants to implement these tools. Many European countries have successfully reduced CNP and ebanking fraud using EMV tools, and American banks are beginning to explore these tactics, too. MasterCard and VISA already offer CNP solutions for some of their customers (CAP and DPA).

It's important to note that EMV payment cards are a worthwhile solution for card-present fraud reduction alone. Reducing card-present fraud is a necessary and important next step in blocking fraud overall. Ultimately we need to address both card-present and card-not present fraud in order to truly secure the payment ecosystem, and EMV can enable strong authentication on both fronts.

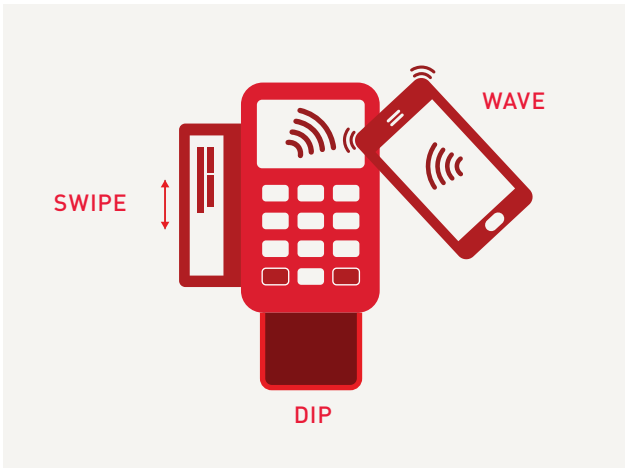
MYTH  
#4

Myth

EMV is expensive and difficult for merchants to deploy.

Truth

EMV payment technology is cheaper and easier for merchants to install than ever before.



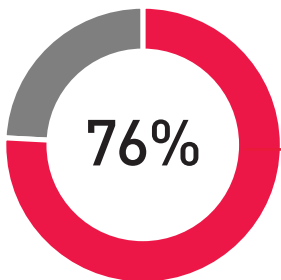
The most versatile option is a "one size fits all" POS terminal

Many merchants have realized that EMV terminals are not only easier to install than they once thought, but they also provide a host of new benefits that they love. Merchants will see fewer fraudulent transactions from counterfeit and stolen cards, and they'll benefit from increased revenue as rollouts of contactless EMV cards and mobile payment methods continue. Contactless EMV transactions (the kind where the customer simply taps a card or mobile phone to the terminal using NFC technology) provide a higher level of convenience for customers and speed check-out at the point of sale.

EMV terminals support mobile payments, too, giving consumers another convenient payment option. And with mobile, merchants will have more sophisticated channels at their disposal to engage with customers. Chip card and smartphone payments could make the promise of additional revenue from loyalty offers and mobile marketing a reality.

To help offset the cost of upgrading to EMV terminals, merchants can take advantage of incentives offered by the payment brands, such as the incentive to eliminate mandatory annual PCI audits for merchants who process 75% of their transactions from an EMV hybrid terminal (that is a terminal capable of processing both contact and contactless transactions).

Migrating to EMV is made easier for U.S. merchants because suppliers have learned valuable lessons during the POS system upgrades in other countries. These lessons should alleviate some of the potential headaches that U.S. merchants could face.



76% of global point-of-sale devices accept EMV cards

EMVCO, 2012



## Learn more

Having shipped over 2 billion EMV cards worldwide, Gemalto's expertise in EMV payments is unmatched. For more information about Gemalto's EMV solutions, mobile payments or consulting services, contact [Philippe.Benitez@gemalto.com](mailto:Philippe.Benitez@gemalto.com)

## About Gemalto

Gemalto (Euronext NL0000400653 GTO) is the world leader in digital security with 2012 annual revenues of €2.2 billion and more than 10,000 employees operating out of 83 offices and 13 Research & Development centers, located in 43 countries. Gemalto is the leading provider of EMV payment cards worldwide, selected as a vendor to participate in 80 EMV deployments.

We are at the heart of the rapidly evolving digital society. Billions of people worldwide increasingly want the freedom to communicate, travel, shop, bank, entertain and work – anytime, everywhere – in ways that are enjoyable and safe. Gemalto delivers on their expanding needs for personal mobile services, payment security, authenticated cloud access, identity and privacy protection, eHealthcare and eGovernment efficiency, convenient ticketing and dependable machine-to-machine (M2M) applications.

Gemalto develops secure embedded software and secure products which we design and personalize. Our platforms and services manage these secure products, the confidential data they contain and the trusted end-user services they enable. Our innovations enable our clients to offer trusted and convenient digital services to billions of individuals. Gemalto thrives with the growing number of people using its solutions to interact with the digital and wireless world.

## Learn more

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