U.S. Migration to EMV

Estimates for Adoption Between 2014 and 2015

The U.S. payments migration away from magnetic-stripe cards to EMV-compliant chip cards is in full swing, thanks in part to massive breaches at retailers such as Target and Neiman Marcus. With banking institutions and retailers scrambling to get chip cards issued and point-of-sale systems upgraded before the card brands' October 2015 fraud liability shift date, here's an overview of where the market is now and where it is expected to be by October.

EMV ADOPTION: A Race Against Time

1992: EMV first deployed in Europe.

May 2010: A \$3.1 billion credit union based in New York takes the first step toward bringing chip and PIN cards to U.S. cardholders.

EMV POS Terminals Cards





) EMVCO

1999: EMVCo is founded to manage, maintain and enhance the EMV specifications.

May 2010: EMV Abuzz in the U.S. The debate over EMV in the United States gains momentum and interest.

Walmart 🔀

May 2010: Walmart's director of payment services tells Storefront-Backtalk that signature-based EMV transactions are a "waste of time."

2011

June 2010: Javelin Strategy & Research estimates an EMV rollout across the U.S. would cost approximately **\$8.6 billion** in POS terminal replacements, EMV card issuance, and ATM upgrades.

January 2011: Fraud, EMV and the U.S.

If the financial space does not get out in

front of the move to EMV, the consequenc-

es could be dire, BankInfoSecurity's Tracy

October 2011: EMV Case Study:

A Silicon Valley bank says Chip & PIN

January 2011: Skimming Fight: New Tech a Must

Fraud expert and distinguished Gartner analyst Avivah Litan estimates the cost associated with upgrading and/or replacing pay-at-the-pump POS technology at franchised convenience stores or gas stations would cost between \$10,000 and \$15,000 per location.



December 2013: Target Breach

Target Corp. confirms that a payments breach caused by **malware** likely exposed some 40 million U.S. debit and credit accounts.

will reduce fraud. 2013

> WHOIS RESPONSIBLE

Kitten warns.

WEWANT ASSURANCES! & BETTER SECURIT WEWANT CHIP AND PIN!!

NOW

2014



2014: Chip-capable terminals

By the end of 2014, of the approximately 13.9 million POS terminals in the U.S., the Merchant Advisory Group estimates only 2.1 million are EMV compliant. The EMV Migration Forum's estimate more than doubles that, at 4.5 million.

> February 2014: The Independent Community Bankers of America estimates card-reissuance expenses associated with breaches cost community banks \$10-\$15 per compromised card.



March 2014: MasterCard and Visa establish a cross-industry group to work on improving U.S. payment security.

June2014: Michael Grillo of ACI Worldwide says when countries introduce new security countermeasures, fraudsters often alter their tactics to focus on easier-to-exploit types of payments.

120 MILLION

Chip cards issued in the U.S.

By the end of 2014, according to the EMV Migration Forum, 120 million EMV-compliant chip cards – the vast majority being credit cards - had been issued in the U.S.

February 2014: Migrating debit portfolios to EMV will be an ongoing challenge for U.S. banks and credit unions, a UNFCU executive says.

February 2014: The Consumer Bankers Association says its 58 member banks have reissued 17.2 million cards and spent approximately \$172 million on expenses related to the Target breach.

March 2014: Troy Leach of the PCI Council testifies March 5 that a migration to EMV will not, by itself, eliminate all security risks.

September 2014: Home Depot Confirms Data Breach. The retailer confirms that its payment data systems have been breached, potentially impacting customers using payment cards at its U.S. and Canadian stores since April.



October 2014: President Obama signs an executive order directing government agencies to use chip-and-PIN cards for staff as well as in consumer benefits programs, including Social Security.



October 2014: Apple Launches its Apple Pay Service.

Randy Vanderhoof of the EMV Migration Forum says emerging mobile payments are pushing retailers to upgrade and install POS terminals that accept contactless payments.



2015: Chip-capable terminals

By the end of 2015, MAG estimates that only 5 percent more POS terminals, 2.78 million, will be EMV compliant. EMV Migration Forum's estimate has climbed to 7 million.

August 2014: "Since EMV adoption, fraud has shifted to the card-not-present space," fraud expert Neira Jones says.



September 2014: Home Depot's incident, which impacted 56 million cards, is larger than the Target breach, but falls shy of the 2008 Heartland breach, when approximately 100 million cards were compromised.

October 2014: The Credit Union National Association estimates credit unions have spent nearly \$60 million to reissue cards and deal with fraud related to the Home Depot breach.

citigroup usbank **JPMorganChase**

October 2014: JPMorgan Chase, Citigroup and U.S. Bank, which provide debit cards for government benefits, will be leaders in the EMV migration, Vanderhoof says.

600 MILLION

Chip cards issued in the U.S.

By the end of 2015, the EMV Migration Forum estimates the U.S. will have 600 million chip cards in circulation, the majority of which will be credit, not debit.

Fraud Liability Shift Date

2015

The liability shift date for fraud that results because of non-EMV-compliant cards or point-of-sale terminals is October 2015.







2016: Chip-capable terminals

By the end of 2016, the EMV Migration Forum estimates the U.S. will have 9 million chip-capable terminals. MAG does not provide a projection for 2016.



900 MILLION

Chip cards issued in the U.S.

By the end of 2016, the Forum estimates the U.S. will have 900 million chip cards in the market, a mix of credit and debit cards, though the majority will still comprise credit.

Key takeaways:

- Banking institutions, merchants are not going to make October 2015 liability shift date
- The U.S. will not be completely upgraded and ready for shift away from mag-stripe
- Banks are winning the race and will be further along in their EMV card issuance than merchants are with EMV POS deployments

View this infographic online http://www.databreachtoday.com/infographic-us-migration-to-emv-a-7785

Sources

Visa, EMVCo, Chase Paymentech, EMV Migration Forum, Research and Markets, Merchant Advisory Group, the White House, StorefrontBacktalk, MasterCard

