



Liberty Petroleum Distributors Conference

April 22, 2015

Rick Schmid
Director, Relationship Management
National Accounts

EMV™ Update

Liberty Distributor Meeting – April 22, 2015

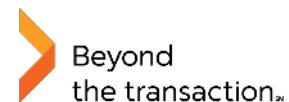
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What is EMV™?



- **EMV** – micro-chip payment standard created by **Europay®**, **MasterCard®**, **Visa®** over 10 years ago and has been implemented globally
- EMVCo – organization owned by the global brands that manages the **standard for global inter-operability**
- EMV payment cards **improve security over magnetic stripe technology** through an embedded computer chip
 - Card validation ensures the card is legitimate
 - Cardholder authentication reduces fraud from lost and stolen cards

The Marketplace at the end of 2015

- The U.S. is set to transition more than 1.2 billion payment cards and 8 million point-of-sale (POS) terminals to meet the requirements for EMV smart card payments to be ubiquitous
- Physical EMV hardware (cards and POS terminals) will cost issuers and merchants more than \$6.8 billion in the U.S.
- It is forecast that 166 million EMV credit cards will be in circulation in the U.S. (29% of the total), and 105 million EMV debit and prepaid cards (17% of the total)
- More than half of U.S. retail locations are projected to be EMV-capable
- The long tail of EMV migration will be small and micro businesses
- The EMV transition will help fix an important loophole in card fraud: counterfeiting. However, based on experiences in other markets, card fraud is expected to migrate to the point of least resistance: the card-not-present environment.

EMV™: Recent history and how we got there



EMV timeline

- **2011**: global payments brands introduced roadmaps for EMV technology and encouraged its adoption
- **April 2013**: first domestic milestone required processors like First Data to accept EMV-based payments from merchants
- 4Q 2013 – Retailer data breaches occur
- 1Q 2014 - First Data reaches agreement with Visa & MasterCard to utilize Common AID
- **October 2015**: next milestone - fraud liability shift to all point-of-sale devices (except Automated Fuel Dispensers Oct. 2017) will take effect
 - Liability for counterfeit fraud transactions shifts from financial institution to merchant if the merchant does not accept EMV transactions

How EMV™ works

Payment Card is...

1. Inserted into chip-enabled slot reader (contact)

OR

2. Waved above the device (contactless)



- Data on the chip ensures the card is authentic
- PIN or signature ensures that the person presenting the card is the rightful cardholder

How EMV™ prevents fraud

1. Authenticates at time of sale that chip is genuine/legitimate
 - Blocks the ability to copy the contents of the chip to another card
 - Prevents the use of skimmed or counterfeit cards
2. PIN verifies the cardholder is “the cardholder”
 - Prevents the use of lost/stolen cards
 - Can be applied to CREDIT cards as well

43.7 %

Of total worldwide payment card fraud losses were from the US, however only generated 23.5% of total volume.¹

\$580.5 million

Total debit card fraud losses incurred by retailers. Spend \$6.47 billion annually on credit and debit card fraud prevention annually.¹

59%

of the more than 37 billion debit card transactions that were made were verified by signature, **85% of all fraudulent debit card transactions involved signature verification** and \$1.15 billion of the total \$1.35 billion in debit card fraud losses (85%) stemmed from signature based debit card transactions.²

¹Nilson Report, August 2013

²Payments Journal, February 2012

\$8.6 billion

Estimated total cost of fraud per year in the United States (0.4% of the \$2.1 trillion card payment industry)

32%

Lost/Stolen, Counterfeit & Non-receipt fraud account for 32% of 2008 US fraud losses, representing approximately \$2.9 billion

95%

EMV deployment in the US is estimated to eliminate 95% of lost/stolen fraud

90%

An estimated 90% of counterfeit card fraud could be eliminated with EMV deployment in the US

Source: Aite Group, "Card Fraud in the United States" – The Case for Encryption, January 13, 2010

Why implement EMV™?

Financial Institutions

Reduce fraud

- Potential to reduce POS counterfeit fraud losses with use of chip
- Shift fraud liability to merchants that do not support EMV

Improve market perception

- Demonstrate to customers and market that cardholder security is important
- Poor brand perception by cardholder if their issuer is last to implement EMV

Avoid increased exposure to cybercriminals

- Late adopters will be the weakest link for cybercriminals – they will find the path of least resistance to identify weakness
- As the market of non-chip card dwindles, the criminals will target non-chip cards

Merchants

Increase security at the POS

- A primary way cybercriminals use stolen credentials is to create a false card to impersonate the actual card
- Historically, as cybercriminals recognize EMV implementation is underway, they increase activity

Reduce liability costs

- The global card brands have announced a Liability shift for Oct 2015
- In 2015, if the merchant does not support EMV, that liability will shift to the merchant

Avoid increased exposure to cybercriminals

- Criminals will find the path of least resistance through late adopters to identify weakness
- As the population of non-EMV locations dwindles, the criminals will concentrate on non EMV-locations

Liability Shifts

There is no mandate for merchants to implement EMV!



Liability Shift = Potential Chargebacks

*Generally liability is going to shift
to the party using the least secure technology¹*

1 Rules outlined are as of September 2014

Counterfeit Card Fraud Liability Shift

American Express, Discover, MasterCard & Visa

Current	October 1, 2015 October 2017 for AFDs
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Issuer Liable	For chip cards Merchant Liable if non-chip cards
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Counterfeit Card Fraud Liability Examples

Current	Mag Stripe Card	+	Mag Stripe Terminal	equals	Issuer Liable
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October 2015 + beyond	Mag Stripe Card	+	Mag Stripe Terminal	equals	Issuer Liable
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October 2015 + beyond	Mag Stripe Card	+	Chip Terminal	equals	Issuer Liable
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October 2015 + beyond	Chip Card	+	Mag Stripe Terminal	equals	Merchant Liable
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October 2015 + beyond	Chip Card	+	Chip Terminal	equals	Issuer Liable
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Counterfeit Card Fraud Liability

To summarize...

Liability for fraud shifts

to the merchant

when a

counterfeit mag stripe

from a chip card

is used at a

mag stripe terminal

after Oct-2015/2017

Lost / Stolen Fraud Liability Shift

Attended / Unattended	Current	October 2015 October 2017 for AFD
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Attended	Issuer Liable	For Chips cards, Merchant liable, if terminal is less secure
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Unattended	Merchant Liable	For Chips cards, Merchant liable, if terminal is less secure
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Lost / Stolen Fraud Liability - Attended

Current	Mag Stripe Card + Mag Stripe Terminal	equals	Issuer Liabile
October 2015 + beyond	Mag Stripe Card + Mag Stripe Terminal	equals	Issuer Liabile
October 2015 + beyond	Mag Stripe Card + Chip Terminal	equals	Issuer Liabile
October 2015 + beyond	Chip and PIN Card + Mag Stripe Terminal	equals	Merchant Liabile
October 2015 + beyond	Chip and Sig Card + Mag Stripe Terminal	equals	Issuer Liabile
October 2015 + beyond	Chip and Sig Card + Chip and Pin Terminal	equals	Issuer Liabile
October 2015 + beyond	Chip and PIN Card + Chip and Sig Terminal	equals	Merchant Liabile
October 2015 + beyond	Chip and PIN Card + Chip and Pin Terminal	equals	Issuer Liabile

Lost / Stolen Fraud Liability

To summarize...

Liability shifts **to the merchant**
when a **lost or stolen chip & PIN card**
is used at a **less secure terminal**
after Oct-2015

Lost / Stolen Fraud Liability - AFD

Current	Mag Stripe Card + Mag Stripe Terminal	Merchant equals Liable
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October 2015 + beyond	Mag Stripe Card + Mag Stripe Terminal	Merchant equals Liable
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October 2015 + beyond	Mag Stripe Card + Chip Terminal	Issuer equals Liable
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October 2015 + beyond	Chip Card + Mag Stripe Terminal	Merchant equals Liable
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October 2015 + beyond	Chip and Sig Card + Chip and PIN Terminal	Issuer equals Liable
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October 2015 + beyond	Chip and PIN Card + Chip and NO PIN terminal	Merchant equals Liable
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October 2015 + beyond	Chip and PIN Card + Chip and Pin Terminal	Issuer equals Liable
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To summarize...
Liability for fraud shifts
to the issuer
when a
lost or stolen card
is used at a
more secure AFD terminal
after Oct-2017



April 22, 2015

The First Data[®] PCI Rapid Comply[®] Solution

You don't have to be a security expert to be compliant.

PCI DSS Compliance Validation

Merchants who store, process, or transmit Visa cardholder data generally fall into one of four merchant levels based on Visa transaction volume over a 12-month period. Transaction volume is based on the aggregate number of Visa transactions (inclusive of credit, debit and prepaid) from a merchant Doing Business As (DBA).

Merchant Level	Description
1	Merchants processing over 6 million Visa transactions annually or Global merchants identified as Level 1 by any Visa region
2	Merchants processing 1 million to 6 million Visa transactions annually
3	Merchants processing 20,000 to 1 million Visa e-commerce transactions annually
4	Merchants processing less than 20,000 Visa e-commerce transactions annually and all other merchants processing up to 1 million Visa transactions annually

Common Merchant Misconceptions about PCI Compliance

- *“Since I don't store credit card information, I don't have to be PCI compliant.”*
- *“I don't process a large number of credit cards, so I'm not at risk of breach.”*
- *“I use PayPal/Authorize.NET, therefore I'm already PCI compliant.”*
- *“The PCI Data Security Standards is only a recommendation and not a requirement.”*
- *“PCI compliance ends with a successful assessment.”*



The Impact of Not Becoming PCI-Compliant can be Devastating

- ✓ Brand damage, loss of customer trust and loyalty
- ✓ Ongoing compliance effort and costs to maintain systems, resources, etc.
- ✓ Fines from regulatory agencies
- ✓ Legal fees
- ✓ Financial institution fees
- ✓ Disruption in day-to-day delivery of goods and services

- Total average cost per breach: **\$5.5M**
 - Average number of breached records: **28,349**
 - Average cost per breached record – overall: **\$194**
 - **78%** of consumers said they would stop shopping at a store if they believed the store had experienced a card data compromise.

¹ 2011 Cost of a Data Breach Study: United States" published Mar. 2012

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A Solution Designed Based on Merchant Feedback

Key Merchant Findings from the First Data PCI Research Report (2011)¹

- **Most Important Requirement:** Protection-themed Benefits
- **Highest Rated Feature:** Completion of the Self-Assessment Questionnaire (SAQ)
- **Other Key Features that Merchants Find Valuable**
 - 69% said an online PCI compliance tool
 - 63% said SAQ validation
 - 59% said a Data Security Plan
 - 59% said Call Center Support

1. PCI Services Market Assessment, Conducted by Applied Research & Consulting LLC for First Data , Feb. 23 – Mar. 16, 2011

The Results...

- A step-by-step, self-guided approach to help small and mid-size merchants complete the SAQ
- Dedicated PCI compliance help desk support
- A global solution package including new security and compliance products and services
- Integration with existing customer databases to simplify the process for our merchants

***Bottom Line Goal:
Offer our small & mid-size merchants a high-quality,
integrated experience***

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The First Data® PCI Rapid Comply® Solution

- **Easy-to-use online tool** - helps merchants quickly and easily achieve and maintain PCI DSS compliance
- **Pre-populates SAQ questions** to minimize the volume of questions merchants must answer*
- **Includes comprehensive support** – online, chat, email and phone-to ensure merchants' receive timely answers to their PCI-related questions
- **Offers integrated scanning** for merchants that are required to pass quarterly scans to achieve PCI DSS compliance
- **Designed by PCI security experts** specifically for small and mid-size merchants

*Merchants are responsible for valid answers to all questions whether or not they are prepopulated



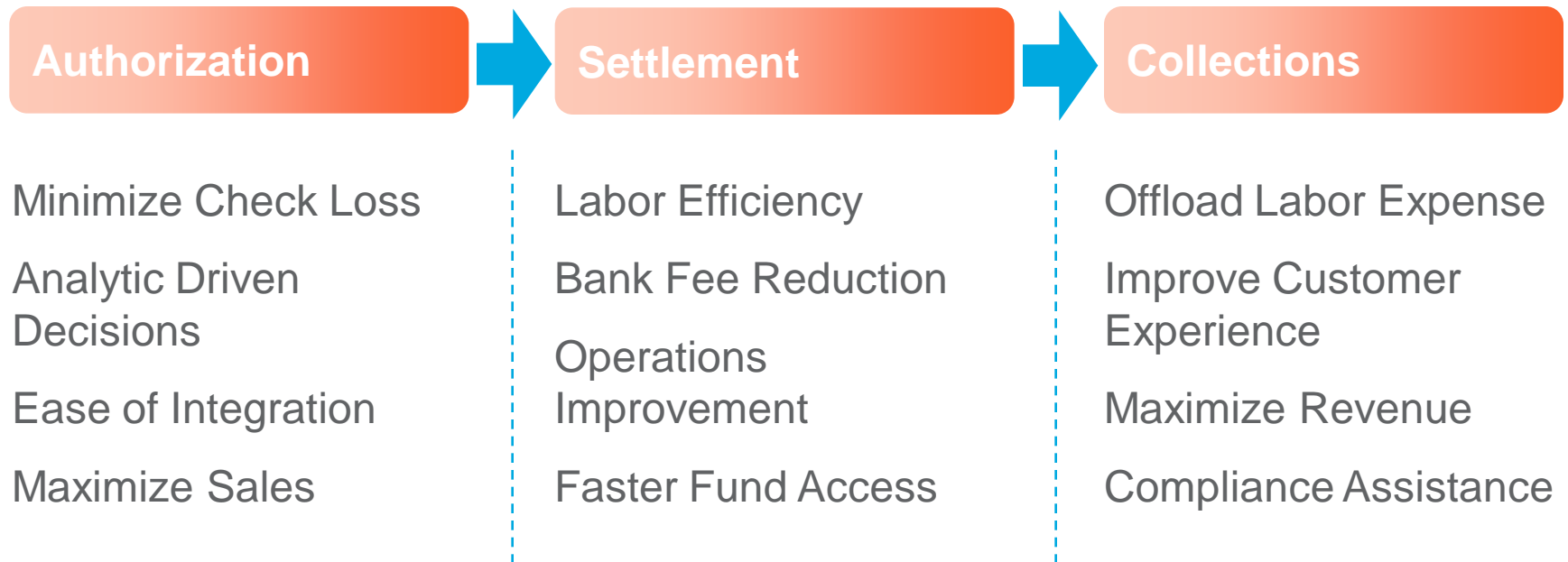
PCI Rapid Comply® : Expertly designed. Easy to use.

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TeleCheck[®] Overview

Improve Your Business With Every Customer Check Transaction

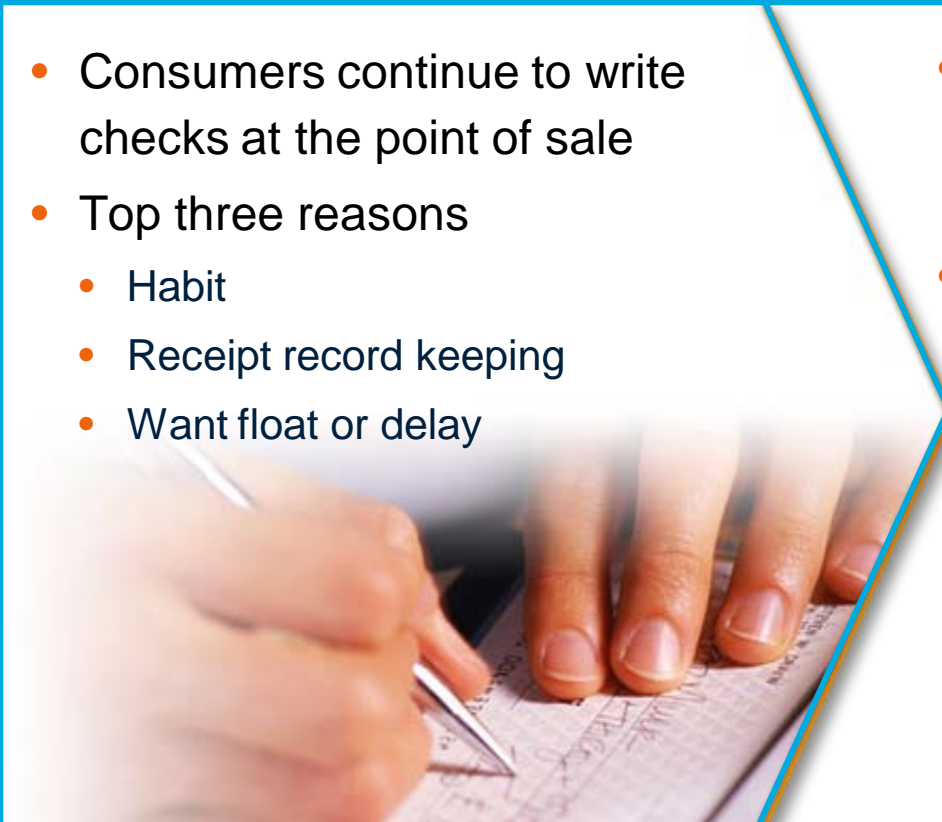


Offering checks as a payment method requires a solution that provides security, speed, and ease with check acceptance.

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Consumer and Merchant Check Trends and Considerations

- 
- Consumers continue to write checks at the point of sale
 - Top three reasons
 - Habit
 - Receipt record keeping
 - Want float or delay
 - Because of this, merchants continue to offer check payment options to their customers
 - Considerations when offering check options
 - Look at total cost of accepting check payments – not just check losses
 - Warranted / verified checks are seen as lower costs than credit, debit, or unverified checks
 - Electronic checks are now mainstream and growing

TeleCheck Proprietary Study, "Consumer Payments Usage", 3/2004

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Now Checks Can Be Processed in a Manner Similar To Cards

The TeleCheck Electronic Check Acceptance® Service



For Stores

- As efficient as cards
- Eliminates many manual processes

For Customers

- Preserves float
- Customer satisfaction

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Thank you.



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