Preparing Costco Members for EMV Success

- EMV Essentials
- Benefits
- History
- EMV Transaction
- Terminal Options
- What’s Next
EMV Essentials: Differentiate the value of the EMV chip card from the magnetic stripe card transaction

Benefits: Identify the benefits of U.S. EMV adoption for major stakeholders including Costco members and cardholders

History: Review the evolution of the EMV chip card

EMV Cards and Transactions: Explain the differences between a magnetic stripe card and EMV chip card transaction

Terminal Options: Analyze the features of terminal options to help Costco members make the best terminal choice for their business

What’s Next: Associate the changes related to the adoption of the EMV chip card with the Costco members' need to proactively plan for a successful transition
What do you need to know about EMV?
What is EMV?

- Europay, MasterCard, Visa
  - EMVCo is the organization responsible for developing a global standard for chip cards
- Customer and account verification information resides in a secure computer chip embedded in the card
- Three main functions
Three Main Functions

1. Improved card authentication to help protect against counterfeit cards
2. With PIN code, improved cardholder verification to help protect against lost/stolen cards
3. Transaction authorization using issuer-defined rules
It’s All About Integrity, Trust, and Risk

- Help prevent counterfeit fraud through authentication and card verification
- Define risk management limits for charge backs and fall backs
- Better validate the integrity of the transaction
- Service international card holders and help provide global protection
EMV adoption is coming fast!

- Card issuers are distributing cards that have BOTH magstripe and chip technology
- Transitional period where cardholders may swipe or insert their chip cards
- Be prepared to service customers with either kind of card
- Consumers will need an adjustment period to get used to inserting, versus swiping, cards
• Businesses must be using EMV enabled terminals to avoid (certain) fraud liability on October 1, 2015

• **Liability shifts** from Issuer to business owners

• “Pay at the Pump” acceptance methods have until October 2017
EMV Liability Shift Impact

Oct. 2015

**Business Owner**

**Covered**
- Domestic card transactions
- International card transactions
- AMEX, DISC, MC, VISA: Counterfeit card transactions
- AMEX, DISC, MC: Lost and stolen fraud

**NOT Covered**
- Card-not-present (CNP) transactions
- Visa: Lost and stolen fraud
<table>
<thead>
<tr>
<th>Transaction</th>
<th>Counterfeit Liability</th>
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<tr>
<td>Chip card at EMV terminals</td>
<td>Issuer holds the limited exposure that still exists</td>
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<tr>
<td>Magstripe cards at EMV terminals</td>
<td>Issuer holds liability (same as today)</td>
</tr>
<tr>
<td>Chip card at Mag Terminals</td>
<td>Costco business owner holds liability</td>
</tr>
<tr>
<td>Contactless Chip at Mag Terminals</td>
<td>Issuer holds liability (same as today)</td>
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What If the Business Owner Doesn’t Get an EMV Enabled Terminal?

• If a business accepts and processes a counterfeit card transaction on a non-EMV enabled terminal, the **liability** for the fraudulent transaction is the **business’s responsibility**, NOT incurred by the card issuers.

• >$1B in losses each year due to counterfeit card fraud.
This is a lot of change in the very near future.

What’s in it for my business and my customers?
Benefits of EMV

Cardholder

Costco Member
Business Owners
• Peace of mind and security confidence
• Never lose sight of card
• Global interoperability
• Payment support via mobile devices that use NFC (Near Field Communications) & mobile wallets
• Fewer fraud-related chargebacks
• Increased international customer satisfaction
• Helps foster the adoption and integration of other payment technologies via NFC

Benefits to Costco Member Business Owners
U.K. Lessons Learned

• Fraud and chargeback reduction on debit and credit cards fell by more than a quarter in 2009

• Counterfeit card fraud—*skimming and cloning*—fell by more than 50%

• Fraud and chargeback reduction on lost and stolen cards is at the lowest levels in 10 years
Evolution of the EMV Chip Card
1970

Evolution of EMV Chip Card

Magnetic strip cards
1979

First commercially available chip cards

Evolution of EMV Chip Card
1984

French banks rollout smart chip cards

Evolution of EMV Chip Card
Europay, MasterCard and VISA start work on EMV
1999

EMVCo founded

Evolution of EMV Chip Card
2008

Contactless protocol published

Evolution of EMV Chip Card
2010

1 Billion EMV cards

Evolution of EMV Chip Card
U.S. EMV Adoption

Evolution of EMV Chip Card
What is an EMV Chip Card? What is an EMV transaction?
What is an EMV Chip Card?

• The EMV chip uses dynamic algorithms to perform functions that validate a card’s authenticity, store and encrypt data
• Chip may be embedded in cards, mobile phones, etc.
• Chip functions determined by EMV, Near Field Communications (NFC), and Card Issuer standards
• EMV chip cards are much harder to counterfeit or copy (“skim”) than magnetic stripe cards
Value of Additional Security

- The additional security value of an EMV chip card applies only in the card present environment.

- EMV chip cards do not provide additional security for card not present scenarios such as mail order, telephone order, or eCommerce transactions.
Types of EMV Chip Cards

Contact

Contactless
• Chip is embedded in the card

• Must be inserted into the reader on an EMV enabled terminal for the **entire** transaction

• Contact points on the chip make contact with the card reader
• Chip may be embedded in the card, key fobs, stickers, mobile phones, etc.

• Near Field Communications (NFC) technology

• Proximity to a reader of less than 4 inches
## Transaction Differences

<table>
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<tr>
<th><strong>Contactless</strong></th>
<th><strong>Contact</strong></th>
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<tbody>
<tr>
<td>Card held within proximity of the reader; does not require dipping</td>
<td>Card is inserted (or dipped) into the reader</td>
</tr>
<tr>
<td>Faster payment experience</td>
<td>Requires card to remain in contact with the reader for the duration of the transaction</td>
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<tr>
<td>Some steps may be performed after the card has left proximity of reader (e.g. online authorization)</td>
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**EMV**
Contactless and NFC Mobile

- NFC enabled devices drive customer interest in adoption

- Emergence of the “digital wallet”
  - A digital wallet employs software that is the electronic equivalent of a wallet for transactions and may reside in a mobile device.
  - Savvy cardholders are looking for this kind of payment option. It can also help businesses gather important data about their customers’ shopping habits.
  - Examples of wallets include:

  - Samsung
  - Apple Pay
Key Differences
Magnetic Stripe vs. Chip

Magnetic Stripe

EMV Chip
Key Differences Magnetic Stripe

EMV

Magnetic Stripe Card at Mag-Stripe Terminal:

- A quick swipe of the magnetic stripe in the terminal
- Terminal reads track data including the static security code, and the issuer decides to approve or decline purchase
- Terminal and card do not interact when Authorization Response is approved
Key Differences
EMV Chip

EMV chip card at EMV Enabled Terminal or Pin Pad

- EMV chip card is inserted and it remains there for the entire transaction
- Cryptogram security code changes dynamically with every transaction
- Issuer requests authorization request and cryptogram
CVM
(Cardholder Verification Methods)

EMV

U.S. CVM Options

Signature

Online PIN

No CVM Required
Low dollar, high volume
How can I make the best choice for EMV terminals?
Elavon and EMV: Terminals

- Terminal lines
  - VeriFone VX Evolution
  - Ingenico Telium 2

- Terminals are EMV enabled (Retail and Restaurant)
  - Certified functionality

- Legacy terminals will not be “upgradeable”
  - Refer to EMV FAQ for more information
Elavon and EMV: Terminals

EMV

VeriFone

VX520 Countertop

VX820 EMV PIN Pad

iWL250G GPRS
  Long-range wireless

VX680B Bluetooth
  Short-range wireless

VX680G GPRS
  Long-range wireless

iCT250 Countertop

iPP320 EMV PIN Pad

COMING SOON

iWL220B Bluetooth
  Short-range Wireless

ingenico GROUP
VeriFone
VX
Evolution

NFC within 4 inches of reader
Dual Communication
Internal PIN Pad
Mag Stripe Reader
EMV Card Reader
EMV Terminals
Ingenico Telium 2

- NFC within 4 inches of reader
- Color screen
- Internal PIN Pad
- Dual Communication
- Mag Stripe Reader
- EMV Card Reader
- EMV Terminals

Colors: Color screen

Brands: Ingenico Telium
GPRS long-range terminals:
• Leverage mobile wireless capability. Each wireless terminal requires an additional wireless plan from Elavon.
• AT&T wireless

GPRS long-range terminals:
• Ideal for businesses not bound by a physical location
• Food delivery, lawn care, home parties, weekend antique malls or markets
Bluetooth Short-Range

EMV

Bluetooth short-range terminals:
- Uses secure, encrypted technology which allows only the base and terminal to communicate
- Monitors channels to prevent interference from other devices

Bluetooth short-range terminals
- Good for businesses who stay on location but prefer going to their customer
- Pay at table restaurants, auto dealerships, jewelry stores
What do I need to do to be prepared?

What’s Next?
Sense of Urgency

- Liability shift is October 1, 2015
- Act now, prepare yourself
- Get more information:
  - https://www.costcopaymentprocessing.com/
- Get Enabled, call Elavon EMV experts at: 844-223-7262
Payment Processing:
Accept Apple Pay™ and other mobile wallet applications.

Executive Members could save an average of $603 per year.*

Receive $100 off a Chip/EMV terminal with Near Field Communications for new and existing customers.**

Call 1-866-213-4748 today and mention code JLU15. Or, visit Costco.com and search: Mobile Wallet.

* Savings calculated on annual processing fees and are based on Elavon’s analysis of The Standard Chartered Bank’s data on payment processing services. Actual savings depend on business type, card type, number of transactions and cash volume of transactions. Merchants may be required to apply for membership. Annual Membership Fee: See page 5 for details. Rates and fees may change with little notice. Rates and acceptance are subject to underwriting. Call Branch at 1-888-277-1962 for all terms and conditions.

** Eligible for this special offer. Business must be a Costco member, must be existing Costco customer and purchase a Chip/Smart Card/EMV terminal with NFC by July 31, 2015, and remain active in the program. The offer may exclude certain card types. The offer is subject to credit approval and may not be available at all FlexOffers.com member sites.
Thank You! for participating in Preparing Costco Members for EMV Success

844-223-7262
https://www.costcopaymentprocessing.com/