EMV: Can you Afford not to Upgrade?

Wednesday October 2, 2019 8:00am
Presenters

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Director of Standards
Conexxus
About Conexxus

✓ We are independent & non-profit…
✓ We set standards…
✓ We provide clarity…
✓ We advocate for our industry…
✓ We improve profitability

Knowledge * Connections * Advocacy
Conexxus thanks our 2019 Annual Diamond Sponsors!
After This Session You Can…

1. List the risks associated with waiting to convert to EMV at the pump

2. Estimate the costs if you don’t upgrade by October 1, 2020

3. Analyze the best practices and lessons learned from other retailers implementing EMV
What is EMV?
EMV

Europay

MasterCard

Visa

EMVCo maintains specification
Mag Stripe vs EMV (Chip)

- “Swipe”
- Static Card Data

Chip: Secure IC (processor with memory)

- “Dip”
- Dynamic Card Data
- Magstripe Still Present
- Service Code Indicator in magstripe “EMV”
EMV Transaction

LOTS more data as compared to Mag Stripe

Data secured with keys “Cryptogram”
Liability Shift* Dates

Oct 1 2015
Payment Terminals (except AFDs)

Oct 1 2020 (3 yr. deferment)
Outdoor AFDs

*Not a card brand mandate, but may be required by oil brands & is a common-sense mandate
Liability shifts to the party in the payment chain with the **least secure** payment technology

Retailers are covered by implementing EMV
Conexxus EMV Preparedness Survey
June 10 – July 8, 2019
1100+ Companies Invited
88 Responses representing 26,284 Sites

Indoor & Outdoor
Contact & Contactless
Fraud
EMV Preparedness

Conexxus Survey June, 2019
88 Responses representing 26,284 Sites

Indoor (Contact) EMV

100% Plan to Deploy

86% Fully Deployed

Lack of (Certified) Software
EMV Preparedness

Conexxus Survey June, 2019
88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

70% have ZERO sites deployed
80% Plan to deploy
17% Undecided
EMV Preparedness
Conexxus Survey June, 2019
88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

42% by Oct 1, 2020
+16% by 2021
25% Don’t Know
EMV Preparedness
Conexxus Survey June, 2019
88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

17% Undecided about whether to Implement

Cost of Upgrades (43%)*

Risk doesn’t justify the expense (43%)*

*Respondents could choose more than one reason
$451 MM projected in AFD fraud in 2020
How much will YOU be liable for?

Upgrade before
October 1, 2020
Why Upgrade to Outdoor EMV?
Chargeback Types

First, we need to explain the types of chargebacks. And who is paying for each type today.
Chargebacks Today

Lost or Stolen
Credit Card has been lost or stolen
Retailer pays Fraud

Counterfeit
Card in your wallet Counterfeit card used (Same card number)
Bank pays Fraud
Without EMV after October 1, 2020

Lost or Stolen Credit Card has been lost or stolen

Retailer pays Fraud

Counterfeit Card in your wallet
Counterfeit card used (Same card number)

Retailer pays Fraud
Who pays for what?

Let’s look at that again
Outdoor EMV **TODAY**

**Lost & Stolen Fraud**
- Petroleum Retailers *pay* for *lost & stolen* chargebacks

**Counterfeit Fraud**
- Card Issuing Banks *pay* for *counterfeit* chargebacks
Install EMV by Oct 1, 2020

Lost & Stolen Fraud

Visa Lost & Stolen paid by Banks

Counterfeit Fraud

➢ Card Issuing Banks continue paying for counterfeit chargebacks
No EMV Outdoor Upgrade by Oct 1, 2020

Lost & Stolen Fraud

➢ Petroleum Retailers *pay* for lost & stolen chargebacks

Counterfeit Fraud

➢ Petroleum Retailers *pay* for counterfeit chargebacks
What Does That Mean?

10% Lost & Stolen Chargebacks Paid by Retailers

90% Counterfeit Chargebacks Paid by Banks UNTIL...Oct 1, 2020

TODAY
What Does That Mean?

Without EMV

100%

Oct 1 2020

10% Lost & Stolen Chargebacks
Paid by Retailers

90% Counterfeit Chargebacks
Paid by Retailers
Check with your Oil Brand

Early upgrades may be required

Check with your oil brand or fuel supplier on the outdoor EMV liability shift.

Indemnification could end **before** Oct 1, 2020
Why pay for chargebacks AND EMV upgrades?
Can you AFFORD both?

Upgrade before October 1, 2020
Identify how to get ahead and justify the investment in EMV Upgrade before October 1, 2020
To Up Grade…
Or Not To…
Where are we at?

Folk Oil Outdoor EMV Status

100% completed!
To Upgrade…Or Not To…

Owner understanding the $ impact

- **$ignificant Inve$tement**
- Calculating the Return on Investment (ROI)
- Owner saves $$ by upgrading before Oct 1, 2020
- Reduces Chargebacks
To Upgrade...Or Not To...

Why we chose to upgrade

<table>
<thead>
<tr>
<th>GETTING AHEAD</th>
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<tbody>
<tr>
<td>Avoid paying chargebacks and upgrading dispensers after Oct 1, 2020</td>
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</table>
To Upgrade…Or Not To…
Technology upgrades

Early Adoption

Consumer Demand

NFC/Contactless (Tap & Pay)
$27.23 Billion Sales by 2023*

*Source: Allied Market Research: “Contactless Payments by Market” white paper
To Upgrade…Or Not To…

Next steps after owner agreed

Individual Site Plans

Know Technology Upgrade Options

New Dispensers -OR- Retro Fit Kits

CAT 6-7-8 Cables -OR- 2-Pair or Twisted
NOTICE!

Potential chargebacks over next 7 years will exceed $201K per site! Can you AFFORD to wait?

Upgrade before October 1, 2020
Examine how to avoid counterfeit chargeback fraud

Upgrade before October 1, 2020
Does EMV Really Work?
Does EMV Work?

EMV cards contain a “chip” that performs cryptographic functions making counterfeit fraud almost impossible.
Indoor EMV Results
EMV Works!

87% Counterfeit Fraud Decrease

EMV Enabled Retailers

Sep 2015 March 2019

Source: usa.visa.com
Sep. 3, 2019
$451 MM projected in AFD fraud in 2020
How much is YOUR share?

Upgrade before
October 1, 2020
How did we calculate?

Glad you asked!
Counterfeit AFD Fraud

3 Major Card Brands Reporting as of 9/19

$299 MM (actual) in 2018

23% average YOY increase

Projected $367 MM in 2019

Projected $451 MM in 2020
Counterfeit AFD Fraud

Projected $451 MM in 2020

Fraud will seek non EMV enabled sites!
Fraud Will Move Rural

When outdoor EMV is implemented in high fraud areas such as CA, AZ, TX, FL, fraud will shift to the “lower risk” areas.
Projected Quarterly Liability Per Site through 2022

Assumes no YOY increase in total fraud

$10,635

58.0%

$1,784

Projected Liability per Store, per Quarter

% of Stores Without EMV
Counterfeit AFD Fraud

Projected $451 MM in 2020

Fraud will seek non EMV enabled sites!

Annual Projected Liability Per Store
2021 = $12,860
2022 = $31,396
ROI – Finance Example
(Assumes $55K at 8% over 7 years)

$23,127
$43,959
$64,790
$85,622
$106,454
$127,285

$2,296

Financed Upgrade Cost/Year ($10,564)
Annual Fraud Avoided ($12,860, $31,396)
Cumulative Net Return on Investment $AVE

$AVED
ROI – Cash Example (Assumes $55K)

2021: $(42,140)
2022: $(10,745)
2023: $20,651
2024: $52,046
2025: $83,442
2026: $114,837
2027: $146,233
Dispenser EMV is a 5-7 Year Investment!

Example $55K Investment

Finance Example:

$127K saved in chargebacks over 7 years

Cash Example:

$146K saved in chargebacks over 7 years
Potential chargebacks over next 7 years will exceed $201K per site! Can you AFFORD to wait?

Upgrade before
October 1, 2020
Analyze costs to calculate ROI and upgrade benefits

Upgrade before October 1, 2020
Analyze Costs & Calculate ROI
Can you afford to wait?

Can you afford the financial impact?
Analyze
Wait Until AFTER Oct 1, 2020

➢ Pay for 100% Chargebacks
-- AND --
➢ Upgrade Fuel Dispensers
Upgrade BEFORE Oct 1, 2020

✓ Upgraded Fuel Dispensers
✓ New Technology
✓ Meet Customer Demands
✓ Reduced Chargebacks
Calculate Risk

Obtain Counterfeit Fraud Amount

Sources

Major Oil - Fuel Brand

Credit Card Processing Company
Re$earch Funding Options

Look for Bundle Deals with Other Equipment or Upgrades

Financing Companies

Major Oil / Fuel Brand Funding

Manufacturer Upgrade $pecials
NOTICE!

Why pay for chargebacks AND EMV upgrades?
Can you AFFORD both?

Upgrade before
October 1, 2020
Follow the steps to avoid counterfeit chargeback fraud

Upgrade before
October 1, 2020
Steps to Upgrade AFD’s
Planning Outdoor EMV

4 to 6 Months
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

1. Outdoor EMV POS Software Availability

Plan To Be Ready
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER (“AFD”) UPGRADES

2

Age & Reliability of Dispensers

10+ Years Replace
0-9 Years Replace or Retrofit Kit

Consult with Dispenser Distributor
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

1. Consult with Dispenser Distributor
2. Upgrade Forecourt Communication
3. Broadband Internet
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

4. Order Dispensers or Retrofit Kits
   - Consult with Dispenser Distributor

Allow Plenty of Time
Planning Outdoor EMV Timeline
AUTOMATED FUEL DISPENSER (“AFD”) UPGRADES

5. Consult with Dispenser Distributor

Install Dispensers or Retrofit Kits

Schedule Ahead
Technicians in Demand

Consult with Dispenser Distributor
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER (“AFD”) UPGRADES

6. Schedule Ahead
Technicians in Demand

Allow 4-6
Months or more!

Consult with Dispenser Distributor
Technician Scheduling

Choose Technician

- For each location

Schedule Technician

- Weeks/months in advance
Technician Scheduling

Prior to Installation

- **Contact Provider(s)**
  - Firewall, MNSP and/or Network

- **Update POS Profile**
  - Terminal Profile Update with Processor or Brand

- **Obtain Permits**
  - Building, EPA & other
Be Patient!

Down times are longer

Technicians need to follow your Implementation & Installation Guides

All brands and processors are different

New software for everyone

Expect a few hiccups with software bugs
Upgrade Best Practices

1. Avoid Fridays & Holidays
2. Technician use and follow customer-specific POS implementation & installation guides
3. Individual Site Surveys before ordering pumps
4. Test & verify transactions with payment processor or brand before technician leaves
5. Pay technician to stay extra 30-60 minutes to watch for issues
NOTICE!

Waiting to upgrade could cost you $201K per site over the next 7 years. Can you AFFORD to wait?

Upgrade before
October 1, 2020
Identify additional upgrade requirements

Upgrade before October 1, 2020
Other Forecourt Upgrades
Communication Upgrades

- Business Grade Broadband Internet for Forecourt & POS
- POS & Forecourt
  - EMV = more data per transaction
  - CAT 6 (or higher)
  - Payments & Video
  - Separate Conduit
  - Electrical
Triple DES PIN Pad

Oct 1, 2020 Requirement

- Triple Debit Encryption Standard
- “TDES”
- Required for PIN Debit if not upgrading to EMV
- Included with EMV Upgrade
Single DES PIN Pad

Discontinue Oct 1, 2020

- Single Debit Encryption Standard
- “SDES”
- Upgrade to EMV or TDES, or disable PIN debit acceptance
CAUTION

TDES does not replace EMV
Lost, Stolen & Counterfeit Chargebacks will be yours
$451 MM projected in AFD fraud in 2020

How much will YOU be liable for?

Upgrade before
October 1, 2020
Make good business decisions to avoid long-term costs

Upgrade before October 1, 2020
Technicians

Technician demand exceeds supply
• 700+ fuel technician job postings

Technician lead times for your project
• 6-8 weeks; will only get longer

Down time during installation
• EMV upgrades take many hours

Black-out periods
• Holidays
• Winter Weather
Work together for successful outdoor EMV upgrades

Upgrade before October 1, 2020
Purchase? Or Finance?
Financing Upgrades

$ Purchase $

New Dispensers
Capitalize & Depreciate

Retrofit Kits
Expense

$ Finance $

Monthly Payments

Companies here at NACS
Upgrade Today!
Avoid counterfeit chargeback fraud

Upgrade before
October 1, 2020
Plan & meet with staff and technicians

Individual Site Plans

- Upgrade POS Software
- Schedule technicians
- Business-grade Broadband Internet for fuel dispensers and POS
- Order & install dispensers/upgrades

Complete before Oct 1, 2020
Don’t Delay!
Upgrade to Outdoor EMV Now!
Upgrade before Oct 1, 2020
Plan 4-6 Months
NOTICE!

EMV:
Can you AFFORD not to upgrade?

Upgrade before
October 1, 2020
Learned the risks associated with waiting to convert to EMV at the pump

Estimated the costs if you don’t upgrade by October 1, 2020

Analized the best practices and lessons learned from other retailers implementing EMV
Resources

Conexxus.org

• Resources/EMV Resources (Resource Guide, Survey Results)

• Webinars (webinars@conexxus.org)

NACS Show

• Vendors Booths

• Tech Edge Solution Center # 3755
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