Introductions

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Agenda

• About U.S. Payments Forum
• About Conexxus
• Overview of the C-Store Industry
• EMV Liability Shift
• Overview of EMV
• Sample Implementation Plan
• Resources
• Q&A
About the U.S. Payments Forum

U.S. Payments Forum Mission

Supporting the introduction and implementation of new and emerging technologies that protect the security of, and enhance opportunities for payment transactions within the U.S.

Petro Working Committee and Communications & Education Working Committee

Providing educational resources and forum for industry stakeholders to resolve challenges associated with EMV implementation in the U.S. petroleum and convenience market

Recent Resources

• EMV Frequently Asked Questions for Petroleum Merchants
• Understanding the U.S. EMV Fraud Liability Shifts
• Optimizing Transaction Time at the POS
Who is Conexxus?

• We are independent & non-profit...
  – Expert volunteers, shaping the industry
• We set standards...
  – Data exchange, security, payments
• We provide clarity...
  – Emerging tech/trends; identifying & educating
• We advocate for our industry...
  – Open standards, innovation & competition
• We improve profitability
At the NACS Show
October 17-20, 2017
Chicago, IL
Booth 4384

• Website: www.conexxus.org
• Email: info@conexxus.org
• LinkedIn Group: Conexxus Online
U.S. Channel Count Comparison

- **154,535** Convenience Stores
- **51,191** Superettes/Supermarkets/Supercenters
- **43,636** Drugstores
- **28,832** Dollar Stores

Source: NACS
Nielsen TDLinx, NACS State of the Industry Survey of 2016 Data & CSX, LLC
Overview of the C-Store Industry
U.S. Convenience Stores

- More than 150,000 stores
- 124,000 sell motor fuels
- 39 million Americans fill up their tank every day
- Americans fuel up four to five times each month
- 160 Million transactions a day
- Sell an estimated 80% of all gasoline sold
- $549.9 B / $316.8 B Sales/Fuel
- 72% of Consumers Pay for Fuel at the Pump with “Plastic”

Source: 2016 NACS Retail Fuels Report, 2016 NACS SOI Report
U.S. Convenience Stores

• Did you Know? - Over 60%, that’s 97K are single-store operators!!
• Another 11K are chains with less than 10 stores

• You have no IT dept.
• You have no EMV “Task Force”
• You have questions...

While the following information applies to all merchants, the webinar is focused on the independent operator.

2016 NACS SOI Report
EMV Liability Shift* Dates for Petro

Oct 1 2015
Payment Terminals (except AFDs)

Oct 1 2020
Outdoor AFDs

*Not a payment network mandate (may be mandated by your oil brand)
EMV Liability Shift

*Liability shifts to the party in the payment chain with the *least secure* payment technology*
Who’s Liable? – It Depends!

• Type of Fraud
  - Counterfeit
  - Lost & Stolen
• Card Type (Chip, Mag Stripe)
• Payment Network
• Location (Attended, Unattended)
• System (Terminal, POS) Capabilities
Who’s Liable?

Merchant is protected if
✓ EMV terminal with PIN processing enabled; AND
✓ Site system software with EMV processing enabled.
Liability Shift Deferment (*Fine Print)

Several Payment Networks have chargeback threshold limitations relative to the EMV counterfeit liability shift

- Check with your payment processor or oil brand for specific information
- Limitations:
  - Excessive fraud-to-sales ratios; and
  - Excessive amounts of chargebacks; or
  - Excessive number of chargebacks
- Effective: October 1, 2017
- Types Affected:
  - Outdoor EMV Counterfeit Liability Only
  - Indoor and Outdoor, Lost & Stolen, EMV and Non-EMV
- Effects:
  - Possible additional fraud management processes
  - Outdoor counterfeit liability (EMV) chargebacks prior to Oct 1, 2020
  - Additional penalties/fines imposed on top of the chargeback
- Chargeback Timing:
  - Immediate or remediation period offered depending upon the total volume of the chargebacks

3-year extension may only apply to U.S. issued Cards for some Payment Networks
Overview of EMV
EMV What is it?

• EMV is a global standard for terminals and chip cards and devices (debit, credit, and prepaid payments) using microprocessor (chip) technology

• EMV cards contain a “chip” that performs cryptographic functions making counterfeit fraud almost impossible.

• EMV transactions work as Contactless too - either from a card or a mobile device
EMV What it is not!

• Very important for a merchant to understand what EMV is not!
• EMV is not a data encryption standard!
  – Cardholder data read from an EMV chip is in the clear just like a magstripe would be.
  – Card data must still be protected. PCI still applies.
- Point-to-Point Encryption, End-to-End Encryption, or tokenization is still recommended for maximum security.
EMV Terms – Sorting Out the Alphabet Soup!

• AID – Application Identifier. The EMV application defines transaction behavior
  – U.S. Common AID
  – Global AID
• Kernel – The software that “talks” to the chip (L2)
  – L1 refers to the hardware
• Contact/Contactless
• CVM – Cardholder Verification Method. There are four Offline PIN, Online PIN, Signature, NoCVM – *Signature is not used outdoors* (CDCVM, ODCVM too)
• PIN Bypass – An alternative to debit/credit prompting
• Be Careful! Fallback (stand-in) and Offline have a different meaning in EMV-speak
EMV Transactions – Simple View

• Pure Credit
  – Single AID
  – All CVMs are possible (no Signature outdoors)
  – Signature and/or NoCVM currently predominates in the U.S.

• Debit
  – In the U.S. there will be two or more AIDs. Facilitates routing choice (Durbin)
  – The AID menus are largely a thing of the past. Most implementations auto-select the AID
EMV Transactions – Choices

- **EMV Full Flow** – Card stays in the reader the entire authorization time.
- **Quick Chip, M/Chip Fast, Faster EMV**
  - All mean the same thing. Card can be removed prior to the authorization.
  - Decrease in transaction times
  - Maintains full EMV fraudulent card protection
  - A “Predetermined Amount” used for Contact or Contactless
  - The final amount is sent up in the Financial Advice.
  - Simplified Testing/Certification
  - In Petro, Faster EMV enables loyalty processing as with MSR. (post payment option)
EMV Transactions – Choices Loyalty

• Speaking of Loyalty....What about my loyalty
• Loyalty works pretty much as it alway has. Check with your Vendor.
  – Still always available pre-payment
  – Price per Unit discounting
  – Ticket level or post fueling discounts still available.
EMV Transactions – Fleet and Prompting

• Currently mixed bag with Fleet
  – There are specs that account for EMV
  – Today, Vendors can support the Prompting and Product restrictions via the track equivalent data

• EMV Fleet standards are currently under development
  – P2P causes problems
  – Conexxus with U.S. Payments Forum participation creating standard. Vendors, Brands, Fleet providers, and Acquirers
EMV Transactions – It’s Different Outdoors

- Two Part transactions (auth/advice)
- The card DOES NOT have to stay in the reader all the way through fueling, only for the authorization.
- Card readers may or may not “clamp” cards.
- The U.S. auths for max amounts.
- No signature CVM.
- Several kernel options can complicate certifications for vendors.
Outdoor EMV – What’s it Look Like?

What happens when card is removed too soon?
Outdoor EMV – What’s it Look Like?

When it all comes together...
Sample Implementation Plan
Benefits to upgrading early

• Receive next generation hardware & software
  – Upgraded Communications
  – Contactless
  – Secure Dispenser Access

• Better availability
  – Equipment
  – Technicians

• Image Refresh

• Consumer perception

• Don’t be the “last man standing”

• Avoid excessive chargebacks
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

- Determine Availability of POS Software Outdoor EMV
- Assess Fuel Dispenser Age & Operability
- Site Survey
- Order Upgraded Fuel Dispensers & Upgrade POS software
- Install Upgraded Fuel Dispensers
AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

Determine Availability of POS Software Outdoor EMV

Obtain availability date for Point of Sale Software for Outdoor EMV acceptance

Consult with your Vendors (POS, Processor) or Oil Brand
AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

Upgrade Options
✓ Replace
✓ Retrofit Kit
✓ New PIN Pads

Assess
Fuel
Dispenser
Age &
Operability

10+ Years  Replace
0-9 Years  Replace or Retrofit Kit?
          Assess Operability

Consult with AFD Distributor or Manufacturer
Projecting Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

- EMV = more data & requires more bandwidth
- Assess the need to upgrade Communication lines
- Add extra time if rewiring and/or breaking concrete

NOTE: If re-plumbing wiring, separate Communication & Payments from Electrical Lines by using two separate conduits

Survey the site with the AFD Distributor or Manufacturer

Build in extra time to break concrete and remediate soil contamination
AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

Consider AFD Options:

✓ Video Monitors
✓ 2D Scanners
✓ Tamper Alarms
✓ Near Field Communications ("NFC")

Order Upgraded Fuel Dispensers
Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

✓ Allow 4-8 weeks from order to delivery*
✓ Allow 2-4 weeks for scheduling certified technicians*
✓ Allow 1-2 weeks installation if new AFD’s
  – OR-
✓ Allow 1-4 days installation if retrofit kits or PIN Pads

Consult with AFD Distributor or Manufacturer

*Times will vary by manufacturer/distributor
Demand for equipment & technicians may increase exponentially as we approach 2020
AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

- Determine Availability of POS Software Outdoor EMV: Now!!!
- Assess Fuel Dispenser Age & Operability: Oct 2017
- Site Survey: Oct 2017
- Order Upgraded Fuel Dispensers: Jan 2018
- Install Upgraded Fuel Dispensers & Upgrade POS software: Apr 2018

These are example dates, actual timelines will vary depending upon the individual site’s needs.
Planning Outdoor EMV Timeline – Roll-Out

Roll-out timeline based on 10 store chain – 1 store per 2 weeks

- **Beta Testing**: Apr 2018 - 4-8 weeks
- **POS Software Fixes**: Jun 2018 - 4-16+ weeks
- **Roll-out Starts**: Oct 2018 - 1 store every 2 weeks
- **Rollout Complete**: Apr 2019

- Holidays were avoided (Thanksgiving – New Year’s) due to high fuel volume season
- Account for winter weather

These are example dates, actual timelines will vary depending upon the individual site’s needs
Resources

• U.S. Payments Forum
  – Petroleum Working Committee
• Conexxus
  – Data Security Standards Committee
  – Retail Financial Transactions Committee
• Each Payment Network’s Website

Website Resources
  – www.uspaymentsforum.org
  – www.emv-connection.com
  – www.emvco.com
  – www.conexxus.org
  – www.nacsonline.com

new Petroleum FAQs
http://www.uspaymentsforum.org/petroleum-industry-emv-faq/
Q&A