Effective Communication Practices for U.S. Chip Migration

Communication & Education Working Committee
June 2014
The EMV Migration Forum is a cross-industry body focused on supporting the implementation steps required for global and regional payment networks, issuers, processors, merchants, and consumers to help ensure a successful introduction of more secure EMV chip technology in the United States. The focus of the Forum is to address topics that require some level of industry cooperation and/or coordination to migrate successfully to EMV chip technology in the United States. For more information on the EMV Migration Forum, please visit http://www.emv-connection.com/emv-migration-forum/.
Moving to chip card payments requires broad education of the entire payments industry. Since consumers have multiple payment cards and wide range of merchant interactions, it is particularly important that consumers receive accurate and consistent messages about their new chip cards and about the new way for paying in-store.

This webinar will enable executives to build sound communication strategies that will help the U.S. market understand and embrace chip payments and their many security benefits.

This webinar will be recorded and made available on the EMV Connection website at http://www.emv-connection.com.
Presenters

Randy Vanderhoof, Director, EMV Migration Forum

Cynthia Knowles, Vice President Market Integration, North American Card Solutions, FIS

Brady Cullimore, Director U.S. EMV Project Management Office, American Express

Eric Rainsberg, Senior Manager Multi-Channel Strategy and Development, Macy's
Effective Communication Practices for U.S. Chip Migration

**Agenda**

- Overview of U.S. Chip Migration
- Value of Clear Communication
- Best Practices and Tools
- Q&A

EMV Migration Forum
Effective Communication Practices for U.S. Chip Migration

OVERVIEW OF U.S. CHIP MIGRATION
Worldwide EMV Deployment and Adoption

<table>
<thead>
<tr>
<th>Region</th>
<th>EMV Cards</th>
<th>Adoption Rate</th>
<th>EMV Terminals</th>
<th>Adoption Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada, Latin America, and the Carribean</td>
<td>471M</td>
<td>54.2%</td>
<td>7.1M</td>
<td>84.7%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>942M</td>
<td>17.4%</td>
<td>15.6M</td>
<td>71.7%</td>
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<tr>
<td>Africa &amp; the Middle East</td>
<td>77M</td>
<td>38.9%</td>
<td>699K</td>
<td>86.3%</td>
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<tr>
<td>Europe Zone 1</td>
<td>794M</td>
<td>81.6%</td>
<td>12.2M</td>
<td>99.9%</td>
</tr>
<tr>
<td>Europe Zone 2</td>
<td>84M</td>
<td>24.4%</td>
<td>1.4M</td>
<td>91.2%</td>
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</tbody>
</table>

* Figures reported in Q4 2013 and represent the latest statistics from American Express, Discover, JCB, MasterCard, UnionPay, and Visa, as reported by their member institutions globally.

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<th>EMV Terminals</th>
<th>Adoption Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Estimates</td>
<td>~17-20M</td>
<td>~1-2%</td>
<td>~2M</td>
<td>~20%</td>
</tr>
</tbody>
</table>

Source: Estimates stated from The Smart Card Alliance/EMV Migration Forum, May 2014
Why Chip And Why Now?

<table>
<thead>
<tr>
<th>Security &amp; Fraud</th>
<th>Global Interoperability</th>
<th>NFC and Mobile</th>
<th>Payment Networks</th>
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</thead>
<tbody>
<tr>
<td>Reduce counterfeit, lost and stolen card fraud</td>
<td>Increasingly difficult for U.S. travelers to use cards</td>
<td>Accelerator for EMV in the U.S. to enable acceptance of other form factors</td>
<td>Major card brands are advancing the adoption of EMV through a series of liability shifts and mandates</td>
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<td>Unique microprocessor that prevents card cloning</td>
<td>Vulnerability of U.S. payments infrastructure</td>
<td>Merchants implementing NFC in combination with enabling of EMV on POS devices</td>
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<td>Dynamic data</td>
<td>Foreign visitors will be able to use their chip cards in the U.S.</td>
<td>Consumer adoption of contactless cards and mobile payments will continue to grow</td>
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<tr>
<td>Fraud migrates to the weakest link, which is becoming the U.S. since other major markets have migrated</td>
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EMV Migration Forum
How Does Chip Technology Protect Against In-person Counterfeit Card Fraud?

- Embedded microprocessor – strong security
- Secure storage of cardholder data
- Dynamic data generated by the chip for every transaction
- Stolen data cannot be reusable in a chip transaction
- Terminal device will detect chip card vs. magnetic stripe
Magnetic Stripe Data

**HERE IS YOUR CARD NUMBER**

**HERE IS YOUR NAME**

**EXPIRATION DATE**

**SERVICE CODE**

**CVV**

EASY TO READ, EASY TO REPLICATE!!!
### Chip Data

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<th>Chip Data</th>
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<td>C 03</td>
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<td>5A</td>
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**EMV Migration Forum**
Complexities Surrounding U.S. Chip Migration

U.S. payments market is unique from other regions who have implemented chip technology

- Two international and 16 regional debit networks
- “Durbin Amendment” governs transaction routing for debit cards requiring U.S. issuers to participate in at least two unaffiliated debit networks
- Largest number of issuers, acquirers, merchants, ATM operators and cardholders
Effective Communication Practices for U.S. Chip Migration

VALUE OF CLEAR COMMUNICATION
Customers Today Expect More

The payment technology revolution is raising customers’ expectations for their ideal shopping experience.

GREATER SECURITY
- Rigorous Safeguards
- Fraud Prevention Services
- 24/7 Global Protection

GREATER FREEDOM
- Uniformity & Consistency

Simplicity

Flexibility

Mobility

Speed
Cardholder Predicament

How do I get a chip card?

When do I need to sign for a purchase?

If I am using my credit card, why do I have to enter in a PIN?

What is EMV?!!

How do I know if I should swipe or insert the card?

Is personal information stored on the chip?

Will the merchant charge me more?

Will all my cards have a chip?

Where can I use this chip card and how will I know?

How do I get cash from an ATM?

Will my mag stripe still work?

What does contactless mean?
Merchant Dilemma

What is the best CVM method?

What about mobile payments or accepting contactless?

None of my customers have chip cards, so why upgrade?

What is EMV?

How will I know when a customer needs to insert or swipe?

How will my customers know I am chip ready?

What if the chip card isn’t working or my customer forgets their PIN?

What if I am not ready by October 2015?

What about my gift and private label card – can I accept those?

What is the cost to upgrade?

I don’t have fraud – do I have to upgrade?

Will it cost more to accept a chip card?

EMV Migration Forum
Inaccurate and Inconsistent Communication = Confusion

Every credit card in the U.S. will be replaced by October 2015 with new cards that contain the chip-and-PIN technology that the rest of the world has had for years.

The U.S. is moving to new chip cards based on a global standard called EMV, already in use in 2.37 billion payment cards worldwide, to enhance in-person payment security for consumers, merchants and issuers. Throughout this year, consumers should start receiving their new chip cards, and by 2015 will be able to use them more frequently to pay at retail outlets.

Chip-and-PIN cards, often referred to as EMV cards due to the common standard for the technology created by Europay, MasterCard and Visa, have gained popularity because the cardholder data stored on the chip is encrypted and the cards are almost impossible to duplicate.

EMV chip cards contain secure computer chips that validate the authenticity of the card and include a one-time use security code in every transaction, making chip payment data virtually impossible to use for counterfeit card fraud.
U.S. EMV Ecosystem

Card Issuers

Mobile Device

ATM

Online

Card Processors

Point of Sale

Offshore (e.g., transit, vending, parking)

Payment Networks

Merchants

Merchant Acquirers

Federal Government

Courtesy of FIS
How a chip card works in a mixed acceptance device environment

- There are many terminals in market today with the chip reader that do not support chip cards. This could cause some cardholder confusion/frustration.
- If a chip card is swiped in a chip card enabled terminal the terminal will prompt the cardholder to insert the card into the reader.
Merchant/Device Differences

Different merchant and device environments will have unique experiences and timelines for chip deployment.

**Restaurant**
- Terminal to table
- PIN or signature
- Add tip on device prior to making payment

**ATM**
- Online PIN – required

**Automated Fuel Dispensers (AFD)**
- Pay at pump with PIN
- Pay at pump No CVM
- Pay inside with PIN or signature
Communication Framework

- Accurate
- Consistent
- Relevant & Timely
- Know Your Audience
Effective Communication Practices for U.S. Chip Migration

BEST PRACTICES AND TOOLS
Standardization of Terminology

Defines standard terminology to enable clear recognition and understanding of information for industry stakeholders and consumers.

Column headers:
1. Recommended Standardized Terms
2. "Also Known As" (AKA) terms
3. Industry Stakeholder Definition
4. Cardholder/Customer Definition

http://www.emv-connection.com/standardization-of-terminology
Top Chip Terms

**Terms to Use**

- Chip card
  (or potentially “EMV chip card” for first reference)
- Insert
  (as in “insert your chip card”)

**Terms to Avoid**

- Integrated Circuit Card (ICC)
- Chipped card / Chipped
  (i.e. – your card will be chipped)
- Chip-and-signature
  (unless specifically referring to signature as a verification method on a chip card)
- Chip-and-PIN
  (unless specifically referring to PIN as a verification method on a chip card)
- Microchip
- EMV card
- Smart chip
- Smart card
- Dip
  (a popular marketing phrase used during the UK chip migration)
A card reader with an opening for a chip card is considered “chip-capable” until it obtains a software update which converts the reader to be “chip-enabled.”

i.e. – There are currently many “chip-capable terminals” in the U.S., but relatively few “chip-enabled terminals.”
Analysis of relationships between stakeholders who are involved in U.S. chip migration with an emphasis on communication and educational objectives among stakeholders.

1. Fourteen stakeholder diagrams
2. Communication glossary
Who Educates the Cardholder?

- **Issuer**
  - Chip awareness
  - Usage instructions
  - Chip value proposition
  - FAQs
  - Merchant/ATM location finder

- **Merchant**
  - Acceptance awareness at POS
  - Assistance at POS

- **Payment Network**
  - Chip awareness

- **Industry Organization**

- **POS / ATM Owner / Operator**
  - Instructions on / around POS / ATM
  - Messaging on LED screen

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EMV Migration Forum
Who Educates the Merchant?

*Tier 3 and 4 Merchants: Less than 1 million transactions per year, though precise classification can vary.
Welcome to the EMV Migration Forum Knowledge Center, the online resource library for all stakeholders involved in EMV implementation. The Knowledge Center has gathered white papers, links, industry best practices and other resources from across the web, all relevant to EMV migration in the US.

The Knowledge Center is implemented as an interactive Excel spreadsheet. The need to update the Knowledge Center resources on a regular basis was apparent, and given the combination of topics and resource links, it became necessary to create a simple table that would allow users to filter by Category, Stakeholder or Subtopic, or search by keyword in an easy-to-navigate format. The Excel Interactive View was determined to be the best solution.

To access the Knowledge Center, click on the Excel Interactive View link below. An interactive Excel spreadsheet will open within the web browser — this is the Knowledge Center. Each resource is categorized by column heading — Category, Stakeholder, Subtopic, Title, and Author — and is searchable by filters.

To search for a specific resource by column heading, use the filters to the left of the spreadsheet. Select the filter criteria to locate the resource; select multiple filters to further narrow the search. Select two or more criteria under one column heading by holding the “Control” key while making selections.

To search by keyword, select the Excel-file symbol on the left-most side of the spreadsheet. This link will open two options. Select the “Open in Excel Web App” option. The spreadsheet will then open as a full Excel spreadsheet within the browser. In this view, select the “Find” button in the top middle of the page and enter the keyword(s). Conducting this type of search will highlight the keyword within the spreadsheet. This function is also helpful when searching without a specific Category, Stakeholder or Subtopic in mind. To return to the Excel Interactive View, return to the previous page.

Thanks to the Communications & Education Working Committee for initiating the Knowledge Center and seeing it through to completion. C&E Working Committee members contributed many hours to gathering, organizing, and researching resource links to ensure that the content provided is relevant to implementing EMV in the US.
# Knowledge Center

<table>
<thead>
<tr>
<th>Category</th>
<th>Stakeholder</th>
<th>Subtopic</th>
<th>Title</th>
<th>Author</th>
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<td>Testing &amp; Certification</td>
<td>Acquirer/Processors</td>
<td>Testing &amp; Certification Overview</td>
<td><a href="#">EMV Testing &amp; Certification Video Presentation</a></td>
<td>Smart Card Alliance</td>
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<td>Links to Tools (Merchant, Acquirer, Issuer, etc.)</td>
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<td>EMV and Brand Resources for Training / Education Services</td>
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<td>EMV and whitepaper</td>
<td>General</td>
<td>EMVCoo</td>
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</table>

**EMV Migration Forum**
• Consistent and continuous messaging across all customer touch points

**Example Messaging for Issuers**

- **Statements**: "Your card is changing", "What's Different", "How to use"
- **Welcome Packs**: "Your new chip card is here"
- **Call Centers/IVR**: "Your card is changing", "How to use your card"
- **Online**: "Your card is changing", "How to make Internet purchases"
- **ATM's**: "How to use your card in the ATM"
Example Messaging for Merchants

• Consistent and continuous messaging across all customer touch points
Messaging & Branding Infographic

EMV Migration Forum

Terminal Upgrades

PRE | DURING | AFTER
--- | --- | ---
1 | 2 | 3

Merchants

Issuers

Migration Phases

PRE | DURING | AFTER
--- | --- | ---
1 | 2 | 3

Receipts
Cashier
Call Center

FAQ's

Standardization of Terminology

Hints & Tips

Help and Resources

Statements
ATM's
Call Center
EMV Migration Forum Resources

• Categorized for Issuers, Merchants, Acquirers and Consumers
  ▪ [www.emv-connections.com](http://www.emv-connections.com)
  ▪ EMV 101 Webinar
  ▪ EMV Frequently Asked Questions
  ▪ Glossary of Standardized Terminology
  ▪ EMV-related White Papers
    • *Card-Not-Present Fraud: A Primer on Trends and Transaction Authentication Processes*
    • *Card Payments Roadmap in the U.S.: How Will EMV Impact the Future Payments Infrastructure?*
    • *EMV and NFC: Complementary Technologies that Deliver Secure Payments and Value-Added Functionality*
    • *EMV Testing and Certification White Paper: Current U.S. Payment Brand Requirements for the Acquiring Community*
    • *U.S. Debit EMV Technical Proposal*
Other Resources

• General EMV Migration Forum and Smart Card Alliance press releases
• EMVCo
• EMV Migration Forum Weekly Newsletter
• Payment Brands websites
• Industry related webinars
Communication Framework – Examples

- **Accurate**
  - Press releases and webinars
  - emv-connection.com
  - Press releases Google Alerts

- **Consistent**
  - Standardization of Terminology

- **Relevant & Timely**
  - Press Room

- **Know Your Audience**
  - Who Educates Whom
Somehow it all works out...
What would be the most valuable method of educating you about chip cards?

a. Public broadcast/TV
b. Information from my card issuer
c. Merchant point-of-sale
d. Payment brands (e.g. Visa, MasterCard, American Express, Discover)
e. Digital (e.g. YouTube, Internet, Social Media, etc.)
Effective Communication Practices for U.S. Chip Migration

Q&A
Thank you

Contributing organizations:

- cpi card group
- VeriFone
- montner & associates
- FIS
- Datacard Group
- ingenico
- EMV Migration Forum
- American Express
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