Contactless EMV Payments: Issuer Opportunities
Webinar

November 9, 2016
Smart Card Alliance

Smart Card Alliance Mission

To stimulate the understanding, adoption, use and widespread application of smart card technology through educational programs, market analysis, advocacy, and industry relations . . . .

Payments Council

Facilitating the adoption of chip-enabled payments and payment applications in the U.S.

Recent Contactless Payments Resources

- Contactless EMV Payments: Benefits for Consumers, Merchants and Issuers
- EMV and NFC: Complementary Technologies Enabling Secure Contactless Payments
Today’s Webinar Topics and Speakers

• **Introductions**
  - Randy Vanderhoof, Smart Card Alliance

• **Why Contactless – Why Now**
  - Oliver Manahan, Infineon Technologies

• **Contactless Lessons Learned: Australia, UK and Canada**
  - Jose Correa, NXP Semiconductors

• **Contactless EMV Payments: Benefits for Issuers**
  - Nick Pisarev, Giesecke & Devrient

• **Issuer Implementation Considerations**
  - Jamie Topolski, Fiserv

• **Q&A**
  - Randy Vanderhoof, Smart Card Alliance
Then...... and Now

• Trials occurred ~ 2005
  • Some merchants, a few issuers, but not enough “critical mass” to drive adoption or modify behaviour
• No clear benefit to participants:
  • Swipe time = tap time
  • Brand rules not requiring cardholder verification (CVM) for some swiped transactions further reduced benefit
• POS Readers were “add-ons” – merchants had to do integration, and in some instances counter space was taken
• Was based on Magnetic Stripe Data (MSD)

• Contactless is now based on EMV standards
  • Globally interoperable
  • Highest standard of Security
• Contactless readers are integrated in standard POS
Consumers

- People prefer “tap” versus “dip”
  - Easier/more intuitive transaction
  - Faster throughput
- Other markets show:
  - Increase usage and frequency
  - Will seek out issuers of DI cards
- No “forgotten card” in EMV reader
- Opens additional use cases – e.g., Transit
Issuers

- EMV = ↑ Security
- EMV = ↑ Transaction time
- Contactless = EMV Security
- Contactless = ↓ Transaction time
- Other markets have shown consumers use dual-interface (DI) cards more frequently, particularly for lower value transactions = tender shift from cash to electronic
- Vast majority of face-to-face transactions are still card-based; DI helps shift consumer behavior to “tap”, thus enabling shift to mobile
Merchants

- EMV = \( \uparrow \) Transaction time ("quick" helps, but still not as fast as contactless)
- Contactless = \( \downarrow \) Transaction time (faster throughput)
- With the EMV migration, most new POS devices have contactless capability built-in... no longer a decision to buy a separate unit, but whether to enable
- Enabling for contactless cards = enabling for any contactless device...
  - Cards
  - Mobile
  - Wearables etc.
Summary

- Consumer
  - Fast
  - Convenient
  - Secure

- Merchant
  - Fast
  - Secure
  - Progressive

- Issuer
  - Secure
  - Consumer Preference
  - New Use Cases

- Network
  - Secure
  - Increase in Transactions
Contactless Lessons Learned: Australia, UK and Canada

Jose Correa
NXP Semiconductors
Australia

- **Contactless adoption**
  - $3B AUD annual contactless spend\(^1\)
  - Over 60% of all Debit transactions\(^1\)
  - Over 50% of all population has used a contactless card\(^2\)

- **Issuance**
  - Two thirds of population own a contactless card\(^3\)

- **Usage**
  - 60% use card once a week, up from 43% in 2014\(^2\)

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Australia

- **Acceptance**
  - Major merchants small business have installed contactless terminals
  - Coles reports 70% of all transactions are now contactless

- **Preference**
  - 66% prefer contactless over contact
  - 64% prefer contactless over cash when transaction < $100 AUD

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UK

• Contactless adoption
  - £7.75B annual contactless spend\(^6\)
  - Over 20% of all spend in the UK\(^7\)
  - Number of contactless transactions represent over 20% of the total\(^8\)

• Issuance
  - Over 50% of all credit and debit cards are contactless\(^6\)

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7- Once it was touch and go, now contactless is a new-wave revolution https://www.theguardian.com/money/2016/sep/10/contactless-cards-wave-pay-oyster-london-use
8- Contactless Statistics http://www.theukcardsassociation.org.uk/contactless_contactless_statistics/
UK

- **Acceptance**
  - Over **1M** transactions per day at TfL
  - Over 460k contactless capable terminals

- **Preference**
  - Improved user satisfaction:
    - Transaction speed
    - Convenience
    - Safety
  - Customers report **50%** faster transactions compared to traditional chip and PIN

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10 - VISA, “Visa Europe announces record revenues as the UK goes contactless,” [https://www.visa.co.uk/newsroom/visa-europe-announces-record-revenues-as-the-uk-goes-contactless-1300858?returnUrl=/newsroom/index#hash.7o7ZNXcVdpuf](https://www.visa.co.uk/newsroom/visa-europe-announces-record-revenues-as-the-uk-goes-contactless-1300858?returnUrl=/newsroom/index#hash.7o7ZNXcVdpuf)

Canada

- **Contactless adoption**
  - Improved adoption compared to Magstripe
  - Data based contactless implementations

- **Issuance**
  - By late 2014 over 70% credit and 40% debit cards were dual interface\(^\text{12}\)

- **Usage**
  - Over 30% of all transactions are contactless based
  - Usage saw linear increase as limits moved from $50 to $100 CAD\(^\text{13}\)

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Canada

• Acceptance
  ▪ Over 80% of merchant POS devices from the following categories are contactless enabled:
    • Grocery Stores
    • Quick Service Restaurants
    • Pharmacies
    • Gas Stations
  ▪ Over 30% of all POS devices nationally

EMV Contactless - Issuer Benefits

**Cardholder Convenience**
- Keep card in hand at all time
- Secure speedy transaction

**Revenue Increase**
- Displace cash transactions
- Top of wallet card through frequency of use

**Security**
- Better fraud detection through frequency of use
- Tap to dip fallback guarantees liability compliance

**Easy Deployment**
- Same personalization equipment
- EMV technology same as contact

**Global Interoperability**
- Issue globally accepted DI cards
- Leverage globally deployed DI card technology
Contactless interface presents opportunities to use the card in many different ways

- Interaction with a mobile device
  - Secure mobile payment enrollment
  - Mobile banking access and/or high risk mobile transaction authentication

- Have additional application(s) for authentication and/or access control – corporate environment, university campus etc.
Q: I’ve tried it before, it didn’t work, why try again?
A: Benefits vs. complexity ratio is now much different.

Q: If the consumer wants contactless, can’t they just use mobile?
A: Mobile payment does not represent a critical mass of payment devices. Consumer habits take time to change.

Q: There is no acceptance, so why issue cards? (The Chicken and Egg problem)
A: There’s growing merchant contactless acceptance with EMV migration. Plus, contactless offers benefits in segments that drive frequency of use: transit / grocery / convenience store / coffee / fast food restaurants.
Solving the Chicken and Egg problem

- Convenience
- Habit
- Demand
- Issuance
- Acceptance
NFC-enabled Mobile Device vs. Dual-interface Card

- There are different costs and benefits for both options
  - Issuance costs (provisioning the card to the mobile device vs. incremental cost of dual-interface cards)
  - Ongoing usage costs (some mobile wallets charge a percent of every transaction)
- “Interface Redundancy” on dual-interface cards
- Visibility / branding
- Integrated functionality (coupons, loyalty) via mobile device

Segmentation Strategy

- Credit, debit, or both
- Entire card portfolio or subset (e.g. active cardholders, high net-worth, etc.)
- Cost per card vs. cost of multiple card inventories
Dual-Interface Profiles
• Refer to profile recommendations from Payment Brands
  ▪ MSD Contactless, in addition to EMV
  ▪ Offline Data Authentication
  ▪ Offline Transactions
  ▪ U.S. Common Debit AID

Authorization Processing and Risk Management
• Support for additional types of cryptograms
  ▪ Dynamic CVV / CVC; ARQC / TC

Cardholder and Employee Education
• Instruct cardholders about the new option for contactless usage and address any security concerns
• Employees will need to know how to identify the interface for each transaction
Q&A