

CREDIT CARD SECURITY MYTHS VS REALITY

Presented by:

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DISCLOSURES

- ▶ Brad Jones is an employee of Retail Management Solutions. The conflict of interest was resolved by peer review of the slide content. He declares no other conflicts of interest or financial interest in any product or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria.
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LEARNING OBJECTIVES

Following this presentation, attendees should be able to:

- ▶ Describe the differences between the credit-card technologies and the role those technologies play in overall security strategy for merchants.
- ▶ Explain the difference between PCI DSS and PA-DSS and how this impacts you as software developers and the merchants you service with regard to PCI scope.
- ▶ Explain the significance of October 2015 with regard to EMV card processing.



CREDIT CARD SECURITY OVERVIEW

- ▶ Technology
- ▶ Standards
- ▶ Timeline

CREDIT CARD SECURITY OVERVIEW





CREDIT CARD SECURITY TECHNOLOGY

- ▶ EMV
- ▶ P2PE
- ▶ NFC

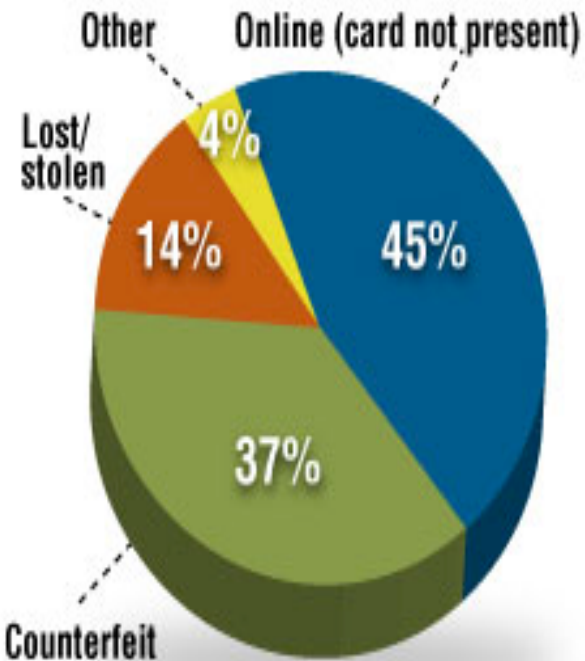
CREDIT CARD SECURITY TECHNOLOGY



- ▶ EMV – Europay, Mastercard, Visa
 - ▶ Uses microchip technology to stop card duplication
 - ▶ Protects the card brands and acquirers
 - ▶ Does not prevent data breaches

CREDIT CARD SECURITY TECHNOLOGY

U.S. Card Fraud by Type, 2014



Source: Alte Group, "EMV: Lessons Learned and the U.S. Outlook," June 2014.

CreditCards.com

CREDIT CARD SECURITY TECHNOLOGY

▶ P2PE – Point-to-Point Encryption

- ▶ Hardware Encryption at the Point of Interaction
- ▶ Directly links system 1 (the point of payment card acceptance) to system 3 (the point of payment processing) without any interaction with system 2 (the point of sale application)
- ▶ Would have prevented most, if not all, of the well publicized credit card breaches like Target and Home Depot

CREDIT CARD SECURITY
TECHNOLOGY



- ▶ NFC – Near Field Communication

- ▶ Google Wallet, Apple Pay, etc.

CREDIT CARD SECURITY
TECHNOLOGY



Contactless mobile payments (finally) gain momentum

MID
2014

0.5%

of the base of 450-500 million near-field communication (NFC)



END
2015

5%

of the base of 600-650 million NFC equipped smartphones will be used at least once a month.

CREDIT CARD SECURITY TECHNOLOGY



CREDIT CARD SECURITY STANDARDS

- ▶ PCI-DSS:

- ▶ Payment Card Industry – Digital Security Standards

- ▶ PA-DSS:

- ▶ Payment Application – Digital Security Standards

CREDIT CARD SECURITY
STANDARDS



▶ In Scope vs Out of Scope

CREDIT CARD SECURITY
STANDARDS



- ▶ PCI-DSS V3.0 and V3.1 – Now
- ▶ EMV – October 2015
- ▶ PCI-DSS next version – Fall 2016

CREDIT CARD SECURITY TIMELINE