Creating, Developing and Instituting an Effective Incident Response Plan

Webinar

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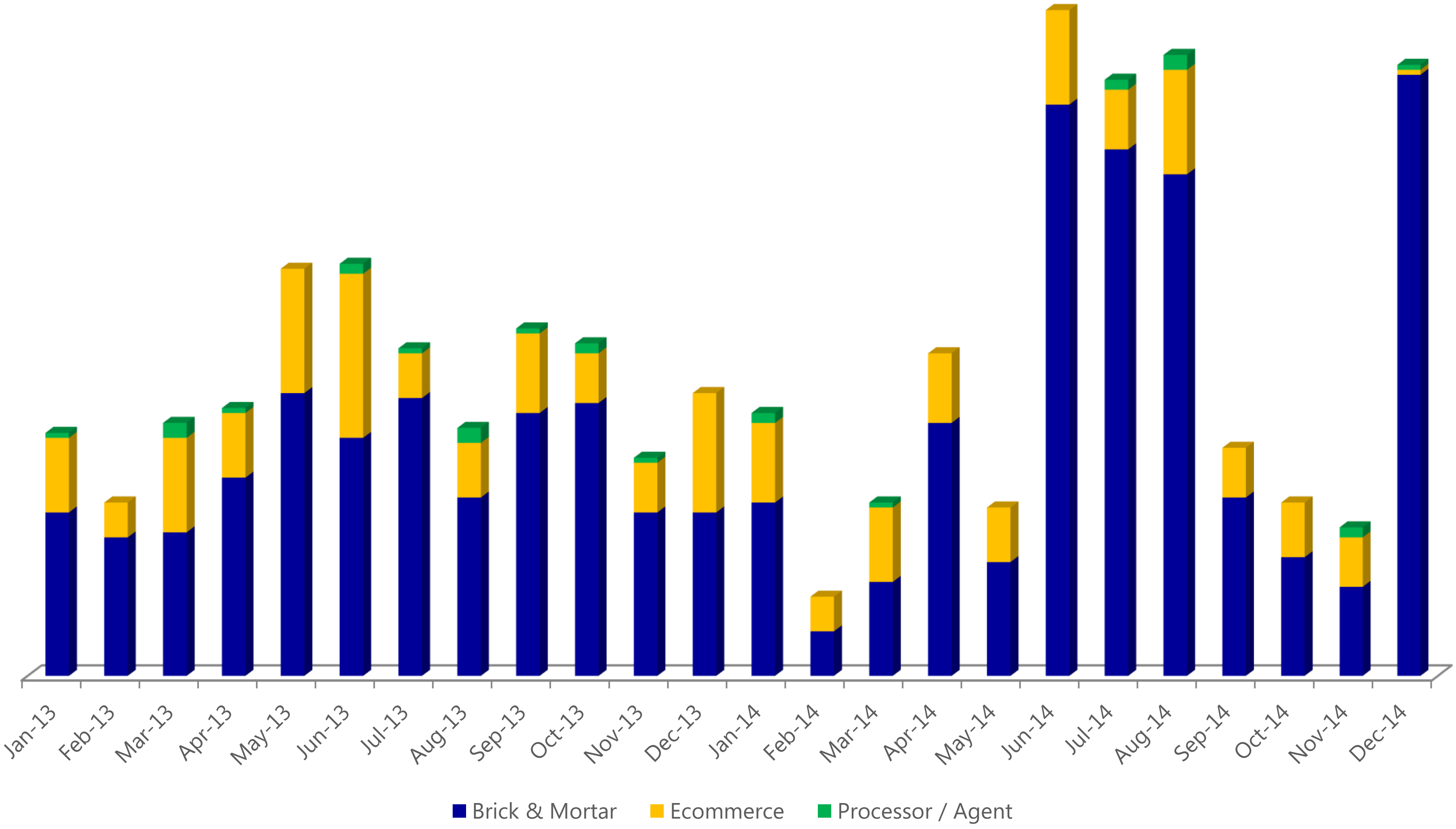
Agenda

- Data Breach Landscape
- The Need for Incident Response
- Incident Response Plan Elements
- Questions and Answers

Data Breach Landscape

Stan Hui

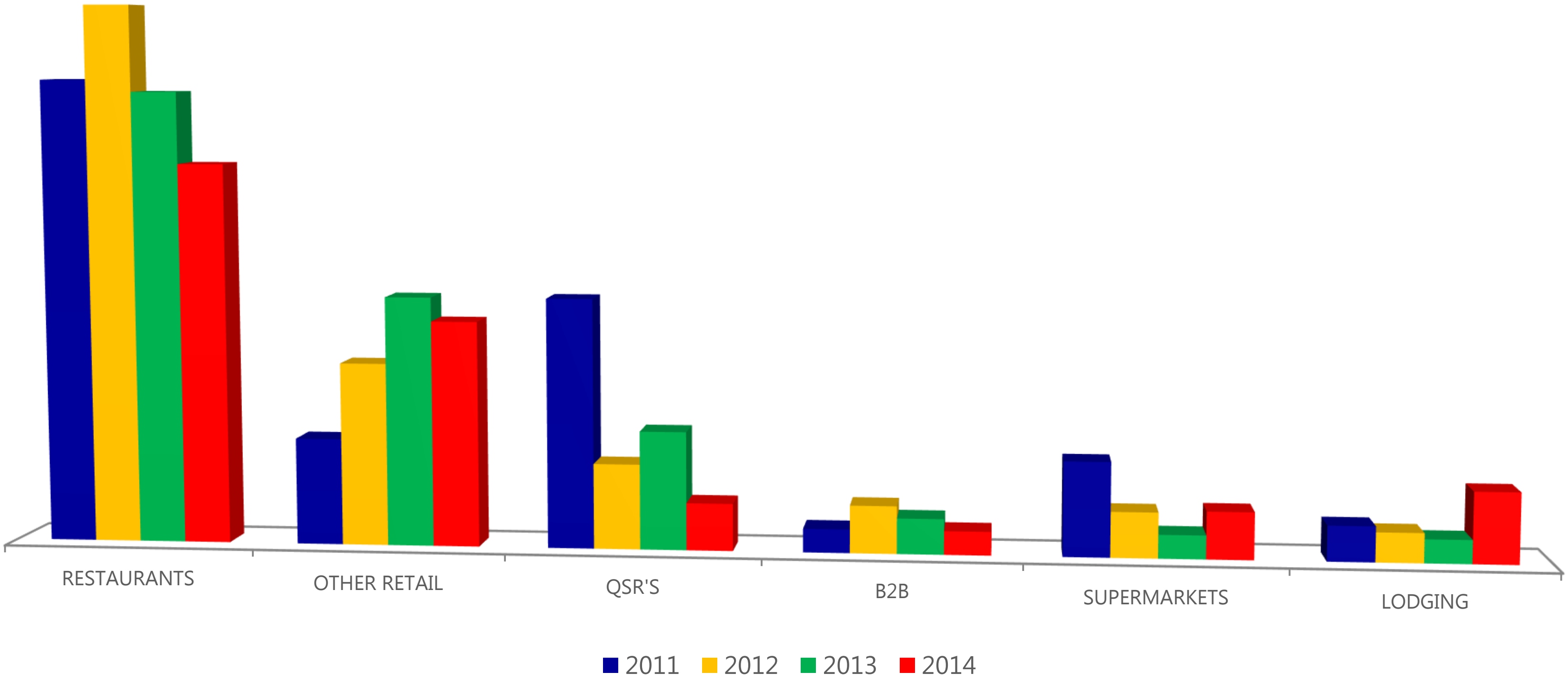
Visa Inc. CAMS Compromise Events
Entity Type by Month



Source: Compromised Account Management System (CAMS) – Original "IC" and "PA" Alerts

Visa Inc. CAMS Compromise Events
Top Market Segment* (MCC)

- Restaurants and retailers are leading market segments in 2014
- Insecure remote access and poor credential management continue to be attack vectors



* Market Segment based on Acceptance Solutions MCC "Market Segment" category

Source: Compromised Account Management System (CAMS) – Original "IC" and "PA" Alerts

Recent Threats due to POS Integrators

- POS Integrators support merchant POS software installations
- Typically merchant setup includes Remote Access Services (RAS) for monitoring and software support
- Integrators have access to POS system - however PCI compliance not maintained
- Multiple POS Integrator related compromises since June 2014
- Merchants infected with ‘Backoff’ family of malware
- Remote Access Services and Applications Exploited
  - Currently **LogMeIn** users targeted (other RAS include: Remote Desktop Protocol, PCAnywhere, TeamViewer and VNC)
  - Brute forces login credentials
  - Creates a ‘backdoor’, logs keystrokes and collects credit card data
  - Extremely low anti-virus detection rates
  - Exfiltration to remote IP addresses
- Non-Compliant Integrators / Merchants set up with default / shared remote access IDs without two-factor authentication or regular password changes
  - Entities not following PCI compliant practices

Merchant Due Diligence

Requirement 12 – Maintain a policy that addresses information security for all personnel

- Requirement 12.5.3 – Establish, document, and distribute security incident response and escalation procedures to ensure timely and effective handling of all situations
- Requirement 12.10 – Implement an incident response plan. Be prepared to respond immediately to a system breach

"Without a thorough security incident response plan that is properly disseminated, read, and understood by the parties responsible, confusion and lack of a unified response could create further downtime for the business, unnecessary public media exposure, as well as new legal liabilities."

- Requirement 12.10.1 – Create the incident response plan to be implemented in the event of system breach

Creating, Developing and Instituting an Effective Incident Response Plan

Stephen J. Kopeck, Verizon

verizon
RISK Team

VISA

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OBJECTIVE

OBJECTIVE—

To outline and discuss the fundamental components of developing, and implementing an Incident Response Plan.

PUTTING IT INTO PERSPECTIVE

THE NEED FOR IR—

- **Incidents continue to occur with increasingly sophisticated threats:**
  - organized crime / sensitive data theft
  - denial of service attacks / “hacktivism”
  - insider threats / corporate espionage
  - malware outbreaks
- **Question of not “if”, but “when”**
- **Solution = IR Plan**

IR is not just an IT problem…

- Management
- Legal
- Human Resources
- Physical Security
- Loss Prevention
- Corporate Communications
- Others, as necessary

The cost of being prepared is always less than being a victim

PUTTING IT INTO PERSPECTIVE

THE NEED FOR IR—

1 – Recover quickly from an incident

—damage and loss minimized

—future incidents prevented, or at least mitigated

2 – Implement a pre-planned strategy

—efficient, effective, and repeatable process

3 – Protect the company's interests

—proprietary information / intellectual property

—sensitive customer data

—brand image / reputation

4 – Maintain compliance

—legal liability reduced

—insurance costs reduced

IR Plan Elements

FOCUS AREAS—

—Scope & Purpose

—IR Roles and Responsibilities

—Internal Stakeholders

—External Entities

—IR Process Flow/Phases

—Revision History

—IR Resources

—IR Stakeholder Contact List

—First Responder Checklist

—Incident Report Template

—Evidence Chain of Custody/Log

IR Plan - Stakeholders

INCIDENT RESPONSE STAKEHOLDERS—

—Chief Information Risk Officer

—Incident Response Team / Manager

—Business Organizations / Managers

—Information Technology (IT) Organizations / Managers

—Information Security / Officers

—Legal

—Human Resources

—Compliance

—Physical Security

—Loss Prevention

—Corporate Communications / Public Relations

It ultimately depends on the situation…

INCIDENT RESPONSE ELEMENTS

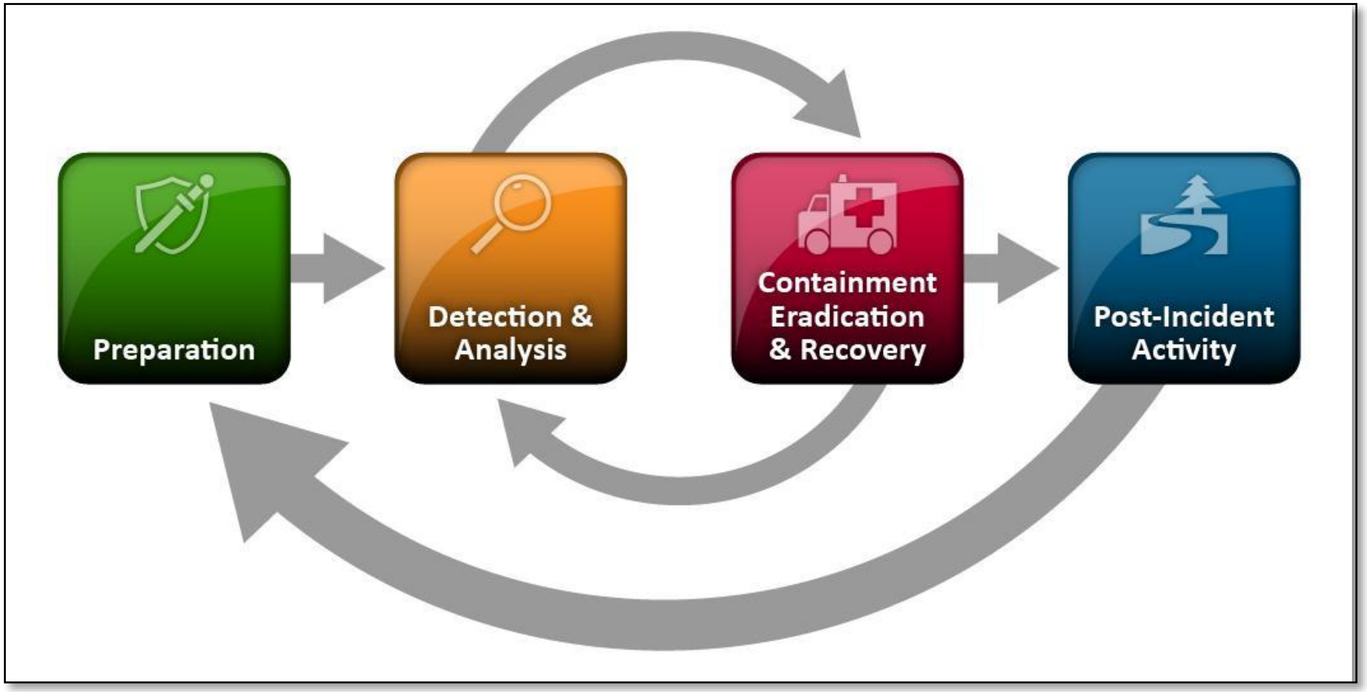
INCIDENT RESPONSE PHASES—

- Preparation
- Detection & Analysis
- Containment, Eradication, & Recovery
- Post-Incident Activities

NIST SP 800-61, R2, Computer Security Incident Handling Guide

INCIDENT HANDLING ELEMENTS

INCIDENT RESPONSE PROCESS—



Source: NIST SP 800-61, R2, Computer Security Incident Handling Guide

RECOMMENDATIONS

THINGS TO CONSIDER—

- Less is more philosophy
- Develop, Review, Train, & Operate by the Plan
- It is a living document
- Ensure everyone is familiar with the plan – Required reading

CONCLUSION

TAKE-AWAYS—

- Remember any organization can be a target
- Establish policies and plans before an incident occurs
- Processes should be reliable and consistent
- Ensure Incident Responders are trained and know their roles, responsibilities, & authorizations
- Maintain good documentation
- Always consider preservation of evidence
- Engage outside help if necessary; don’t exceed your knowledge level
- Ensure maximum participation in post-mortem discussions; integrate lessons-learned into Incident Response Plan

The cost of being prepared is far less than being a victim

VISA

2015 Visa Payment Security Symposium

The Power of Partnership

Securing the Future of
Commerce Together

August 12-13, 2015
Hyatt Regency Hotel
Burlingame, CA

Visa is hosting a must-attend event that will focus on trends and developments related to cyber security, mobile payments, e-commerce and Visa's global authentication strategy. In order to secure the future of commerce all stakeholders including merchants, acquirers, agents and Visa need to collaborate on key initiatives in addressing today's most relevant issues. This event will be held in the San Francisco Bay Area at the Hyatt Regency Hotel just south of San Francisco. For more information, email pcirocs@visa.com.

Upcoming Merchant Events and Resources

Upcoming Webinars – Training tab on www.visa.com/cisp

- Identifying and Mitigating Threats to E-commerce Payment Processing
  - 29 April 2015, 10 am PST
- Strategies to Effectively Manage Data Compromise Events
  - 27 May 2015, 10 am PST

Visa Data Security Website – www.visa.com/cisp

- “What To Do If Compromised” Guidelines
- Alerts, Bulletins
- Best Practices, White Papers
- Webinars

PCI Security Standards Council Website – www.pcissc.org

- Data Security Standards – PCI DSS, PA-DSS, PTS
- Programs – ASV, ISA, PA-QSA, PFI, PTS, QSA, QIR, PCIP, and P2PE
- Fact Sheets – ATM Security, Mobile Payments Acceptance, Tokenization, Cloud Computing, and many more…

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