

Managing Risk in the Digital World

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Global Payment System Risk



VISA

Agenda

1. Current Landscape
2. Payment Security
3. Visa's Payment Security Strategy
4. Merchant Security
5. Tools & Resources



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Current Payment Landscape



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What is driving the security landscape?



Innovation

- New entrants
- New technologies
- New business models

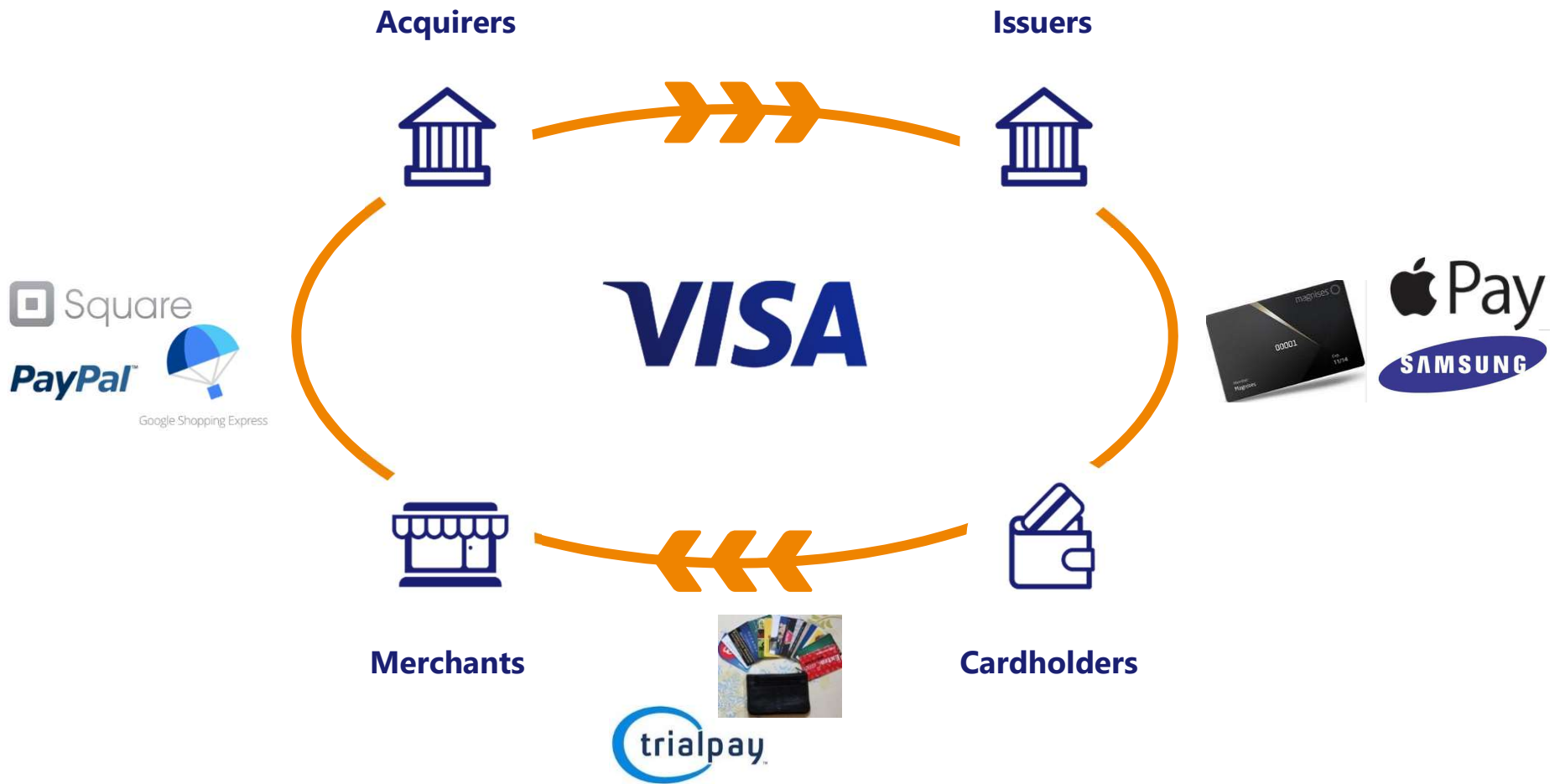
Data Compromises

- Increasing attacks against data aggregators/third parties
- Enhanced risk in card-not-present channel

Government

- Security mandates
- Regulation

The Expanding Payments Ecosystem



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Payment Security

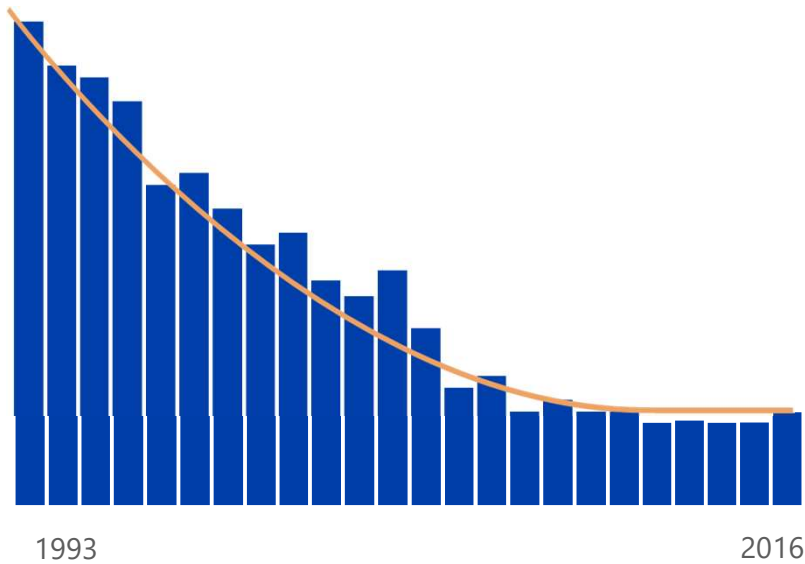
VISA



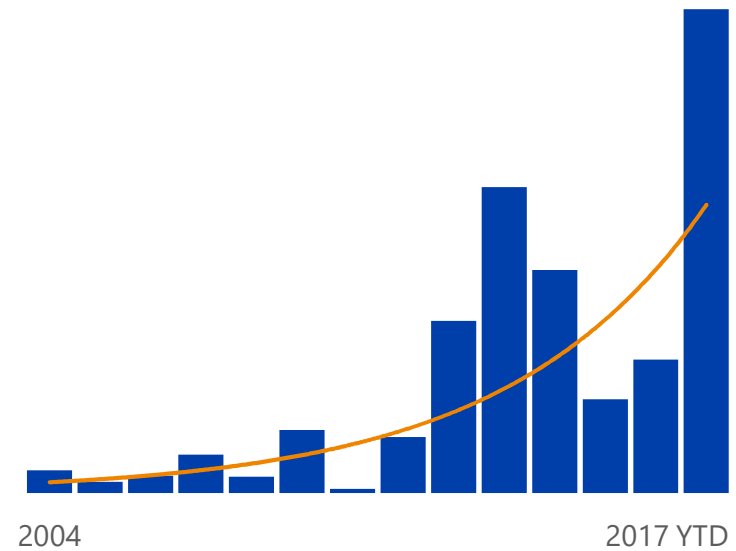
Payment Security: Where are we now?

Fraud remains near historic lows, but data losses continue to accelerate

Gross Fraud Rate



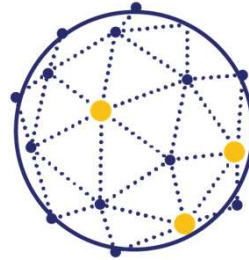
Personal Data Exposed



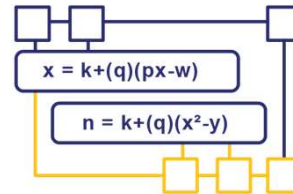
Changes in Criminal Attacks are Keeping Pace



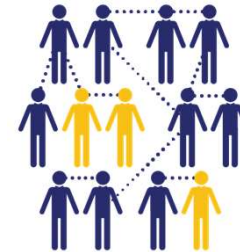
Frequency



Magnitude



Sophistication



Organization

Shifting Breach Types

- ❖ Decrease in magnetic stripe data breaches
- ❖ Increase in card-not-present compromises
- ❖ Proliferation of third-party breaches

Hackers Moving Beyond Merchants

- ❖ Pursuing data aggregators
- ❖ Targeting integrators/re-sellers
- ❖ Penetrating financial institutions

Increasing Threat: eCommerce Breaches

- Less sophisticated attack required
- Harder to identify breaches
- Low barrier of entry for merchants

2015

Brick & Mortar = 70%
eCommerce = 27%

2016

Brick & Mortar = 44%
eCommerce = 55%

2017*

Brick & Mortar = 11%
eCommerce = 87%



* YTD through September 2017

Visa's Payment Security Strategy



Visa's Strategy for Payment Security

Data is Key to Addressing Threats



Protect Data



Merchant Levels & PCI DSS Compliance Validation Requirements

Level/Tier	Merchant Criteria	Minimum Validation Requirements
1	Processing over 6 million Visa transactions annually (all channels) or global merchants identified as Level 1 by any Visa region	<ul style="list-style-type: none"> • Annual Report on Compliance (ROC) by Qualified Security Assessor (QSA) or internal resources if signed by officer of the company • Quarterly network scan by Approved Scan Vendor (ASV) • Attestation of Compliance (AOC)
2	Processing 1 million to 6 million Visa transactions annually (all channels)	<ul style="list-style-type: none"> • Annual Self-Assessment Questionnaire (SAQ) • Quarterly network scan by ASV • AOC
3	Processing 20,000 to 999,999 Visa e-commerce transactions annually	<ul style="list-style-type: none"> • Annual SAQ • Quarterly network scan by ASV • AOC
4	Processing fewer than 20,000 Visa e-commerce transactions annually and all other merchants processing below 1 million Visa transactions annually	<ul style="list-style-type: none"> • Annual SAQ • Quarterly network scan by ASV

Small Merchant Security Basics

Simple Processes Providing Significant Security



Change Default Passwords



Install Antivirus



Enable Remote Access Only When Necessary



Use Only PCI Certified QIRs



Use Only Visa Registered Service Providers

Ease of Implementation

Easy

Medium

Easy

Easy

Easy

Cost

None

Medium

None

None

None

Effectiveness

Medium

Medium

High

High

High

*Based on PCI Forensic Investigation Reports of Small Merchants

Merchant Risk

PCI SSC Small Merchant Security Taskforce



Purpose

- Communicate unique small business security challenges
- Simplify understanding of PCI DSS
- Provide educational materials that relate to small businesses

Participants

- Collaboration from dozens of small merchant owners and franchisees
- Co-chaired by Barclaycard and National Restaurant Association

Products

- Materials that are easy to understand
- Tips for improved security implementation
- Small merchant resources

PCI SSC – Small Merchant Taskforce

Providing infographics, diagrams and illustrations with easy-to-understand guidance on security

The impact of breaches to small businesses

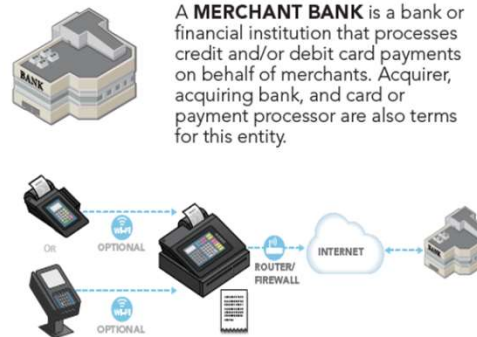
\$20,752
 AVERAGE COST TO A SMALL BUSINESS DUE TO HACKING, UP FROM \$8,600 IN 2013 (NSBA)

69% OF AMERICAN CONSUMERS WORRY ABOUT THEFT OF THEIR PAYMENT CARD DATA (Gallup)

What's at risk?
 Understanding data on a payment card

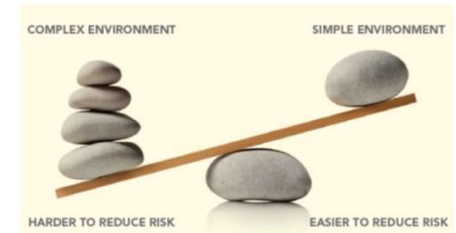


Common payment terms and types of POS terminals



A **PAYMENT SYSTEM** encompasses the entire process for accepting card payments in a retail location (including stores/shops and e-commerce storefronts), and may include a payment terminal, an electronic cash register, other devices or systems connected to a payment terminal (for example, Wi-Fi for connectivity or a PC used for inventory), servers with e-commerce components such as payment pages, and the connections out to the merchant bank.

Different risk for different environments and payment systems



Simple payment system for in-shop purchases

Devaluing Data



Merchant Risk

Technology Innovation Program

- In 2012, Visa announced the Technology Innovation Program (TIP) to recognize merchants that invest in secure technology
- Program eliminates the annual PCI DSS validation exercise for qualifying merchants

Merchant Qualification Criteria



At least 75% of merchant's Visa transactions originate from EMV chip-enabled devices



Implementation of PCI-validated point-to-point encryption solution

Call to Action

VISA

Action Items

Quick Wins



- Leverage the data security resources on visa.com
- Subscribe to RSS feed for automatic Data Security updates
- Create – and practice – an after-hours response escalation plan

Data Security Compliance & PCI DSS Merchant Levels

From fraud prevention tips to innovative security technologies, we provide powerful resources to help keep your business safe and secure.

Training + PCI DSS compliance | Compliance validation | Regulations + assessments | Service providers + payment applications | Security programs

Security training

Visa provides valuable information regarding the latest data security trends, data breaches and attack vectors, best practices and Visa compliance programs through an on-going series of conferences, webinars and training sessions.

Event title	Event date	Audience
East 2017 Visa Security Symposium Recap	September 19, 2017 10 am Pacific Time	Merchants, Acquirers, Issuers, Processors
Card Not Present Fraud Intelligence	November 1, 2017 10 am Pacific Time	Merchants, Acquirers, Issuers, Processors

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Visa Inc. (including Visa Debit Processing and IntelliLink Compliance Management)

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SAN FRANCISCO, CA, U.S.A.
Website:
Email:



Visa Inc. is a global payments technology company that connects consumers, businesses, financial institutions & governments in more than 200 countries & territories to fast, secure & reliable electronic payments. Visit usa.visa.com/about-visa, visacorporate.tumblr.com, @VisaNews.

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Visa Inc. (including Visa Debit

Profile

Technology: TOKENIZATION
Participation History: N/A
Region of Operation: AP,CEMEA,LAC,U.S.,CAN

Closing Thoughts

The digital future is happening now – it's rapidly changing the payment experience offering nearly limitless growth potential for payments



Back to basics — require strong passwords that must be changed, use two factor authentication, and restrict remote access for third parties

Key to success is to continue to innovate and collaborate



Data Security Resources

Websites:

- Visa Data Security @ www.visa.com/cisp
- Visa Global Registry of Service Providers @ www.visa.com/onthelist
- Visa Business School @ www.visabusinessschool.com
- PCI Security Standards Council Website @ www.pcissc.org
- “What to do if compromised”

Questions?

Merchants @ cisp@visa.com

Service Providers @ pciocs@visa.com



Thank You

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