



The need for a secure & trusted payment instrument in e-commerce

Ali AIMeshal

In Physical/Real World

- Hand over card
- Visual check
- Swipe in POS
- Online authorization
- Receipt with signature panel
- Sign or Pin
- Check signature



Visa Card Security Features

Visa Flag Cards Using Dove Design Hologram on Front of Card



Visa Card Security Features

Cards Using Visa Dove Design Hologram on Front of Card



Visa Card Security Features

Cards Using Visa Holographic Magnetic Stripe



Smart Card



Counterfeit Cards



Counterfeit Cards



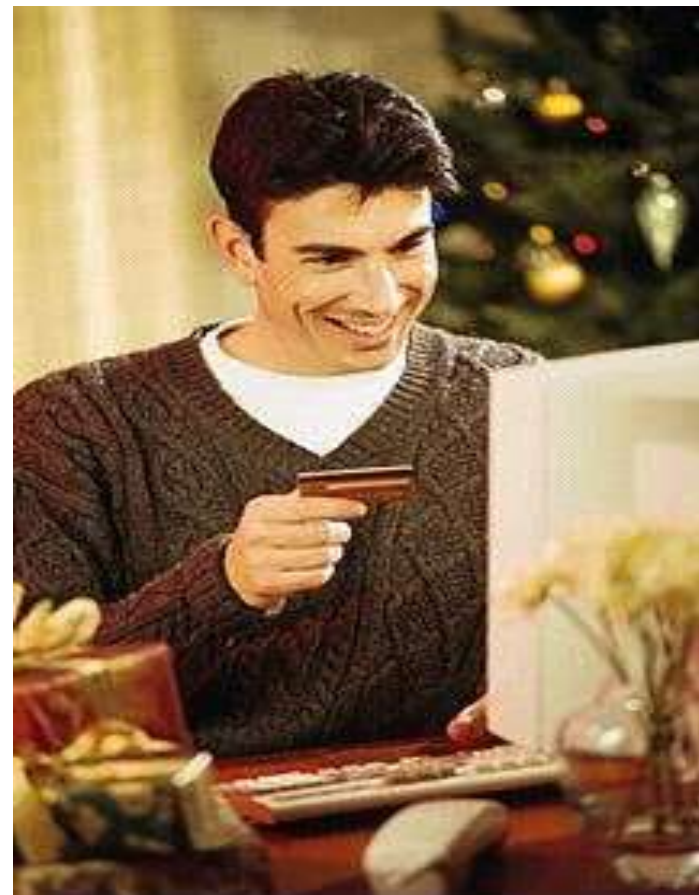
Counterfeit Cards





In Virtual World

- **Cardholder is remote**
 - Virtual shopper
 - Card Not Present - CNP



Most Common Types of e-Channels



Call Center/MOTO



E-Commerce



Mobile Commerce

Did You Know...?



- ❑ Significant increases in card not present fraud linked to compromise of data and greater opportunities for MOTO and e-commerce
- ❑ Improved security for card present transactions means a greater emphasis by card criminals on CNP fraud
- ❑ Large scale compromise of cardholder and account data affecting Members and consumers worldwide

Did You Know...?



Ecommerce fraud cost internet retailers approximately \$3.6 billion in 2008,

[CyberSource](#)

Did You Know...?



- In 2006 the value of fraud loss on one of Credit Cards brands worldwide was around **\$2.8 billion**
- This figure represents **0.09%** of total brand sales volume worldwide
- When a Credit card is stolen the average amount spent on that card before detection is **\$650**

Did You Know...?



Over 5 million *Visa* cardholders make one or more purchases every year without their card ever being present at the point of transaction

**Visa Canada 2004/2005 Statistics.

Did You Know...?



In 2007 there was around \$8.45 **Trillion** eCommerce transactions worldwide with an increase rate of 26% from 2006.

2007 eCommerce Chargeback Report

Did You Know...?

- **International Order Risk 2 ½ Times Higher Than Domestic Orders**

On average, merchants say the rate of fraud associated with international orders is two-and-one-half times as high as domestic orders. Merchants also reject international orders at a rate three times higher than domestic orders.

[CyberSource](#)



Why Is Fraud So Popular?



- Inadequate or total lack of specific criminal legislation
- Weak sentencing
- High profit margins
- Ease of international travel
- Limited co-operation between Law Enforcement in different countries & jurisdiction issues
- Payment card fraud at present = low risk, high reward

Fraud Distribution



■ Lost cards & Stolen cards	26%
■ Not received as issued (NRI)	2%
■ Fraudulent application	2%
■ Counterfeit cards	34%
■ Miscellaneous	3%
■ Fraudulent use of account (CNP)	33%

Types of E-commerce Fraud - **Phishing attacks**



Are transactions really safe?

Gartner Survey Shows Phishing Attacks Escalated in 2007; More than \$3 Billion Lost to These Attacks .

Debit Cards Emerged as the Financial Instrument Targeted Most by Fraudsters

- **47 percent debit or check card**
- **32 percent a credit card**
- **24 percent bank account**





Secure with Visa

Total purchase protection.
For the holidays, and every day.

Dear Customer,

Our latest security system will help you to avoid possible fraud actions and keep your investments in safety.

Due to technical security update you have to reactivate your account

Click on the link below to login to your updated Visa account.

To log into your account, please visit the Visa Website at

<http://www.visa.com>

**We respect your time and business.
It's our pleasure to serve you.**

Please don't reply to this email. This e-mail was generated by a mail handling system.



I want Visa

I've lost my Visa

Accepting Visa

I use Visa

 My Future Visa

Downloads

Lost cards

Travellers cheques

Keep your card safe

Attention

Because of frequent hacker and charlatan attacks several visa bases have been stolen. Your card might be in the lost base and have already fallen among thieves. You should check your card balance and in case of suspicious transactions immediately contact your card issuing bank.

If all transactions are alright, it doesn't mean the card is not lost and cannot be used. Probably, your card issuers have not updated information yet.

You will fill, if you please, form for obtaining Visa secure code, this code will allow you to preserve their economy in the soundness and safety, and it will be known only to you. You will preserve attention, and you will better memorize this code and give no one.

Attention! After the incidents banks must block all online access to cards.

If you have online access to your credit card or online access to the bank - your card issuing bank, fill in the bands. We will send your data to your card issuing bank for your accounts not to be blocked.

Credit Card Number*:

Credit Card Expire Date*:

example - mm / yy

 /
Last 3 digits on Signature Panel:

Assistance

Attention!

After the incidents banks must block all online access to cards.

If you have online access to your credit card or online access to the bank - your card issuing bank, fill in the bands. We will send your data to your card issuing bank for your accounts not to be blocked. 24 hrs a day. 365 days a year.

Lost Cards:

Lost Travellers Chqs:


Preparing for international travel?
Let Visa help.

Download this free application onto your Palm handheld and have both Visa toll-free global assistance nos. and international travel tips on hand at all times.

Palm OS v3.1 or higher recommended.

Visa Lost Card v1.0

[Download: zip \(70k\)](#)
[Download: sit \(70k\)](#)

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Online Branch

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Online Services
Verified by VISA

We use advanced SSL encryption technology to ensure confidential information cannot be viewed, intercepted or altered.

ACTIVATE NOW FOR VERIFIED BY VISA
Enter your card number (without spaces):

Privacy & Security | Terms & Conditions

NCUA | Equal Housing Lender | Mountain America Privacy Statement | Mountain America Financial Services, LLC Privacy Statement | USA Patriot Act Disclosure

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Most Viewed Photos (4:00 a.m. ET)

- Vijay K. Taneja invested millions of his mortgage proceeds in Indian films and theatrical productions.
- This undated photo provided by the U.S. Army shows Lt. Gen. Ann E. Dunwoody. From its humble beginning 33 years ago at Fort Sill, Okla., the career of Ann E. Dunwoody is ascending to a peak never before reached by a woman in the U.S. military: four-star ge
- Michelle Obama visited Georgetown Day School, above, on Monday. Maret School, left, is also considered to be a top choice for daughters Malia and Sasha, who could stay on the same campus throughout their education there.

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Connecting People

Types of E-commerce Fraud



“Friendly” Fraud?

Genuine Cardholder denies having placed or received the order.
Consumer become aware of this loophole in Credit card industry

Types of E-commerce Fraud

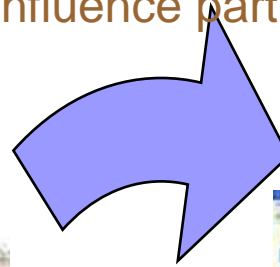


- Counterfeit
 - Duplicating the full plastic data
- Account Number Generation
- Data Compromising
- Others.....

Commerce Partners

(customers, merchants and financial organizations)

- What factors influence the level of trust in the Internet?
- How does trust influence participation in ecommerce?



Consumer eConfidence



Consumer eConfidence is a cross-reference between the degree of trust a consumer has in a website or business and the perceived level of security that must be present on the website before the consumer will share any personal information.

2007 eCommerce Chargeback Report

Commerce Partners

(customers, merchants and financial organizations)

Party Trust + Control Trust = Transaction Trust. The strength of control trust depends not only on the control mechanisms used, but is also influenced by how much trust a party

Trust	Control	
<p>SECURITY</p> <ol style="list-style-type: none"> 1. Authentication 2. Authorization 3. Confidentiality 4. Integrity 5. Non repudiation 6. Availability <ol style="list-style-type: none"> 6.1 Recovery - Durability 6.2 Consistency - Continuity 	<p>Perimeter</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;">Physical Access</div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0; text-align: center;">Network Access</div>	
Foundation		
Security Policy	Security Principles	Security Criteria



Security tools for e-comm.

- PCI (Payment Card Industry)
- DSS (Data Security Standard)
- CVV2 & CVC2 (Card Verification Value / Code)
- SSL – SET and 3DS (3 Domain Security)

Verified by Visa Adoption Statistics



Region	Issuers	Merchants	Enrolled CH	Activated CH
USA	9,000	27,500	288M	13.3M
Canada	8	2,000	23.4M	5.0M
AP	71	83,000	66.5M	17M
LAC	69	8,828	Not avail	Not avail
CEMEA	36	6,505	Not avail	Not avail
Visa Inc. Total	9,200	128,000	378M	35M

Region	Issuers	Merchants	Enrolled CH	Activated CH
Visa Inc.	9,200	128,000	378M	35M
Visa Europe	161	75,000	Not avail	30M
Global Total	10,000	203,000	378M	65M

Source: Visa Inc. and Visa Europe, September 2008

Conclusion

- It is very much clear that all commerce partners need better tools, consistent guidelines, cooperation and support from all concerns in the e-business. Trust and security are the key requirement for the e-commerce business which drive the confidence in sharing the personal information on the net.
- Fraud and risk management in the payment industry have always been the key concerns to the commerce partners. However strong combined strategies from the financial institutions, merchants and consumers, should be able to address these new fraud phenomena and challenges.



Thank You