

The background features a white canvas with several overlapping circles in teal, lime green, orange, and pink. A thin, light blue dashed line curves around the central text. The title is written in a large, bold, black sans-serif font.

# **SECURITY AND PAYMENT SYSTEM E-COMMERCE**

**By:  
Huy Nguyen**

A decorative background featuring a large, faint dashed circle. Various colored circles and arcs are scattered around the perimeter: a large green circle at the top left, a small green circle with a white dot, a blue circle, an orange circle, a pink circle, a yellow arc at the bottom left, a large cyan arc at the top right, a blue circle with white quotation marks, a yellow circle, a pink circle, a green circle with a white dot, and a cyan circle at the bottom right.

“

© “If you think technology can solve your security problems, then you don’t understand the problems and you don’t understand the technology.”

© — *Bruce Schneier*



# **E-COMMERCE SECURITY**

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- E-commerce security and its dimensions
- E-commerce Threat Concerns
- E-commerce Threats
- Ways to Protect your Ecommerce Site from Hacking and Fraud
- E-Commerce Payment Methods



# WHAT IS E-COMMERCE SECURITY?

E-commerce security is the protection of e-commerce assets from unauthorized access, use, alteration, or destruction.





# DIMENSION OF E-COMMERCE SECURITY

- **Integrity** ensures that info sent and received has not been altered by unauthorized party
- **Nonrepudiation** ability to ensure that participants do not deny (repudiate) their online actions
- **Authenticity** ability to identify the person's identity with whom you are dealing with over the internet
- **Confidentiality** authorized to be seen by those who should view it
- **Privacy** ability to control who sees your info
- **Availability** e-commerce site functions as intended

# E-COMMERCE THREATS



Threats: anyone with the capability, technology, opportunity, and intent to do harm.



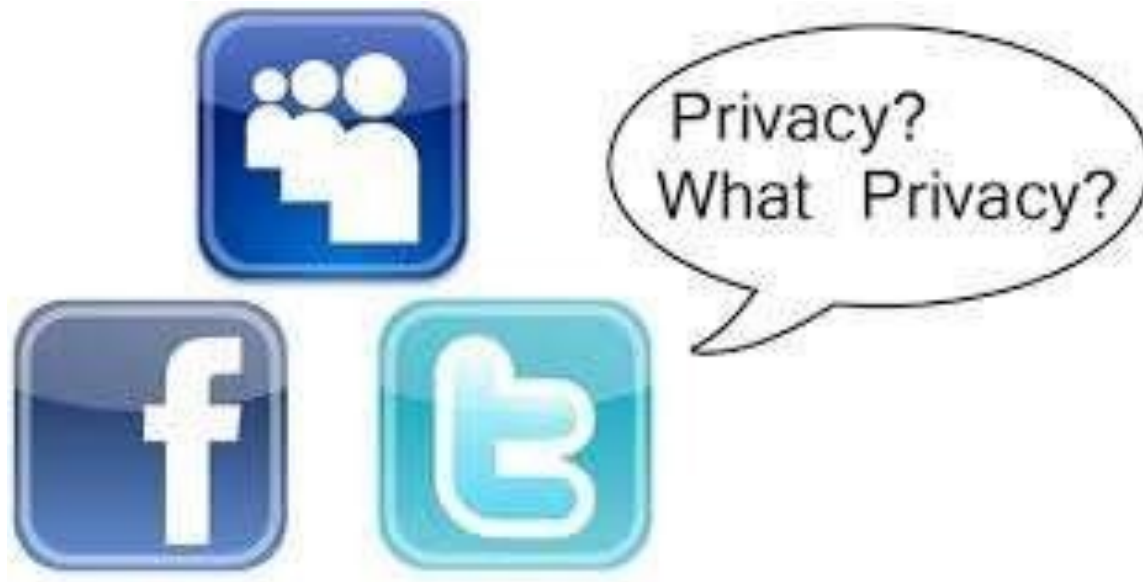
Potential threats can be foreign or domestic, internal or external, state-sponsored or a single rogue element.



Terrorists, insiders, disgruntled employees, and hackers are included in this profile.

# E-COMMERCE THREATS CONCERN

## 1. Loss of Privacy/confidentiality, data misuse/abuse





# E-COMMERCE THREATS CONCERN

## 2. Cracking, eavesdropping, spoofing, rootkits



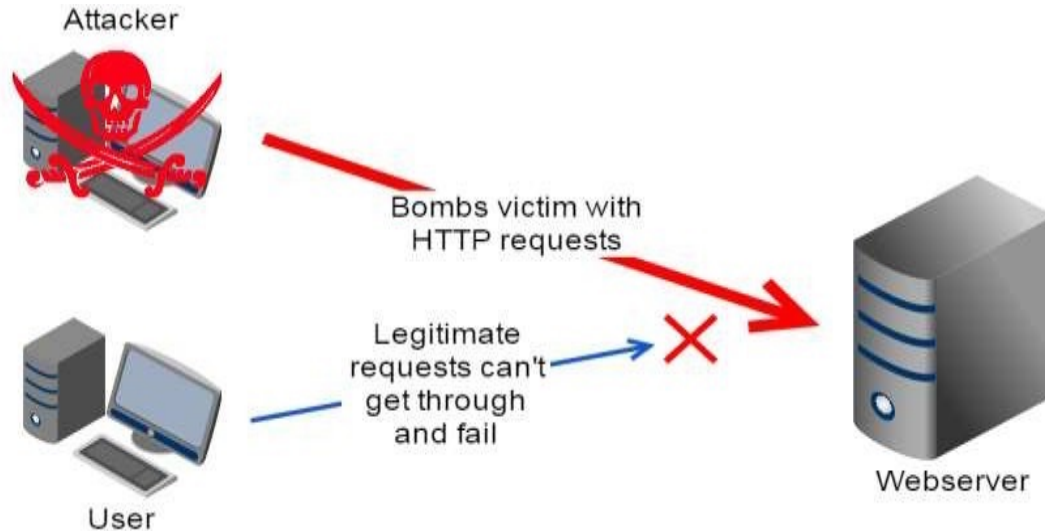
# E-COMMERCE THREATS CONCERN

## 3. Viruses, Trojans, worms, hostile ActiveX and Java



# E-COMMERCE THREATS CONCERN

## 4. System unavailability, denial of service, natural disasters, power interruptions



# Intellectual Property Threats

use existing materials found on the Internet without the owner's permission, e.g., music downloading, domain name (cybersquatting), software pirating



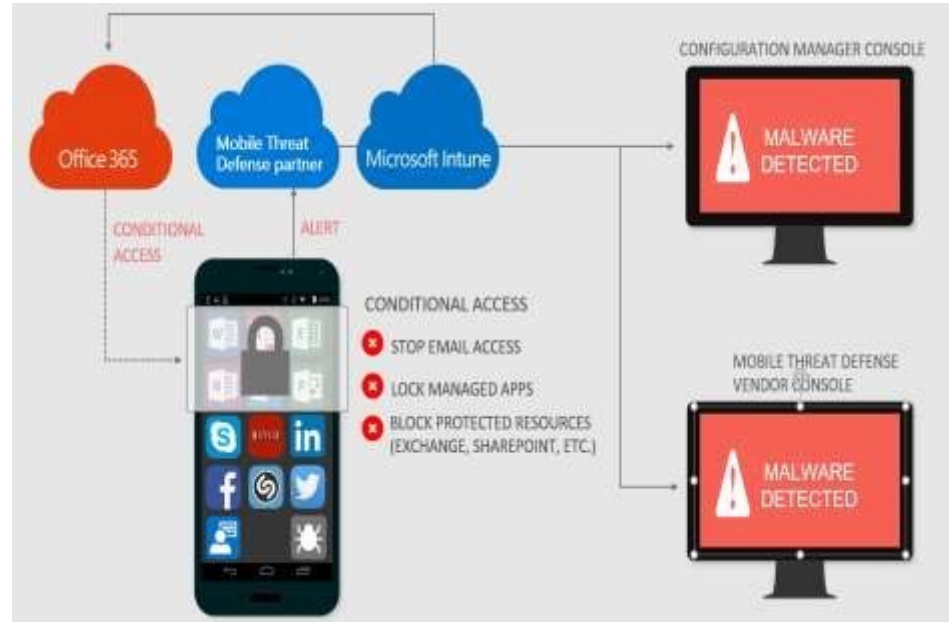
# Client Computer Threats

- Trojan horse
- Active contents
- Viruses



# Communication Channel Threats

- Sniffer program
- Backdoor
- Spoofing
- Denial-of-service



# Server Threats

- Privilege setting
- Server Side Include (SSI), Common Gateway Interface (CGI)
- File transfer
- Spamming



# COUNTER MEASURE

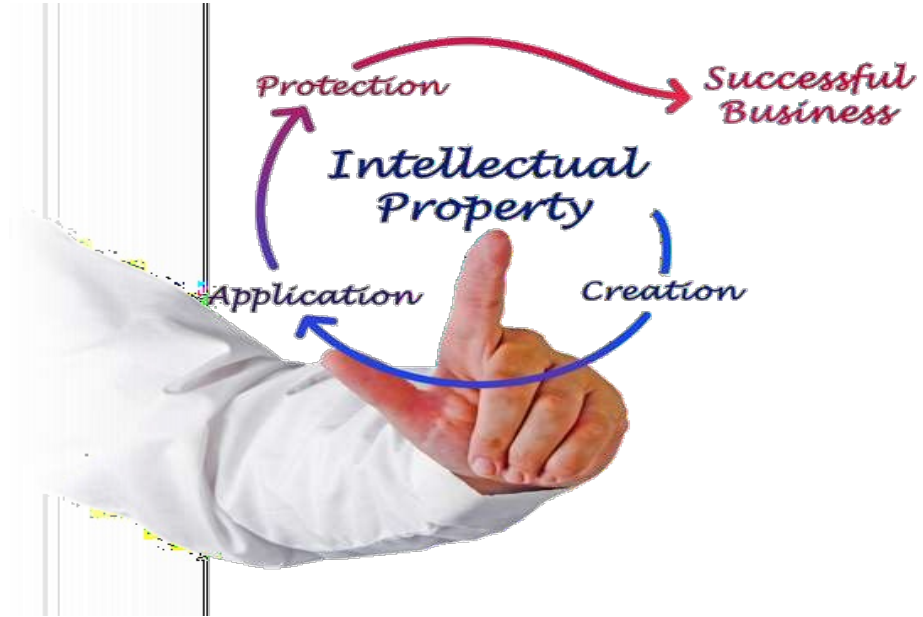
A procedure that recognizes, reduces, or eliminates a threat





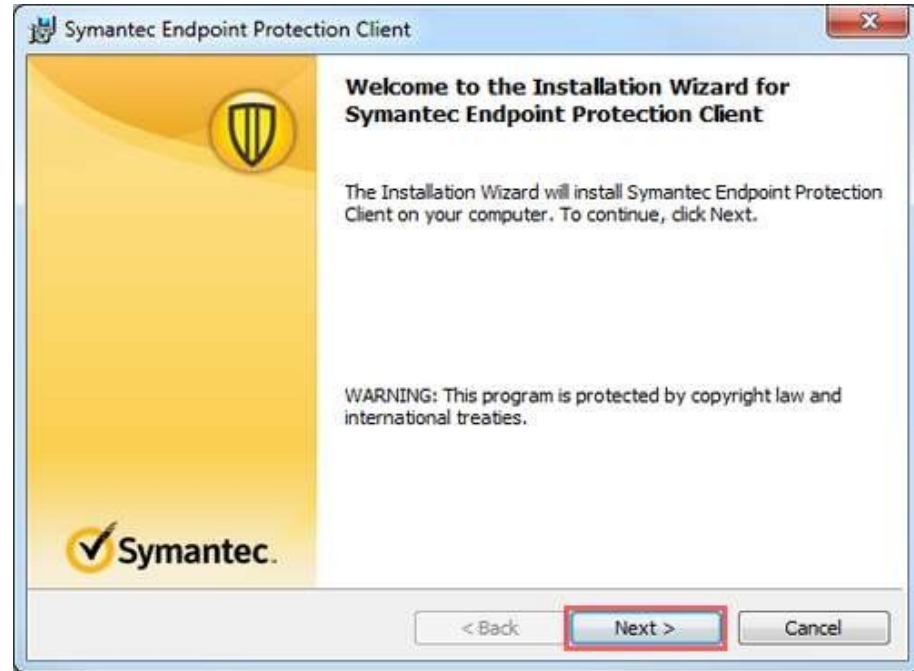
# Intellectual Property Protection

- Legislatures
- Authentication



# Client Computer Protection

- Privacy (Cookies Blockers, Anonymizer)
- Digital Certificate
- Browser Protection
- Anti-virus Software
- Computer forensic experts



# Communication Channel Protection

- Encryptions
- Protocol
- Digital Signature



# Server Protection

- Access Control & Authentication
- Firewall



# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

- Start by Going with an e-commerce Platform You Know is Secure

- A secure online checkout
- Enterprise-level, layered security
- Encryption for all customer data, including tools that don't store any of the credit card information
- Constant fraud monitoring
- PCI compliance and scans
- Card verification value
- Address verification system

# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

## Some Words on the Address Verification System (AVS) and the Card Verification Value (CVV)



### Visa, Mastercard & Discover Cards

Your Security Code is a 3-digit number located after your account number in the signature strip on the back of your card.



### American Express Card

Your Security Code is a 4-digit number located above your account number to the left or right on the front of your card.

# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

## Have a Backup Plan

Rewind - Backups for Shopify

**Details**  
Review the status and details of your backups.

Last backup: 7 May 2016 01:09 AM EDT

Last backup result: Success

Real time monitoring: Enabled

**Account**  
An overview of your current plan and billing details. Our better piece of mind by upgrading your plan features.

Rewind has proudly backed up your store since April 11, 2016. You are subscribed to the Rewind Personal plan. [Change plan.](#)

**Rewind Vault™**  
Your data is stored safely and securely in our Rewind Vault™, ready when you need it.

**One by One**  
Browse and export all of your shop data. Restore any item instantly.

[Enter the Rewind Vault](#)

**Store**  
Rewind your entire store to a specific date and time.

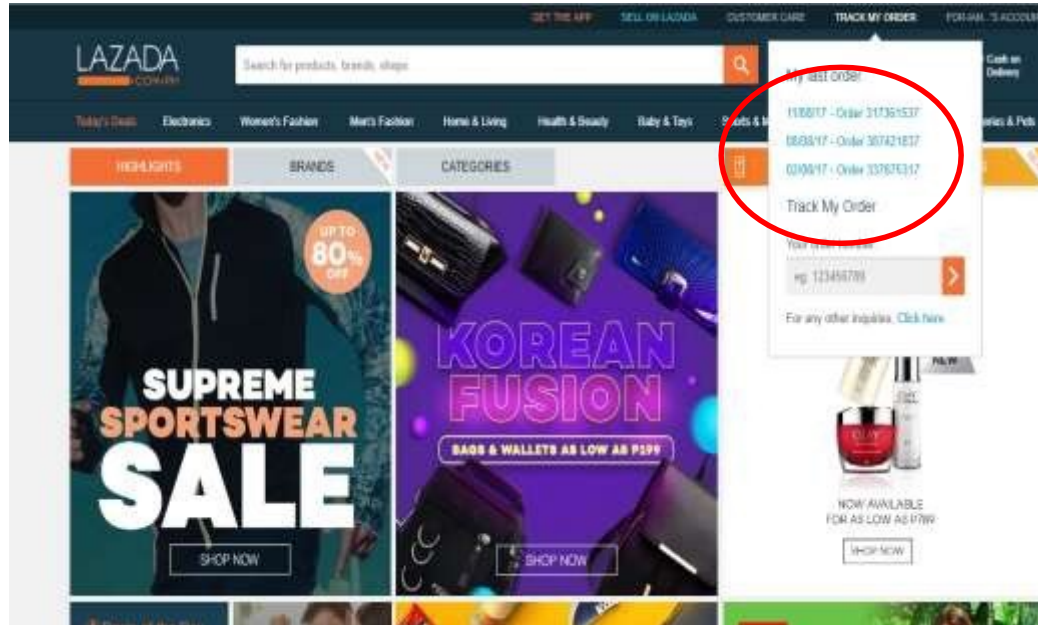
[Enter Store Rewind](#)

[Terms of Service](#) [Privacy Policy](#) [Payments and Refunds](#)

[Click Here for help](#)

# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

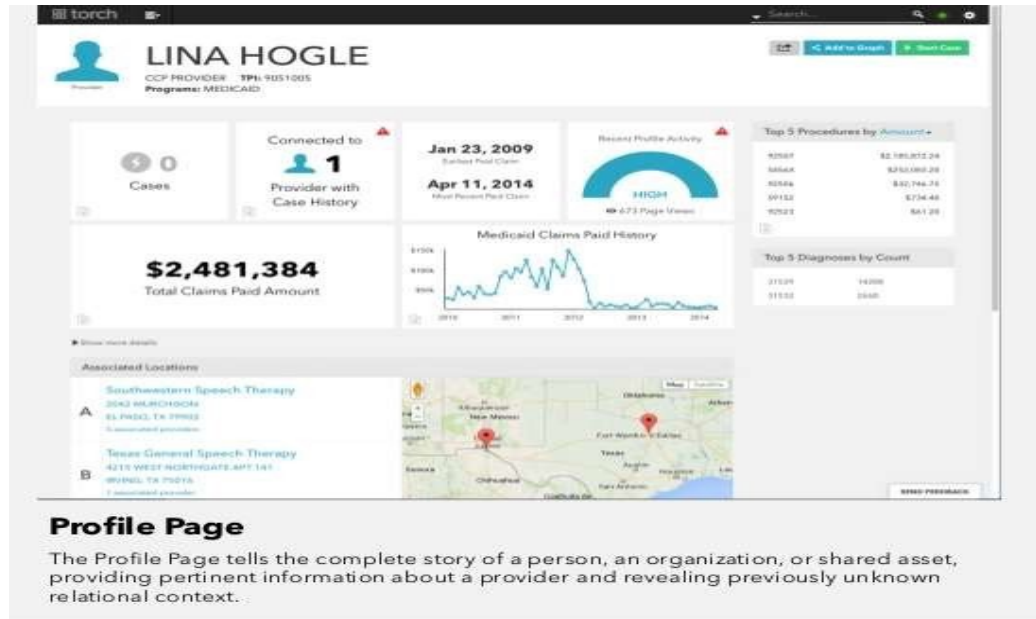
- Prevent Chargebacks with Tracking Numbers and a Human Monitoring All Orders





# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

## An Automated Fraud Detection System Helps Too



# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

## Configure System Alerts For When Suspicious Activity Occurs



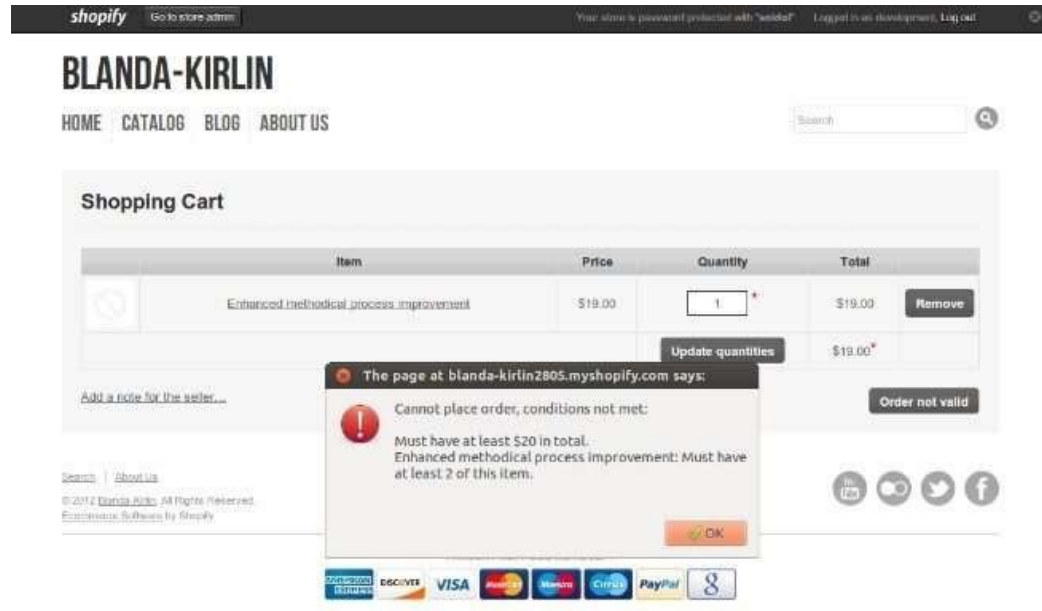
# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

- Force Yourself and All Employees to Have Strong Passwords



# WAYS TO PROTECT E-COMMERCE SITE FROM HACKING AND FRAUD

## Set Limits on Purchases from Accounts on a Given Day





# E-COMMERCE PAYMENTS

**CASH ON DELIVERY (COD)**

**CASH ON  
DELIVERY**

**ALL OVER THE PHILIPPINES!**



**100% RISK-FREE & HASSLE-FREE SHOPPING!**



# ELECTRONIC FUND TRANSFER (EFT)

## Various Modes of EFT



▶ **NEFT- NATIONAL ELECTRONIC FUNDS TRANSFER**

▶ **RTGS- REAL TIME GROSS SETTLEMENT**

▶ **IMPS- IMMEDIATE PAYMENT SERVICE**



# PAYMENT CARDS – CREDIT CARD





## PAYMENT CARDS – DEBIT CARD



## PAYMENT CARDS – CHARGE CARD



# SMART CARD



# ELECTRONIC CASH (E-CASH / E-MONEY)

 UNIFIED PRODUCTS & SERVICES  
**ecashpay**

REMITTANCE  
INTERNATIONAL PARTNER

 **Trans-Fast**  
WORLDWIDE MONEY TRANSFER

 **NYBP**  
NEW YORK AIRPORT

 **Tele Money**  
International Remittance Service

 **IREMIT**  
GLOBAL REMITTANCE

 **easyremit**  
GLOBAL REMITTANCE

 **MoneyGram**  
INTERNATIONAL REMITTANCE SERVICE

LOCAL PARTNER

 **gprs**

 **unifed**

 **GlobalPinoy**  
Travel and Tours

 **SMART MONEY**

 **BudgetLane**  
SulitMarket

 **Savemore**  
Home Appliances and Electronics

 **CAPITAL PAWNSHOP**

 **Tambunting**  
Travel and Tours

 **GEMCRAFT**  
PAWNSHOP, INC.

 **KwartaGram**  
PAWNSHOP, INC.

 **GLOBAL PINOY PAWNSHOP**

 **R.D. PAWNSHOP, INC.**  
"The place for everything you & your loved ones"

 **RAQUEL**  
PAWNSHOP, INC.

Be an E-Cash Pay Center Now!  
Contact: 09999930315, 09178811365 & 09228807291  
[www.UPSPHilippines.com](http://www.UPSPHilippines.com)

**cashU**  
online payment

 **PayPal**

# E-WALLET





# DIGITAL CASH



# VIRTUAL CURRENCIES



Thanks!



**Any questions?**