

Cybersecurity Considerations for E-Commerce

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Objectives

- Discuss cybersecurity risks in online retail and e-commerce platforms
- Explore how to protect the e-commerce ecosystem and build trust

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The Online Retail/Hospitality Landscape & Threats to E-Commerce

Retail & Hospitality Landscape

- Online sales rapidly accelerating, while in-store sales slow
 - Black Friday/Cyber Monday online sales up 20% in 2019 from previous year
 - In store purchases fell 3% during same period

(source: [Reuters](#))

Mobile purchases also rapidly accelerating

- Mobiles sales will account for 47% of e-commerce by end of 2020

(<https://www.businessinsider.com/mobile-commerce-shopping-trends-stats>)

Hospitality organizations (hotels) are rapidly embracing IoT and other connected technologies to improve guest experiences.

BRIEF

Retail cyberattack attempts up 20% last year

used to push ransomware

Once hackers compromise an MSP's network, they can use its hundreds of companies and thousands of computers.

Exposed database left terabyte of travelers' data open to the public

Magecart Card Skimming M



Lee Mathe
Cybersecurity
Observing, p

Consumer Concern About Holiday Fraud Comes True

novation research finds 60% rise in suspected holiday weekend e-commerce fraud since 2017, reinforcing consumer worries in recent TransUnion survey

Hotel fro hackers

The hospitality industry can't catch a break when it comes to cybercrime.

Credit Card Fraud Has Tripled. Don't Let It



Businesses Reporting Data Breaches In Half Of 2019

No Market Vertical Is Safe From Exposed Data Records

E-Commerce Under Threat

- Malicious actors shift from using stolen credit card data in stores at the checkout counter to using stolen credit card data for fraudulent online shopping.

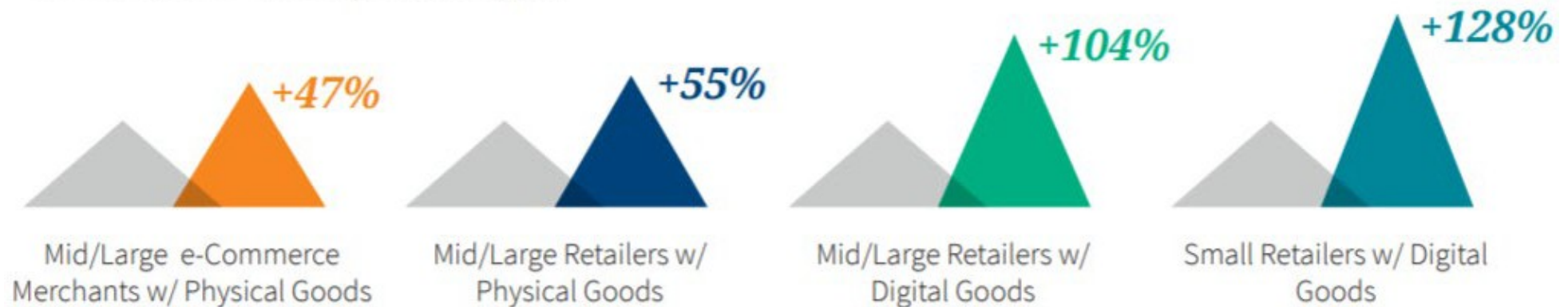


E-Commerce Under Threat

- Retail fraud attempts have **TRIPLED** since 2017 and each \$1 of fraud costs a retailer \$3.13.

Fraudsters are targeting a more diverse set of retailers.

YoY increase in fraud by retailer type:



Source: LexisNexis® Risk Solutions 2019 True Cost of Fraud SM Study - Retail Edition

Available: <https://risk.lexisnexis.com/insights-resources/research/2019-true-cost-of-fraud-study-e-commerce-retail-edition>

E-Commerce Fraud Scenarios

- Data Breaches – when sensitive data is leaked from a secure location to an untrusted environment
- Phishing or spoofing – when a scammer uses fake email, text messages, or copycat websites to steal your identity or personal information
- Credit card fraud – when scammers obtain money or property through the unauthorized use of a credit or debit card or card number

Protecting the E-Commerce Ecosystem and Building Trust

Protecting the E-Commerce Ecosystem



Customer



Online Shopping Platform



Retail Back Office

Customer

- Integrate Strong Authentication: biometric, fingerprint, facial recognition and One Time Password (OTP)
- Verify the Identity of the Device Owner and Payment Information
- Prevent Account Take Over (ATO) fraud
- Encrypt Data during Transmission and Storage
- Malware, Man-in-the-Middle Attacks, and Overall App Health

Online Shopping Platform

- Secure the Platform Against Online Attacks:
 - Conduct Regular Vulnerability Scans
 - Implement Distributed Denial of Service (DDoS) Protections
- Choose a Secure E-Commerce Platform (e.g. Magento, WooCommerce, Prestashop, etc.)
- Don't Store Sensitive Customer Data
- Keep Your Website Updated
- Perform Regular Backups

Retail Back Office

- Implement Robust Order and Inventory Management Systems
- Prevent Fraudulent Returns and Exchanges
- Deploy Advanced Fraud Management Tools
- Automate Back-Office Processes
- Secure Back-Office Systems
 - Wi-Fi Networks
 - Servers
 - Laptops and Desktops

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Questions?