

Building Success. Together.



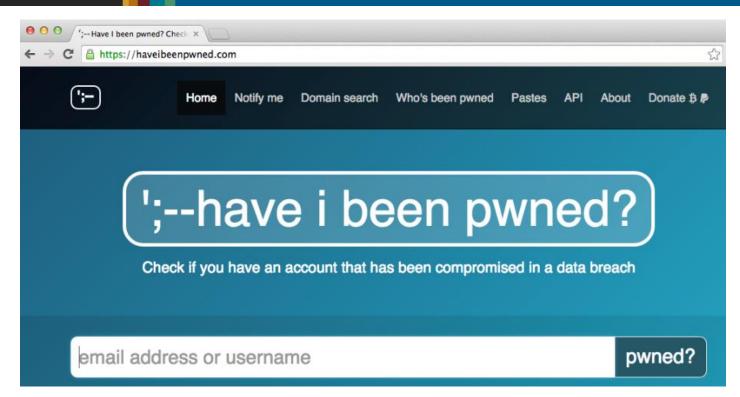
Digital Threats and Cyber Risk Where You Least Expect It:

Social Media and Digital Risk

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www.haveibeenpwned.com





Social Media

Social Engineering





Business Email Compromise

New Trends in BEC ——— Social Media

- 1. Fake Promotions
- 2. Social Account Takeovers
- 3. Social Account Imposters
- 4. Search Engine Advertisements
- 5. Rogue Mobile Apps



Social_Media





Business Email Compromise
Operational Risk
Physical Security Risk



<u>Agenda</u>

- 1. What are the known threats?
- 2. What's the next vulnerability?
- 3. How to think about risk and security?
- 4. How to respond in a supervised, heavily regulated industry?



Business Email Compromise



Business Email Compromise

Purpose:

- Access consumer data (W2's)
- Convince company to send fraud wire
- Change account details of legit vendor for future payments



Business Email Compromise

What data is targeted?

- Financial account information
- Payment data
- Biographical information
 - health, beneficiaries, property



Real or Fake?

From: Emily Clark [mailto:emily.clark22@gmail.com]

Sent: Thursday, November 24, 2016 12:25 AM

To: Webmaster < webmaster@aba.com >

Subject: Infographic for Cybersecurity/Fraud

Hi,

We recently just published a new animated infographic entitled 'The Online Shopper's Saga: In Search of a Secure Payment Solution' which I think you might be interested in reading and possibly sharing with your readers, here's the link:

https://www.totalprocessing.com/blog/secure-payment-solution-infographic/

Let me know what you think, we have it as both the animated version (gifographic) you see here and a standard flat infographic if you like it, I'd be happy to write you a unique intro to go with it as well if you thought it was something worth sharing with your audience.

Keep up the good work!

Best regards,

Emily Clark



Social/Digital Risk Management



What is Social/Digital Risk?

- 1. Compliance & Legal Risk
- 2. Reputational Risk
- 3. Operational Risk
- 4. In Real Life (IRL) Risk

- Misuse of brand identity
- Reputation management
- Inadequate human resources
- Malware infections
- Data loss
- Breach of information security
- Breach of privacy
- Decreased employee productivity
- Legal liability
- Fraud/Scams
- Social Engineering

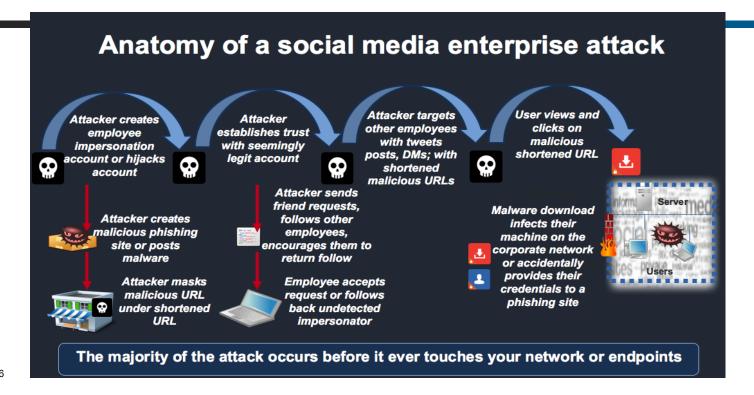


DATA FOOTPRINT

	Company employees		• Bio		• Bio
	• Titles		• Birthday		• Interests
	• Locations		• Interests		Other Twitter accounts
LinkedIn	• Email addresses	Facebook	• Hobbies	Twitter	owned Other brands/sub-
	• Phone numbers		• Connections		brands
	• Former employees				Employees responsible for managing brand accounts
					• Followers



Network of "Trust"



ZeroFox. 2016

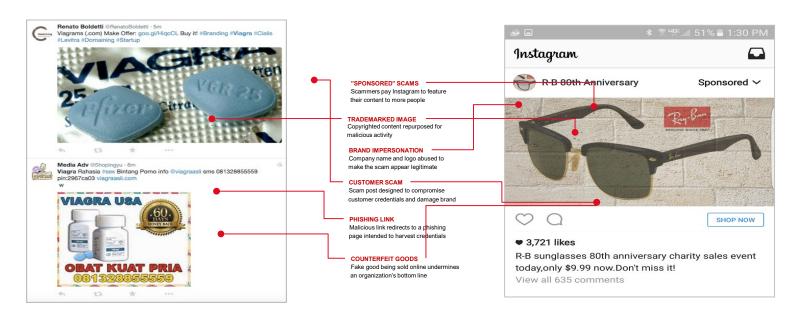


Impersonations





Scams and Payment Fraud



ZeroFOX, 2017





CARD CRACKING

Responding to an online solicitation for 'easy money' and providing a debit card for withdrawal of fake check deposits



5
The fraudster gives the account holder a kickback



YOU call the bank to report a lost or stolen card, or compromised credentials



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RANSOMWARE

LOCKER RANSOMWARE



freezes your computer or ersonal and business files



I am writing to talk to you about the recent cyber incident which temporarily affected the operation of our enterprise-wide hospital information system.

It is important to note that this incident did not affect the delivery and quality of the excellent patient It is important to note that this incident did not affect the delivery and quality of the excellent patient care you expect and receive from Hollywood Presbyterian Medical Center ("HPMC"). Patient care has not been compromised in any way. Further, we have no evidence at this time that any patient or

employee information was subject to unauthorized access.

On the evening of February 5th, our staff noticed issues accessing the hospital's computer network. Our On the evening or retrusty 3 , our staff noticed issues accessing the nospital 3 computer network. On IT department began an immediate investigation and determined we had been subject to a malware it department degan an immediate investigation and determined we had been subject to a many attack. The malware locked access to certain computer systems and prevented us from sharing attack. The manware locked access to certain computer systems and prevented us from sharing communications electronically. Law enforcement was immediately notified. Computer experts immediately began assisting us in determining the outside source of the issue and bringing our systems

The reports of the hospital paying 9000 Bitcoins or \$3.4 million are false. The amount of ransom requested was 40 Bitcoins, equivalent to approximately \$17,000. The malware locks systems by requested was 40 bitcoins, equivalent to approximately \$17,000. The manware locks systems by encrypting files and demanding ransom to obtain the decryption key. The quickest and most efficient way to restore our systems and administrative functions was to pay the ransom and obtain the decryption key. In the best interest of restoring normal operations, we did this.

HPMC has restored its electronic medical record system ("EMR") on Monday, February 15th. All clinical operations are utilizing the EMR system. All systems currently in use were cleared of the malware and operations are utilizing the EMIN System. All Systems currently in use were cleared or the maiware and thoroughly tested. We continue to work with our team of experts to understand more about this event. I am very proud of the dedication and hard work of our staff who have maintained the highest level of

I am very proud or the dedication and hard work of our staff who have maintained the highest level of service, compassion and quality of care to our patients throughout this process. I am also thankful for

Social Media Security Checklist

Identify your organization's **social media footprint:** active and dormant accounts, key individuals.

Obtain 'Verified Accounts' for your Company and Brand on Social Media to provide assurance to customers that they are interacting with legit account.

Enable two-factor authentication for social media accounts to deter hijacking.

Monitor for **impersonation accounts**, **scams**, **fraud**, **and social media account hijacking**, and, when malicious, arrange for takedown.

Initiate **employee training** on social media security hygiene.

Incorporate social media into your **informational security policy and incident response plans.**

Incorporate social media accounts in the IT password policy requirements.

Develop a **multidisciplinary approach** to information security.

Consider occasional **third party reviews** of your program.



What's the next vulnerability?

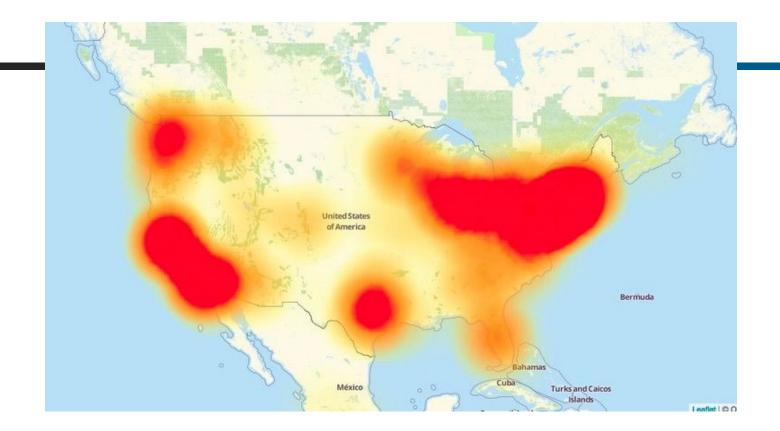


Wistation allering?

- Artificial Intelligence
- Big Data
- National Digital Infrastructure

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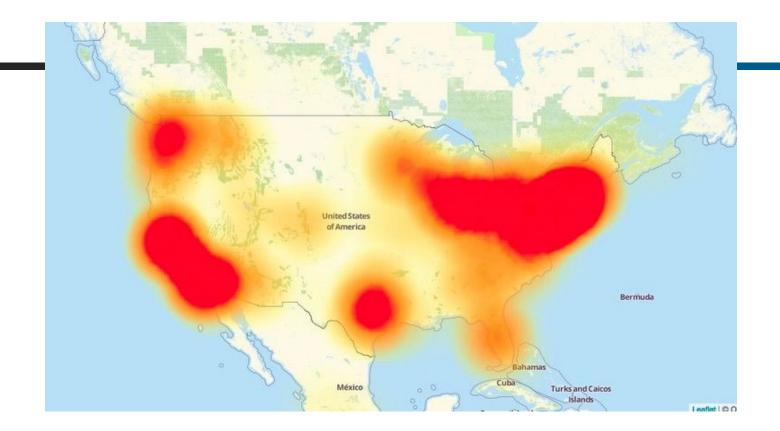






What is critical infrastructure?







The **Risk Culture** is **Shifting**



Pandemic = changing supervisory language

Risk Response Recovery



Resiliency
Capacity
Agility



Digital Risk Management ...and Resiliency

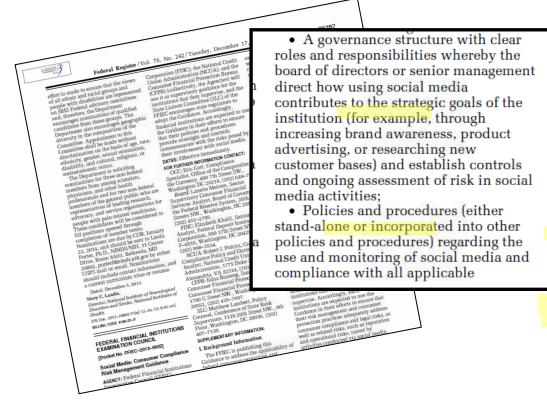


Risk/Resilience Resources

- Social Media Risk Management (2013)
- FFIEC IT Handbook: Information Security (2016)
- FFIEC IT Handbook: Business Continuity Management (2019)
- Cyber Insurance Policy



FFIEC Social Media Risk Management Guidance (2013)



- A risk management process for selecting and managing third-party relationships in connection with social media;
- An employee training program that incorporates the institution's policies and procedures for official, work-related use of social media, and potentially for other uses of social media, including defining impermissible activities;
- An oversight process for monitoring information posted to proprietary social media sites administered by the financial institution or a contracted third party;
- Audit and compliance functions to ensure ongoing compliance with internal policies and all applicable laws and regulations, and incorporation of guidance as appropriate; and
- Parameters for providing appropriate reporting to the financial institution's board of directors or senior management that enable periodic evaluation of the effectiveness of the social media program and whether the program is achieving its stated objectives.

American Bankers Association

FFIEC Social Media Risk Guidance

FFIEC Guidance: Social Media Risk Management (2013)

"A financial institution should have a risk management program that allows it to identify, measure, monitor, and control the risks related to social media."

"The risk management program should be designed with participation from specialists in compliance, technology, information security, legal, human resources, and marketing."

Reputation Risk - Fraud and Brand Identity.

"Risk may arise in many ways...spoofs of institution communications, and activities in which fraudsters masquerade as the institution...Financial institutions should have appropriate policies in place to monitor and address in a timely manner the fraudulent use of the financial institution's brand, such as through phishing or spoofing attacks."

Operational Risk:

"A financial institution should pay particular attention to the [FFIEC IT] booklets "Outsourcing Technology Services" and "Information Security" when using social media, and include social media in existing risk assessment and management programs."

"Social media is one of several platforms vulnerable to account takeover and the distribution of malware. A financial institution should ensure that the controls it implements to protect its systems and safeguard customer information from malicious software adequately address social media usage.

Incident Response:

Financial institutions' incident response protocol regarding a security event, such as a data breach or account takeover, should include social media....



2016 Information Security Exam Tool

 $\frac{www.aba.com/Tools/Function/Technology/Documents/IT-Examination-}{Toolkit.pdf}$



FFIEC IT Handbook

FFIEC Information Security Booklet (2016)

Objective 2: Determine whether management promotes effective governance of the information security program through a strong information security culture, defined information security responsibilities and accountability, and adequate resources to support the program.

I.A. Security Culture (p. 3). The board and management should:

- Understand and support information security,
- Provide appropriate resources for developing, implementing, and maintaining the information security program, and
- Foster an information security program in which management and employees are committed to integrating the program into the institution's lines of business, support functions, and third-party management program.

Indictors of Mature InfoSec culture: Integration of new initiatives.

A stronger security culture generally integrates information security into new initiatives from the outset, and throughout the life cycle of services and applications.



FFIEC IT Handbook

FFIEC Information Security Booklet (2016)

Objective 4: As part of the information security program, determine whether management has established risk identification processes.

II.A. Risk Identification (p. 7) An information security program should have documented processes to identify threats and vulnerabilities continuously.

Threats Can be a natural occurrence, technology or physical failure, person with intent to harm, or who unintentionally causes harm.

Information is available from:

- **Public sources:** news media, blogs, government publications and announcements, and websites.
- **Private sources**: information security vendors, and information-sharing organizations.



FFIEC IT Handbook

FFIEC Information Security Booklet (2016)

Objective 6: Determine whether management effectively implements controls to mitigate identified risk.

II.C.7(e) Training (p. 17). Management should:

- 1. Educate users about their security roles and responsibilities and communicate them through acceptable use policies.
- 2. Hold all employees, officers, and contractors accountable for complying with security and acceptable use policies
- 3. Ensure that the institution's information and other assets are protected.
- 4. Have the ability to impose sanctions for noncompliance.

Content:

- Training materials for most users focus on issues such as end-point security, log-in requirements, and password administration guidelines.
- Training programs should include scenarios capturing areas of significant and growing concern, such as phishing and social engineering attempts, loss of data through e-mail or removable media, or *unintentional posting of confidential or proprietary information on social media*.
- Training should change to reflect the risk environment.
- Employing training should be <u>annual</u>.



BUSINESS CONTINUITY MANAGEMENT

The process for management to oversee and implement resilience, continuity, and response capabilities to safeguard employees, customers, and products and services.

- FFIEC IT Handbook, Business Continuity Management



Business Continuity Management (BCM)

What has changed?

- FFIEC IT Handbook for Business Continuity Management (November 2019)
- Pandemic update (March 2020)
- Cloud Security (April 2020)



BCM: Key Points

- 1. Identify and inventory:
 - ☐ Internal/external risks,
 - ☐ Types of threats,
 - ☐ Interconnectivity, and
 - ☐ Existing controls.
- 2. Reconcile Business Impact Analysis (BIA) and risk assessment results with assumed priorities.







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Joint Statement

Cyber Insurance and Its Potential Role in Risk Management Programs

The Federal Financial Institutions Examination Council (FFIEC) members 1 developed this statement to provide awareness of the potential role of cyber insurance in financial institutions' risk management programs. This statement does not contain any new regulatory expectations. Use of cyber insurance may offset financial losses resulting from cyber incidents; however, it is not required by the agencies. Financial institutions should refer to the FFIEC Information Technology (IT) Examination Handbook booklets referenced in this statement for information on regulatory expectations regarding IT risk management.

The increasing number and sophistication of cyber incidents affect financial institutions of all sizes, and remediation of cyber incidents can be costly. Traditional insurance policies for general liability or basic business interruption coverage may not fully cover cyber risk exposures without special endorsement or by exclusion not cover them at all. Coverage may also be limited and not cover incidents caused by or tracked to outside vendors. Cyber insurance may offset financial losses from a variety of exposures, such as data breaches resulting in the loss of sensitive

The cyber insurance marketplace is growing and evolving in response to the increasing cybercustomer information. attack frequency, severity, and related losses. Many aspects of the cyber insurance marketplace, such as terminology, claims history, legal precedents, and risk modeling continue to evolve and are shaping the nature and scope of cyber insurance.

Cyber insurance coverage options vary greatly and may be offered on a stand-alone basis or as additional coverage endorsed to existing insurance policies, such as general liability, business interruption, errors and omissions, or directors' and officers' policies. Further, cyber coverage options may be structured as first-party or third-party coverage. First-party coverage insures against direct expenses incurred by the insured party and may address costs related to customer notification, event management, business interruption, and cyber extortion. Third-party coverage

¹ The FFIEC comprises the principals of the following: the Board of Governors of the Federal Reserve System, Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, and State Liaison Committee.



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Cyber Insurance:

Do you know if losses arising from clicking on a phishing link are covered or excluded in your cyber insurance policy?



Cyber Insurance:

If you knew the answer to that question:

- 1. Would you change your approach to antiphishing training?
- 2. Would you change your cyber policy?



Cyber Insurance: Gotcha!

READ YOUR POLICY



Managing New Risk ...and Resiliency Under Old Rules



About the Speaker



Denyette DePierro

Vice President & Senior Counsel, Cybersecurity American Bankers Association

Denyette DePierro joined the American Bankers Association in March 2008. Prior to joining ABA, Denyette was Legislative Counsel at the Independent Community Bankers of America (ICBA) in Washington, D.C. and the California Independent Bankers in Newport Beach, California. Denyette received her J.D. and M.DR from the Pepperdine School of Law, where she was a fellow at the Straus Institute for Dispute Resolution. She received a B.A. from the University of California, Santa Barbara, and was a European Union Fellow at the University of Padua in Padua, Italy in Developmental Economics. At ABA, Denyette focuses on the state, federal, and international regulation of technology, cybersecurity, privacy, data security and emerging trends in banking, including fintech, blockchain, internet of things (IOT), artificial intelligence, and social media.

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For charts and graphs



For spreadsheets

