

Data Breach! Now what?

John Lande
Dickinson, Mackaman, Tyler, & Hagen, P.C.



Agenda

- ❖ Cybersecurity threats
- ❖ Cybersecurity liability
- ❖ Cybersecurity insurance issues
- ❖ Mitigating cybersecurity risks



Cybersecurity Threats



DICKINSONLAW
ITA 2018

Two Kinds of Attacks

- ❖ Social engineering
 - ❖ Using public or non-public information to trick organizations into providing confidential information or sending money

- ❖ Hacking
 - ❖ Unauthorized access to organization's computer network and devices



DICKINSONLAW
ITA 2018

Social Engineering



DICKINSONLAW
ITA 2018

Examples

- ❖ Principle Solutions Group v. Ironshore:
 - ❖ \$1.717 million wired to fraudsters
- ❖ Medidata v. Federal Insurance:
 - ❖ \$4.7 million wired to fraudsters
- ❖ Maxum Indemnity v. Long Beach Escrow:
 - ❖ \$250,000 wired to fraudsters
- ❖ Apache Corp. v. Great Am. Insurance:
 - ❖ \$2.4 million in AP sent to fraudsters



DICKINSONLAW
ITA 2018

PSG v. Ironshore Indemnity

- ❖ PSG: wealth management company
- ❖ 9:10 am: controller received fraudster email
- ❖ 10:15 am: "lawyer" called controller
- ❖ "Lawyer" claimed director authorized wire transfer



DICKINSONLAW
ITA 2018

PSG v. Ironshore Indemnity

- ❖ "Lawyer" emailed wire instructions
- ❖ Controller forwarded email to bank
- ❖ Bank required online submission
- ❖ Controller prepares wire via online system
- ❖ Fraud prevention unit at the bank contacts controller
- ❖ Controller calls "lawyer" to confirm authority
- ❖ Bank released \$1.7 million



DICKINSONLAW
ITA 2018

How did this happen?



- ❖ Fraudster's fault?
- ❖ Controller's fault?
- ❖ Managing director's fault?
- ❖ Bank's fault?



DICKINSONLAW
ITA 2018

Preventing PSG v. Ironshore

- ❖ "Lawyer" sent an email with wire instructions
- ❖ Controller forwarded email to bank
- ❖ Bank required online submission
- ❖ Controller prepares wire via online system ←
- ❖ Fraud prevention unit at the bank contacted controller
- ❖ Controller called "lawyer" to confirm authority ←
- ❖ Bank released \$1.7 million



DICKINSONLAW
ITA 2018

Preventing PSG v. Ironshore



- ❖ Segregate duties
- ❖ Controller can't wire money if the controller doesn't have the sole authority
- ❖ Threshold for approval: Controller has authority for wires below a certain amount

Email Spoofing



FAKE E-MAIL

- ❖ jlande@dickinsonlaw.com
- ❖ jlande@dickensonlaw.com
- ❖ ilande@dickinsonlaw.com
- ❖ jlande@dickinson.com

Medidata v. Federal Insurance

- ❖ Medidata executives informed accounting department that there would be M & A activity on short notice
- ❖ Medidata routinely did business via email
- ❖ Accounting department received a series of emails claiming to be from a Medidata executive
- ❖ "Executive" told employees that a lawyer would be contacting them with wire instructions



DICKINSONLAW
ITA 2018



Medidata v. Federal Insurance

- ❖ "Attorney" called accounting department and asked for a wire transfer
- ❖ Employee informed "attorney" that authorization would need to come from particular executives
- ❖ Fraudsters sent email on behalf of authorized signatories confirming wire
- ❖ Employees authorized the wire
- ❖ Wired \$4.7 million to China
- ❖ Second request for \$4.8 million caused suspicion



DICKINSONLAW
ITA 2018


Preventing Medidata

- ❖ Medidata executives informed accounting department that there would be M & A activity on short notice 
- ❖ Medidata routinely did business via email 
- ❖ Accounting department received a series of emails claiming to be from a Medidata executive
- ❖ "Executive" told employees that a lawyer would be contacting them with wire instructions



DICKINSONLAW
ITA 2018

Preventing Medidata

- ❖ "Attorney" called AP department and asked for a wire transfer
- ❖ Employee informed "attorney" that authorization would need to come from particular executives 
- ❖ Fraudsters sent email on behalf of authorized signatories confirming wire
- ❖ Employees authorized the wire
- ❖ Wired \$4.7 million to China
- ❖ Second request for \$4.8 million caused suspicion



DICKINSONLAW
ITA 2018

Fraud Nuts & Bolts



- ❖ Fraudsters altered the “from” address on the “envelope” that transmits the email
- ❖ Difficult to detect



DICKINSONLAW
ITA 2018

Preventing Medidata

- ❖ Executives told employees that transactions might occur on short notice
- ❖ Employees disclosed key individuals who could authorize transactions



DICKINSONLAW
ITA 2018

Tips

- ❖ Verify identity of person making request through some other means
- ❖ Be wary of urgent requests
- ❖ Limit authority to make significant transfers
- ❖ Setup procedures for when you are unavailable to verify authenticity of requests



DICKINSONLAW
ITA 2018

Hacking



DICKINSONLAW
ITA 2018

State Bank of Bellingham



- ❖ Bank's computer for initiating wire transfers was compromised
- ❖ Hackers were able to transfer \$940,000 from bank to accounts located in Poland
- ❖ After reversing some of the transactions the bank lost \$485,000



DICKINSONLAW
ITA 2018

How did the hackers get in?

- ❖ Failed to implement automatic security updates;
- ❖ Clicked on a spam link that downloaded multiple pieces of malware;
- ❖ The malware—Zeus—allowed hackers to obtain all passwords and usernames;
- ❖ Bank employees left secure token in computer;
- ❖ Antivirus software detected the Zeus virus; bank employees failed to remove the virus;
- ❖ History of spam email messages being opened;
- ❖ Computer was accessible by any employee because the computer was not password protected.



DICKINSONLAW
ITA 2018

Hybrid Attacks

Outlook Rules

- ❖ Phishing email to gain access
- ❖ Hackers install rules to re-route email
- ❖ Fraudsters send/receive emails on behalf of the user



Tips



- ❖ Utilize anti-malware/anti-virus software
- ❖ Implement security updates as they are released or shortly thereafter
- ❖ Be wary of emails, particularly emails that “urgent” or seem too good to be true

Liability Rules

What is the source of the loss?



- ❖ Cases involving money almost always involve wiring money or sending it via ACH
- ❖ Personally identifiable information and other data exfiltration



DICKINSONLAW
ITA 2018

No Consumer Protection

- ❖ Regulation E: Generally provides for reimbursement of funds for *unauthorized* transfers
- ❖ Limited to consumer accounts held directly or indirectly by a financial institution and established primarily for personal or household purposes
- ❖ Excludes accounts held under bona fide trust agreement
- ❖ Does not apply to remittance transfers



DICKINSONLAW
ITA 2018

Accounts Not Covered by Reg E

- ❖ Brokerage accounts
- ❖ IRAs
- ❖ Trust accounts
- ❖ Business accounts



Authorization



Resolution 550x750 px - Free from file download - www.psdgraphics.com

- ❖ Consumers may not be protected if they authorize the transfer
- ❖ Bank did what it was supposed to do
- ❖ May not have recourse against the bank

Relationship of UCC and Reg E

- ❖ UCC “does not apply to a funds transfer any part of which is governed by the Electronic Fund Transfer Act of 1978, 15 U.S.C. § 1693 et seq.”
- ❖ Key: is the transfer from an account established primarily for personal or household purposes, **not** whether bank is liable



DICKINSONLAW
ITA 2018

UCC: Legal Framework

- ❖ Governs non-EFTA and remittance transfers
- ❖ Default: Banks are liable for loss
- ❖ Banks can shift liability to account holders
- ❖ Bank and account holder agree to verify the authenticity of payment orders using a commercially reasonable security procedure
- ❖ The bank follows the procedure in good faith



DICKINSONLAW
ITA 2018

Keys for Liability

- ❖ Commercially reasonable security procedure
- ❖ Acceptance of payment order in good faith
- ❖ Agreement on that procedure



DICKINSONLAW
ITA 2018

What does that mean for account holders?



- ❖ Do they initiate wire or ACH transfers?
- ❖ How does the bank verify authenticity of payment requests?
- ❖ Account holder may be liable if tricked into transferring money or gets hacked



DICKINSONLAW
ITA 2018