# **BIG APPLE BITES - IT**

- 1. THERE'S AN APP FOR THAT!
- 2. A Cyber Space Odyssey: The Internet of Things
- 3. THE TOP 5 LIST: TRENDS IN LEGAL TECHNOLOGY
- 4. Cybersecurity Training: Not an Oxymoron



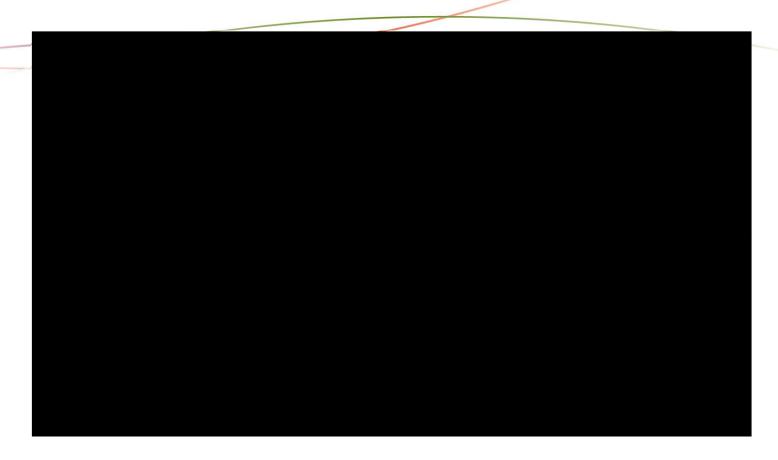




# There's An App For That!

**Useful Apps For Everyone** 





# The App Evolution



- Abbreviation for "Application"
- Modern take on the word software or application
- Three main types of apps: desktop, mobile and web
- Free and Paid
- Categories



# **Dropbox**



- File hosting service
- File transferring service
- Basic Free: 2gb
- Plus Not Free: 1tb



### Waze



- GPS navigation
- Community-driven
- Collects map data, travel times and traffic information
- Traffic accidents, police car, emergency work
- Free



# LinkedIn



- Business and employment-oriented networking
- Professional networking, not social
- Post jobs, seek jobs
- Basic Free, Premium Not Free



### **Hootsuite**



- Platform for managing social media (twitter, facebook, Instagram, linkedin, etc.)
- Dashboard interface
- Not Free



# PDF Expert



- PDF editing app for iphone, ipad and Mac
- Read, annotate, edit, sign
- Not Free



# **ScannerPro**



- Scan paper documents into PDFs
- Scan receipts, checks, agreements, books, etc.
- Not Free



# Quizlet



- Study application
- Study via flashcards, games and tests
- Free



# **Microsoft Word**



- Word processor
- See track changes
- Not Free



# Zello



- Push-to-talk walkietalkie over cell phone networks
- Became a popular method for communications between rescuers and people stranded following Hurricane Harvey in Texas
- Free



### The Skimm



- Daily email newsletter on popular news
- Short, simple and easy-to-read
- Not Free



# **SimplyE**



- The New York Public Library's free e-reader app
- Borrow e-books
- Over 300,000 ebooks
- Free with Library Card



### Merriam-Webster



- Dictionary
- Voice search
- Word of the day
- Example sentences
- Free



# Remind



- Communicate with teachers, students, parents quickly
- Free



### 2. A Space Odyssey: The Internet of Things

# SIMPLICITY TO OUR PERSONAL LIVES AND HAVOC TO OUR PROFESSIONAL ONES

Douglas Gibson, Director of Information
Chaffetz Lindsey LLP







In the [21st] century, planet earth will don an electronic skin.

It will use the Internet as a scaffold to support and transmit its sensations.

**Neil Gross** 

# The what



What it is
What it can do for you personally
And professionally



# Physical Place

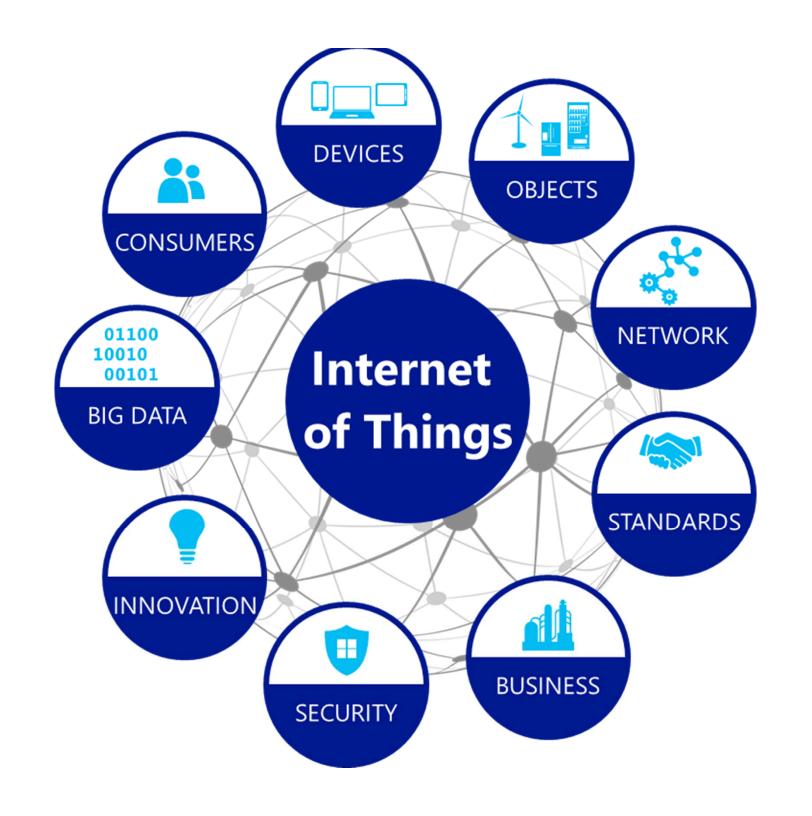
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Sensor / Controller / Actuator

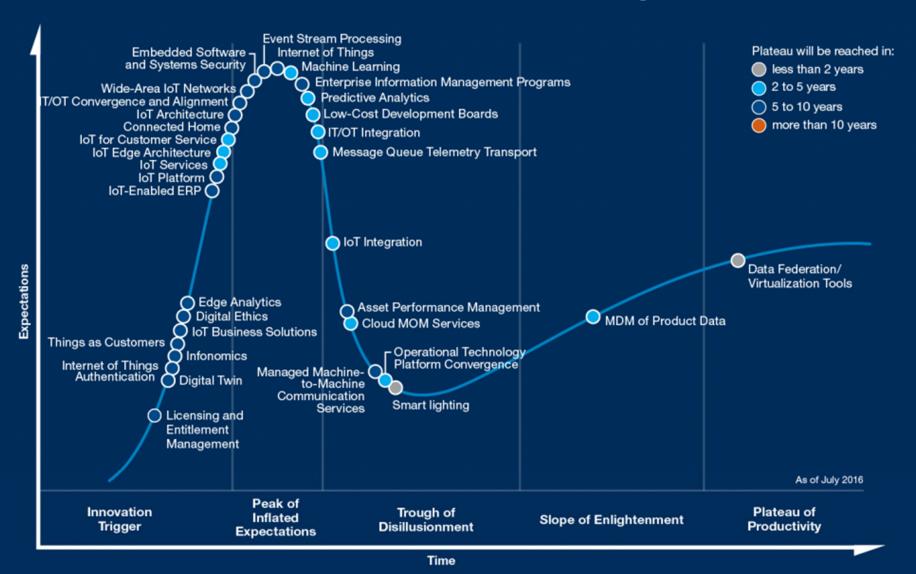
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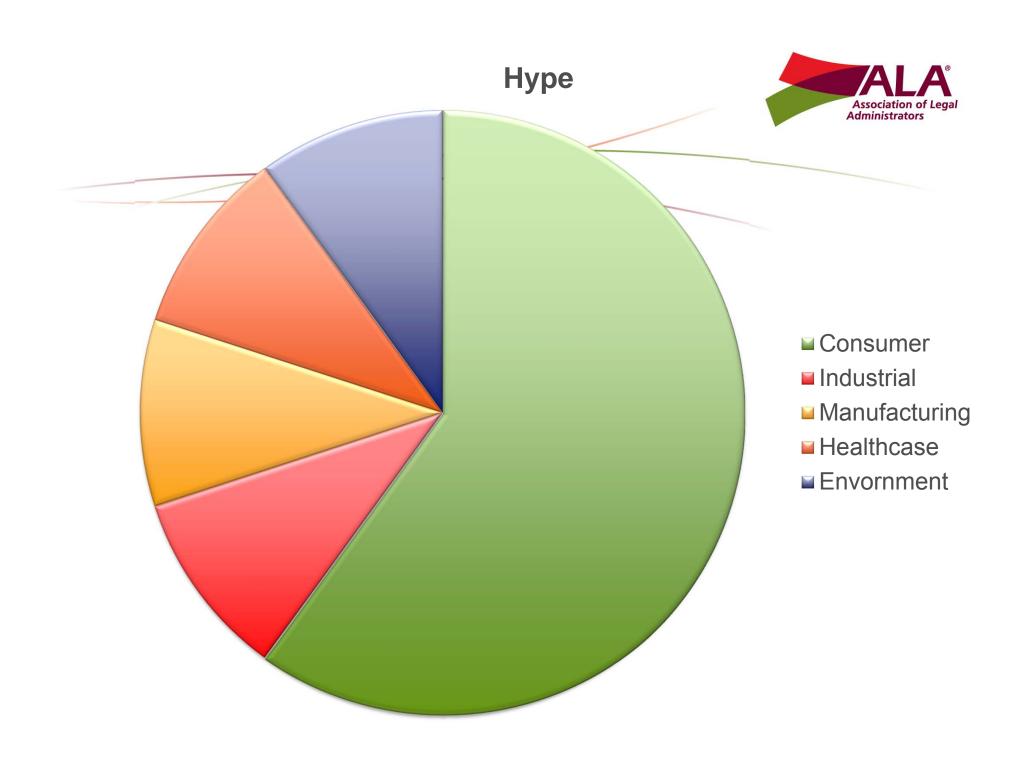
Internet

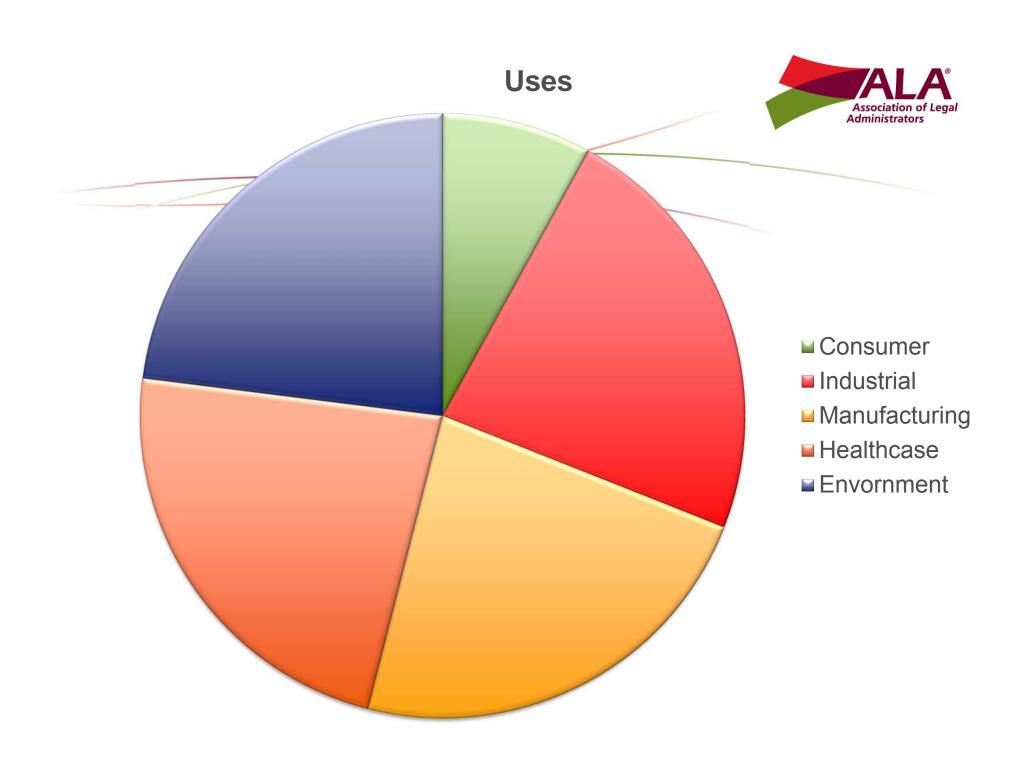
Internet of Things



### Gartner Hype Cycle for the Internet of Things, 2016













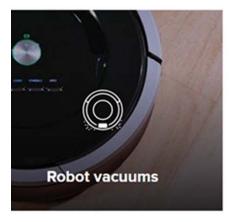






















Apple HomeKit

If you own a recent iPhone or iPad, you have HomeKit. Control products with Siri or Apple's Home app.



Belkin WeMo

These smart home devices offer simple app controls for things like lights, power outlets and appliances.



#### Google Home

The Google Home is a speaker; Google Assistant is the voice inside. Play music, look up facts and control smart home gadgets — just ask.



#### Lutron

Makes a variety of lighting products, including smart light switches and appenabled, motorized window shades.







#### Samsung SmartThings

Controls more smart home gadgets than any other hub thanks to its open software and active user community.



#### Wink

The Wink Hub and its well-designed app give you control of smart home products from lots of different companies.





# The uber dash





# **Simplicity**



#### Amazon Dash Wand With Alexa Amazon

★★☆☆☆ ▼ 1,641 customer reviews | 158 answered questions



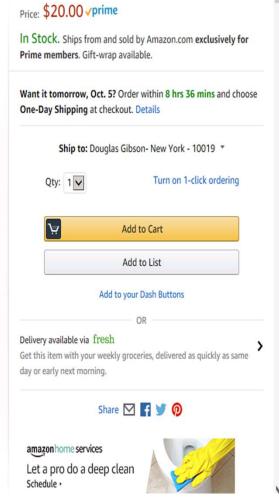


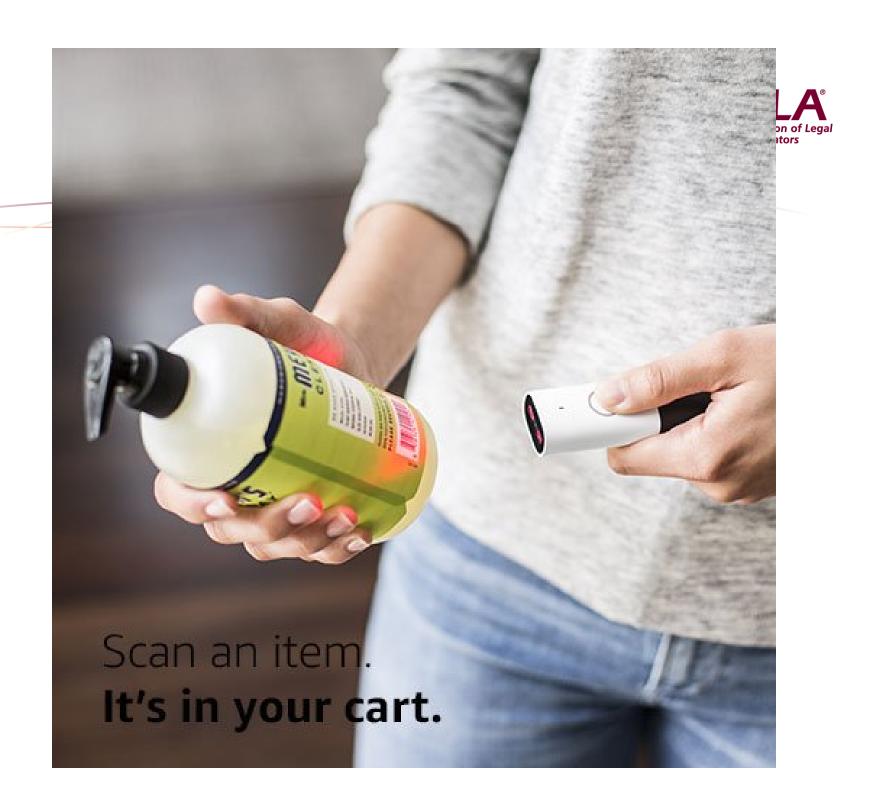




#### About the product

- Groceries have never been easier. All new Amazon Dash Wand with Alexa helps you find recipes, convert cups to ounces, buy and reorder essentials, find nearby restaurants and more.
- . Say it or scan a barcode. It's added to your shopping cart. Just say "paper towels."
- Water-resistant, durable design, and magnetic so you can stick it on your fridge. You'll need an iPhone or Android phone to register the device.





### Havoc at work



havoc

Q

# hav-oc

/ˈhavək/ •)

#### noun

1. widespread destruction.

"the hurricane ripped through Florida, causing havoc" synonyms: devastation, destruction, damage, desolation, ruin; More

### verb archaic

1. lay waste to; devastate.



# Key points to consider



Security vs. Data privacy
Notice and consent
Matter centricity or not
Discoverability
Data breach - Whose liability?
Monitor – Audit / Device Management Software / Guess



#### **Analysis**

### Web Attack Piles Onto Internet Of Things Security Concerns

Share us on: y fin 🖂 By Allison Grande

Law360, New York (October 25, 2016, 12:34 PM EDT) -- Hackers recently hijacked millions of internet-connected devices to help them carry out a cyberattack that temporarily blocked access to popular websites such as Twitter, Netflix and Amazon, a move that puts a new spin on the focus of concerns and potential liability risks associated with the growing internet of things.

The headline-grabbing distributed denial-of-service attack began around 7 a.m. Eastern time on Friday, when domain name service provider Dyn was flooded with traffic from tens of millions of internet protocol addresses, a large portion of which were found to be tied to common DVRs and webcams that had been infected by malware known as Mirai according to the company.

The barrage of traffic from the devices and other digital sources caused web users to be unsuccessful in their efforts to access the array of sites that Dyn is charged with directing them to, which include Twitter, Netflix, Amazon, Airbnb, the New York Times and Spotify. The first wave of the DDoS attack, which compromised access to sites primarily on the East Coast, was contained by Dyn within roughly two hours, while a pair of subsequent hacks disrupted traffic for shorter periods of time but were "more global in nature," Dyn said in a blog post.

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Troutman Sanders	
Companies	
Airbnb Inc.	$\square$
Netflix Inc.	
New York Times Co.	
Spokeo Inc.	
Spotify Technology SA	
Twitter Inc.	
<b>Government Agencies</b>	
Federal Trade Commission	
U.S. Supreme Court	

## **Takeaways**



Have a policy

Assess your risk
Secure both information and devices
Align IoT strategy and security
Identify legal and regulatory issues

- Implement a Bring Your Own Device policy
- Use a VPN to control access in and out of your network
- Consider moving to the cloud with client files and work product
- Educate your employees
- Patch regularly

## **Additional Resources**



#### ABA on the Internet of Things

National Institute of Standards & Technology, ("NIST") <u>IoT Notices and Warnings</u>
<u>Ten Steps</u> to Secure your Firm according to CSO Online
TechTarget on why <u>IoT security</u> is not possible

## Top 5 Trends in Legal Technology

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Franklin, Weinrib, Rudell & Vassallo, PC

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# Top 5 Trends in Legal Technology



- Outsourced/Managed Technology Services TaaS (No wait, that's not it!)
- Mobility and Mobile Technology
- Cloud Computing
- Cyber Security
- Artificial Intelligence
- Blockchain (Let's learn together)

# Outsourced/Managed Technology Services – TaaS (No wait, that's not it!)



- SaaS Software as a Service
- DaaS Desktop as a Service
- laaS Infrastructure as a Service
- DRaaS Disaster Recovery as a Service
- CSaaS Computer Security as a Service
- TaaS Is it Technology as a Service or Tokens as a Service?

# **Cloud Computing**



- The beauty of the cloud is its elasticity
- Private, Hybrid, Public
- Encryption keys

# **Cyber Security**



- Law firms are honey pots for hackers
- Law firms need to be doing everything they can to protect client data
- Hardware, software, monitoring services
- Cyber Liability Insurance
- Security programs can not be only technology focused. They must also focus on the technology user. Firms need a security conscious culture as Dominic will discuss in his 15 minutes.

# **Artificial Intelligence**



- Will not replace lawyers
- What is Al
- What are the objectives for AI in Legal
- Use Cases

# Blockchain (Let's Learn Together)



- Think of a blockchain as a decentralized database.
   Information held on a blockchain exists as a shared and continually reconciled database.
  - As a result:
    - A blockchain cannot be controlled by a single entity
    - It has no single point of failure
    - Blockchain gives internet users the ability to create value and it authenticates digital information.
- Bitcoin (a crypto currency) was the reason blockchain technology was conceived but now people are seeing many potential applications for blockchain technology.

# Blockchain (Let's Learn Together)



- How is blockchain impacting the Legal Industry
  - Global Legal Blockchain Consortium
  - Enterprise Ethereum Alliance (a cross industry collaborative blockchain consortium) recently launched ids Legal Industry Working Group
- Most of the discussion revolves around understanding and guiding blockchain policy that affects cryptocurrency markets, which utilize the blockchain to transfer currency like bitcoin.
- Law firms are creating blockchain practice groups and accepting bitcoin payments.

# Blockchain (Let's Learn Together)



- Practical Legal Blockchain application Smart Contracts
  - OpenLaw is a blockchain-based protocol for the creation and execution of legal agreements.
     Using OpenLaw, lawyers can more efficiently engage in transactional work and digitally sign and store legal agreements in a highly secure manner, all while leveraging next generation blockchain-based smart contracts.



- Join ILTA if your firm is not already a member. If your firm is a member, register for online access. It's a firm membership structure, not individual. It's a tremendous resource with an active online community.
- Subscribe to Pinhawk newsletters (daily aggregators of legal tech and legal admin news on the internet). The subscription to the below two newsletters is free.
  - http://www.pinhawk.com/subscribe/subscription.php?t=sub scription&n=18
  - Sample of Law Technology Daily Digest
    - http://pinhawk.com/latest.php?nl=18
  - Sample of Legal Administrator Daily Digest
    - http://pinhawk.com/latest.php?nl=11



- aaS and Cloud
  - ALANYC Business Partners
    - Adaptive Solutions
    - Canon Business Process Services, Inc.
    - Document Solutions
    - DTI
    - eSentire
    - FSO
    - Konica Minolta
    - Lloyd Group
    - MindShift
    - Rippe & Kingston
    - Tabush Group
    - The MCS Group



- Cyber Security
  - ALANYC Business Partners
    - Adaptive Solutions
    - eSentire
    - Herbert L. Jamison & Co., LLC (Cyber Insurance)
    - Lloyd Group
    - MindShift
    - Tabush Group



#### Blockchain

- https://blockgeeks.com/guides/what-is-blockchaintechnology/
- http://bit.ly/2yHYb1b at page 16
- https://blockgeeks.com/guides/smart-contracts/
- https://media.consensys.net/programmable-blockchainsin-context-ethereum-s-future-cd8451eb421e
- https://media.consensys.net/introducing-openlaw-7a2ea410138b

## **Cybersecurity Training: Not an Oxymoron**

Dominick Fato mindSHIFT, a Ricoh company





# Agenda



- Definition
- Business Implications
- Email Security
- Security Awareness Program
- Summary + Q&A

#### **Definition**



- Cyber security is the protection of computer systems from the theft or damage to their hardware, software or information, as well as from disruption or misdirection of the services they provide.
  - Due to malpractice by operators, whether intentional, accidental, IT security is susceptible to being tricked into deviating from secure procedures through various methods.

Source: Wikipedia

# The Business Challenge



## **Business Impact of Being Hacked**

- Outages
- Data theft
- Data loss
- Productivity loss
- Public image / reputation damage
- Cost of cleanup and recovery (time and money)

# **Shared Responsibility**



- Cyber security is <u>everyone's responsibility</u>
- Always follow your organization's security and operational policies



## **Email Security - Terms**





Irrelevant or inappropriate messages sent on the Internet to a large number of recipients



Emails meant to dupe users into providing financial/confidential info or installing malware



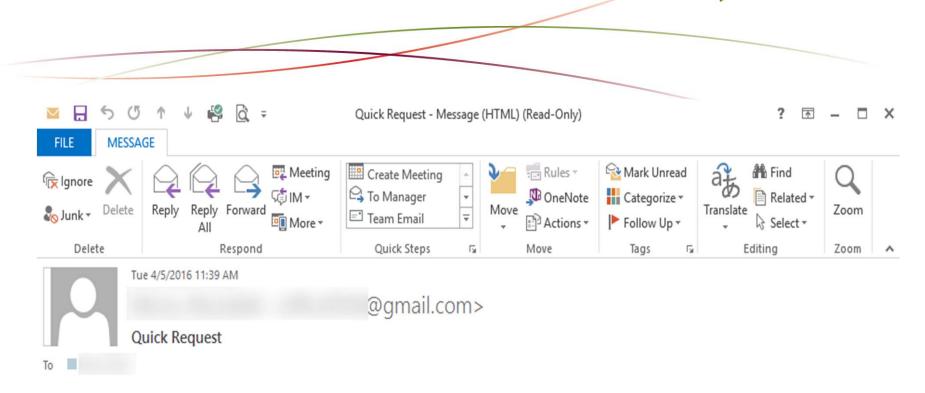
Target specific individuals or organizations.



Target high-level executive individuals

# **Spear Phishing Example**





#### Hi Dave,

I want you to send me the list of W-2 copy of employees wage and tax statement for 2015, I need them in PDF file type, you can send it as an attachment. Kindly prepare the lists and email them to me asap.

## **Phishing Stats**



- Phishing costs the average U.S. organization more than \$3.7 million annually.
- Every day 80,000 people fall victim to phishing scams from 156 million phishing emails sent globally – 16 million of which circumvent spam filters – resulting in 8 million scam emails being opened.

#### **Beware the Senders**

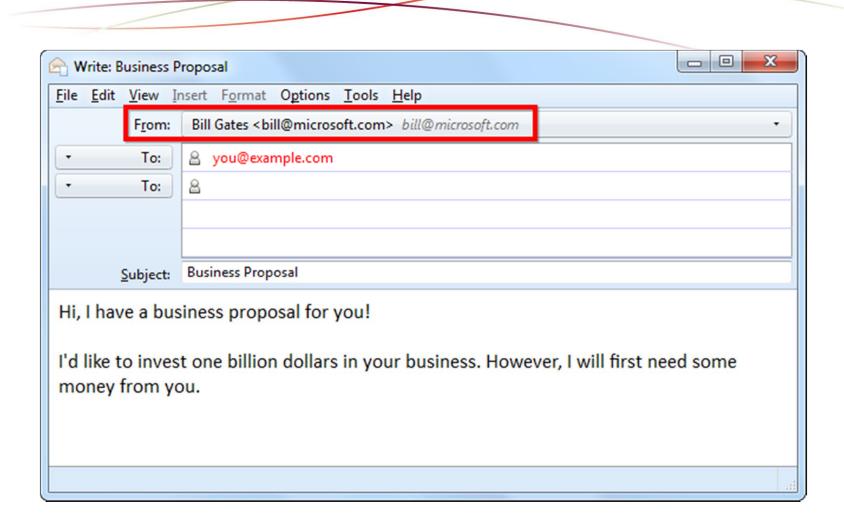


- Verify Sender
  - Real person
  - Real company/organization
  - Real domain
- Watch for Spoofed Emails
  - Email with a forged sender address
  - Call the person or company if you're suspicious
  - Social engineering



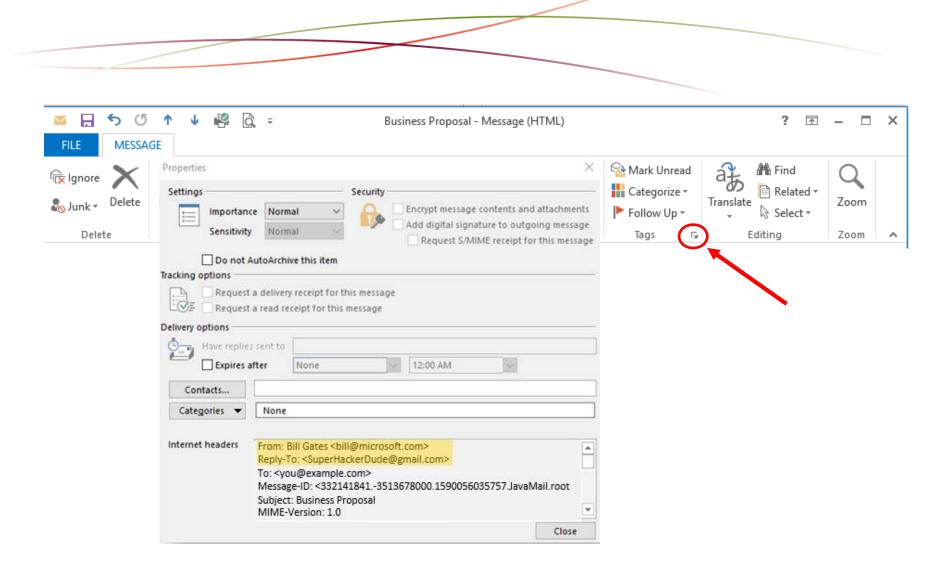
## **Spoofed Message Example**





#### **Email Internet Headers**

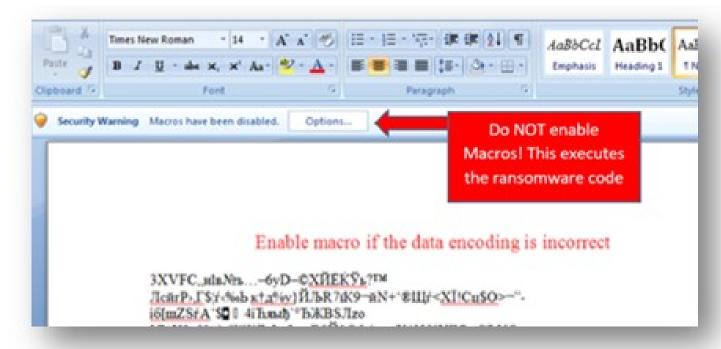




#### **Beware the Attachments**



- Don't open odd attachments
- Don't open attachments from unknown sources
- Don't enable macros



#### **Beware the Links**



- Go to the website directly don't click the link
- Hover over the hyperlink to view the URL
- Notice subtle differences e.g. micresoft.com

http://www.this\_is\_not\_your\_bank.com/ Click to follow link

Please log into to yourbank.com

## **Beware Strange Messages**





- Does it sound right?
- Is there odd grammar and spelling?
- A response to something you didn't send in first place?
- Super general?
- Oddly specific?
- Threatening?

# **Security Awareness Program**



- Three key components
  - Tools
  - Policies
  - Education







#### **Tools**



- Next Gen firewalls
- Vulnerability scans/pen testing
- Centralized patching
- Multi-factor authentication
- Phishing assessment



#### **Policies**



- Policies should come from the top down
- Policies should require system builds according to security standards (NIST, ISO, HIPAA, etc.)
- Policies should include:
  - Incident Response Plan
  - Business Continuity / Disaster Recovery
  - Acceptable use of Info Systems

#### **Education**



- Ongoing security training
  - Led by Privacy Officer, Security Team, or IT
     Admin
  - Social engineering
  - Should include phishing emails
- Resources
  - <a href="https://phishme.com/pm-free/">https://phishme.com/pm-free/</a>
  - https://www.knowbe4.com/automated-securityawareness-program



## Questions?

Dominick Fato mindSHIFT, a Ricoh company Dominick.Fato@mindSHIFT.com