### Bring Your Own Device Security and Privacy Legal Risks



### Introduction

#### **Information Law Group, LLP**

- National boutique firm with focus on information law
- Experienced, nationally-recognized privacy, technology, media, advertising & information management attorneys
- Clients include: Financial institutions, Fortune 10 multinational corporations, Energy, Media companies, payment processors, retailers, start-ups, non-profits
- Co-Chair American Bar Association's Information Security Committee
- Certified Information Privacy Professional (IAPP)
- Former in-house lawyer for eBusiness Risk Group of multi-national insurance company based in New York

#### **Chris Paschke**

- Experience working in federal and state government
- Background in system management and IT security auditing
- Specialises in IT security management and incident response
- Currently manages IT security for a large Colorado school district.



### **Road Map**

- Introduction
- BYOD Basics
- Information Security and BYOD
- Privacy and BYOD
- Incident Response and Investigation of Personal Devices
- Personal Device Use Policies



### **BYOD Basics**



### **BYOD Drivers**

#### Mobile device explosion

- 76 percent of people have Internet mobile device, and 68 percent have a desktop or laptop (Source: Ad Age)
- But don't forget laptops and desktops

### Employee satisfaction

- Too many devices
- Consumerization of IT ("COIT")
- Generational aspect

#### **BYOD Drivers**

- Efficiency/productivity
- Cutting-edge technology

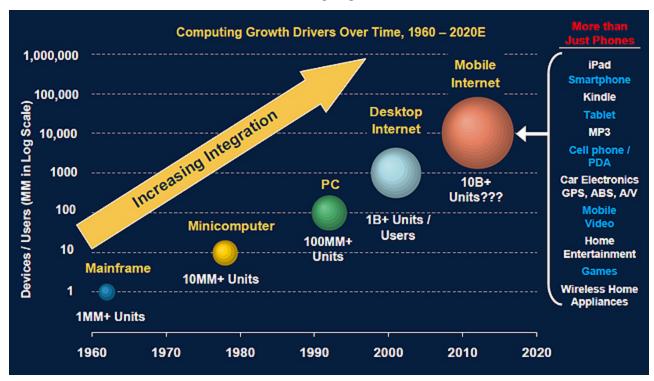




### **BYOD Drivers -- Perceived Cost-Savings**

- Device costs
- Data costs
- IT management costs
- Inefficiencies
- True cost savings?

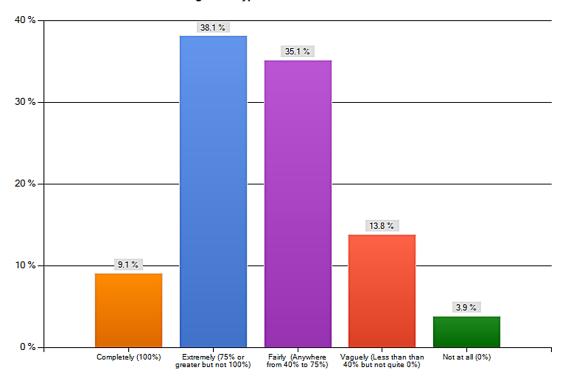
### Mobile Web to Rule by 2015



Source: Morgan Stanley Study / Mashable Tech ( <a href="http://mashable.com/2010/04/13/mobile-web-stats/">http://mashable.com/2010/04/13/mobile-web-stats/</a>)



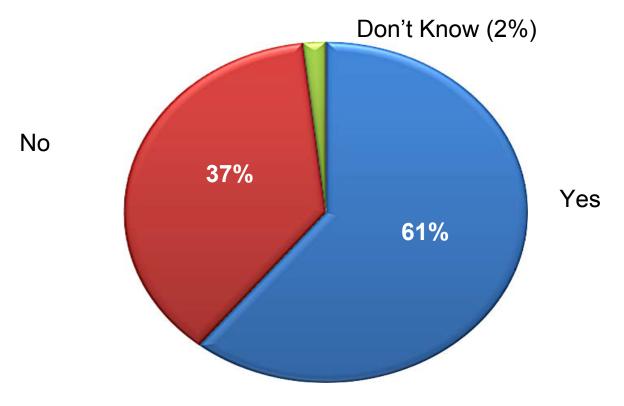
Confidence in Knowing What Types of Devices Access Business Resources



Source: SANS Mobility/BYOD Security Survey, March 2012



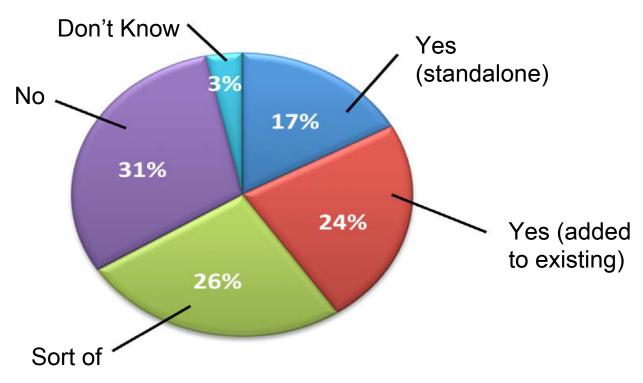
#### Is BYOD Use Allowed?



Source: SANS Mobility/BYOD Security Survey, March 2012



#### **Policies Supporting BYOD**



Source: SANS Mobility/BYOD Security Survey, March 2012



### Information Security and BYOD



## Addressing BYOD Security Risk Strategy

- Not addressing the risk
- Prohibiting BYOD
- Limiting BYOD (e.g. limited employees; limited data; limited connectivity; limited devices)
- "Traditional" technological security controls

### **Traditional Security Measures**

- Determine and limit the type of devices that can be used
- Implement minimum system requirements and configurations
- Install security-related software to the device
- Encrypt company data on the device
- Apply security patches
- Monitor the use of the device to detect misuse, hacking or malware
- Dictate how the device connects to the company's network
- Install and update anti-virus software
- Provide support for the device
- Obtain/access the device for purposes of an investigation (because the company owns the device).

### **Security Challenges**

- Mobile nature / lost devices
- Personal use = riskier use
  - More opportunities to pick up virus/get hacked
  - Shared devices
  - Lack of IT / security knowledge sophistication (e.g. configurations, patching, anti-virus)
  - Riskier environments
  - Always in use

#### Multiple device-types and operating systems

- May need to be treated/configured/secured differently
- May pose different levels of security risk
- Constant change -- new devices getting popular all the time



### **Security Challenges**

- Jailbroken/modded devices
- Think beyond the device
  - Offsite data transfer ("the Cloud"; auto back-up)
  - Applications
  - Social media access and social engineering/social media hacking
  - Device as portal to entire company network
- Lack of control over device, data and security

# Security Challenges Consistency and Legal Risk

- Reasonable security factors
  - Sensitivity of the personal information,
  - Foreseeability of risks
  - Likelihood of damage
  - Medium and format of the record
  - Potential harm from an incident
  - Cost of preventive measures
- Specific security controls required by law or contract
  - Mass personal information protection law
- Comply with own policies
  - acceptable risk
  - subjective reasonableness



# Addressing BYOD Security Risk Strategy

- Acceptable Use Policies (e.g. email, mobile devices, Internet, etc.)
- Security Policies (e.g. mobile, encryption, password, anti-virus)
- Social Media Policy
- Wireless Access Policy
- Remote Access Policy
- Remote Working Policies
- Employee Code of Conduct (or other HR Policies)
- Incident Response Policies
- Privacy policies (or PII Handling Policies)

### Addressing BYOD Security Risk Strategy

- Authorization and inventorying process
- Compensating controls
- Encryption
- "Sandboxing"
- Mobile Device Management ("MDM") software
- Tracking/wiping/bricking
- Personal device use policies
- Training

**Key legally:** being able to explain that despite security being different, level of protection/risk is the same



### **Privacy and BYOD**



### **Privacy Challenges**

- Personal nature of device and expectation of privacy
  - Is prohibited web surfing on a company device allowed on the personal device?
  - Personal data: pictures, videos, personal emails, bank statements, tax returns, social security numbers, chat histories, user names/passwords, medical information
- Mobile nature of the devices
  - Remote working and travel (checking to see if employee is where they are supposed to be)
- The employee "creep out" factor (see e.g. requiring employees to provide Facebook password)



# Privacy Challenges – Employee Monitoring

- Monitoring of company-owned devices
- Where monitoring may occur on a personal device:
  - While connected to the network
  - Data in transmission between personal device and network
  - Monitoring of "sandboxed" or company area of mobile device.
  - Monitoring of entire device (e.g. key stroke logger; recording browser history, etc.)
- Data collection about usage may be monitoring (e.g. logging)
- Location, location, location
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### **Privacy Challenges – Investigations**

- Investigations (internal, criminal, audits)
- Security breach response forensic investigations
- Litigation holds
- eDiscovery (searching for, preserving and collecting data)
- Information requests/demands/subpoenas/regulatory investigations

Problem: difficult, impracticable/impossible, harmful to try to limit collection and access to non-company information on/from a personal device

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### Privacy Challenges – Expectation of Privacy

- U.S. Supreme Court -- City of Ontario, California v. Quon
- 4<sup>th</sup> Amendment unreasonable search and seizure
- Search concerning personal use of a company device
- Applies to public entity, but instructive to private
- Was there a reasonable expectation of privacy?
  - Not ruled upon; assumed by the Court
  - Employee policies are a factor in setting expectation
- Was the search reasonable?
  - Work-related purpose existed
  - Scope and intrusiveness of the search was limited

### Privacy Challenges – Specific Laws

- Computer Fraud and Abuse Act
  - Unauthorized access/use of computer
- Electronic Communications Privacy Act --Stored Communications Act
- Computer Trespass

# Incident Response and Investigation of Personal Devices

- Loss of control
- Inability to remotely access device
- Obtaining physical possession of a device
- Investigation of employees themselves
- Incident detection (lost devices v. breached devices; actual v. reasonably suspected breach)



- Investigations (internal, criminal, audits, customers)
- Security breach response forensic investigations
- Litigation holds
- eDiscovery (searching for, preserving and collecting data)
- Information requests/demands/subpoenas/ regulatory investigations (either to company or employee directly)

- Obtaining access to the device and data thereon
  - Physical possession
  - Unlocked/login credentials
  - Unencrypted
- Remote wiping, bricking of a device
- Timing issues
  - Incident detection
  - Litigation holds/spoiliation of evidence



- Damage to the device
  - Installation of software may be required
  - Data loss
  - Software corruption
  - Loss of use
- Privacy issues
  - Cooperation issue
  - Ability to tie to business need and limit scope



### **Personal Device Use Policies**



- Relationship to other policies
  - Scope of existing policies
  - Conflicts with existing policies
- Key definitions
  - Personal device
  - Security incident
  - Prohibited information

Privilege v. requirement Personal device system requirements, configuration and limitations

- Remote connectivity
- Device support
- Software installation
- Expectation of privacy

- Security requirements
  - May vary by device
  - No sharing devices
  - Software/configuration requirements
- Security incident response
  - Detection
  - Notice
  - Cooperation
  - Investigation
  - Remote wiping



- Investigations
  - Internal, assessments and audits
  - Subpoenas
  - e-Discovery/Litigation holds
- Damage and Liability
- Consent and waiver

### Q&A



### Thank You!



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