# Educating the End User on Mobile Device Security

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#### **Mobile Device**

 Mobile device refers to any mobile phone, tablets, e-Readers such as Kindle, GPS



### Bring Your Own Device (BYOD)

 A phrase that has been adopted for employees who bring their own computing devices such as smartphones, laptops and tablets to the workplace for use and connectivity on the secure corporate network.

## Mobile Devices are Attractive Targets

#### PERSONAL DEVICE

- Contact List
- Photos
- Calendars
- Email Accounts
- Notes
- PIN Numbers

#### **WORK DEVICE**

- Corporate email
- Customer Information
- Corporate Information
- Network/Login Credentials
- Confidential Information
- Access to Database

## Four Common Mobile Vulnerabilities

- 1. Lost or Stolen
- 2. Malware
- 3. Unsecured Network
- 4. Gaps in Mobile Management/Policy



#### **Lost or Stolen Devices**

- 123 Cell Phones/Smart Phones are lost or stolen each minute
- 120,000 mobile devices are lost annually in Chicago Taxi cabs

Major city transit authorities receive over 200 lost

items per day



### **Cash for Device Machines**



#### Malware and Mobile Apps

- 82% of applications are tracking the end user
- 80% collect location information
- 55% continuously track location while the device is turned on
- 36% know the users device information
- 35% contain malware



#### Example App Agreement

- Terms of use agreements create a legal agreement between end user and company
- We can collect, use and share your personal information
- You give us permission to use your personal email and contacts to network with your friends



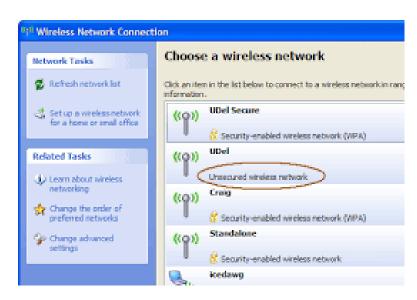
#### Symptoms of Malware

- There is a sudden increase in your phone bill without cause
- The device has emails and messages in the sent folder that you did not send
- The user interface changed

#### **Connecting to Unsecured Networks**

- Automatically connecting to Wi-Fi
- Leaving Bluetooth setting to "ON"
- Connecting to a Hot Spot that is not

password protected

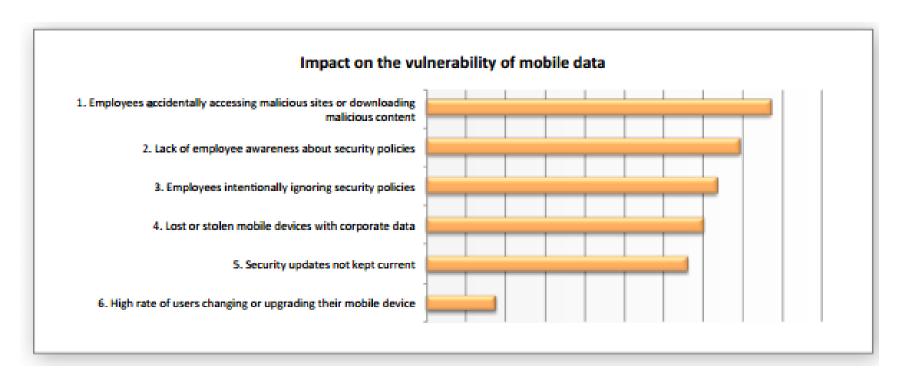


### Gaps in Mobile Management

- Management of network
- Authentication of devices
- Policies and implementation
- Enforcement of policies



#### **Employee Actions and Mobile Data**



#### **Preventative Measures**

- Keep your mobile device with you at all times
- Turn on the security features on the device
- Set a password of PIN
- Install anti-malware/anti-virus software
- Turn Bluetooth to "OFF" when not in use
- Turn Wi-Fi "OFF" when not in use
- Record the International Mobile Equipment Identifier (IMEI) on the device

#### **Preventative Measures**

- Check your phone bill for unusual activity
- Backup data on a regular basis
- Set the device so that it automatically locks
- Stick with reputable sites when downloading

from the Internet



#### Questions

