Mobile Technology in the Workplace

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Some Considerations

- We mostly look at cybersecurity and compliance through a vulnerability lens.
- What about the remaining components of the architecture such as the network and system hardware?
- How about mobile devices that are so common they are almost invisible to cybersecurity and compliance processes and procedures?
- Mobile devices are advancing in processing, storage, and networking capabilities.

Some Considerations (cont.)

- Miniaturization of mobile devices is a common challenge like the BMW style key fob mini phone, which looks like a OEM key fob with the capability of a phone.
- Cloud services has introduced yet another consideration in the form of distributed computing and storage.
  - Dropbox
  - Microsoft One Drive
  - Google Drive
  - Amazon Web Services

Personal Devices

- Dynamic vector opportunities for technical and human threat enabling.
  - Malicious
  - Unknowing
- Personal devices are not consistently subject to technical and non-technical security controls.
- Operational and technical artifacts from within the organization's infrastructure travel with the personal device outside the infrastructure.
- Organization compliance and IT policy rarely define the implementation and handling of technical controls to manage or guide personal devices within the work environment.

Controls

- Technical and non-technical.
  - Physical
  - Information technology
  - Proactive & Passive (e.g. RF sensor)
- BYOD, Wi-Fi access hotspots, and IoT considerations - electronics and RF.
- Personal devices allowed in the workplace, but not for official functions.
- Personal devices used to perform official functions with access to organization resources.
- Consideration of the technical and human factors.

Human Factor

- Awareness and understanding of organization policy.
- Employee perceptions of personal and organization risk.
- Governance of the personal device, if introduced and/or used in the workplace.
- Compliance awareness and understanding.
- Why should I know about various behavioral theories?

Closing

Questions and Discussion

Baseline questions (handout) to assist with pattern and behavior analysis.

"As we've come to realize, the idea that security starts and ends with the purchase of a prepackaged firewall is simply misguided."
– Art Wittmann