**Motivation**

Bringing personal devices into the workplace is a difficult problem to overcome. It might seem as easy as saying yes or no; however, studies have shown that employees who use their personal devices at work tend to be more efficient.

**Objective**

Develop scripts emulating user behavior to be implemented into existing security test bench setups. The goal is to increase the ease with which security professionals can establish a system ready to handle BYOD policies.

**Impact Analysis**

Impacts from the project range from individual workers using their devices at work, cell phone companies who no longer have the market of company specific smart phones, to millennials who have grown up with electronics and benefit from their use in the office. These impacts could have a major effect on how companies are run, and how comfortable an employee is at their workplace.

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**Project Components**

- **Hardware:**
  - Android: Nexus 6, Nexus 9
  - iOS: iPhone 6

Most common devices used on the market, Windows phone excluded for lack of support and less use.

- **Applications scripted:**

  **Android**
  - Facebook and Facebook Messenger: Represents social media use. Posts, sends messages, downloads message attachments.
  - Gmail: Represents general email use, sending and receiving, downloading attachments.
  - Turbo VPN: Runs a host of other scripts through a VPN to demonstrate complexities of routed traffic.

  **iOS**
  - Firefox: Browses websites, downloads data and uploads it through browser.
  - Note: iOS is very limited in that Apple only permits scripts to be run over apps that the individual has developer access to. For us to develop a Facebook script for example, we would need to be on the FB dev team or be granted access. Firefox was chosen because it is open source.

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**Glossary**

- **ADB (Android Debug Bridge):**
- **SDK (Software Developer Kit):**
- **BYOD (Bring your own device):**

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