L. M. Saxton THF_2023

Seminar 1: Exploring Human Behaviours and its Impact on Security of Systems

Prior to this week's seminar, read:

• The study published Zhang et al. (2017) titled "Information security behaviours of smartphone users in China: an empirical analysis".

This paper provides a window to understanding user attitudes and behaviours towards the use of smartphones and their security implications based on data collected in China.

Then **reflect** on:

- The data collection techniques used.
- The alternative data collection techniques that could be employed.
- The security technology being researched.
- Any alternative approaches that could be applied.

We will review the study during the seminar, as well as the assessment guidance.

- 1. The data techniques were qualitative a self-disclosure questionaire then subjected to the Pearson's Chi-Square Test to add some quantitative validity.
- 2. Alternative data collection could include:
 - · rate of smartphone compromise through archival data and statistical analysis
 - a "dummy" test wherein random people are sent hypertext links and researchers document the rate of compromise
 - a questionnaire which focuses on perceived threat as well as threat prevention techniques
- 3. Security technology:
 - password use
 - anti-virus software
 - SPAM filtering
 - back-up storage
- 4. Possible alternative approaches:
 - Multi-factor authentication vs password-only
 - how often OS updates are installed
 - browser settings / browser use (Chrome vs Firefox, etc.)
 - success rate of anti-virus software when employed