Password Management Strategies for Online Accounts

Shirley Gaw & Edward W. Felten

SOUPS '06: Proceedings of the Second Symposium on Usable Privacy and Security, pp 44-55, 2006

Presented by: Rick Zhang

Rating System for Scholarly Articles

- **Range of points: 1 – 5**
- **Criteria**
  - **Credibility: Can we trust these authors?**
  - **Objectivity: Can we rely on these results?**
  - **Suitability: Did the work focus on the topic?**
  - **Clarity: Can we understand these results clearly?**
  - **Productivity: Did the work efficient and effective?**
  - **Significance: Did authors see something important?**
  - **Creativity: Did the work differentiate these authors from the competition?**

Summary

- **Gaw used lab experiments and questionnaire survey to measure the behavior of users on their online accounts, regarding Password Management, Password Reuse, Perceptions of Attackers, and Perceptions of Attack.**
- **They show how current systems encourage poor password practices.**
- **They suggest improvements in website authentication systems.**

Critical Comment

- **Gaw recruited 49 Princeton undergraduates.**
- **The article did not disclose how the participants were recruited.**
- **What are criteria used to select these participants? Age? Gender? Hours spent on the Internet weekly? Laptop owned or not?**
- **It is important to give evidence that the sample is statistically valid: this survey of undergraduates may not generalize to "users", "people".**
- **Credibility: 4/5; Objectivity: 2/5; Clarity: 2/5**

Participants

The participants are random samples? Not clearly explained
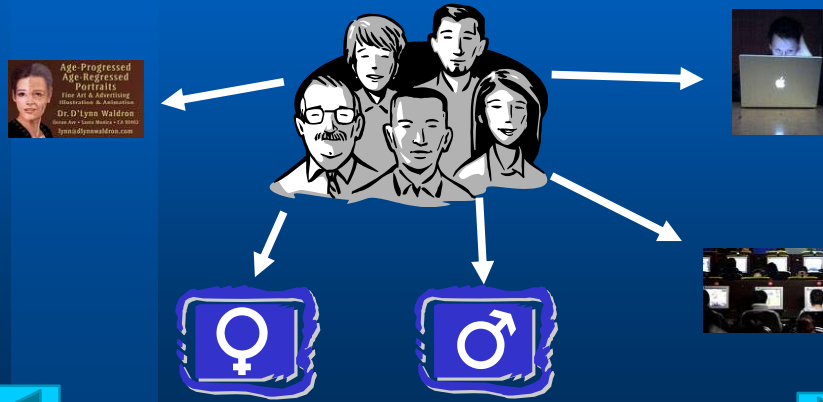
Appreciative Comment I

- For password management, many projects only focus on developing new technology about poor practices.
- In contrast, Gaw stepped into the problem and approached it differently by trying to understand the characteristics and capabilities of the users and looked at user behaviours.
- To make your work outstanding, as a scholar, you must be capable to see things in multi-dimensions, which others could not see, ignored or overlooked, approaching it differently and differentiating your work from the competition.
- Highly recommend my fellow students to see how Gaw approached it.
- Method is more important than ability.

Appreciative Comment I

- Shirley Gaw and Edward Felton used their own unique method to measure results. Gaw's method recorded actual login attempts rather than relying on participants to recall website use.
- Used data from failed login attempts to analysis where users have problem with password management authentication, and why? Approached it differently again!
- It is excellent to be creative and inspiring to set up a new experiment, instead of just following others' lead. Being creative for your biggest success. Your dream will become true.
- Creativity: 5/5; Significance: 5/5

Appreciative Comment II

- Password management is a very broad and general topic.
- By focusing on online accounts, and narrowing it down to real users password reuse behaviours and the related technology supporting these practices, Gaw made several contributions and added new value to this research area. Finding Key Entry Points of Your Study.
- Productivity: 5/5; Suitability: 5/5
- Recommend my fellow students to think about how to carry out your research effectively, effectively, and successfully.

Final Rating Over all

- **Outstanding Work, Highly Recommended**
- **Ratings**
  - **Credibility: 4/5**
  - **Objectivity: 2/5**
  - **Clarity: 2/5**
  - **Creativity: 5/5**
  - **Suitability: 5/5**
  - **Significancy: 5/5**
  - **Productivity: 5/5**
- **Overall Score: 4/5**

Discussion

- **Do you agree with my ratings? Any other criteria?**

  - **Credibility: 4/5**
  - **Objectivity: 2/5**
  - **Clarity: 2/5**

  - **Productivity: 5/5**
  - **Suitability: 5/5**

  - **Creativity: 5/5**

  - **Significancy: 5/5**

DETAILS

ANY QUESTIONS WILL BE WELCOME. THANK YOU

http://doi.acm.org.ezproxy.auckland.ac.nz/10.1145/1143120.1143127