ICT&S Center
Advanced Studies and Research in Information and Communication Technologies & Society
University of Salzburg

UNIVERSITÄT SALZBURG

Can we afford to remain apathetic towards security apathy?

Alexander G. Mirnig, Sandra Trösterer, Elke Beck, Manfred Tscheligi
24.09.2013

1 What is security apathy?

- Security apathy is unwillingness to protect oneself.

1 What is security apathy?

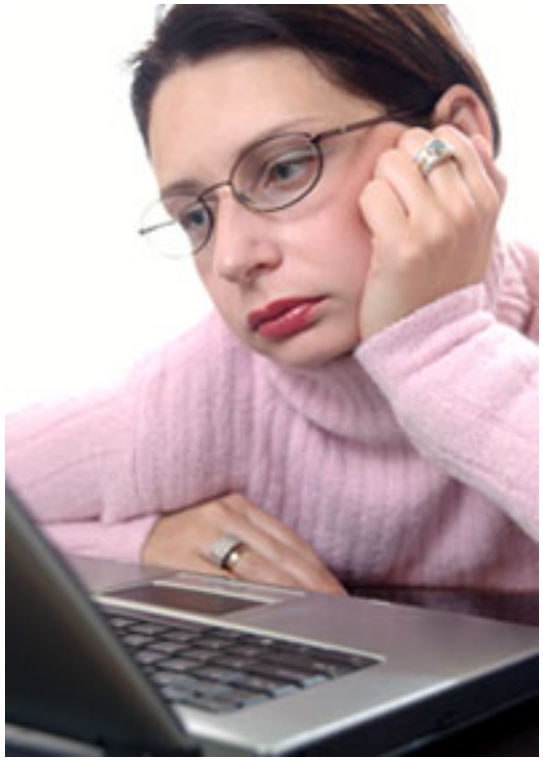
- Security apathy is unwillingness to protect oneself against IT-based threats.

1 What is security apathy?

- Security apathy is unwillingness to protect oneself against IT-based threats.
  - “[The users] also showed apathy towards security, and knowingly compromised their security to get work done faster.” (DeWitt, A. J. And Kuljis, J. 2006)

1 What is security apathy?

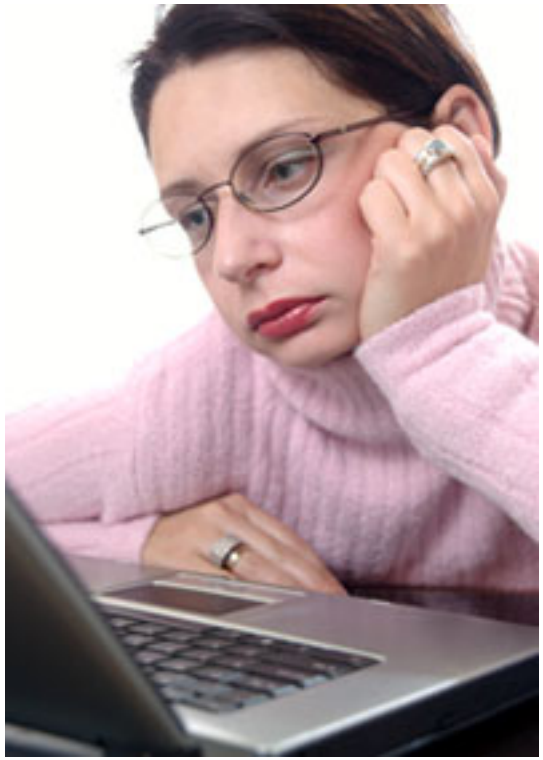
- **Security apathy is unwillingness to protect oneself against IT-based threats.**



img. source: www.computerbild.de

1 What is security apathy?

- Security apathy is unwillingness to protect oneself against IT-based threats.



1 What is security apathy?

- Security apathy is unwillingness to protect oneself against IT-based threats.
  - unwilling =/= unable

2 Factors for security apathy

- Tools don’t consider the characteristics of security management done by users

2 Factors for security apathy

- Tools don’t consider the characteristics of security management done by users
- Not feeling responsible for securing IT

2 Factors for security apathy

- Tools don’t consider the characteristics of security management done by users
- Not feeling responsible for securing IT
- Differences in Internet experience, knowledge

2 Factors for security apathy

- Tools don’t consider the characteristics of security management done by users
- Not feeling responsible for securing IT
- Differences in Internet experience, knowledge
- Differences in perception of risks, cultural differences

2 Factors for security apathy

(Dourish et al. 2004)

- Frustration

2 Factors for security apathy

(Dourish et al. 2004)

- Frustration
- Pragmatism

2 Factors for security apathy

(Dourish et al. 2004)

- Frustration
- Pragmatism
- Sense of Futility

3 Why Security Apathy?

- Evaluate design on how well it copes with apathetic behaviour and attitudes.

3 Why Security Apathy?

- Evaluate design on how well it copes with apathetic behaviour and attitudes.
- Design accordingly
  - [...]counteracting user's apathy by ensuring that the fast way of doing things is the secure way." (DeWitt, A. J. And Kuljis, J. 2006)

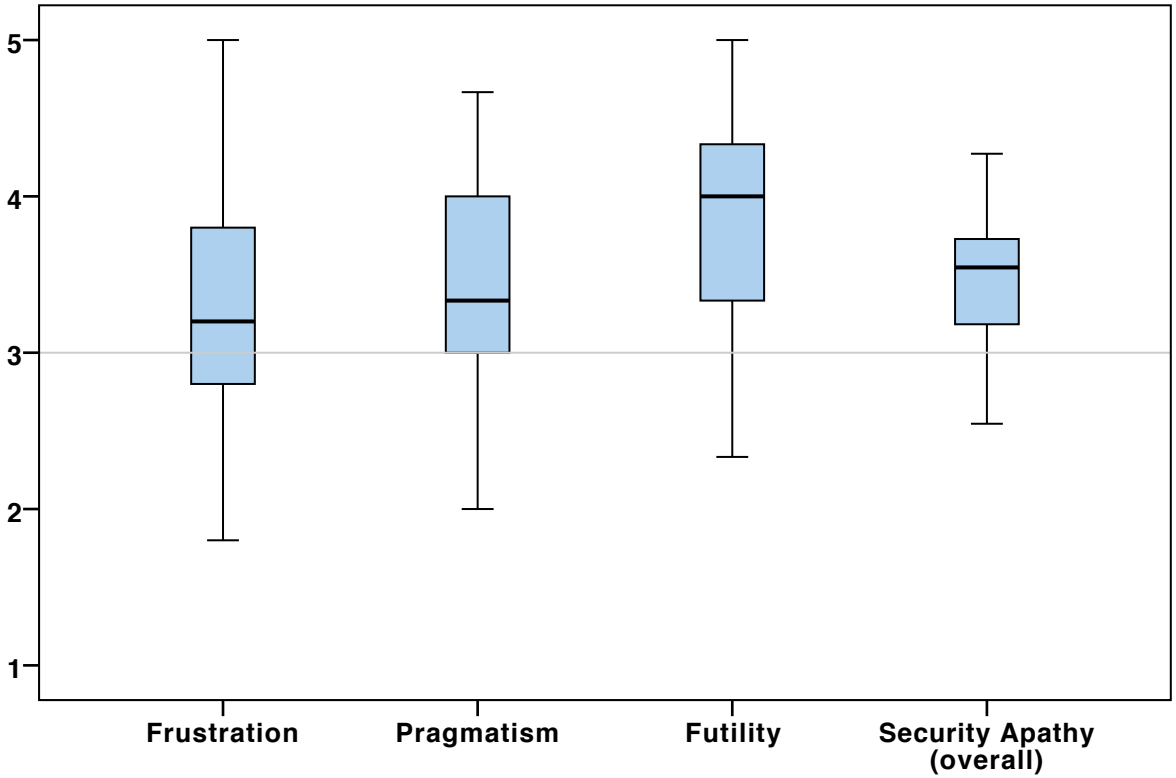
3 Why Security Apathy?

- Evaluate design on how well it copes with apathetic behaviour and attitudes.
- Design accordingly
  - [...]counteracting user's apathy by ensuring that the fast way of doing things is the secure way." (DeWitt, A. J. And Kuljis, J. 2006)
- Balance trust- and apathy inducing factors.
  - "If this does what it says on the tin, then why should I care?"

3 Why Security Apathy?

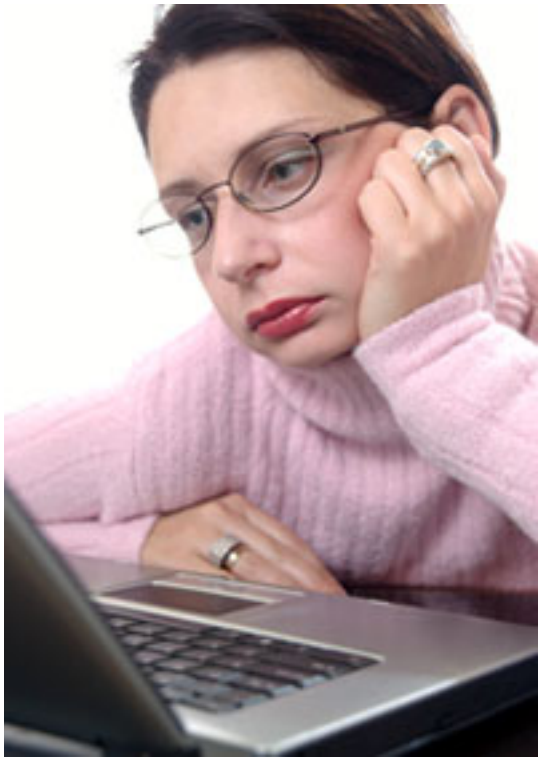
- Scenario evaluation: Persona with apathetic traits
- Questionnaire items for the three factors Frustration, Pragmatism, Futility.

4 Questionnaire results (N=101)



5 Security apathy?

From



5 Security apathy?

To

References

- Ackerman, M.S., Cranor, L.F. and Reagle, J. 1999. Privacy in e-commerce: examining user scenarios and privacy preferences. In *Proceedings of the 1st ACM conference on Electronic commerce*, ACM Press, New York, NY, 1-8.
- Bellman, S., Debray, E.J., Kobrin, S.J. and Lohse, G.L. 2004. International differences in information privacy concerns: A global survey of customers. *The Information Society*, 20(5), 313-324.
- Berendt, B., Günther, O. And Spiekermann, S. 2005. Privacy in e-commerce: stated preferences vs. actual behavior. *Communications of the ACM*, 48(4), 101-106.
- DeWitt, A.J. and Kulis, J. 2006. Aligning usability and security: a usability study of Polaris. In *SOUPS '06 Proceedings of the second symposium on Usable privacy and security*, ACM Press, New York, NY, 1-7.
- Dourish, P., Grintner, R.E., De La Flor, J.D. and Joseph, M. 2004. Security in the wild: user strategies for managing security as an everyday, practical problem. *Personal and Ubiquitous Computing*, 8(6), 391-401.
- Gross, J.B. and Rosson, M.B. 2007. Looking for trouble: understanding end-user security management. In *Proceedings of the 2007 Symposium on Computer Human Interaction For the Management of Information Technology*. ACM Press, New York, NY, 10.
- Karvonen, K. 2007. Users and trust: the new threats, the new possibilities. In Universal Access in Human-Computer Interaction. *Applications and Services*. Springer, 893-902.
- Raja, F., Hawkey, K., Hsu, S. and Wang, K.-L.C. 2011. A brick wall, a locked door, and a bandit: a physical security metaphor for firewall warnings. In *SOUPS '11 Proceedings of the Seventh Symposium on Usable Privacy and Security*. ACM Press, New York, NY.
- Sheehan, K.B. 2002. Toward a typology of Internet users and online privacy concerns. *The Information Society*, 18(1), 21-32.
- Slovic, P., Fischhoff, B. and Lichtenstein, S. 1980. Facts and Fears: Understanding Perceived Risks. In *Societal Risk Assessment: How Safe is Safe Enough?*, Schwing, R.C. and Albers, W.A., Eds. Plenum Press, New York, NY.

Contact

HCI & Usability Unit
ICT&S Center, University of Salzburg
Sigmund-Haffner-Gasse 18
5020 Salzburg, Austria

Mag. Alexander Mirnig
alexander.mirnig@sbg.ac.at

Mag. Sandra Trösterer
sandra.troesterer@sbg.ac.at

Mag. Elke Beck
elke.beck@sbg.ac.at