



Open your mind. LUT.

Lappeenranta **University of Technology**

# The Luddite Argument, Titanic Phenomenon, Case for Caution and Conclusions

CT60A7001 Critical Thinking and  
Argumentation in Software Engineering

Jarkko Kananen

# Agenda, chapters 20&21

- Biometrics & “Titanic Phenomenon”
- Critique and faced “Luddite argument”
- Case for caution
- Conclusions (the whole book)



# Biometrics



Open your mind. LUT.  
Lappeenranta University of Technology

- Identification based on physical characteristics
  - DNA
  - Voice
  - Eye patterns
  - Etc...
- Argued that once perfect, people will no longer be able to pretend to be people they aren't
- Biometric identification promises more accurate security



# ”Titanic Phenomenom”

- Dead certainty of unsinkability
- Not giving adequate thought to the consequences if something goes wrong
- The consequences can prove to be catastrophic
- “The bigger they are, the harder they fall”



# Biometrics: what could go wrong?



Open your mind. LUT.  
Lappeenranta University of Technology

- Possibility of giving too much power to government
  - Rounding up people
  - Greater tool for surveillance and tracking
- Data leaks or breaches
  - Misuse
  - People can't change their biometrics
- It's not perfect
- We are not ready for it

# “Luddite argument”



Open your mind. LUT.  
Lappeenranta University of Technology

- People pointing out the flaws are compared to Luddites
  - Group which protested the inevitable mechanization of the Industrial Revolution
  - “Change is bad”



# Case for Caution



Open your mind. LUT.  
Lappeenranta University of Technology

- Current attitude; play first, worry later about the consequences
- Technologies are not often the root of problem
- What should be done
  - Prepare for the new technology and its implementation
  - Fix the weak links (laws etc...)
  - Prepare a solution for the possible failure



# Conclusion, the final questions (Whole book)



Open your mind. LUT.  
Lappeenranta University of Technology

- Currently balance between privacy and security
  - Scale is rigged; security wins nearly every time
- Security and privacy often clash, but it doesn't have to be a zero-sum tradeoff
- How to correctly balance privacy against security
  - Are there tradeoffs
- What are the problems with certain measures
  - Privacy
  - Civil liberties

Discuss