

# Questions?

- Project?
- Hardware?
- UI adds e-mail alerts to washing machines

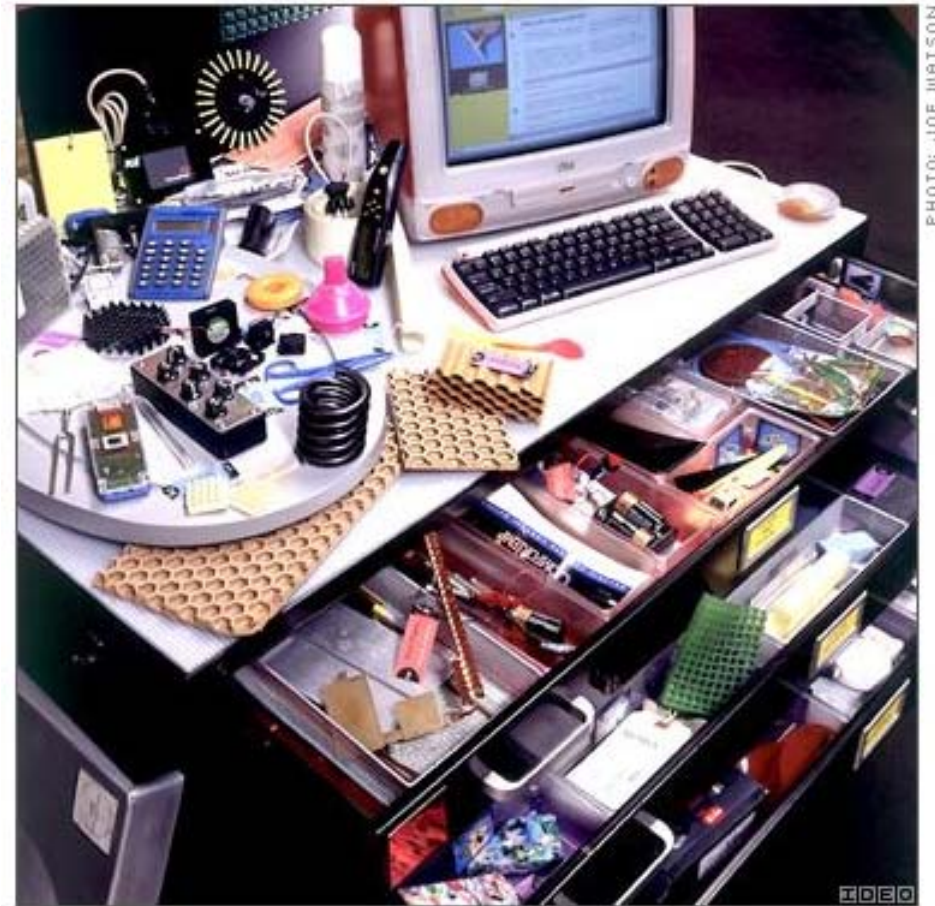
- Thank to John for the pointer.

- <http://www.press-citizen.com/apps/pbcs.dll/article?AID=/20070201/NEWS01/70201003>

# Ideation

“The best way to get a good idea is to get a lot of ideas”

- Seed the brainstorm
- Get physical
- Follow the rules (IDEO)
  - One conversation at a time
  - Stay focus
  - Encourage wild ideas
  - Defer judgment
  - Build upon idea from others



# Idea selection

- Define each idea importance
  - User preference and target user population
  - Available hardware
  - Available software
  - Cost
  - Window to market
  - ...
- Rank ideas according the your criteria
- Pick the tops 1-5
  - Depend on resources and stage of the project

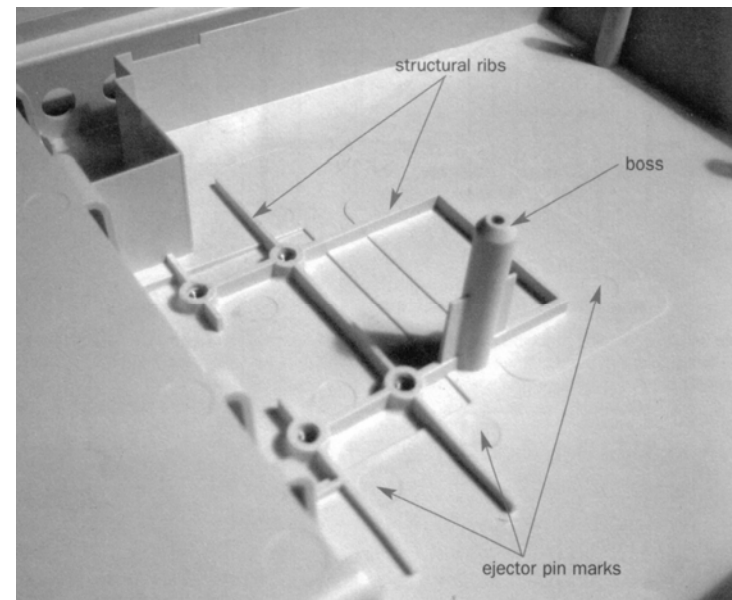
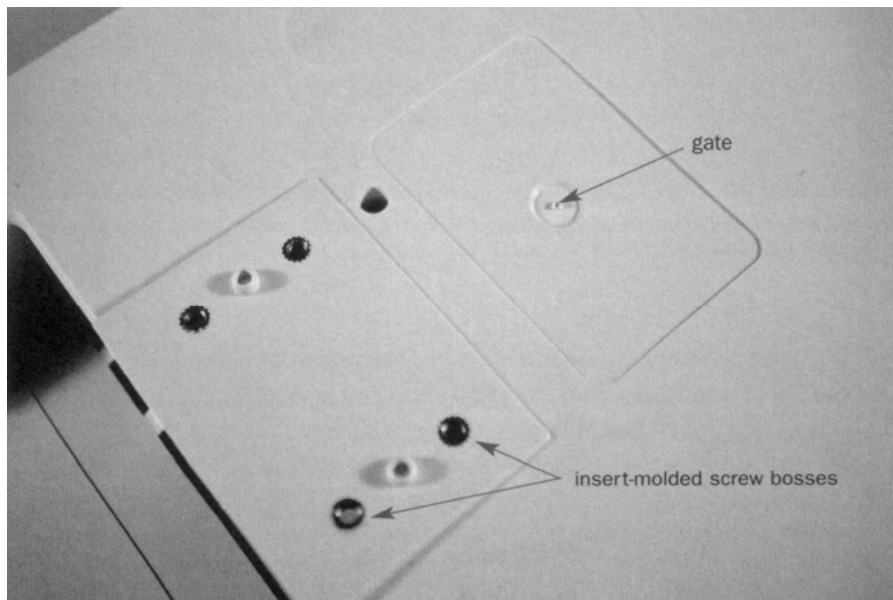
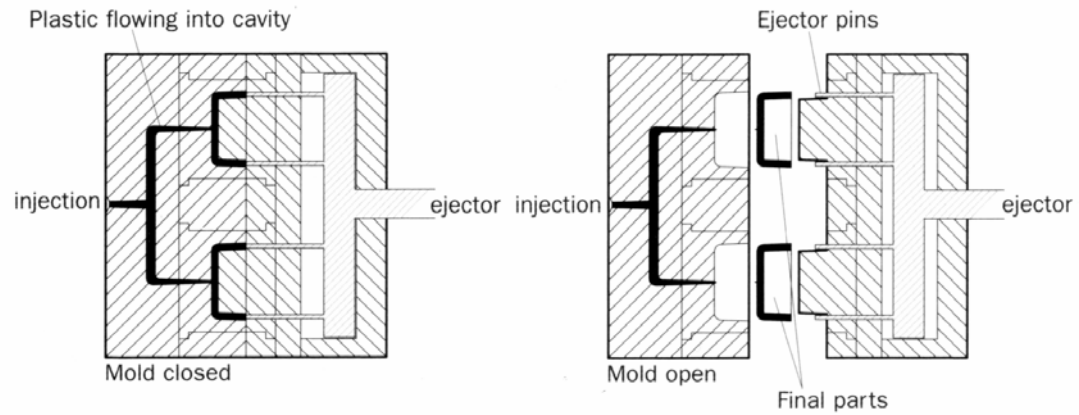
# Importance of “Know how”

- Literature search, previous work and patent
  - Well documented report of previous experiences
- Looking around to see how others solved similar problem
  - In everyday life
  - By putting things apart
- Be aware of Intellectual property rights
  - Patents
  - Trademarks
  - Copyrights

# Deconstruction

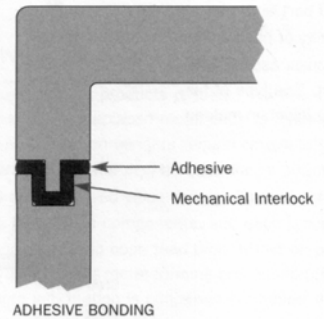
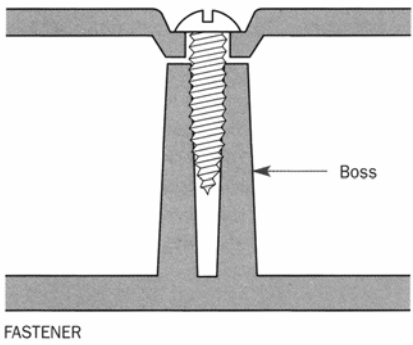
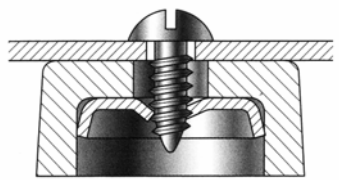
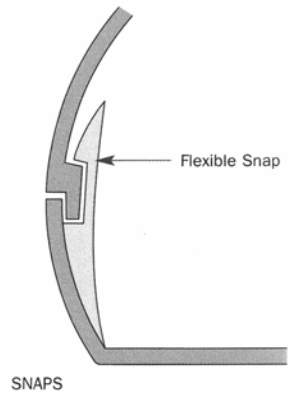
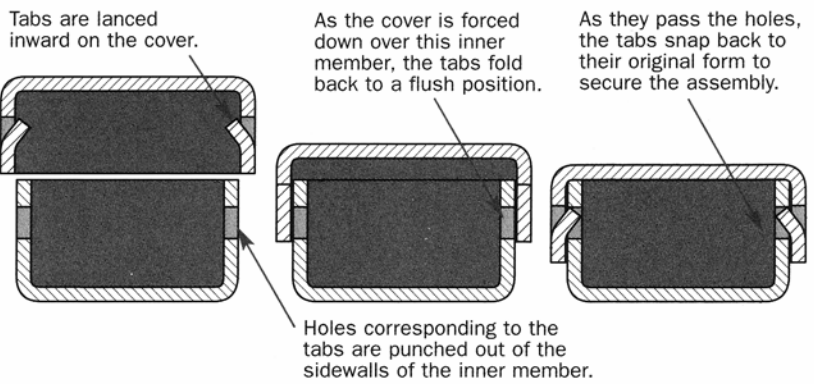
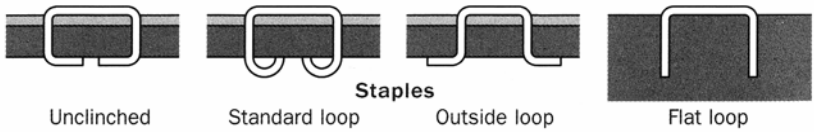
- Safety is always the most important consideration
  - Wear safety glasses!
  - If there is a warning about dangerous content: Don't open it!
  - Be mindful of sharp tools and parts!
  - Predict the outcome of your action before carrying them!
    - *Things might snap, pinch...*
  - Always put safety first
    - *If it does not feel right don't do it...*
- Document
  - Location of screws, orientation of connectors...
  - Sketches assemblies
  - Take pictures

# Molded part



From "Process Material Measurements", Cuffaro et al.

# Fasteners



From "Process Material Measurements", Cuffaro et al.

# What to look for

- Assembly techniques
- Mechanisms
- Architecture
- ...