“Management is doing the things right. Leadership is doing the right things.”
-- Peter Drucker 1909-2005
RFID

• RFID chip used for identification
  • useful for identifying vehicles
RFID

• RFID chip used for identification
  • Useful for medical purposes

• Guest Workers
  • Voluntary?
  • Branding? Human rights?

• Ethical issue
  • Laws prohibit requiring anybody to implant a chip
  • Employment may require implanted chips
Exploding Samsung Note 7

• Attempted aggressive design
• Crammed phone internals and compressed battery, possibly shorting the battery.
• Researchers believe Samsung engineers knew the battery too tight, but “took deliberate step towards danger” anyway.

• Samsung lost $5.3 billion.
Volkswagen “Diesel Dupe”

- VW cars’ diesel engine had a “defeat device”
  - Software to detect whether being tested
  - If so, then run on low power/performance to pass emission test
  - Else, run on regular power and performance
Edward Snowden, NSA Whistleblower

• Worked in Information Technology (IT) for the National Security Agency (NSA)
• Revealed court order that requires Verizon to release customers’ phone activities to the NSA
• Hero
  • Revealed US surveillance programs, some ruled unconstitutional
• Traitor
  • Unauthorized communication of national defense info
• Hero or Traitor?
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Atlantis Launch, the Challenger Disaster

• Engineers of NASA contractor noted a connection between low temperatures and O-ring problems. Due to forecasted low temperatures, they recommended not to launch.

• Senior managers of NASA contractor were focused on pleasing their clients, NASA. They default to “launch unless you can prove it is unsafe,” went against the engineers’ objections, and voted to recommend the launch.

• The space shuttle disintegrated 73 seconds after launch, killing all 7 crew members.
Releasing Untested Software

• Boss pressuring you to release software
• Every day delay is $1 million in sales
• Is it okay to release software not fully tested?

• What if it’s a medical device?
• A number of patients receive up to 100x the intended dose of radiation therapy in 1985-1987. 3 died as a direct result and 21 died the following years
Project Zero

• Team of security analysis in Google to find vulnerabilities in software used by many end users
• They implement a 90 day deadline, giving software companies 90 days to fix the problem

• Ethical issue?
  • help in reducing software vulnerabilities
  • is 90 day enough?
    ➢ is it with the intent to reduce the credibility of competitors
    ➢ Google drops a zero-day on Microsoft: Web giant goes public with bug exploited by hackers
      ➢ [https://www.theregister.co.uk/2016/10/31/google_drops_zero_day_on_tardy_microsoft/](https://www.theregister.co.uk/2016/10/31/google_drops_zero_day_on_tardy_microsoft/)
Inside Apple
How America’s Most Admired—
And Secretive—Company
Really Works
Writing backdoor in Operating System
Fake News Stories

• Filtering and sharing stories based on personal bias.