



# Managing IT Risks:

that come with the complexity of  
technology

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# From a Department Chair

“Could we please talk about managing risks that come with the complexity of technology?”

- What do you mean by risk?
- How do we distinguish risky from non-risky? and risky from difficult or inconvenient?
- Do we all experience risk in the same way?
- Can this conversation help us all to better manage IT risk?

# Levels of Risk “Management”

- NASA Level



## Current Policy Documents

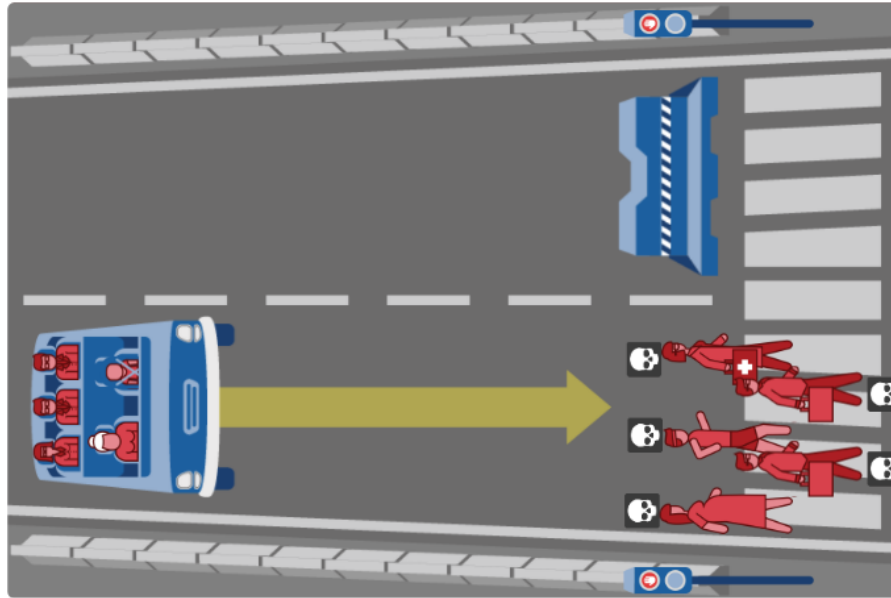


- **NPD 8730.2 NASA Parts Policy**
  - Control Risk and Enhance Reliability

Lots of regulation!  
High cost. Slow.

# Levels of Risk “Management”

- Self-driving car



Loss of life risk.  
Lots of redundancy.

# Levels of Risk “Management”

- Consumer-grade technology

## Windows 2000 Has 65,000+ Bugs

Microsoft

596



Posted by HeUnique on Friday February 11, 2000 @09:36PM from the surprised? dept.

According to a [story](#) on ZDNET, Sm@rt Reseller got an internal MS memo that says Windows 2000 has 63,000 "defects" (if you read the article the number goes up to 65,000+ bugs), and that's the same Windows that will be out on Feb. 17! Is this what MS suggests putting on people's workstations and installing on production servers? What do you think?

**Risk of competitor innovation.**

# A Joke about **Value vs Risk** of innovation

- **Bill Gates:** “If GM had kept up with the technology like the computer industry has, we would all be driving \$25.00 cars that got 1,000 miles to the gallon.”
- **GM:** “If GM had developed technology like Microsoft: 1) every time they repainted the lines on the road, you would have to buy a new car, 2)when your car died on the freeway for no reason, you would just accept this, restart and drive on.

# Carleton Technology Risk Tradeoff

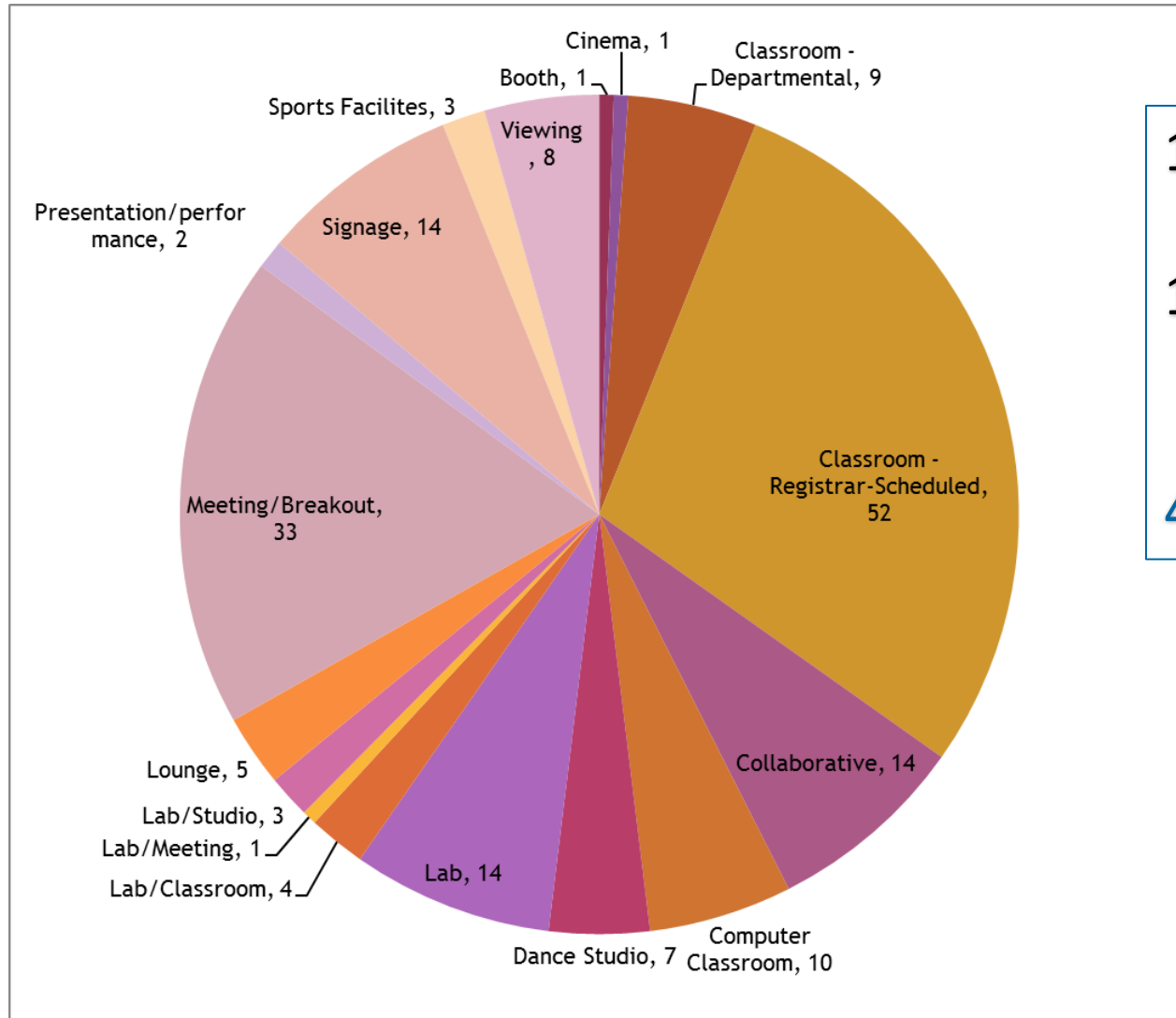
- Example of “dual-boot” computers
- Value:
  - Clients can choose their preference (Mac vs PC) without the cost of two computers
  - More consistent experience room to room
- Risks & Costs:
  - More complicated which increases risk of an outage
  - And more expensive use of staff time to develop
  - Can't remotely update software on both platforms
  - Eliminated most lecture capture options

# EXERCISE

- Either individually or with your group, brainstorm some ways in which “the risks that come with the complexity of technology” affect you.
- And add comments about how you define risk or other suggestions for how we (individually, ITS or Carleton) could manage, evaluate or support technology risk.



# More technology: e.g. technology-enabled spaces



181 spaces in 2017.

124 spaces in 2008.

46% growth.

# Institutional Technology Risk

- Loss of critical information, through a breach
  - Reputational risk
  - Fines, lawyers, recovery efforts, etc
- Mitigations
  - Bitlocker
  - Security officer