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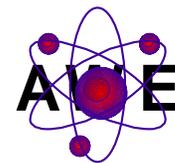
# Industry Leaders Panel Session - 2012 Successes



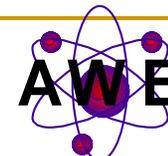
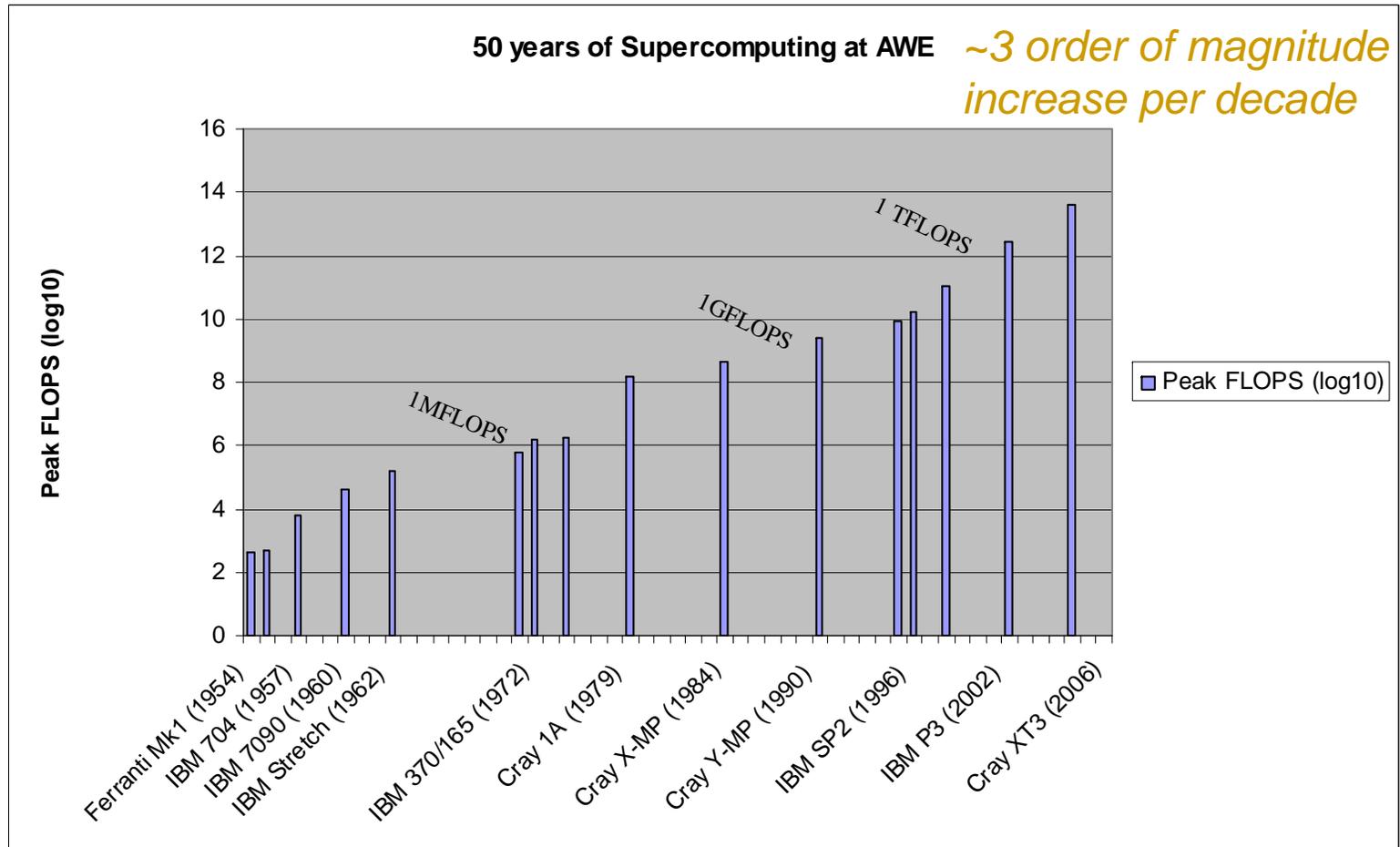
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***It is not the strongest that survive best, nor even those species with the biggest brain.  
It is those that adapt best that are the most successful.***

**Charles Darwin, 1862**



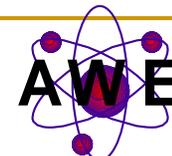
# HPC Industry Progression



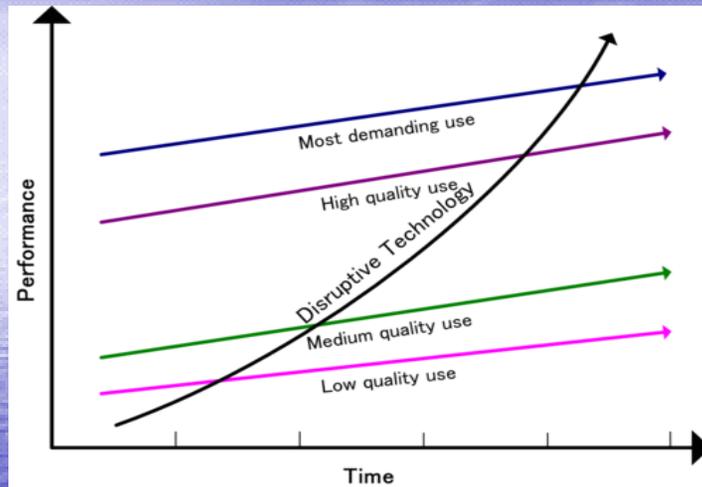
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# Recognisable Trends

- Incredible rate of increase in system peak
- Thru generic technology advancement
- ...and periodic *paradigm shifts*
- That sometimes come from outside
- But most *emerging technologies* fail
- If successful get adopted



# Disruptive Technologies



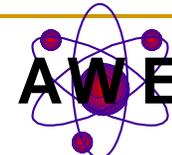
Low-end disruption  
(new-market disruption also possible)

Clayton M. Christensen  
*The Innovator's Dilemma '97*

Disruptive Innovation	Displaced Technology
Steam engine	Horse-propulsion
Minicomputers	Mainframes
Containerisation	Stevedored ships
Desktop publishing	Printing press
Digital camera	Chemical photography

# Questions to the Panel

- **Expect 100 PFLOPS systems soon after ~ 2012.**
    1. What type of systems do you think will first achieve this?
    2. Will they be general-purpose?
    3. How much electrical power are they likely to consume?
    4. How will applications be programmed on these systems?
  - **Industry faces huge challenges (eg. mounting electricity costs, keeping system reliability, memory bandwidth, scalability).**
    5. What paradigm shifts do you see occurring by 2012?
    6. Where might you look for new partners?
  - **But drastically different economics to ever seen in the life time of HPC. Companies may fail as customers want healthy competition.**
    7. What do you think is your company's best strategy for survival?
    8. How do you think HPC customers can realistically help you?
- **What might be your company's greatest success in 2012?**



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# Agenda

- Introduction
- Steve Scott, Cray
- Don Grice, IBM
- Giri Chukkapalli, Sun
- 14.45 Break
- Richard Kaufmann, HP
- Bill Camp, Intel
- Jenny Koerv, AMD
- 16.30 Finish

