Cloud – Really?

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I think I just got called stupid…

Building HPC Systems is Nerve Wracking

HPC Compute Demand Vs. Cluster Size

Missed Opportunity

Wasted Resources

Cluster Size

Compute Demand

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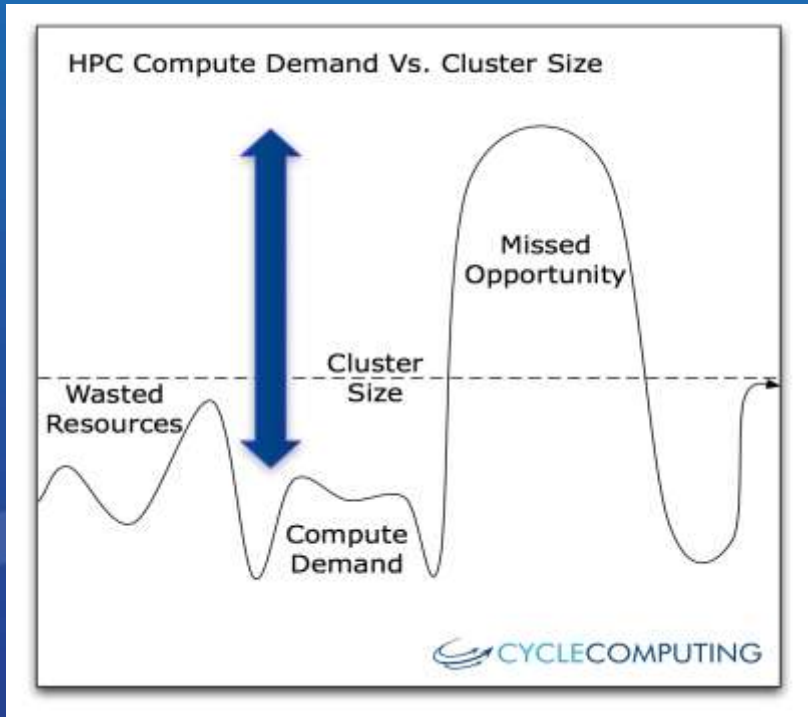
- A cross between building a stadium and upgrading your smartphone….

- The capex/opex balancing act

- Staff retention and training

- No do-overs

- And these systems are our most important tool

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The Jelly is Out of the Doughnut

NOVARTIS

- Have 7600 - need 10,000
- 3 promising compounds
- "Simple, flexible & secure"

HGST a Western Digital company

- 10TB helium filled HD with shingled magnetic recording that overlaps tracks to improve density
- Why not cloud?

AEROSPACE

- Auto-scaling and on-demand workloads on GovCloud for job-specific requirements
- Not yet mimicking internal clusters

2011   2012   2013   2014   2015

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What Next? Think 2016

Talk to lots of people, CSPs & your current vendor

Beware of the great 40% dismissal – CSPS are fluid so the math is too

Look beyond cores: Cloud is compute, data and collaboration

Setting up an account in 2014 is easier than scrounging servers and NICs in 2003

How could this be harnessed to make it simple, flexible and secure for your users?

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