Center Funding + Vendor Relations
Value Proposition

• Need to include current users as well as potential no-users who need us
• Capability that changed the game, brought in new users
• New users from Arts & Sciences and well as Medical School
• Enables you to be competitive
Value Proposition 2

• For researchers:
  – Reliable
  – Professional staff
  – Support
  – Port + Tune codes
  – Quick turnaround

• For Administrators
  – Efficiency
  – Saving resources
  – Include those who cannot afford own resources
Value Proposition 3

• Nanoscience and physics, help to scale to national scale resources
• Unique visualization capabilities
• Make unfunded grad student research possible
• Provide faculty/post-docs/students with training in computational science, new tools, new software
Value Proposition 4

• Site licensing of software
• Be a guide to the IT org for faculty
• Assistance with proposal development
• Assist in bringing together faculty with industrial researchers with needs
• Jointly develop use cases with vendor, but need to watch legality
Sustainability + Others

• 3 issues:
  – Machine room, power and cooling
  – Staff
  – Hardware

• 5 yr + 3 yr agreement; no plan

• OK and OK, initially from DoD grant

• Charge for cycles, usage went from 90% to 10%
Sustainability + Others 2

• Need to work out in the next year or two, cannot pay for itself, have to consider as part of doing research
• Difficult to make part of indirect cost recovery
• 70% of areas 1 and 2 covered by univ budget, for area 3, 20% from university, 80% condo
• 1 OK from univ overhead, 2 open, 3 OK
• 1 OK from univ overhead, 2 upto a limit, 3 off grants, integrated
Sustainability + Others 3

• 1, OK; 2 current staff OK, no increase; 3 recurring state $, but need more
• Focus on the provisioning of IT and the needed people as needed to meet the academic mission of the academic enterprise; research computing is just a part of it. Why not pop the discussion to this higher level?
• Can the univ. computing centers be regarded as the equivalent of Amazon cloud?
• Expertise (people) is a fixed cost, but hardware is an issue
• Can write expertise costs into grants
• Bring value by training grad + UG students who can help researchers who need code scaling
• Condo models bring the community together and foster collaboration
Sustainability + Others 4

- Condo models help faculty and staff concentrate on the science
- Hire IT staff but locate them in faculty labs
- NIH funds core labs (OMBA21), but uniform charging is an issue
- Need to focus on research computing as a multi-stakeholder investment, not a subsidy
Sustainability + Others 5

• How do you quantify the missed opportunity and choice cost?
• Who makes the case?
• Senior and junior faculty who speak out in support of research computing are key
• Faculty voice is key have a faculty advisory board
• Engage faculty who are not usual suspect, broaden participation
Sustainability + Others 6

• Arts and Letters engagement big help
• Peer pressure may work in the short term
• Should focus on research computing, not just HPC
• A few star faculty who champion the cause make the difference
• Anecdotes of consequences (data loss, missed grant) are quite useful
Sustainability + Others 7

• eScience in Europe, CI enabled science in US
• Make supporters of not just faculty but deans and CIO also
• Research computing, CI – adapt language to campus culture and norm
• Make believers of Arts and Humanities
Vendor Relations

• Vendor community can help sell research computing upstream
• Vendors can help sell research as mission critical
• Where is the common interest between vendors and academia
• Make argument for becoming economically competitive
Vendor Relations

• Private sector users + vendors together can help

• Vendors want to help develop parallel processing curriculum – everything is parallel now