Organizational Models, Staffing and Succession Planning

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Summary

- Everyone’s different.
- That’s okay.
- Or maybe it isn’t.
Serve Single or Multiple Institutions?

- People trust locals more than nationals.
- Always needs someone who can sit with you and help out.
- More important to make the interface, the buffer, between computational science and the domain discipline.
- Track3 centers at an institutional scale?
- The overwhelming group of people who need computational support for their research don’t need HPC, they need help with computational science tools on their laptop.
- Getting the people with the expertise that can be applied to various research projects is a huge challenge.
- People who can use commodity vs people who need specialized resources: what’s the breakdown?
- It can be difficult to show a need for HPC. If we build it, researchers will have an opportunity to use it — but if we don’t get to that point, how will we be able to prove it’s a good idea?
- For solving a particular science problem, computing power is only one component of what’s needed.
- Regional sharing of people and expertise is likely to be accepted by research offices, but not other things.
Multiple Institutions: How Created?

• Types
  – Institutional strategic plan/center
  – Government fiat
  – Grassroots

• Examples
  – State law
  – Initially informal, now semi-formalized – playtest future grad students from non-PhD-granting members
  – Initially internal, now state government funded – government set expectations but centers set policies and then are reviewed against those expectations (specifically economic development)
  – Ad hoc and ground-up is common.
Report to Whom?

- CIO: 7
- VPR: 6
- Provost: 5
- Other: 1
# Funding Sources

## Primary
- CIO: 6
- Provost: 2
- VPR: 6
- Other: 3

## Secondary
- CIO: 5
- Provost: 2
- VPR: 3
- Other: 2
Compared to Libraries ...

... computation is young, and has built a perception that it’s nearly free, where libraries have centuries of building the idea that they’re expensive.

Not funding computation has much lower backlash than not funding libraries.
Oversight Boards

- Advisory board actively engaged: 9
- User boards: 10
- Administrative boards: 7
- Funding boards: 6
- Technical boards: 2
- Strategy boards: 11
- None functioning: 4
- Has non-STEM members: 7
- Board meetings are formalized and public: 2, with 1 more expected
Tenure Track Faculty Involvement

• Center directors who are also tenured/tenure track: 8
• Formal involvement of tenure track faculty: 7
• Centers that have a say in tenure decisions: 2
Center Activities

• Cycles: 18
• Data/Storage: 16
• Education, Outreach and/or Training: 16
• Software Development: 12
• Virtual Organizations: 11
• Visualization: 10
• Research of its own: 8
• Economic development: 5
• Networking: 4
Overhead

What if research computing were considered a valid overhead?

• Right now enterprise computing is covered, but not research computing, especially data storage and services.
• There’s a lot of difference between a cyberinfrastructure center, as opposed to just HPC, which is less broadly applicable.
• Need to engage the funding agencies in the overhead issue – need a consistent message about this.
• It takes more than going to the agencies, including rewriting the existing policies – what vehicle do we have to escalate to an OMB review (e.g., CRA)?
• Need to look at it from an application perspective instead of a machines perspective – hardware is just part of the cost of running the application.
Greatest Challenge for Centers

- Administration doesn’t understand us.
- Commitment by central administration.
- Ownership of the center.
- Finding or growing people with expertise.
- FTE count.
- Increasing our user base.
- Skating to where the puck will be: anticipating what needs are going to arise.
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