



IT Division

Communication and Collaboration Needs

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Computing is critical for science

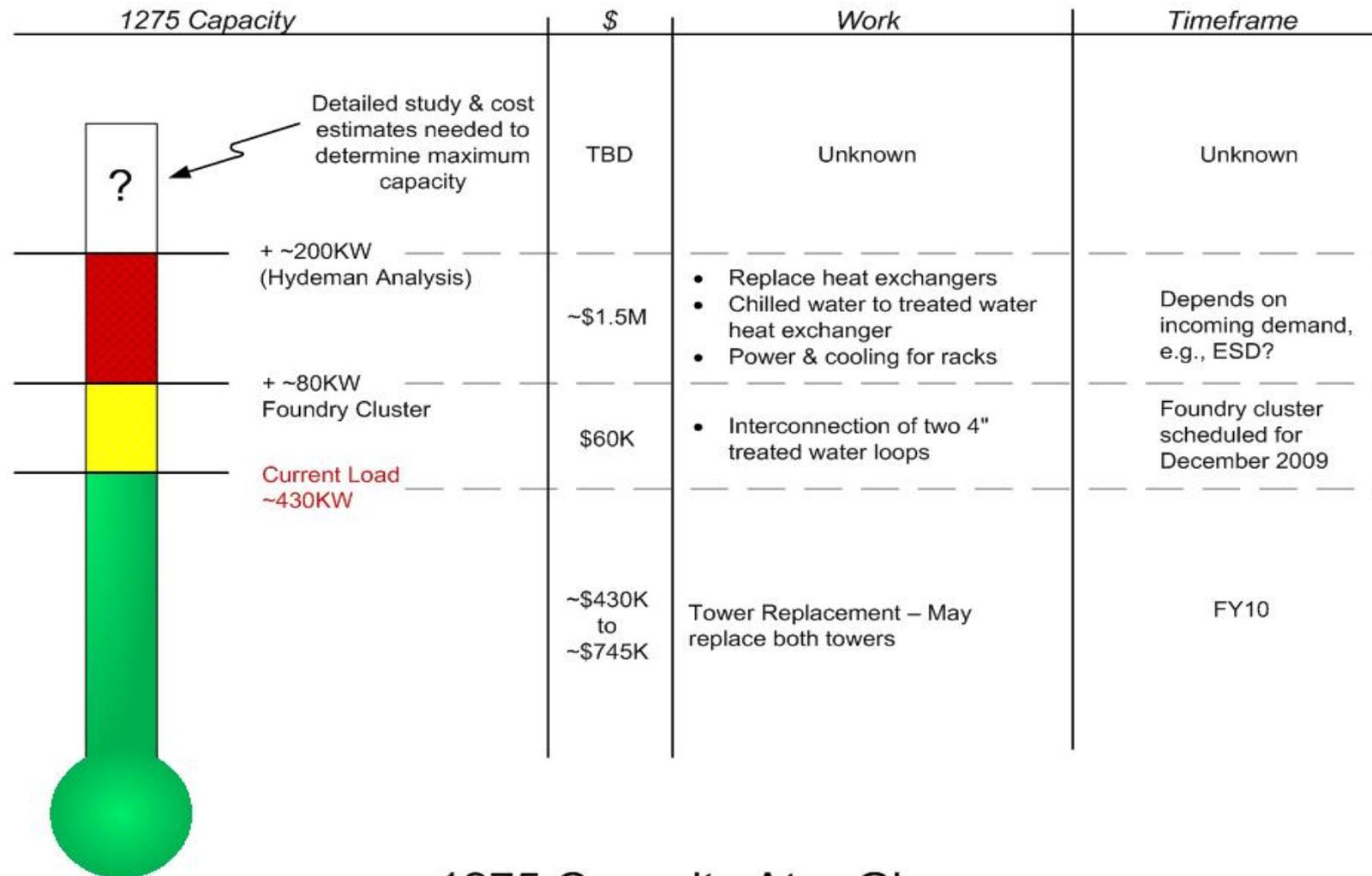


- **Over 40% of our scientists rely on computing clusters for their research (IT Survey 2007)**
- **Clusters have been growing at approximately 20% each year**
- **This year we will see 50% growth due to ARRA funding**
- **Great news for science but a challenge for IT**

A compute cluster is a group of linked computers, working closely together so that in many respects they form a single powerful computer. We use tightly coupled clusters (densely located compute nodes and high speed dedicated network) to support computation for research and experimentation

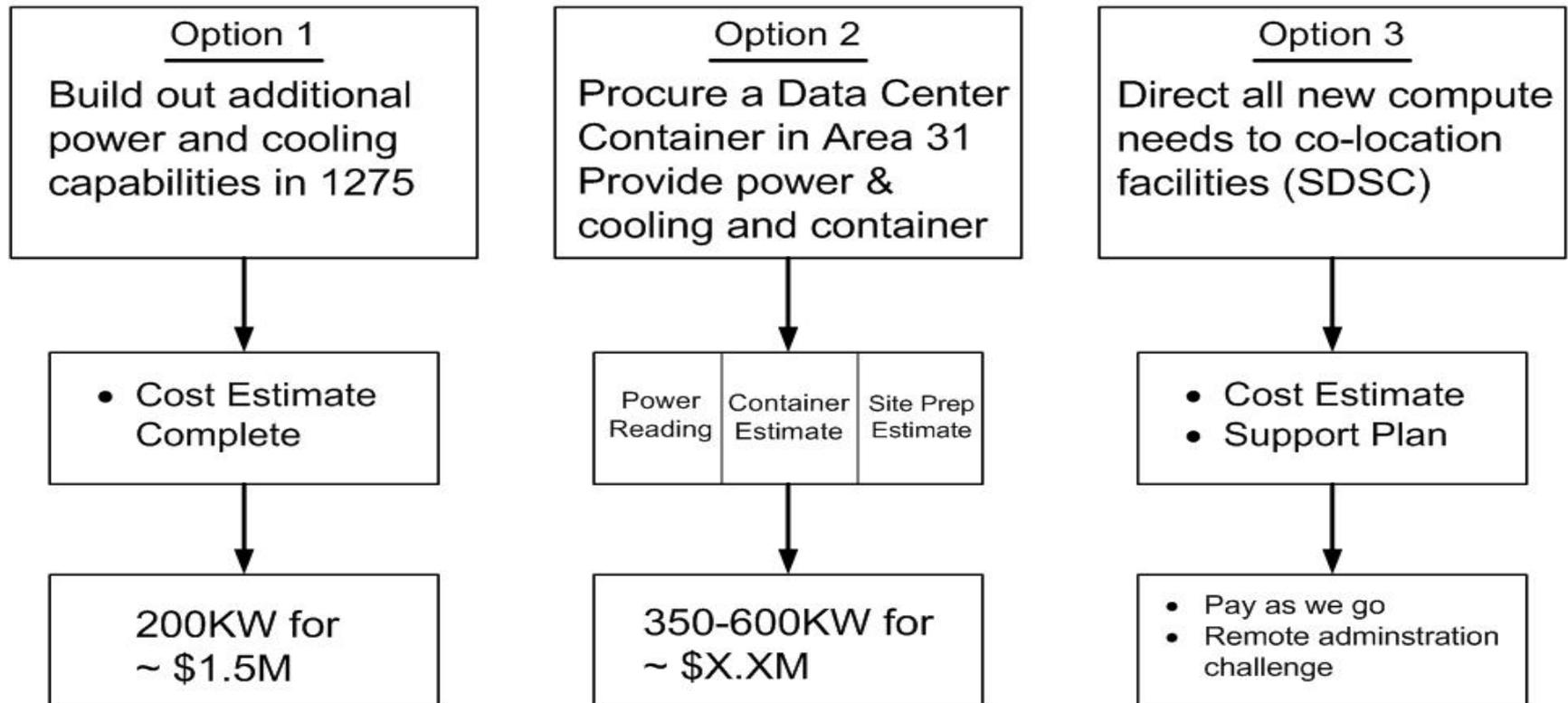
50B-1275 Lab Data Center

Capacity at a Glance

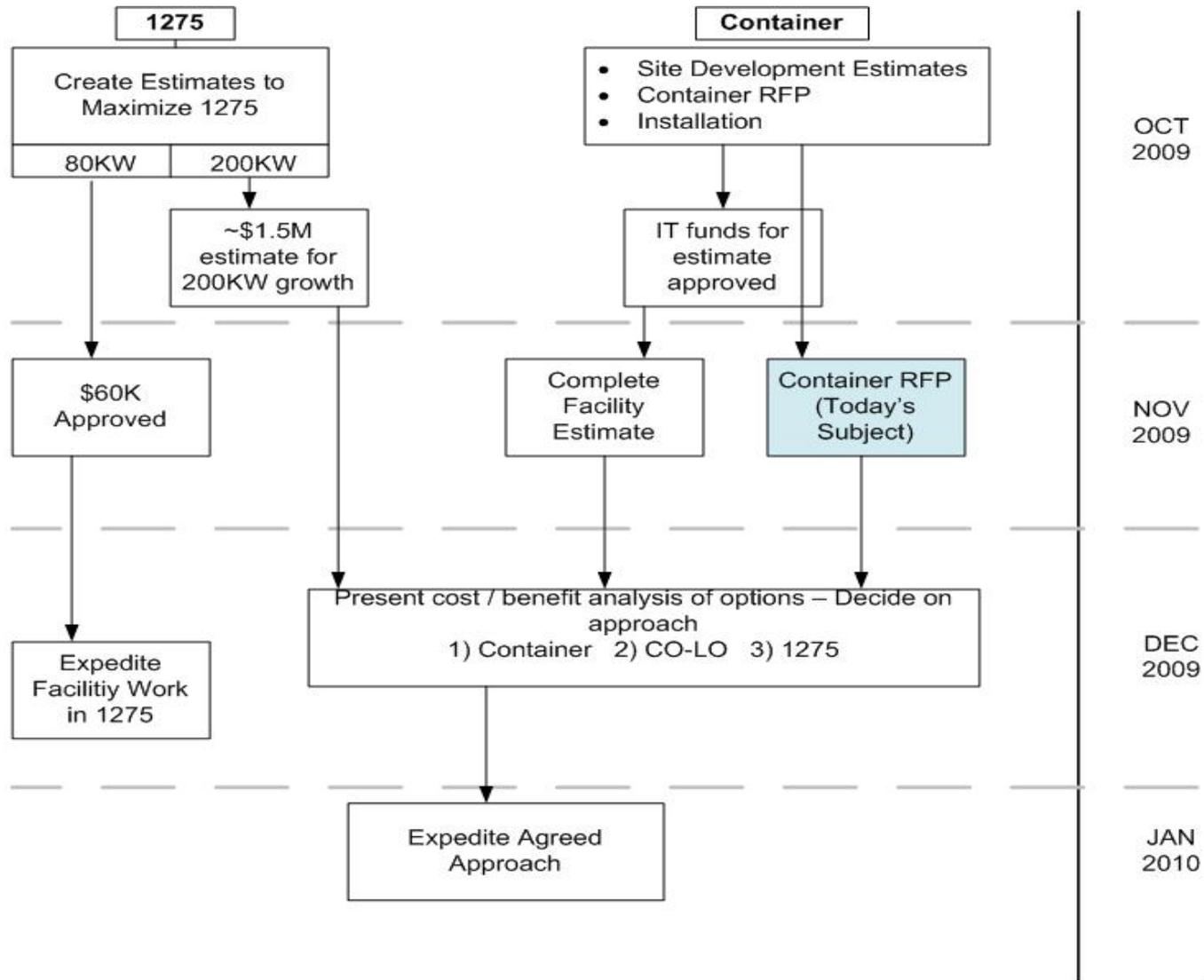


1275 Capacity At-a-Glance

Options for Capacity Growth

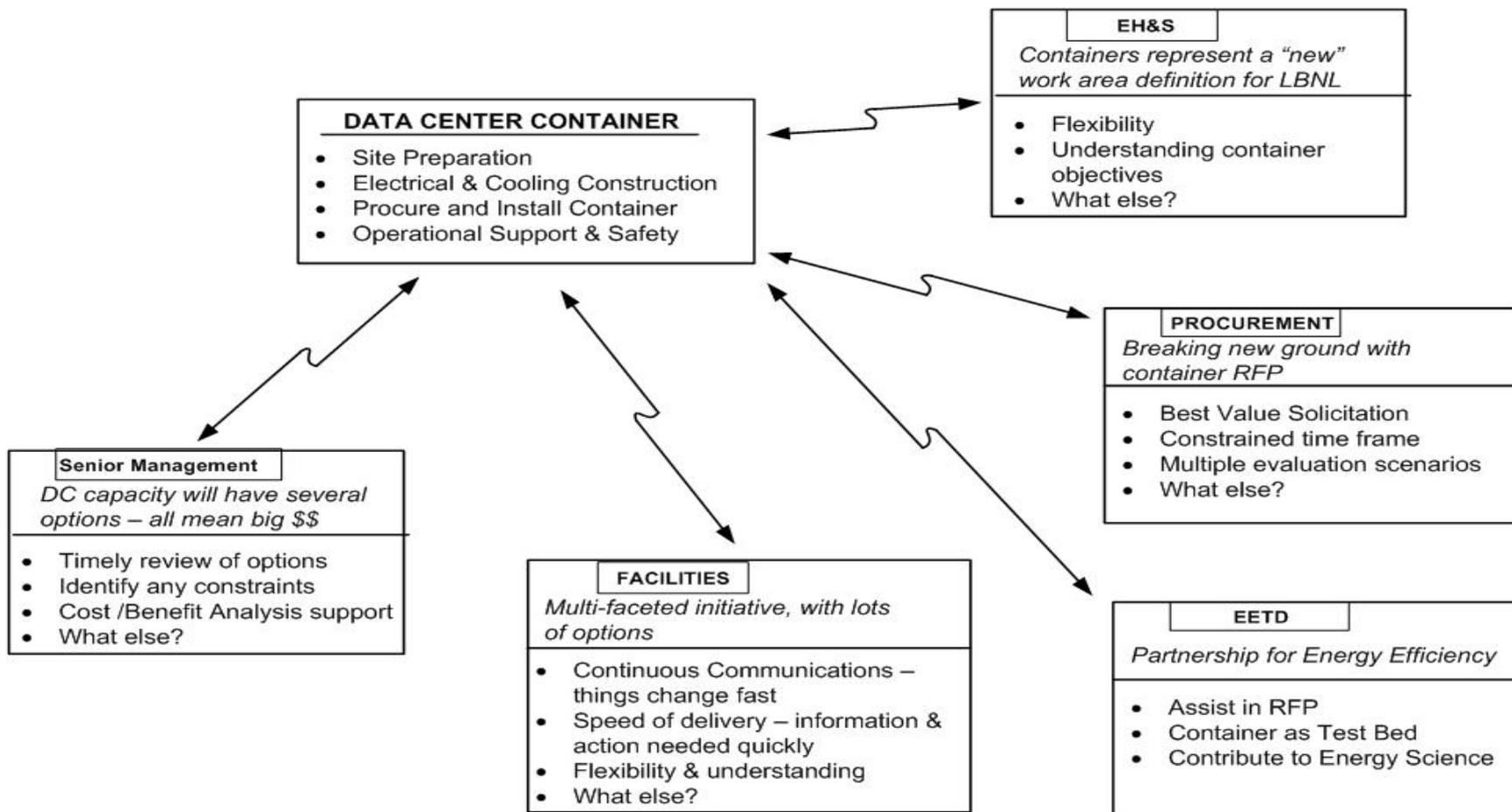


Decision Actions and Timeline



Partnership Mapping-Container Option

Key Relationships and Communication Links



Keys to Success

How we can ensure successful completion



- Communicate early and often
- Create an affinity group across Divisions---sort of a Data Center capacity SWAT team
- Ensure our priority and needs are understood and supported
- Find ways to expedite the process
- Container is a new paradigm, work collectively to establish new operational and safety rules