Why did Computer Science join the Beast ?

Valerie Taylor, Nancy Amato, Lawrence Rauchwerger

CompSci gets $$$ from NSF

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- Dept. of Computer Science (Taylor, Amato, Rauchwerger) wins NSF Computing Research Infrastructure award

- $534,000 over 3 years.

- Very Competitive – requires a real proposal (we won at 2nd attempt)

Let's buy a machine

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- COST = Cost to buy + Cost to own
- Cost to own = Sys Admin + Space
- Space = Electric bill + A/C bill + Setup bill
- Cost to own ~ hassle

- Need a big machine, for everybody and every application in Dept.

IBM/SURA offers a good price

- CS wants an IBM P575
- Can afford only 128 processors
- SC – TAMU: bigger is better
- UT has even bigger ..
- SC asks for money
- CS joins

The good deal for CS

- CS wants SC to maintain, etc.
- CS will have full access, any time to 128 processors in any configuration (e.g., exclusive user)
- Access to entire machine when needed (for experiments)
- Access to installed SW

The good deal for SC

- SC gets a bigger machine
- SC integrates CS into HYDRA
- SC gets any unused cycles of CS processors.
- SC does not pay for the machine

Is this a good deal ? YES IF:

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- SC provided service to CS is acceptable.
- Acceptable means “as if we would run it”
- “we” would not have to stand in line to use our own machine
- “we” would install anything we want

How can this model be successful ?

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- SC has the will to provide service
- SC has the CAPACITY to provide it
- CAPACITY means

  knowledge + people

➔ This means MONEY$

Let's make this model work because:

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- **If model works SC and CS both win**
- **If it works others will join**

➔To make it work SC needs more qualified people, i.e., more $$$