Suggestions for Planning for IT at UC Berkeley

Micronet

Jack McCredie

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UCB IT Environment - 1993

- Emerging from organizational chaos
- Primitive network e.g. ~ 7,000 connections and no connections in residence halls
- Bandwidth out of campus ~ 4.5Mbits/second
- Computer ownership by students ~ 60%; few public labs; very few classrooms media equipped
- NSFnet phasing out
- Obsolete batch administrative applications
- No California Digital Library
- No campus-wide email service => UCLink
- California financial situation deteriorating quickly

UCB IT Challenges - 1993

- Create a modern campus network infrastructure
- Work closely with library & museums to develop rich set of online resources
- Expand use of technology in learning
- Develop distributed computing environment
- Redesign crucial, but obsolete, campus administrative applications
- Provide access to high performance computing
- Adjust to significant campus budget reductions
- Retain, recruit, and train IT staff

Recent UCB IT Planning Processes

- 1993 – IST internal management team
- 1994 – Academic Planning Board – Instructional Technology at UC Berkeley
- 1998 - Commission on Campus Computing
- 1999 – IST internal management team with several campus focus groups
- 2000 – Chancellor's Cabinet Cisco retreat – development of e-Berkeley Initiative

UCB IT Environment - 2003

- Expanding network infrastructure (46,000 nodes; external bandwidth => 3 gigbits/sec; I2; CENIC
- Wireless connectivity emerging rapidly
- ~96% of students in residence halls have a computer connected to the network
- Dozens of open labs and media equipped classrooms throughout the campus
- Redesigned online administrative applications
- e-Berkeley campus initiative
- Web is everywhere! => CDL, Webcast, DCP, etc.
- California financial situation deteriorating quickly

UC Challenges - 2003
UC IT Infrastructure TF

- Systemwide standards and policies
- Instructional technology
- Digital content management and preservation
- Scholarly interaction
- ERP administrative applications (e.g. payroll)
- Network infrastructure development
- Information security and protection
- Decreased funding (e.g. Digital California Project)

UCB IT Challenges – 2003

- Develop revised funding strategy and operating plan for next few years
- Work with Academic Senate to develop Strategic IT Plan for campus – integrate with campus strategic plan & “new ideas” committee recommendations
- Enhance IT support for faculty – research, teaching, and scholarly communications activities
- Expand & enhance campus network infrastructure
- Enhance campus IT policy development with special emphasis on copyright, spam, and security issues

UCB IT Challenges – 2003 (continued)

- Move to new operations center and continue development of business resumption plans
- Transition to a 24X7X365 service model
- Strengthen campus IT security procedures and practices
- Resolve several campus IT gaps & overlap issues
- Support, promote, and enhance e-Berkeley projects

SEISMIC REPLACEMENT BUILDING #1

VIEW FROM OXFORD STREET

University of California, Berkeley

University of California, Berkeley

National IT Plans & Studies

- American Council on Education (2002) – *Higher Education in the Digital Age*
- National Academy of Science (2002) – *Preparing for the Revolution: Information Technology and the Future of the Research University*
- National Science Board (2003) – *Science and Engineering Infrastructure for the 21st Century*
- National Science Foundation (2003) – *Revolutionizing Science and Engineering through Cyberinfrastructure*

IT Strategic Planning Suggestions

- Build on UCB Academic Strategic Plan & Process
  - IT requirements to support major components of plan (e.g. maintain research leadership, enhance undergraduate education, etc.)
  - Specific proposals (e.g. 8.5, 8.6)
  - Academic Senate Comments => Computing and Communications
  - IT requirements to support new strategic thrust areas (e.g. computational biology, metropolitan studies, new media initiative, nanotechnology, etc.)

IT Strategic Planning Suggestions (cont)

- Develop ways of implementing the most important IT recommendations of the Chancellor's organizational structure study (McKinsey)

  - suggest features of "best practices" hybrid model

  - recommend new model for faculty support

  - suggest most important overlaps to eliminate

IT Strategic Planning Suggestions (cont)

- Focus on a few key unanswered strategic IT questions for UC Berkeley, such as:
  - What is the role of IT in transforming teaching and learning on our campus?
  - What kind of IT environment does our campus need to achieve its goals (e.g. innovator, early adopter, join-the-pack, lagging)?
  - Is it time for a new research partnership with IT (e.g. Internet2, Abeline, National Lambda Rail, grid computing, etc.)
  - Are we "preparing for the revolution" or ignoring it?

Proposal: Use key existing committees

- Academic Senate COMP Committee
- IST Management Team
- IT Architecture Committee
- Micronet
- Administration & Student Services
- Education Technology Committee
- E-Berkeley Steering Committee
- Etc.

Questions & Discussion

- What role does Micronet wish to play?
- Who should be involved?
- Etc. etc.