
UB
it
Advancing UB's
Excellence

University at Buffalo
The State University of New York

Town Hall Presentation

Draft ITST Recommendations

December 16, 2005

IT Transformation Strategic Goals

In order to position UB for the future and create capacity, we need to:

- Establish an institutional process for effective IT decision making and funding
- Build a robust and adaptable technology foundation
- Improve user support
- Optimize IT management
- Enhance IT support for innovation in instruction & research

Effective IT Decision Making & Funding Recommendations

- Adopt and endorse the Bill of Rights and Guiding Principles articulated in this report - *Executive Committee Leadership*
- Endorse the shared governance structure recommended by the ITSC - *Executive Committee Leadership*
- Institute an IT planning, funding and assessment process integrated with the institutional processes – *CIO Leadership*
- Develop and adopt a set of minimal standards for the provision of IT services to the University – *CIO Leadership*
- Adopt an investment strategy that aligns IT priorities with institutional mission, goals, and priorities – *CIO Leadership*

Technology Recommendations

- Administrative systems
  - Replace legacy administrative systems with integrated, interoperable enterprise applications that meet both central and distributed needs
    - *$10.8M/yr. currently*
  - Bring enterprise-wide administrative application development under one management structure to insure integration, security, manage risk, meet regulations
    - *Roughly 70% non-CIO*

Technology Recommendations

- Web services:
  - Develop an improved web and application hosting service, consolidating web services, including marketing and web publication services to drastically reduce the number of web servers
    - *High level of dissatisfaction with current central web services*
  - Create a hybrid application development and web support model, including a web content management strategy and approach (53 FTE, $2.5M)

Technology Recommendations

- Storage (Network Accessible):
  - Create a digital media storage and delivery service
  - Expand and enhance institutional network file space and make it easily accessible to faculty, staff and students
- E-mail & Calendaring
  - Define and implement an e-mail service that offers appropriate quotas, good remote access, folder support, a calendaring solution, web access, virus and spam management.
  - Consolidate e-mail while not compromising the current services
    - *> 25 systems, $1.1M*

Technology Recommendations

- Data Network:
  - Expand wireless coverage
    - *Customer Profile high priority*
  - Accelerate network expansion and upgrades on and off-campus
    - *Bandwidth to all wall ports to meet emerging needs*
    - *Continue providing leadership for regional networking initiatives*
  - Fully engage in national research networking initiatives
    - *Participate in National Lambda Rail and GENI*
  - Enable transition to next generation of the Internet (ipv6)
- Telephones:
  - Develop and implement an integrated VOIP telephone system to replace 75 independent campus telephone switching systems
    - *$5M investment repaid in 3 yrs, savings $1.5 -$2M/yr in yrs 4-n*

Technology Recommendations

- Technology classrooms and labs:
  - Convert all classrooms to technology classrooms
    - *68 centrally scheduled out of 141, 43 departmental out of 121*
    - *Instructors cannot get access to technology classrooms – can't teach without it*
  - Implement a refresh cycle for technology classroom equipment
  - Standardize basic services in computer labs while protecting necessary discipline specific diversity
  - Standardize basic classroom technology
    - *consistency of equipment, interface, software*
  - Explore and adopt alternative models for labs and classrooms
    - *Create infrastructure to support virtual laboratories*

Technology Recommendations

- Student Printing
  - Expand “iprint” print management to department student labs
    - *129 distributed labs, 23 CIO labs, expenditure $875K*
    - *high level of dissatisfaction*
- Server Support
  - Expand the offering and use of server “club rooms”, together with a robust suite of software for remote server management
  - Develop a server administration support model that optimizes resources and reliability
  - Consolidate servers where possible while not compromising the current services
    - *773 servers*

User Support Recommendations

- Develop a hybrid, customer-centric user support model
  - Build partnerships, shared knowledge and a set of clearly defined services and associated metrics
  - Leverage central and distributed IT resources to provide high-quality, seamless support
  - Insure that geographically distributed support is available
  - Build a strong user support infrastructure
    - *Define a first point of contact for IT service support*
    - *Revise the current Help Desk model to make it more effective*
    - *Implement a work ticketing system capable of being shared*
    - *Implement a shared knowledge management system*
    - *Implement a shared customer relationship management system*
    - *Implement a call center facility capable of being shared*
    - *Improve mobile computing support*
    - *Insure that computer lab support is responsive to user needs*
      - *~93 FTE provide user consulting support*

User Support Recommendations

- Upgrade workstation services
  - *15,600 workstations*
  - Deploy common services where appropriate:
    - *Minimum refresh cycle for hardware and software*
    - *Standard base system images*
    - *Common software tools*
    - *Security infrastructure*
    - *Patching*
    - *Data backup*
  - Leverage the buying power of UB in the procurement of IT hardware and software
- Establish an Institutional IT Literacy Process
  - Provide training for faculty, staff & students to acquire IT skills

IT Management Recommendations

- Build a Human Resources portfolio for IT staff
  - Create an IT professional training program
  - Create a consistent IT staff position description system, compensation system, career path and promotional plan
  - Improve performance management
- Actively manage the IT service portfolio
  - Develop a carefully articulated service portfolio for all IT services at UB which includes deliverables, attributes, service levels, costs and component details.
  - Develop a service costing model
  - Offer a base level of services consistently across the campus to help create capacity
  - Adopt an ITIL-based service management model where appropriate

IT Management Recommendations

- Define & implement an enterprise-wide approach to security
  - Security Program
    - Develop a comprehensive enterprise-wide security strategy
    - Develop a campus-wide security awareness and training program
    - Develop an enterprise-wide security incident response process
  - Security Infrastructure
    - Eliminate unapproved DNS servers
    - Logically segregate network traffic
    - Implement network access control for all devices & network users
  - Data Security
    - Develop policies & practices for sensitive data handling
    - Improve security for sensitive data through encryption
    - Deploy role-based data/application access control
    - Deploy a digital signature system
      - *Proactive -$520K, Reactive $102K*

IT Management Recommendations

- Define & implement an open, enterprise-wide technology architecture
- Develop a campus-wide IT service continuity plan & insure appropriate facilities to support the plan
- Establish an IT-wide service assessment process based on Service Level Agreements, specific metrics, balanced scorecards & customer input/surveys
- Create an institutional software licensing process that optimally meets the needs of faculty, staff (including IT staff) & students

Enhance IT Support for Innovation in Instruction & Research Recommendations

- Under construction