IT Services Opportunity

• Universities are largely decentralized
• Information technology is embedded into everything a university does

• How do we improve services, reduce costs, create efficiency, and enhance innovation and creativity?
ARR IT Objectives

• The role of the University Technology Management Team be strengthened
• Continued strategic investments in technology be made to support the core mission and enhance revenues
• Tactical IT investments be made to support administrative functions by enhancing the capabilities of the University’s enterprise IT system to improve business processes and cost monitoring
ARR IT Objectives

Operating costs be reduced by improving efficiency in delivering IT operational services, *for example*:

- In-sourcing Banner ERP software modifications
- Reduce portfolio of application software
- Consolidate data centers
- Consolidate e-mail and calendaring services
- Reducing power consumption
- Support desktop technology more efficiently through selective standardization
- Shift from Centrex voice service to converged voice and data communications
- Expand reliance on cloud computing and other rapid-response outsourcing
ARR IT Measurements

- Potential savings $17- $19M with continued need to invest in IT
Sample Infrastructure Growth

Capacity in Terabytes

Chicago
- FY08: 35.9
- FY09: 41.1
- FY10: 49.6
- FY11: 53.7

Urbana
- FY08: 47.8
- FY09: 65.5
- FY10: 85.3
- FY11: 96.7
The ideal state of each IT function at U of I can be determined by the level of commonality and degree of faculty / customer involvement required.

### Infrastructure – Centralized
- **Description**
  - Basic infrastructure & core enterprise systems
- **Central Role**
  - University-wide approach
  - Provides for sharing of control for research and instructional needs
- **Unit Role**
  - Provide Central IT with feedback on needs

### Administrative – Blended / Centralized
- **Description**
  - Project & transaction-driven
  - Provides for reporting requirements
- **Central Role**
  - Central provides for commonalities
  - Service level management/accountability
- **Unit Role**
  - Provides services for unique/local needs

### Academic – Blended / Decentralized
- **Description**
  - Classroom capabilities
  - Distance education
  - Instructional technologies
- **Central Role**
  - Central services for common needs (general support, software purchases)
  - Promote collaboration
- **Unit Role**
  - Local support for instructional technology

### Research – Decentralized
- **Description**
  - Individual research-driven
  - Complex, unique computing
- **Central Role**
  - Maintain existing central services
  - Provide shared control of infrastructure and common needs
- **Unit Role**
  - Address areas of unique needs (not scalable)

The organizational “ideal state” is a flexible organization that efficiently provides for common needs, but allows flexibility for local units to accommodate unique needs.
ECIO Role

• Improve enterprise IT services and infrastructure delivered on the University’s campuses and reduce the cost of delivering these services.

• Approx. 600 staff out of 1500-2000 total staff
University IT Service Structure
UIS IT Groups

Information Technology Services (ITS)
- Instructional Support Services, Network & Communication, Application Development & Database Support, Technology Support Center

Office of Web Services
- Oversees the primary UIS Website, including the campus home page and the top-level pages of the site

Center for Online Learning, Research and Service (COLRS)
- Online learning support, the study and application of online learning pedagogy, technology, and best practices
UIC IT Groups

**Academic Computing and Communications Center**

**UI Medical Center IS**
- Hospital Network, Patient Care & Clinical Systems

**CADE**
- Consulting, web publishing for hire

**College Level**
- Local desktop support, local servers, local applications, education support

**Department/Center Level**
- Specific research needs, for example MRI, chemistry, engineering, data mining, visualization
UIUC IT Groups

Campus Information Technologies and Educational Services (CITES)
• Computing, networking, telephone, instructional technology services, identity management, security, application development, server and database support, software licensing

ATLAS
• ATLAS provides information technology services that support and enhance the educational, research and administrative activities of students, faculty and staff in the College of Liberal Arts & Sciences

National Center for Supercomputing Applications (NCSA)
• Provides powerful computers and expert support that help thousands of scientists and engineers across the country improve our world

Beckmann Institute
• An interdisciplinary research institute devoted to leading-edge research in the physical sciences, computation, engineering, biology, behavior, cognition, and neuroscience
UA IT Groups

Administrative IT Services
- Enterprise-wide solutions and services for administrative processes
- Data center services, 24/7 Service Desk support, development of applications

Business Information Systems
- Application and process support for OBFS information systems and services

HR Information Systems
- Application and process support for Human Resources information systems and services

CARLI
- The Consortium leads Illinois academic libraries to create and sustain a rich, supportive, and diverse knowledge environment that furthers teaching, learning, and research through the sharing of collections, expertise and programs
Peer and Industry Comparisons

Indiana University
• Enterprise IT structure

University of Michigan
• IT governance structure

Gartner
• Education v. commercial IT data and research analysis

EDUCAUSE
• Higher education benchmarking and collaboration
IT Governance
IT Governance

• Promotes the intelligent use of resources, providing a shared, rational, and transparent framework for the selection and prioritization of IT investments.
• Aligns investment to strategy, facilitating decision-making, allocating limited resources, and measuring performance
• Defines purpose and scope, participants and roles, structure, decision points, and communication and operational issues
• Requires logistics and portfolio management
Scope of Customers and Providers for IT

IN

OUT

SPH-IT Nursing - IT Medicine - OIR ENG - EMS
Urban Planning & Affairs IT LAS OIT Social Work - CCO CBA - CS
OSSS ACCC GSLIS ENG - OIS
CITES Web Services Education ATLAS
OPIA DMI ACES Business - OIM
UIS ITS UIS Office of Web Services UIS - ORR UIS COLRS
AITS BIS DS HRIS
Requires a repeatable, rational process to collect ideas, select projects, prioritize.

IDEA

Governance Groups
Governance Groups
Governance Groups
Governance Groups

IT Governance Process

Ideas from 100,000 customers

Approved Strategies and Projects
IT Governance Status by Campus

- **UIS** – IT Governance website
  http://www.uis.edu/informationtechnologyservices/about/ITGovernance.html

- **UIC** – Invitations to IT Governance Council sent by Provost’s Office; first meeting June 23rd

- **UIUC** – Task force created and governance workshops underway
IT Expenses
Estimated $250M: IT Spending by Category
Estimated $250M: IT Spending by Funding Source

<table>
<thead>
<tr>
<th>Fund Hierarchy</th>
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<tbody>
<tr>
<td>Buildings/Equipment Acquisition (Plant Funds)</td>
<td></td>
</tr>
<tr>
<td>Buildings/Equipment Renewal and Replacement</td>
<td></td>
</tr>
<tr>
<td>State Funds</td>
<td></td>
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<tr>
<td>ICR, Campus/UA Assessments (Other Unrestricted)</td>
<td></td>
</tr>
<tr>
<td>Grants, Gifts (Current Restricted)</td>
<td></td>
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<tr>
<td>Aux Enterprises/Self-Sup Activities</td>
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</table>
Spending in ECIO Central IT Units

- UA AITS: $22.8M
- UIUC CITES: $35.5M
- UIC ACCC: $20.2M
- UIS ITS: $3.0M

- Total: $81.5M

- Big Ten *single campus* average: $65M for central IT
IT Next Steps
General IT Challenges (Educause Top 10)

1. Funding IT
2. Administrative/ERP/Information Systems
3. Security
4. Teaching and Learning with Technology
5. Identity/Access Management
6. (tie) Disaster Recovery / Business Continuity
6. (tie) Governance, Organization, and Leadership
7. Agility, Adaptability, and Responsiveness
8. Learning Management Systems
9. Strategic Planning
10. Infrastructure/Cyberinfrastructure
IT Solutions

• Complete IT governance for advice and decision making
• Integrate IT planning with University strategic planning
• Develop enterprise-wide roles and responsibilities
• Think of ARR as continuous improvement, not a report

Project Examples:
• IT leadership training program
• Identity management
• Process office (research admin business process analysis)
• Remote desktop and end-point management
• Records and information management services
• Unified communications
Next Steps

• Complete IT governance structures and charters
• Improve performance measures and cost reporting for IT services
• Formalize process improvement services
• Develop integrated IT planning process
• Develop methodology for service catalog and service level agreements
• Engage in additional enterprise-wide projects
Questions and Discussion