IT ASSESSMENT

UPCADS Briefing
June 7, 2011
IT Assessment Objectives

• Take a snapshot of current state
• Develop framework for re-balancing services
  • Immediate opportunities
  • Principles for the future
• Strengthen key enablers including governance, priority setting and funding practices
Approach

- Extensive interviews
  - Budget executives
  - IT leaders – campus, college and administrative areas

- Data collection and analysis
  - Staffing, expenditures and services
  - 100% participation from all budget units
  - Collaborative analysis – advisory committee, ITS leadership, project work team

- Opportunity analysis
  - Advisory committee identified initial list of opportunity areas
  - Sub-committee of advisory committee and ITS staff developed action plans

- IT Governance
  - Drew extensively from interviews and successful practices at other institutions
  - Advisory committee and ITS SLT held multiple working sessions
Data Collection Method

• Data was collected from all budget areas of the University. The only excluded entity is the Pennsylvania College of Technology.
• Data was self-reported by individuals with knowledge of the IT operations and expenditures in each budget area.
  • Data collection was coordinated by liaisons selected by the budget executive.
  • Liaisons sub-divided their areas as necessary to facilitate data collection.
• Expenditure and staffing data is a snapshot as of the end of FY09-10.
• Staffing data was provided for any staff member that spends a quarter or more of their time managing technology or providing technology support.
  • Data collection was not limited only to those staff in job family 11.
  • The allocation of staff time by activity was captured in increments of .1 full time equivalents (FTE).
Total Technology Expenditures

<table>
<thead>
<tr>
<th>Estimated Personnel Costs* (salary and benefits)</th>
<th>$129,360,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Personnel Expenditures</td>
<td>$119,013,799</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td><strong>$248,373,799</strong></td>
</tr>
</tbody>
</table>

*Assumes an average cost per FTE of $80,000
** Includes expenditures from auxiliary funds, restricted funds and internal budget transfers

About 6% of total University spending.
## Non-Personnel Expenditures by Area

<table>
<thead>
<tr>
<th>Area</th>
<th>Total NPE Including Transfers and Research Related Expenditures*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Support Units</td>
<td>$47,960,007</td>
</tr>
<tr>
<td>Penn State Hershey Clinical Enterprise</td>
<td>$27,705,741</td>
</tr>
<tr>
<td>Colleges</td>
<td>$17,022,191</td>
</tr>
<tr>
<td>Administrative Support Units</td>
<td>$14,278,067</td>
</tr>
<tr>
<td>Campuses</td>
<td>$12,047,793</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$119,013,799</strong></td>
</tr>
</tbody>
</table>

*FY09-10

ITS = $29 million
IT Effort by Area (FTE)

1,617 Total FTE

- Clinical enterprise: 160 FTE
- Campuses: 160 FTE
- Colleges: 329 FTE
- Administrative & Academic Support: 448 FTE
- ITS: 520 FTE

Admin support = 167 FTE
Academic support = 281 FTE
## Comparative Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Colleges</th>
<th></th>
<th>Campuses</th>
<th></th>
<th>Academic and Admin Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Avg.</td>
<td>Low</td>
<td>High</td>
<td>Avg.</td>
</tr>
<tr>
<td>Faculty, Student and Staff per IT FTE</td>
<td>479</td>
<td>182</td>
<td>62</td>
<td>603</td>
<td>244</td>
</tr>
<tr>
<td>IT Expenditures as % of Total Expenditures</td>
<td>9.5%</td>
<td>5.3%</td>
<td>2.9%</td>
<td>10.3%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Student Credit Hours Per IT FTE*</td>
<td>13,001</td>
<td>5,442</td>
<td>963</td>
<td>14,780</td>
<td>6,683</td>
</tr>
</tbody>
</table>

*Excludes the College of Medicine and Dickinson School of Law.
IT Effort by Area and Function

Academic Support
- Academic Support Units: 231.5
- Support (371): 78.3
- Security (49): 18.0
- Research Computing (64): 20.1
- Infrastructure (351): 45.0
- Applications (438): 56.2
- Academic Technology (121): 0.6
- Other (224): 0.0

Administrative Support
- Support (371): 40.9
- Security (49): 25.4
- Research Computing (64): 9.6
- Infrastructure (351): 53.6
- Applications (438): 81.6
- Academic Technology (121): 38.1
- Other (224): 8.6

Campuses
- Support (371): 44.9
- Security (49): 14.5
- Research Computing (64): 2.2
- Infrastructure (351): 70.4
- Applications (438): 14.5
- Academic Technology (121): 0.0
- Other (224): 0.0

Colleges
- Support (371): 25.9
- Security (49): 60.6
- Research Computing (64): 24.1
- Infrastructure (351): 15.6
- Applications (438): 15.6
- Academic Technology (121): 0.0
- Other (224): 0.0

Penn State Hershey - Clinical Enterprise
- Support (371): 16.1
- Security (49): 6.7
- Research Computing (64): 2.4
- Infrastructure (351): 6.6
- Applications (438): 9.6
- Academic Technology (121): 0.0
- Other (224): 0.0

Penn State Hershey - Clinical Enterprise
Opportunities

• Email and calendar for faculty and staff
• Long-term data storage and archiving
• Server co-location and virtualization
• Expanded lab and desktop management
• Software distribution license management
• Shared service desk system
• Wireless as a common good
# Anticipated Benefits

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Anticipated Benefits</th>
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<tbody>
<tr>
<td>Email/Calendar</td>
<td>Retire under-performing legacy ITS email solution</td>
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<tr>
<td></td>
<td>Eliminate distributed costs to license email/calendar solutions</td>
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<tr>
<td></td>
<td>More consistent and cost-effective risk management.</td>
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<tr>
<td></td>
<td>Small cost avoidance for hardware</td>
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<tr>
<td>Storage</td>
<td>Opportunity to meet a new need with a collaborative solution.</td>
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<tr>
<td></td>
<td>Less costly, more consistent archiving of data.</td>
</tr>
<tr>
<td></td>
<td>Improved research data management plans.</td>
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<tr>
<td>Virtualization/co-</td>
<td>More cost-effective strategy to support systems that require high availability and</td>
</tr>
<tr>
<td>location</td>
<td>redundancy.</td>
</tr>
<tr>
<td></td>
<td>Reduced distributed expenditures for hardware and consulting.</td>
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<tr>
<td></td>
<td>Frees up some staff time</td>
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# Preliminary Rationale

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Anticipated Benefit</th>
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</thead>
<tbody>
<tr>
<td>Lab and Desktop management</td>
<td>Increased productivity</td>
</tr>
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<td></td>
<td>Improved responsiveness</td>
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<tr>
<td>Software distribution license management</td>
<td>Reduced software acquisition costs</td>
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<tr>
<td></td>
<td>More convenient process to access software</td>
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<tr>
<td>Shared service desk system</td>
<td>Improved coordination of central and distributed support</td>
</tr>
<tr>
<td></td>
<td>Increased productivity</td>
</tr>
<tr>
<td></td>
<td>Improved service</td>
</tr>
<tr>
<td>Wireless as a common good</td>
<td>Greater consistency and availability of wireless networks</td>
</tr>
<tr>
<td></td>
<td>Some reduction in equipment costs</td>
</tr>
<tr>
<td></td>
<td>Some productivity gains</td>
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IT Governance

• Focus IT governance on the University’s total IT investments and service portfolio, not only ITS’.
• Create a representative, executive level IT governance group invested in understanding the complexities of IT issues and decisions.
• Charge governance structure with **planning** what needs to be done, **prioritizing** how to do it and **assessing** the effectiveness of strategies and services.
• Engage faculty, students and staff to determine the needs technology must meet and to evaluate its performance.
• Leverage the IT Leadership Council to bring together the University’s IT community to share best practices, seek expertise and input to improve solutions, and foster communication among IT units.
• Empower the Vice Provost and CIO to facilitate the governance processes in a manner that is transparent, consistent, and efficient.
IT Governance Model

IT Board

Research

Enterprise Systems

Instructional Technology

Information Security

IT Architecture

IT Services

DRAFT
## Timeline to Completion

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Target Completion Date</th>
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<tbody>
<tr>
<td>Advisory committee to review draft report</td>
<td>Week of June 6th</td>
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<tr>
<td>Comparative reports delivered to data collection liaisons</td>
<td>Week of June 6th</td>
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<tr>
<td>Draft report presented to Executive Committee</td>
<td>Week of June 20th</td>
</tr>
<tr>
<td>Recommendations presented to project sponsors</td>
<td>July</td>
</tr>
</tbody>
</table>