Commons, Chaos, and Clouds in my CIs: Implications for Higher Education

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Why libraries?

Commons & Clouds

Students today

Social Networking

Information Commons

5 things to prepare for what’s ahead
Commons & Clouds

Students today

Social Networking

Information Commons

5 things to prepare for what’s ahead

They're the most privileged generation ever to study at Binghamton University, and the most culturally diverse. They're driven to succeed, and they're anxious about the future. They've grown up racing from one scheduled activity to the next, and they don't remember a world without the Internet.
Commons & Clouds

Social Networking

Information Commons

5 things to prepare for what’s ahead
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Students today

Social Networking

Information Commons

5 things to prepare for what's ahead
Convenience

Self service
Single sign-on
24 x7 access and support
Collaboration

Commons & Clouds

Students today
Social Networking
Information Commons

5 things to prepare for what’s ahead
Conversation

5 things to prepare for what’s ahead

Chat with a Librarian

wtyrefdesk is online

Type here and hit enter to send a private message.

ed nickname: meeboguest:177354

get meeb
Cooperative

Commens & Clouds

Students today

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5 things to prepare for what’s ahead
Clouds & University

Relevance

- Time Frame
- The Provost Model
- Governance
- Funding Methodology
- Extreme Networking
- Cloud Applications
- Content & Security
- IT Leadership & Cloud Ownership
- Issues
# Clouds & University

## Time Frame

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Transformational</th>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networking in Education</td>
<td>Virtual Environments</td>
<td>Social Learning Platform</td>
<td>Digital Rights Management</td>
<td>Open-Source Higher Education</td>
</tr>
<tr>
<td>Web Services for Administrative Applications</td>
<td>Virtual Worlds — Higher Education</td>
<td>Digital Presentation of Research Data</td>
<td>Lecture Capture and Retrieval Tools</td>
<td>Open-Source Higher Education SaaS</td>
</tr>
<tr>
<td>Open-Source E-Learning Applications</td>
<td>BPO — Higher Education</td>
<td>IT Infrastructure</td>
<td>Creative Commons</td>
<td>Quantum Computing</td>
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</tbody>
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### Benefit and Years to Mainstream Adoption

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Years to Mainstream Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>More than 10 years</td>
</tr>
<tr>
<td>Moderate</td>
<td>5 to 10 years</td>
</tr>
<tr>
<td>High</td>
<td>2 to 5 years</td>
</tr>
<tr>
<td>Transformational</td>
<td>Less than 2 years</td>
</tr>
</tbody>
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As of June 2008

Source: Gartner (June 2008)
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Relevance

Time Frame

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Extreme Networking

Cloud Applications

Content & Security

IT Leadership & Cloud Ownership

Issues

Provost
- accountability
- investment

Faculty
- specialization
- collaboration

Student
- networking
- mobility
Professors decreased dependence on instructionally delivered technology.

Shift of power from institution to the individual.

Trend of the “cloud” providing new sources of business process outsourcing is marginalizing the relevance of the traditional IT organization.
IT does not mandate what happens on every desktop...

IT does not manage 100% of the campus network...

IT are known for telling others what they cannot do...
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- Historically IT is based on capital purchases
- Cloud applications will be budgeted in the operating budget
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Issues
Clouds & University

- **Regulatory Compliance**
  - HIPAA
  - FERPA

- **Identity Management**
  - Directory federation
  - Privileged user access

- **Information Management**
  - Data location
  - Data segregation
  - Data recovery
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- 1st reaction will be reject what we cannot control

- Lack of governance will bring about shift of technology decisions for IT to functional departments

- Provost will gain power in all technology decisions

- Faculty & students will be winners

- 50% of all CIOs will retire or be encouraged to leave
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Issues

What's Holding Cloud Computing Back?

- Service Management
  Technologies immature
- Scalability
  Parallel processing, no problem; sequential processing, different story
- Costs
  Economies of scale only go so far, unless customer is willing to trade data or advertising views for services
- Culture
  Trust, chargeback, sharing
- Connection
  Only as good as the Internet, unless you pay to harden your connection
- High Availability
  For workloads that are stateless, no problem; for stateful workloads, same issue as enterprises
- Customization
  Difficult — at least with monolithic applications

Gartner