e-Volution and Adaptation: Doing *Higher Education’s* Business Electronically

NWACC
Portland, Oregon
June 18, 2004

Richard N. Katz
EDUCAUSE
Outline

- Higher education’s evolutionary journey.
- What is higher education’s business?
- What do we mean by electronic?
- The adaptable academy.
- 7 e-business directions to support adaptability?
- How are we doing?
- Pithy observations.
Our Evolutionary Journey

150 BC 1100 AD 1450 AD 1810 AD 1982

Agrarian Industrial ERAS e-Education
Lessons Learned

- Higher education IS highly adaptable!
- Old models complement rather than replace old models
- Technology has driven change, but culture and mission moderate that change
- Adaptability is key to our prosperity.
- IT should be organized in ways that promote adaptability
What IS Our Business?

- Educating students
  - Fostering student success
  - Grooming future leaders?
  - Preparing an enlightened citizenry?
  - Fostering lifelong learners?

- Creating new knowledge
  - Conducting ethical and transparent research
  - Enabling open scholarly discourse (mostly)
  - Preserving data, information, and knowledge

- Serving the public
  - Communicating our intentions, actions and results openly and honestly

- Serving the institution
  - Enhancing sustainability
  - Supporting values
  - Fostering a work force
  - Forging a reputation
What is Our Business Vision?

“Our university seeks to enhance access to its services by implementing technologies that are welcoming, easy to use, and save their users time. Information technology has a clear aim to value the enquirer and to be flexible, efficient, and cost effective.”

University of Ulster
What is Our Business Vision?
The Adaptable Academy

The IT mission is to plan and organize a technical environment that will enable our institution to continually find new ways of meeting its basic mission.

This environment will make it easy for members of the community to sense, find, evaluate, and exploit opportunities to meet their objectives quickly, responsibly and transparently.
Adaptable (e.g. fit for survival)

- Scaleable
- Mobile
- Nimble
  - From strategic planning to ‘sense and respond’
  - From ‘debate and perfect’ to ‘experiment and prototype’
- Sustainable
  - Durable infrastructure
  - Durable values
Available and Accessible

- Utility-like dependability
- Always on services
- Ubiquitous availability
- Idiot proof, or better yet, elegantly simple
- One-stop service experience and model
Personalized

- Stakeholder centric
- Mass customization
- Self service
- Standard user interfaces and navigation
- Role-based authorities and views
Real Time

- Data Warehouses and Marts
- Web Services
- Content Management
- Workflow
- Digital Dashboards
- Decision Simulation and Modeling
Transparent

- Modeling business processes
- Clear and compelling business case
- Open IT project portfolio
- Deployment models
- Visible results
  - Digital dashboard
  - Balanced scorecard
Community Oriented

- Communities of Practice
- Social Networks
- E-Portfolio
- Instructional repositories and referatories
Secure

- Firewalls
- Encryption
- Awareness
- Policy
- Intrusion Detection
- Identity Services
  - Directory Based
Sustainable

- Life cycle funding
- Assured stream of leadership
- A rational IT architecture
- Inclusive institutional governance
- Mentoring
Examples – UBC’s e-Business Strategy

• Process simplification
• Trustworthy systems that eliminate approvals
• Empowerment of local systems via middleware
• Personal and role-based authentication
• “Simple self service” wherever possible via any platform through the institutional portal
• Secure sharing of administrative information to assure personal privacy and confidentiality

Ted Dodds, Using IT to Radically Improve Administrative Processes at UBC, May 2000
Examples: UCSD Blink

- Personalization
- Service delivery vehicle
- Friendly and easy to use
- Destroys the institutional stovepipes
- Vehicle for customer feedback
Examples: U of Minnesota

- Access to services via portal
- Certification of service conformance
- Self Service
Examples: IT Portfolio Management at Texas Tech

- Protocol for establishing IT priorities
- Community-based criteria for priorities
- Open process
- Visible process
- Leadership support
Examples: University of Kansas Mentoring Program

- Identification of aspirants
- Training of executive coaches
- Pairing of aspirants and coaches
- Joint responsibilities
- Real job tasks
- Focus on women in IT
## How are We Doing?
### Student Experience with CMS

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive</td>
<td>617</td>
<td>14.1</td>
<td>17.0</td>
<td>17.0</td>
</tr>
<tr>
<td>Positive</td>
<td>2151</td>
<td>49.2</td>
<td>59.1</td>
<td>76.1</td>
</tr>
<tr>
<td>Neutral</td>
<td>631</td>
<td>14.4</td>
<td>17.3</td>
<td>93.4</td>
</tr>
<tr>
<td>Negative</td>
<td>196</td>
<td>4.5</td>
<td>5.4</td>
<td>98.8</td>
</tr>
<tr>
<td>Very negative</td>
<td>43</td>
<td>1.0</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3638</strong></td>
<td><strong>83.2</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: EDUCAUSE Center for Applied Research
How are We Doing?: Unplugged!

- Implemented comprehensive: 7%
- Implemented limited: 52%
- Planning - pilot implementation: 17%
- Planning - no pilot yet: 8%
- Intend to implement: 10%
- No plans to implement: 6%

Source: EDUCAUSE Center for Applied Research
## How are We Doing? Cost Management

<table>
<thead>
<tr>
<th>SUPPORT COSTS</th>
<th>MEAN</th>
<th>% decreased or stayed the same</th>
<th>% increased up to 25%</th>
<th>% increased over 26%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaged software</td>
<td>3.25</td>
<td>25%</td>
<td>26%</td>
<td>49%</td>
</tr>
<tr>
<td>Data base</td>
<td>3.44</td>
<td>31%</td>
<td>29%</td>
<td>40%</td>
</tr>
<tr>
<td>Training</td>
<td>3.72</td>
<td>27%</td>
<td>25%</td>
<td>48%</td>
</tr>
<tr>
<td>Staff/personnel</td>
<td>3.84</td>
<td>35%</td>
<td>33%</td>
<td>32%</td>
</tr>
<tr>
<td>Hardware and infrastructure</td>
<td>3.97</td>
<td>38%</td>
<td>26%</td>
<td>36%</td>
</tr>
<tr>
<td>Desktop products and services</td>
<td>4.13</td>
<td>52%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Help desk &amp; user support</td>
<td>4.17</td>
<td>46%</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>System operations and management</td>
<td>4.24</td>
<td>46%</td>
<td>29%</td>
<td>35%</td>
</tr>
<tr>
<td>Consulting</td>
<td>4.28</td>
<td>57%</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Internal applications and code</td>
<td>4.95</td>
<td>66%</td>
<td>23%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: EDUCAUSE Center for Applied Research
How are We Doing? Secure?

Source: EDUCAUSE Center for Applied Research
How are We Doing?: Future Oriented?

Fixed Costs as Percent of IT Budget

Source: EDUCAUSE Center for Applied Research
How are We Doing? Sustainable?

Source: EDUCAUSE Center for Applied Research
Observations about E-Business

• Thomas Stewart was right: e-business is business
• Volatility demands increased adaptability and we live in an era of events
• Increases in connectivity beget interactions. We in IT are in the connections business. Interactions are the primordial soup from which higher ed innovation arises
• Technology is the motive force; culture and history are the brakes
• Our user communities are outstripping our capacity to provide support
• We may be doing better at holding on to our past than preparing for our future
• While today’s higher education leadership is up to the task, we are not grooming the next generation
• IT really does matter
QUESTIONS & ANSWERS