COPYRIGHT Notice

This paper was presented at CUMREC 2000, the Higher Education Administrative Technology conference. It is the intellectual property of the author(s). Permission to print out or disseminate all or part of this material is granted provided that the copies are not made or distributed for commercial advantage and that the title and authors of the paper appear. To copy or disseminate otherwise, or to republish in any form, requires written permission from the authors.
Go Boldly Where No University Has Gone Before
The Unintended Impact of Technology

Jillinda J. Kidwell, Leader
Global Education Industry
PricewaterhouseCoopers LLP

The agenda for Ms Kidwell’s presentation comprises four major areas:

- Synopsis of four drivers creating market uncertainty
- The e-business framework to provide a structured way to think about the market
- Lessons learned from examples of “disruptive” technologies in other industries
- Strategies for the future

New technologies are potentially disruptive, unless their consequences are understood at the outset.

The value chain of education is undergoing significant, dramatic change.

- Demand
- Technology
- Capital
- New Entrants

The traditional value chain in higher education is being challenged by new comers.

<table>
<thead>
<tr>
<th>Curriculum Development</th>
<th>Content Development</th>
<th>Learner Acquisition &amp; Support</th>
<th>Learning Delivery</th>
<th>Assessment &amp; Advising</th>
<th>Articulation</th>
<th>Credentialing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculties &amp; Departments</td>
<td>Colleges &amp; Universities</td>
<td>Faculties &amp; Departments</td>
<td>Colleges &amp; Universities (central administration)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Educational Management Organizations (U of Phoenix, Open U., Jones International, Concord University School of Law)

Corporate Universities

Training Companies (e.g., SmartForce, Asymetrix Learning Systems, Digital Think, Netg,

University Spin Offs (e.g., Morningside Ventures, NYU Online, Virtual Temple,

Content Conversion and Distribution (e.g., UNEXT.com, Pensare,

University Access, Caliber, Worldwide Learning)

Content Conversion and Hosting Services (e.g., eCollege.com, Converse,

Embnet, Jones International)

Accrediting Associations & Licensing Agencies

Learning Management Systems (e.g., WebCT, Blackboard,

WBT Systems, Lotus LearningSpace, IntraLearn, ORACLE? Microsoft?)

Tutoring and Testing Centers (Sylvan, Kaplan)

Market Research Firms

Educational Publishers (Harcourt)

Student Services (eCollegeBid,

Campus Pipeline, MyBytes,

Jenzabar,eStudentLoan,

Online Applications (XAP, EMBARK,

College Board.com

CollegeNet, others)

Learning Portals (e.g., click2Learn, SmartPlanet,

Blackboard.com,

Hungry Minds.com, ICDL)

Advising and Tutoring (e.g., Smarthinking.com,

lifelonglearning.com)
What does this all means?

Simply put, the cause and effect is e-business and it’s here. At PwC, we have defined four distinct phases of e-business:

The first stage in e-business is presence. Most of us are there—on the Web. We’ve put brochureware, university policies, and forms on the Web. Most of us recognize that we can’t do otherwise. We have a web site to say to the world “this is what and who we are.” Where can we go from here? Have others made the move? What are the benefits? Pitfalls? Returns on investment? Risks? Do I have to do this?

Integration, the second stage, means that we’ve done some transactions on the Web. Purchasing and paying for goods, registering students, even providing some distance education courses. We’re noticing that the customer is taking control of the relationship.

As we increase the role of e-business in our organization, we create more business value. When you reach the third stage, transformation, the world is moving to real-time, interactive, multimedia. This phase too has its benefits and consequences. Your institutional mission is challenged, your are outsourcing even more non-core functions, while you’re beginning to lock-in customers and suppliers.

Finally the fourth stage convergence occurs, or is achieved. There really aren’t players in this phase, yet. But, we predict that the business, as we know it today, will be gone.

The Future?

Several examples in business history may provide insight. Perhaps the disruption of the mini-mill steel technology is an example for higher education. A simple overview is shown below. At the onset, mini-mill steel production had little market value.

Strategy is a process not a project

Ms. Kidwell’s presentation goes on to discuss the ingredients necessary to avoid the unintended consequences of the future developments. For example, how is performance going to be measured? What are the tax & legal issues? Does the infrastructure support the business?

Then, some cautionary notes

- Speed is of the essence, but so is a well-conceived strategy
- Know what you want to do, where you want to play
- Consolidation is coming and the middle will increasingly be “squeezed”
- Among others

And remember the words of J.Yaremchuck, VentureOne

“Everyone is potentially vulnerable….It’s just a matter of timing.”

E-Business is Business; E-Learning is Education

www:pwcglobal.com