Digital Innovation: Driving Greater Access and Stronger Business Models

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Overview of Session

A. Changing enrollment demographics
B. Changing business models call for great digital innovation
C. Trends that led to growth in digital education
D. Power of these new delivery models to improve an institution’s business model
E. Case Study - Practices of institutions who have adopted changing technologies, lessons learned from these institutions, and ways to grow revenue
The buzz words:

- Focus on Growth, Change, and Action
- Challenging Competitive Environment
- Create strong business case
- Innovation
- Transformation
- Make a real impact
- Nimble

Rethinking Models for Higher Education
Business Model Challenges

The changing competitive landscape presents a serious challenge for colleges and universities across the country, impacting enrollment, philanthropic giving and the fundamental economic model of higher education.

Institutions are struggling to match revenues with expenditures, while simultaneously trying to cope with:

- Lower net revenue per student
- Rising costs
- Evolving consumer behaviors
- Shifting student demographics

As a result, institutions are forced to address their business models.

- "Institutional willingness and resolve" will be greatly tested
- Creativity and innovation will be important factors in forging a prosperous future
About AGBIS

• AGB Institutional Strategies (AGBIS) focuses on issues affecting the fundamental economic model and competitive position of colleges and universities.

• **AGBIS service areas include:**
  • Revenue growth and diversification
  • Transformative fundraising
  • Public-Private Partnership (P3) advisory services
  • Mergers, affiliations, and consolidations
  • New delivery models and digital technology
  • Cost containment & realignment

• **Methodologies used include:**
  • Diagnostics, Exploration and Implementation
  • Innovation and Creativity
• The cost structure of industries have dramatically changed over the years because of:
  o New entrants
  o New technology (e-commerce, robotics; future: AI, AVR)
  o New labor agreements
  o Innovative services
K – 12 Enrollment Trends

- 475 + Online Schools
- 400+ Blended Schools
- 400,000 + students enrolled fully online
- 29 States offering fully online education
- Top States: Pennsylvania, Ohio, Florida, Colorado, Arizona
Higher Education Market is Contracting

• The total market has contracted 12% since 2011
  • Total enrollment has dropped from 21 million to 18.3 million students

• Only 34% of institutions met their Fall 2017 enrollment targets

• Major shifts in student demographic and consumer behavior
Moving to online rapidly

• The number of students studying on a campus has dropped by over one million (1,173,805, or 6.4 percent) between 2012 and 2016.
e-Technology
Migration

1

7.1 million students
31 percent of total higher education enrollment
3.4 million college students engaged in fully online programs

2

Technology and e-commerce will play increased role
Meeting the needs of student will shape the economic model of institutions
Beyond the demographic shift, students are migrating towards technology for cost and convenience
• Distance education enrollments increased for the fourteenth straight year.

• The most recent year-to-year addition of 337,016 distance education students, a 5.6 percent increase, exceeds the gains seen over the past three years.

• Distance students are fairly evenly split between those who take both distance and non-distance courses (3,356,041 students) and those who take exclusively distance courses (3,003,080).

• Distance education enrollments are highly concentrated, **five percent of institutions account for almost half of all distance education students.**

• Distance enrollments remain local:
  • 52.8 percent of all students who took at least one distance course also took a course on-campus
  • 56.1 percent of those who took only distance courses reside in the same state as the institution at which they are enrolled.

• Virtually no distance enrollments are international: only 0.7 percent of all distance students are located outside of the United States.
Macro Trend – Enrollment

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>2012</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>12,000</td>
<td>18%</td>
</tr>
<tr>
<td>Part-time</td>
<td>10,000</td>
<td>18%</td>
</tr>
<tr>
<td>Male</td>
<td>8,000</td>
<td>10%</td>
</tr>
<tr>
<td>Female</td>
<td>20,000</td>
<td>20%</td>
</tr>
<tr>
<td>White</td>
<td>15,000</td>
<td>7%</td>
</tr>
<tr>
<td>Non-White</td>
<td>5,000</td>
<td>25%</td>
</tr>
</tbody>
</table>

AGB Institutional Strategies
Digital Learning

67% of students online are earning degrees from public institutions

29% increase in number of private institutions offering online degrees
Changing Consumer Behaviors

According to students, the #1 reason why they attend college is to get a good job.

Price and value are critically important.

Consumers are becoming more astute with their college selection.

In the eyes of the many consumers, student loans are no longer considered “financial aid.”

For consumers, lower cost of education means lower tuition prices.

Looking at other alternatives for “applied learning” – this reducing available student market.

Institutions are cutting costs, which is required for survival, but cut costs do not necessarily translate to lower consumer prices.
Culture of Innovation

**REINVENTION**
Requires rapid improvement of competitive position while retaining strengths of the business model

**ASPIRATION**
Offers an opportunity to focus on early changes by anticipating future trends

**CRISIS**
Presents an urgent need to transform the business model, stabilize finances, and re-establish competitive position

**TURNAROUND**
Requires changing elements of the business model to become financially stable
Slow Operating Rhythms

- Self inflicted wounds - Operating procedures which no longer align to the marketplace, prevent revenue growth
  - Processing student applications
  - Processing transfer students
  - Collaboration without accountability
  - Applying campus based policies to the adult market
  - Old policies that no longer serve the market
  - Core requirements which no longer align to the market
  - Out dated pricing strategies
  - Decision making – that could take an hour, takes weeks and months
  - The “institutional will” to make operating changes is usually in shorter supply than financial resources
Governance Challenges

• Change in competitive landscape is causing many board challenges

• “Nostalgia” prevents many boards from thinking strategically

• Board leadership is critical to produce strategic thinking
  • Creating energy vs withdrawing energy from the President and cabinet

• Large boards which need to act as a collective body, while addressing serious strategic issues, trend is to reduce size of boards to be nimble
Transfer Students

- Students Attending One College: 25%
- Students Attending Two or More Colleges: 75%
Comparing Market Segments

The market segment for adult degree completion is larger than the traditional high school segment

- 40 million adults with college credit and no degree
- 3.3 million high school students graduating
New technologies open new revenue streams

<table>
<thead>
<tr>
<th>New technology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial Intelligence (AI)</td>
<td>AI enhances business processes, research, and in-class teaching. It can identify areas where support is needed.</td>
</tr>
<tr>
<td>Machine learning</td>
<td>Virtual teaching assistants can provide data on student performance and suggest future actions.</td>
</tr>
<tr>
<td>Chatbots</td>
<td>Chatbots can answer questions on enrollment and class choices, and enhance the student experience.</td>
</tr>
<tr>
<td>Adaptive learning</td>
<td>Adaptive learning can deliver real-time, value-added experiences and analyze student responses to provide unique feedback and resources.</td>
</tr>
<tr>
<td>Cloud</td>
<td>Reduces IT costs, delivers simple data storage, enables mobile learning, and harnesses the compute power for administration, research, and learning tools.</td>
</tr>
<tr>
<td>Blockchain</td>
<td>Helps bring legacy paper systems together in a single database. Credentials can be checked and validated more effectively than in a paper filing system.</td>
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</tbody>
</table>
Xavier University has opened a MakerBot Innovation Center on its campus. The University has become the first private institution in the US and the first university in the Midwest to take part in this initiative.

The center was established with an aim to enlighten the students and faculty on generating prototypes, small-scale creative and manufacturing projects, and model making processes. The program allows space for networking and start-ups, attracting researchers, innovators, and other local entrepreneurs.
Augmented Reality

- Augmented Virtual Reality (AVR and VR) technology is quickly coming into the mainstream. It is used to display score overlays on telecasted sports games and pop out 3D emails, photos or text messages on mobile devices.

- Leaders of the tech industry are also using AR to do amazing and revolutionary things with holograms and motion activated commands.
There is a growing demand in the job market for software programmers and subsequent potential to combine a campus-based tutorial program with an online programming curriculum.

Coding boot camps have proliferated over the past few years. They offer a rapid, relatively inexpensive path to a career change into the software development. In a matter of weeks, a successful graduate can entertain programming job offers with high salaries (five- or even six-figure). When aligned with a liberal arts degree, the concept could be powerful.
3D Holographic Education Application will Leverage Faculty
Holograms
Taking Faculty
Global
Implementing Change

Addressing “Institutional Will and Resolve”
Culture of Innovation

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**CRISIS**
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**TURNAROUND**
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Rethinking the Change Paradigm

<table>
<thead>
<tr>
<th>Most Institutions</th>
<th>More Institutions Should</th>
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</thead>
<tbody>
<tr>
<td>Form a committee</td>
<td>Bias towards action</td>
</tr>
<tr>
<td>Have representation from all areas</td>
<td>Use key implementation members who will be accountable</td>
</tr>
<tr>
<td>Select a popular person to lead the committee</td>
<td>Led by or co-led by a cabinet/leadership member</td>
</tr>
<tr>
<td>Lengthy report generated</td>
<td></td>
</tr>
<tr>
<td>Outcomes are recommendations</td>
<td>Define specific outcomes, resources, resource needs, and timelines</td>
</tr>
<tr>
<td>Leadership team waits for recommendation</td>
<td></td>
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</tbody>
</table>
Case Study

Situational Assessment
Consensus on Need
Where do you no longer aligned to market
Slow Operational Policies or Systems

Exploration
Addressing institutional will and road blocks

Building Blocks
Timelines
Priorities for action over three years
Technology tools to increase speed and service
Revenue segment champions

Implementation with a bias towards action
Building the case for margin/financial contribution

<table>
<thead>
<tr>
<th>Additional Margin Contribution</th>
<th>Start Up Costs</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
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<tbody>
<tr>
<td>Initiative 1</td>
<td>$260,378</td>
<td>$737,234</td>
<td>$1,561,596</td>
<td>$2,097,445</td>
<td>$2,196,362</td>
<td>$6,853,015</td>
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<tr>
<td>Initiative 2</td>
<td>$234,000</td>
<td>$686,312</td>
<td>$1,008,050</td>
<td>$1,200,472</td>
<td>$1,450,367</td>
<td>$4,579,201</td>
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<tr>
<td>Initiative 3</td>
<td>$169,260</td>
<td>$870,480</td>
<td>$1,611,355</td>
<td>$2,530,776</td>
<td>$3,709,889</td>
<td>$8,891,760</td>
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<tr>
<td>Initiative 4</td>
<td>$131,539</td>
<td>$414,735</td>
<td>$835,661</td>
<td>$1,249,816</td>
<td>$1,835,746</td>
<td>$4,467,497</td>
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</tr>
<tr>
<td>Initiative 5</td>
<td>$43,300</td>
<td>$257,400</td>
<td>$374,400</td>
<td>$374,400</td>
<td>$374,400</td>
<td>$1,423,900</td>
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<tr>
<td>Total Margin Contribution</td>
<td>$1,137,078</td>
<td>$3,374,162</td>
<td>$6,071,062</td>
<td>$8,200,909</td>
<td>$10,314,764</td>
<td>$28,969,373</td>
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For More Information

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