Engaged Scholarship:
The Experiential Learning, Executive Education and Applied Research Trifecta

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Carlson School of Management

May 28, 2021
2021 IT Teaching Workshop
What you can expect from this talk

› My perspectives on the future of business school education

› Practical insights on how to grow your executive education business in the areas of digital transformation and business analytics

› How to structure experiential learning (in analytics) to maximize impact for students, industry and faculty?

› Opportunities and challenges going forward
GMAT takers declining year on year in the US

Recent FT MBA Closures

- University of Illinois
- University of Iowa
- University of St. Thomas (Feb. 20)
- Simmons College
- Thunderbird School of Global Management
- Virginia Tech
Is Undergrad the Savior?

Demographic Cliff in 5 years!
International students down 43%

Travel bans, executive orders, detrimental regulatory actions and xenophobic rhetoric

International Student Numbers Decline

A survey found that new international enrollments dropped by 43 percent this fall. It also provides the first glimpse of the effects of the pandemic on international exchange and insight into pre-pandemic trends.

By Elizabeth Redden  //  November 16, 2020

B-Schools spend $4 billion per annum on research

“...A very large expense with very limited accountability — and no systemic controls to align the research with the interests of the funding sources.”

https://www.ft.com/content/b921209d-4b5b-4b51-ae93-971d458b6e4a
Questions around relevancy of business school research

Lost in translation

Lost before translation

Is there institutional support for faculty to engage with industry?

“...Moreover, in our experience there are very few business schools that encourage or require their professors to engage with practitioners on a regular basis as part of their job responsibilities.”

https://www.forbes.com/sites/andrewstephen/2019/01/08/how-to-ensure-more-business-school-research-is-relevant-to-business/?sh=1d0a6ccabdd5
Number of publications receives too much weight
While creativity, literacy, relevance, and awards receive too little weight
R-quality (rigor) of research increases research health
Q-quality (practical importance) of research contributes positively to teaching health, as well as external support (by alumni and donors), and institutional integrity

Faculty Research Incentives and Business School Health: A New Perspective from and for Marketing

Stremersch, S., Winer, R. S., & Almeida Camacho, N. (2020). Faculty Research Incentives and Business School Health: A New Perspective from and for Marketing. Journal of Marketing. Available at SSRN 3741126
Business schools are embedded in a society that is at a precipice.

Putnam, Robert D. *The Upswing: How America Came Together a Century Ago and how We Can Do it Again*. Simon & Schuster, 202
What explains the upswing from the 1900s to 1960s?

- SBTC implies college is the public school of the future
- It’s up to us in business education to grab this opportunity
- Our community is in the thick of digital transformation and analytics
- Innovate, differentiate, or get disrupted
Our Innovation Model

- Applied research
- Experiential learning
- Executive education
- Applied research

[Diagram showing a cycle among the four components]
Academic Programs

› Master of Science in Business Analytics (MSBA)
› Undergraduate Business Analytics Minor
› Business Analytics for Leaders (Executive Education)
› Master of Applied Business Analytics (MABA)

› New- Analytics core course in undergrad curriculum
House of Analytics

- Unifies the curriculum
- Integrates theory and practice
- Provides a comprehensive framework for creating change through analytics
- Empowers students to become problem solvers and business leaders
Experiential learning challenges students to apply knowledge and practice skills with real clients.
Carlson Analytics Lab – How we do experiential...

Real Clients
› $30,000 fee raises the bar
› Clients expect high quality work
› Data is often messy

Real Support
› Weekly meetings with a faculty mentor and a professional advisor
› Communications coach, project management, teamwork consultations

Real Results
› 90+ projects for 60+ clients in total
› $2 million in revenue

For many faculty this is their first exposure to working with companies
Partnerships across Industries

› Accounting, Legal, & Professional Services
› Agribusiness
› Consumer Packaged Goods
› Consulting
› Entertainment & Hospitality
› Government & Social Services
› Healthcare & Medical
› Insurance
› Manufacturing
› Personal Services
› Retail
› Travel & Transportation
Takes a village to do experiential well
INSIGHTS & IMPACT
for our business partners
Susan DeFranco
Senior Director, Consumer Insights & Analytics

› Multiple projects, 3-year relationship
› Marketing, promotion, customer service
Our Innovation Model

Applied research

Executive education

Experiential learning

Applied research
Open enrollment program sets up customization

https://carlsonschool.umn.edu/executive-education/courses/leading-business-analytics
Optum had supply but lacked demand!
Customized to supply chain and finance

Example Program Schedule

<table>
<thead>
<tr>
<th>Day 1 9am-noon</th>
<th>Day 2 9am-noon</th>
<th>Day 3 9am-noon</th>
<th>Day 4 9am-noon</th>
<th>Day 5 9am-noon</th>
<th>Day 6 9am-noon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winning with the House of Analytics</td>
<td>Descriptive Analytics-2 using ML</td>
<td>Predictive Analytics-1</td>
<td>Predictive Analytics-2</td>
<td>Text Analytics</td>
<td>Recommender systems and personalization</td>
</tr>
<tr>
<td>Descriptive Analytics-1 using ML</td>
<td>Causal Inference and A/B Testing</td>
<td>Case Studies of Randomized Field Experiments</td>
<td>Value Models</td>
<td>Numeric Prediction, Advanced Techniques, and Ensemble Methods</td>
<td>Deep Learning and Advanced Topics</td>
</tr>
<tr>
<td>Use Cases from Supply Chain &amp; Finance</td>
<td>Use Cases from Supply Chain &amp; Finance</td>
<td>Use Cases from Supply Chain &amp; Finance</td>
<td>Organizational Change for Analytics</td>
<td>Action Learning Project Kickoff</td>
<td>Action Learning Project Workshop</td>
</tr>
</tbody>
</table>
Digital Transformation

Program Schedule | Location: Live Online via Zoom
Dates: Tuesday, May 18, 2021 - Wednesday, May 19, 2021 | Central Time

Tuesday, May 18, 2021

Welcome
8:30 - 10:00 Digital Transformation of an Incumbent

10:00 - 10:30 Break
10:30 - 12:00 Digital Technology Enabled Industry Disruption
12:00 - 1:00 Lunch
1:00 - 2:30 Sharing Economy Based Business Models
2:30 - 3:00 Break
3:00 - 4:30 Platform Competition: The Way Forward

Wednesday, May 19, 2021

8:30 - 10:00 Platform Competition: The Way Forward

10:00 - 10:30 Break
10:30 - 12:00 Convert your Data into an Asset using Analytics
12:00 - 1:00 Lunch
1:00 - 2:30 Artificial Intelligence, Machine Learning and Analytics Based Business Models
2:30 - 3:00 Break
3:00 - 4:30 DEI Challenges with AI Evaluation and Announcements

Ravi Bapna, Associate Dean for Executive Education, Curtis L. Carlson Chair in Business Analytics and Information Systems, Academic Director, Carlson Analytics Lab
Analytics for Good Institute
Research Arm
Positive change for our communities
University faculty and researchers use data and analytics to solve problems for people, communities, and society

▪ Especially for under-served populations facing disparities, and in areas focused on change for the common good
Inter-disciplinary faculty
We have gathered faculty responses to the meeting we held earlier this month. 3 of the use cases were of interest to numerous faculty members. They also mentioned these use cases being possible to pursue for future research.

All faculty would be interested in using the CAL project as a first step to assess the viability of a research project.

1. Winfield United Seed Recommendation Model
2. Purina Intelligent Nutriment for Dairy Cows
7. Member Milk Quality & Component prediction

When asked about general research ideas that might be of interest to Land O Lakes, we've received 4 ideas so far.

1. It is potentially interesting to explore the disparate impact of technology on different rural regions, and how the disparity can be mitigated.
2. Would be interesting to study the effect of the introduction of technology (or new app features) on improvement in agricultural productivity.
3. Generally, I am interested in questions that involve anomaly detection, causal inference, and bias in ml models. There are many opportunities to do
4. Land usage in the future.

I gave the faculty until the end of this week to add to the survey. I will provide you with updates, if there are any, by this Friday.

Ellen

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Access My Calendar Here

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This is awesome!
Really interested to hear about other research ideas as well. I really like the idea of “disparate impact of technology on different rural regions” as its critical foundation insight, that we need to understand as we bring Tech to agriculture.

Thanks,
Chakra
Hi everyone,

Boris and Kyle, last week as we were discussing the Spring Live Case that we just wrapped up the topic of possible research collaboration between Calabrio and Carlson came up and Ravi Bapna (https://carlsonschool.umn.edu/faculty/ravi-bapna) the Associate Dean for Executive Education and the Academic Director for CAL wanted to connect to discuss possible research into improving call center performance. Ravi is CC’d on this email and will be able to go into more detail about what he is potentially looking for but I wanted to make the connection.

Ravi, Boris and Kyle are the two main contacts I have worked with this last year on getting the Spring Live Case and summer ELP project put together. They have been fantastic partners and have discussed in the past the potential for completing some research. They will be the best people to start with.

Thanks everyone and happy connecting!

Pat

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Patrick Smith | Associate Director of Business Development
Carlson School of Management | Carlson Analytics Lab
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Pat,

We’d love to discuss additional research opportunities. As you know, we have a very large list of items we want to look into!

Ravi,

Great to hear you are as interested as we are in expanding our partnership. Are you free anytime tomorrow or Thursday at 10am for an initial discussion? If not, please let me know some timeslots you have available and we figure out something.
Erik Erickson
Chief Data Officer

- Multiple projects on housing stability and fairness
- Inter-agency data integration to study county and social service needs
$225,000 McKnight Foundation
Grants to support collaboration with Hennepin County

$75,000 Target Foundation grant focused on reducing property forfeiture due to non-payment of property tax
Theresa McCormick
Director of Programs and Healthcare Partnerships

- SNAP: Supplemental Nutrition Assistance Program for hunger relief
- Students helped find eligible but underserved populations
Deb Bauman
Chief Information Officer

Using data analytics to find more effective treatments for patients recovering from addiction
We address many of the challenges highlighted earlier using the experiential learning, executive education, and applied research trifecta.

- Lost before translation
- Institutional support for faculty to engage with industry
- Lifelong learning needs of executives dealing with SBTC
  - Discretionary income to the school!
  - Helping our community reduce inequality in housing, hunger, and deal with addiction

What challenges have you faced?

What opportunities do you see?

In conclusion
THANK YOU

@ravibapna