Moving the Red Queen Forward: Maturing Business Analytics Practices

Thursday, October 29, 2015 at 1:30 PM in Sagamore Ballroom 3
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EDUCAUSE  

Hashtags: #EDU15 @ECARresearch
A slow sort of country!' said the Queen. 'Now, HERE, you see, it takes all the running YOU can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!' — Lewis Carroll, *Through the Looking-Glass*
Institutional Analytics Defined

“The use of data, statistical analytics, and explanatory and predictive models to gain and act on complex issues intended to improve services and business practices across the institution.”

Not just theoretical insights!!

Not just reporting!!

Not just a dashboard!!

Actionable intelligence!!
Overview

• Leadership and Expertise

• Priorities and Investments

• Barriers and Opportunities

• Resource and Services...to move your RED QUEEN forward

• Analytics Maturity
leadership and expertise...
Audience Question

Does your institution have a dedicated analytics leader?

YES  NO
Leadership in institutional analytics
(in the institutions that have this role)

- Chief information officer: 55%
- Director of institutional research: 52%
- Chief analytics officer*: 51%
- President/chancellor: 51%
- Chief academic officer: 46%
- Chief data officer*: 46%
- Chief financial/business officer: 34%
- Chief learning officer*: 24%
- Student success leader: 16%

*fewer than 25% of institutions have this role
More than six in ten CDS respondents agreed that their institutional leadership was publicly committed to the use of analytics and data-driven decision making.

### Leadership roles in context

<table>
<thead>
<tr>
<th>Role</th>
<th>Don't have this position</th>
<th>Not involved</th>
<th>Support role</th>
<th>Leader/sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief information officer</td>
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<td>Director of institutional research</td>
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<td>Student success leader</td>
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<td>Chief data officer</td>
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<td>Chief analytics officer</td>
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Leadership roles in context

Learning analytics

Institutional analytics

Percentage of respondents

0% 100%
"it seems to work really well to pair up people who are really good with software systems with people who really understand the data."

-- ECAR focus group

"You have to hire a storyteller."

-- ECAR Focus Group
PANEL DISCUSSION
Leadership and Expertise

• Analytics is a highly collaborative, matrixed process. What advice do we have for IT leaders to find balance with their leadership, support, and strategic advisors roles?

• The ideal analytics workforce needs talent with quantitative methods training, technology understanding, and communication skills. What are the top strategic hires to facilitate analytics?
priorities and investments...
Audience Question

Which is a higher priority for your institution?

LEARNING ANALYTICS

INSTITUTIONAL ANALYTICS
47% of respondents said institutional analytics was a major priority; half as many described learning analytics as one
Motivation for analytics investment

Institutional analytics

- Optimize resources: 30%+
- Demonstrate higher education's effectiveness: *
- Improve retention: *
- Contain or reduce costs: 20-29%
- Create greater transparency: 10-19%
- Understand the characteristics of the student population: 10-19%
- Improve administrative service quality: 10-19%
- Reengineer business processes: 10-19%
- Attract more students: 10-19%
- Reduce students' time to degree: 10-19%
- Generate revenue: <10%
- Improve student course-level performance: <10%
- Reach a different or broader segment of students: <10%
- Improve faculty productivity: <10%

* Among the top 3 motivators for investment in institutional analytics, too

Two of the top three motivations are the same for investing in learning and institutional analytics.
PANEL DISCUSSION
Priorities and Investments

• What is driving institutional analytics on your campus?

• To what extent can institutional analytics investment stimulate/drive/crossover to the learning analytics side of the institution?
barriers and opportunities...
Audience Question

Which of these is more of a barrier for moving an institutional analytics initiative forward at your institution?

Affordability & ROI

Data Quality & Use
Concerns about use of analytics in higher ed

- Affordability Issues
  - Affordability
  - Keeping pace
  - Misuse of data
- Data Issues
  - Regulations requiring questionable metrics
  - Regulations requiring more reporting
  - Inaccurate data
  - Strategy for changing vendors
  - Proprietary vendor algorithms
  - Inability of higher education to use data to make decisions
  - Insufficient ROI
  - Black-box algorithms
  - Students' privacy rights
  - Vendors profiting from higher education data
  - Vendor access to data
  - Faculty privacy rights
  - Staff privacy rights
- Culture Issues
  - Another means of running higher education like a business
- Vendor Issues
  - Inability to measure higher education

Percentage of respondents

- Major concern
- Moderate concern
Concerns about use of analytics in higher ed

- Affordability
- Keeping pace
- Misuse of data
- Regulations requiring questionable metrics
- Regulations requiring more reporting

Percentage of respondents

- Major concern
- Moderate concern
Higher education is data rich but information poor.
Higher education is data rich but information poor.
PANEL DISCUSSION
Barriers and Opportunities

• What is IT’s role in moving higher ed from a data rich, but information poor industry to one that uses analytics for “actionable intelligence”?

• In what ways can we invest in shifting the culture to a data-driven organization?
a few resources and services...
Some EDUCAUSE resources...
ANALYTICS IN HIGHER EDUCATION, 2015

ECAR RESEARCH HUB
Analytics is one of higher education’s top IT-related issues. Institutions need solid methods for campus BI/data reporting and analytics to support campus priorities and decision-making. We’ve reached an inflection point where the maturation of analytics tools and the amount of data available have reached critical mass to engage in data informed solutions. Analytics can provide insight in areas such as reducing students’ time to degree, improving student learning outcomes, targeted recruitment, business process optimization, alumni relationship management, and increasing research productivity. In 2015 EDUCAUSE will update and extend the 2012 ECAR analytics study to understand the nature, magnitude, and future directions of analytics in higher education and provide guidance to institutions enhancing or developing analytics programs.

REPORTS AND SUPPORTING MATERIALS (FORTHCOMING)

The survey instrument and slide presentations will be open access. All other materials will be available to ECAR subscribers only for the first five months after publication.

Subscribe to receive all ECAR research and analysis about IT in higher education.

Subscribe Now

Related Resources
- Infographics: Institutional Analytics and Learning Analytics
- Data Tables
- Survey Instrument
- Slide Presentations: Institutional Analytics and Learning Analytics

Current Landscape Report
Institutional Analytics Report
Learning Analytics Report
A new EDUCAUSE benchmarking service...
Benchmark your analytics progress...

<table>
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<tr>
<th>Area</th>
<th>Maturity Index</th>
<th>Deployment Index</th>
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<td>Student success technologies</td>
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A 2016 collaboration between ECAR and CDS
1) Build reports with customized peer groups on demand
2) Benchmark maturity and technology deployment
3) Receive recommendations for improvement
Stop Guessing.  
Start Making Data-Driven Decisions.

Core Data Service  
IT financials, staffing, and services

EDUCAUSE Benchmarking Service BETA *(Coming in early 2016!)*
Reports you can use to communicate the value of IT to non-IT leaders.

Use benchmarking to inform IT planning and support for strategic initiatives.  
[educause.edu/research](http://educause.edu/research)
analytics maturity...
PANEL DISCUSSION
Maturity

What is/was the most important single thing that you/your institution does/did to jumpstart your institutional analytics programs?
Q&A...
Help Us Improve and Grow

Thank you for participating in today’s session.

We’re very interested in your feedback. Please take a minute to fill out the session evaluation found within the conference mobile app, or the online agenda.
Transforming higher education through the use of information technology