

# Using Data Analytics to Lead

2019 TASSCUBO Primary Members Retreat

October 20-22, 201

# Pre-Read

EDUCAUSE CENTER FOR APPLIED RESEARCH

## **Analytics in Higher Education**

Benefits, Barriers, Progress,  
and Recommendations

**The Data-Enabled Executive:  
Using Analytics for Student  
Success and Sustainability**

*Analytics can save higher education. Really.*

This new statement, a collaborative effort between the Association for Institutional Researchers, EDUCAUSE, and NACUBO, will guide our conversation around “Using Data Analytics to Lead”

**Analytics Can Save  
Higher Education.  
Really.**

# Higher Education Data Analytics Framework

## CULTURE

- How might leaders create a culture that values data-informed decisions?
- How can business officers empower staff across the institution?
- In what ways might business officers collaborate across the institution?

## CONTINUOUS CHECK IN

- ✓ Does my institution support a data-informed culture?
- ✓ Is everyone on campus empowered to use data?

## HINDSIGHT

What happened?  
Why did it happen?



## INSIGHT

What is happening today?  
Should we act on this information?



## FORESIGHT

What might happen?  
How can we achieve better outcomes?



## RETURN ON INVESTMENT

What are the outcomes?  
How has data improved our processes and outcomes?



## CAPACITY

- What tools do we need to facilitate a data-informed culture?
- What skills do our staff need?
- Do we have the necessary data?

## CONTINUOUS CHECK IN

- ✓ Does my institution have the human resources needed?
- ✓ Does my institution have the technology to support data analytics?

# Accounting Principles Council Project

- 30 Institutions Interviewed
  - 53% were private institutions
  - 47% were public institutions
- Question:
  - Which KPI's or analytics are routinely performed?
- Of the list of 67 analytics:
  - Only 8 were used by 10% of the respondents
  - Only 1 was used by over 50% of the respondents

# Accounting Principles Council Project

Degree-Seeking Undergraduates IPED's Moody's Medians Undergraduate test scores (SAT / ACT) and by Rank **Budget or Forecast vs Actual** Average SAT Scores and ACT Scores Average High School GPA Average End-of-First-Year GPA Endowment Per Student Tuition Revenue Tuition, Fees, Room and Board Total Revenue and Investment Return per FTE Student Debt Service vs Operating Budget **Endowment/Investment Performance** Cash Position Revenue & Expense Trends Total Sponsored Projects Research Expenditures Total R&D Expenditure Rank Total Federal R&D Expenditure Rank Tuition, Scholarship, Fellowship Reports Expenses per FTE Student **Monthly or Annual Financial Statements** Personnel Expenses - Instructional / Non-Instructional + % Rating Agency Scorecard Student Recruitment, Application or Enrollment Data Admissions Funnel Freshman Admit Rate **Debt / Liquidity Trends** Freshman Yield Rate Freshman Deposits Undergraduate Race / Ethnicity Racially/Ethnically Minoritized Undergraduates % Undergraduate Minority **Compare to Other Institutions** % Undergraduate international Undergraduate applicants by race / by gender New First-Time, Full-Time Freshmen First Year Home State and Out-of-State FTE Undergraduate / Graduate / Total Students Undergraduates Living on Campus Participation in Varsity Athletics **Net Operating Performance** Undergraduates in Fraternities and in Sororities Student to Faculty/Staff Ratios Class Size Ratios First Year Retention Rate Graduation Rates **Faculty / Staff Counts or Ratio** 4-year Graduation Rates 5-Year Graduation Rates Freshman Discount Rate Average Freshman Institutional Grant Undergraduate Discount Rate Undergraduates with a Pell Grant % of students borrowing & average debt for graduates Undergraduate Need Met Annual Fund Gifts & Total Donations Alumni Donors Funds from Private Giving Faculty Academy Membership Rank Full-Time Tenured and Tenure-Track Faculty Faculty Salaries and Faculty Salaries by Rank % Female Faculty % Minority Faculty % Female Tenured Faculty Tenured Faculty by Race

# The Mythical World of Advice

## Bad Advice

- Invest in a tool to give you cool graphs
- If you can put the numbers in pretty visuals, you'll be golden.

## Good Advice

- No tool can overcome bad data.
- Data integrity is the hardest part.
- The easiest part of any data project is the external look.