



# ANNUAL MEETING

Columbus, Ohio  
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**EXPLORE. EMPOWER. ENRICH.**

## UNDERSTANDING ACADEMIC PROGRAM COSTS AND MARGINS

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## PERSONAL OVERVIEW

- RSM Management Consulting Lead for Higher Education
- 14 years of operations consulting experience
- Focus on providing strategy development, performance assessments, financial analysis, and operational transformation.





# DISCUSSION GUIDE

- ⑩ Situation and Problem
- ⑩ Higher Ed's Response
- ⑩ Academic Margins
- ⑩ Data Presentation
- ⑩ Conclusion
- ⑩ Questions and Answers





# SITUATION AND PROBLEM

## Situation

- State funding for public universities has decreased significantly
- The U.S. government has scaled back funding for many university-based research programs
- Some are still suffering from declining enrollments
- Gross tuition rates are rising faster than education spending per student
- Net tuition rates are also rising as both need and merit aid programs diminish and families are left with a larger fraction of the bill
- Significant shift in modality
- The ability to scale (up/down) the cost of instruction is generally limited

## Problem

- Transformational cost structure changes need to occur while also focusing on a strategic pivot to innovative revenue generation





# HIGHER ED'S RESPONSE

Mandatory Budget Reductions  
(e.g. 5%)

Hiring Freezes

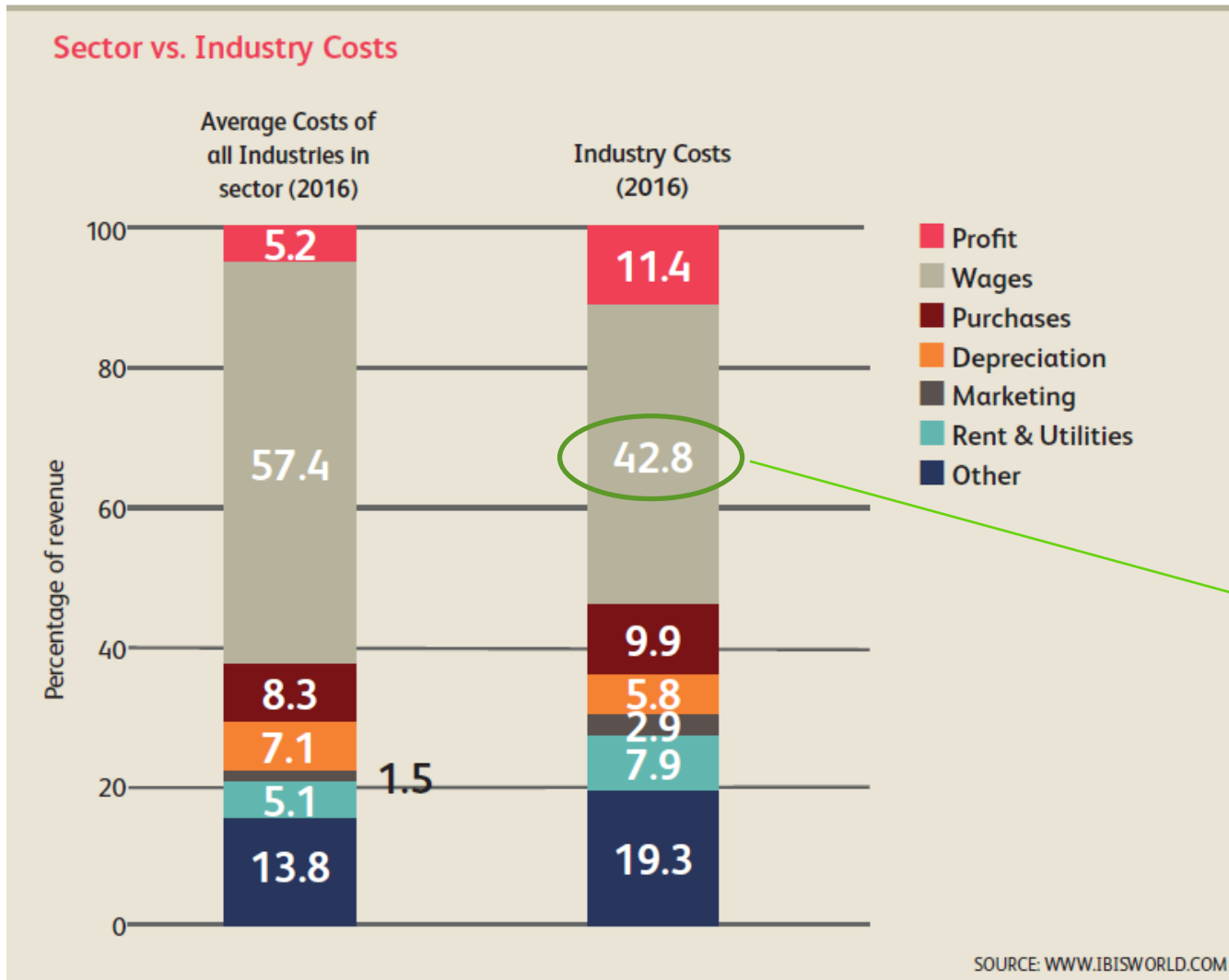
Indirect Spend Reduction  
Initiatives

Administrative Shared  
Services





# TYPICAL COST PROFILE





# ACADEMIC MARGINS

## CHALLENGES AND CONSTRAINTS

### What we hear:

- Difficulty gaining agreement on margin definitions
- Do not have resources or capacity internally to perform required analysis
- Have heard about a number of methods, but not sure of right approach
- Not sure how to gain agreement amongst stakeholders on results
- Systems and reporting can not produce needed information
- Data is not good or reliable





# ACADEMIC MARGINS

## TERMINOLOGY AND CALCULATIONS

### Academic Financial Contribution Margin

Student Type (Rate)  
X Credit Hours

#### ***Gross Tuition***

- Institutional Aid
- Refunds

+ Course Fees

#### **Net Revenue**

- Instructor cost by section
- Non-instructor variable direct costs

#### **Direct Cost**

Academic Financial Contribution Margin

### Academic Financial Gross Margin

Student Type (Rate)  
X Credit Hours

#### ***Gross Tuition***

- Institutional Aid
- Refunds

+ Course Fees

#### **Net Revenue**

- Instructor cost by section
- Non-instructor variable direct costs
- Other OpEx (fixed direct costs)

#### **Academic Department Costs**

Academic Department Gross Margin





# ACADEMIC MARGINS

## MARGIN DIMENSIONS

### Model Capabilities

- Contribution Margins at various attributes:
  - ✓ Program
  - ✓ Department
  - ✓ Course
  - ✓ Section
  - ✓ Major
  - ✓ Instructor
  - ✓ Instructor-type
  - ✓ Student
  - ✓ Student-type
  - ✓ Term

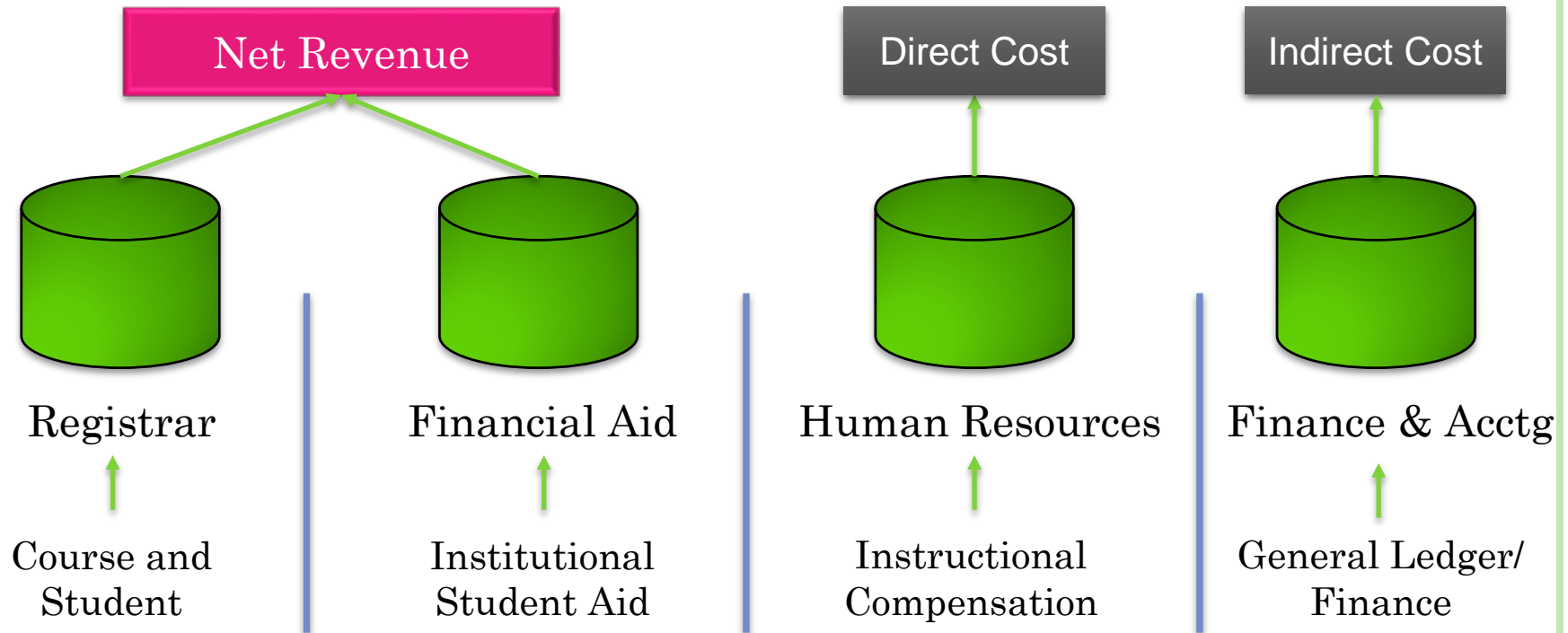
### Benefits

- Establishes benchmark for year-to-year improvements
- Supports what-if scenario analysis & future planning, including:
  - Changes in tuition rates
  - Growth/declines in student counts and enrollment
  - Discontinuation of a section, course or program
  - Change in cost of instruction
  - Efficiency changes (e.g. changing assumption on faculty workload)



# ACADEMIC MARGINS

## MARGIN DIMENSIONS



### KEY CHALLENGES

- Multiple disparate systems
- Timely data cleansing activities and error resolution
- Limited visibility into detailed cost data
- Reconciling data to General Ledger
- Cut-off issues with academic snapshots and summer session
  - Academic Year v. Fiscal Year
- Complexity extracting necessary data



# ACADEMIC MARGINS

## CAPABILITIES AND EXAMPLE INSIGHTS

### Highest five contribution margin academic *programs*

Academic Program	Tuition	Course Fee	Aid	Direct Expense	Margin Total	Margin %
Undeclared	\$12,567,105.38	\$17,775.00	\$1,630,764.26	\$5,250,648.30	\$5,703,467.82	45.32%
Non Degree	\$6,690,403.00	\$94,755.00	\$578,131.28	\$3,718,815.19	\$2,488,211.54	36.67%
Business	\$12,547,085.00	\$515.00	\$1,239,066.22	\$8,888,123.50	\$2,420,410.28	19.29%
Nursing	\$8,952,651.13	\$0.00	\$928,030.69	\$5,777,688.49	\$2,246,931.95	25.10%
Education	\$8,074,563.00	\$480.00	\$681,344.50	\$5,236,023.13	\$2,157,675.37	26.72%

### Lowest five contribution margin academic *programs*

Academic Program	Tuition	Course Fee	Aid	Direct Expense	Margin Total	Margin %
PPM	\$940,281.00	\$0.00	\$233,643.00	\$1,501,216.74	(\$794,578.74)	-84.50%
Applied Medical Sciences	\$202,882.00	\$0.00	\$40,788.50	\$823,868.24	(\$661,774.74)	-326.19%
CPD	\$376,314.00	\$0.00	\$130,834.00	\$643,599.41	(\$398,119.41)	-105.79%
American Studies	\$321,252.00	\$0.00	\$102,837.00	\$578,372.50	(\$359,957.50)	-112.05%
MPH-HPM	\$670,544.00	\$0.00	\$173,984.00	\$836,394.70	(\$339,834.70)	-50.68%





# ACADEMIC MARGINS

## CAPABILITIES AND EXAMPLE INSIGHTS

### Highest five contribution margin academic *departments*

Academic Department	Tuition	Course Fee	Aid	Direct Expense	Margin Total	Margin %
Mathematics	\$8,175,122.75	\$71,381.25	\$1,093,748.25	\$2,704,525.44	\$4,448,230.32	53.94%
Education & Human Development	\$11,988,619.50	\$0.00	\$1,054,210.95	\$6,494,665.76	\$4,439,742.79	37.03%
School of Nursing	\$8,800,282.50	\$0.00	\$734,896.66	\$5,765,537.10	\$2,299,848.74	26.13%
Business	\$11,328,549.50	\$0.00	\$1,031,514.73	\$8,569,048.30	\$1,727,986.47	15.25%
MFA Creative Writing	\$2,155,626.00	\$0.00	\$29,261.80	\$440,822.15	\$1,685,542.05	78.19%

### Lowest five contribution margin academic *department*

Academic Department	Tuition	Course Fee	Aid	Direct Expense	Margin Total	Margin %
PPM	\$1,111,364.00	\$0.00	\$280,057.70	\$1,806,317.69	(\$975,011.39)	-87.73%
Applied Medical Sciences	\$393,310.00	\$0.00	\$88,627.21	\$907,996.51	(\$603,313.72)	-153.39%
Community Planning Develop	\$294,324.00	\$0.00	\$102,354.87	\$644,873.21	(\$452,904.08)	-153.88%
Computer Science	\$1,271,112.25	\$0.00	\$151,457.51	\$1,529,390.56	(\$409,735.82)	-32.23%
American Studies	\$315,741.00	\$0.00	\$102,837.00	\$600,971.67	(\$388,067.67)	-122.91%





# ACADEMIC MARGINS

## CAPABILITIES AND EXAMPLE INSIGHTS

### Highest five gross margin academic *departments*

Academic Department	Tuition	Course Fee	Aid	Direct Expense	Indirect Expense	Margin Total	Margin %
Education & Human Development	\$11,988,619.50	\$2,265,526.15	\$1,054,210.95	\$6,494,665.76	\$1,193,964.61	\$5,511,304.33	45.97%
Mathematics	\$8,175,122.75	\$53,898.39	\$1,093,748.25	\$2,704,525.44	\$829,983.66	\$3,600,763.80	44.05%
MFA Creative Writing	\$2,155,626.00	\$2,497,543.39	\$29,261.80	\$440,822.15	\$1,814,416.65	\$2,368,668.79	109.88%
School of Nursing	\$8,800,282.50	\$556,048.73	\$734,896.66	\$5,765,537.10	\$1,195,633.15	\$1,660,264.32	18.87%
Psychology	\$4,110,281.75	\$0.00	\$529,181.88	\$1,930,154.19	\$188,906.57	\$1,462,039.11	35.57%

### Lowest five gross margin academic *departments*

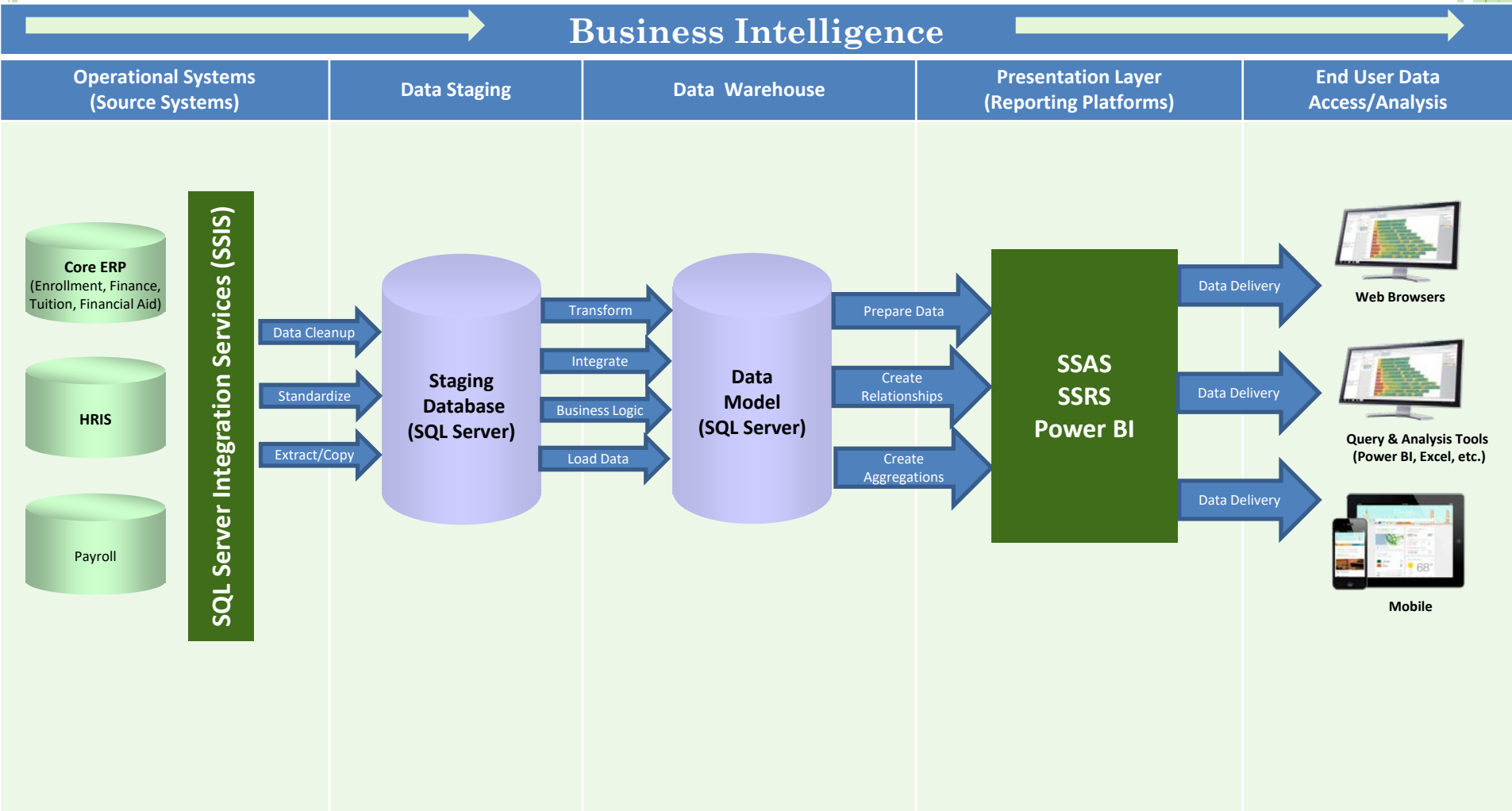
Academic Department	Tuition	Course Fee	Aid	Direct Expense	Indirect Expense	Margin Total	Margin %
PPM	\$1,111,364.00	\$0.00	\$280,057.70	\$1,806,317.69	\$395,681.53	(\$1,370,692.92)	-123.33%
Music	\$3,573,166.00	\$307,629.77	\$713,473.89	\$2,980,758.03	\$1,251,944.95	(\$1,065,381.10)	-29.82%
Applied Medical Sciences	\$393,310.00	\$5,350.00	\$88,627.21	\$907,996.51	\$266,336.53	(\$864,300.25)	-219.75%
MPH-HPM	\$685,195.00	\$0.00	\$171,984.02	\$892,268.55	\$341,264.86	(\$720,322.43)	-105.13%
Art	\$2,220,450.75	\$123,445.58	\$323,333.14	\$1,841,308.89	\$792,505.73	(\$613,251.42)	-27.62%





# DATA PRESENTATION

## EXAMPLE DATA FLOW ARCHITECTURE





## ACADEMIC MARGINS

What is your biggest challenge to overcome in order to implement a process to review academic contribution margins?

- A. Proper ownership or sponsorship
- B. Agreement on methodology
- C. Data integrity
- D. Resource capacity
- E. Other?





## CONCLUSIONS

- Visibility to academic financial contributions can drive impactful sustainability improvements
- Ownership required from the top of the organization
- Need to have a vision from the top – how will the data be used
- Define the model design, document assumptions, implement processes to support improvements
- Develop a management plan that cascades accountability from the top of the organization to improve year over year margin







# Questions and Answers?

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