



PRESENTATION HANDOUT

# Data Analytics Culture

David Lawrence

Vice President for Global  
Campus and Continuing  
Education



**Michigan Tech**  
GLOBAL CAMPUS

# Agenda

- Background
- Developing Data Acumen
- Creating & Driving Culture through Data
- Building a Cultural Skill Set



The background of the slide features a complex network diagram. It consists of numerous white circular nodes of varying sizes, interconnected by thin white lines. The nodes are scattered across the frame, with some appearing more prominent than others. The overall aesthetic is clean and modern, typical of a digital or data-themed presentation.

# How do you know if you have a Data Culture?



# Facts on Data

- Over the **last two years**, more data was created than in the entire previous history of humankind (IBM, 2016; Marr, 2016).
- **1.7 megabytes** of new information will be created every second for every person on earth by the turn of the decade (Evans, 2011; Gantz & Reinsel, 2012; Marr, 2016).
- By 2025, it is expected that the digital universe will encompass more than **50 billion devices and more than 180 billion zettabytes** (Marr, 2016; IDC, 2014).



# Bottom Line

Update business models to **meet the needs and demands** of students, faculty, advisors, and administrators

- **Students** need better insight into decisions on academic careers.
- **Faculty and advisors** need tools to improve student success.
- **Administrators and university presidents** need data resources to create new programs that move your institutions into the future.





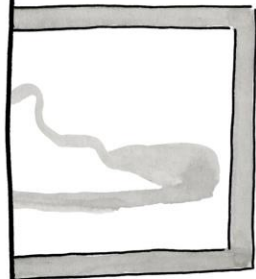
“While collecting data is simple, it’s what your organization does with data, however, which defines the culture” (Stringfellow qtd. in Powers & Henderson, 2018, p.7).



# Developing Data Acumen



LET'S SOLVE THIS PROBLEM BY  
USING THE BIG DATA NONE  
OF US HAVE THE SLIGHTEST  
IDEA WHAT TO DO WITH



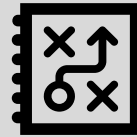
TOM  
FISH  
BURNE

# Developing Data Acumen



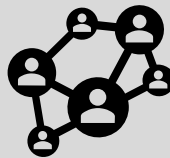
## **Business Strategy:**

**Make better and quicker decisions.**



## **Strategic conversations:**

**Move from *what is going on* to *what to do about it*.**



## **Relationships:**

**Share common knowledge and develop understandings**

# Measuring Data Culture: Data Model



Organize



Collect



Analyze



Interpret



Present



Decide





# The Challenge



Versus



# Data vs Accountability Culture

## DATA CULTURE

- Shared understanding
- Communication of information
- Awareness
- Alignment

## ACCOUNTABILITY CULTURE

- Metrics
- External reporting (e.g. accreditation, mandates)
- Conclusions based on judgments
- Results used to make decisions on programs, positions, campuses, and students that do not meet standards



# Data Analytical Culture - Benefits

- Improved communication
- Increased understanding of institutional metrics and trends

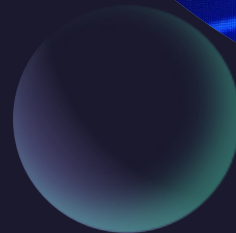


# Data Analytical Culture



- Drive relationships
- Build bridges
- Culture first

“Organizations that successfully use data realize more growth than their counterparts that are not using data effectively”  
(Powers & Hendersen, 2018, p. 5).



# Drive Relationships

- Internal team:  
enrollment /  
marketing
- External team:  
finance, academics,  
board







**"JOAN, I NEED YOU TO PREPARE AN OBJECTIVE ANALYSIS  
PROVING I'M CORRECT."**

# Build Bridges to Other Departments



Creating agenda  
topics



Building  
confidence



Gaining insight

# Create Culture

- Davenport University
- Michigan Technological University





# Examples: Davenport & Michigan Tech

## Private | Public University

- Building the Team
- Sharing Value
- Increasing Trust
- Communicating Effectively



# No Data Culture: Disadvantages

- Data rich, but interpretation poor
- Decisions made on “parts” of data
- Campus myths prominent in a vacuum of data
- Concerns about accuracy, trustworthiness and relevancy of data



# Growing a Cultural Skill set

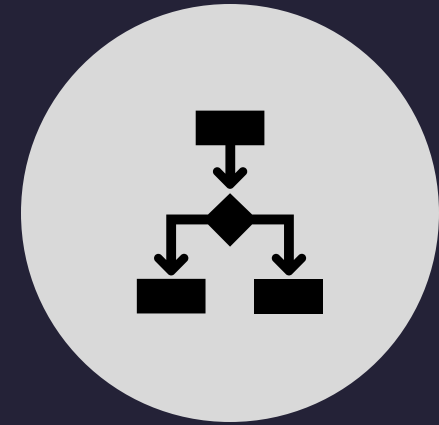
# Growing a Cultural Skill Set



**UNIQUE  
KNOWLEDGE**



**DATA /  
FORECASTING**



**JUDGEMENT /  
DISCERNMENT**





# Conclusion

Developing Data Acumen

Creating & Driving Culture through Data

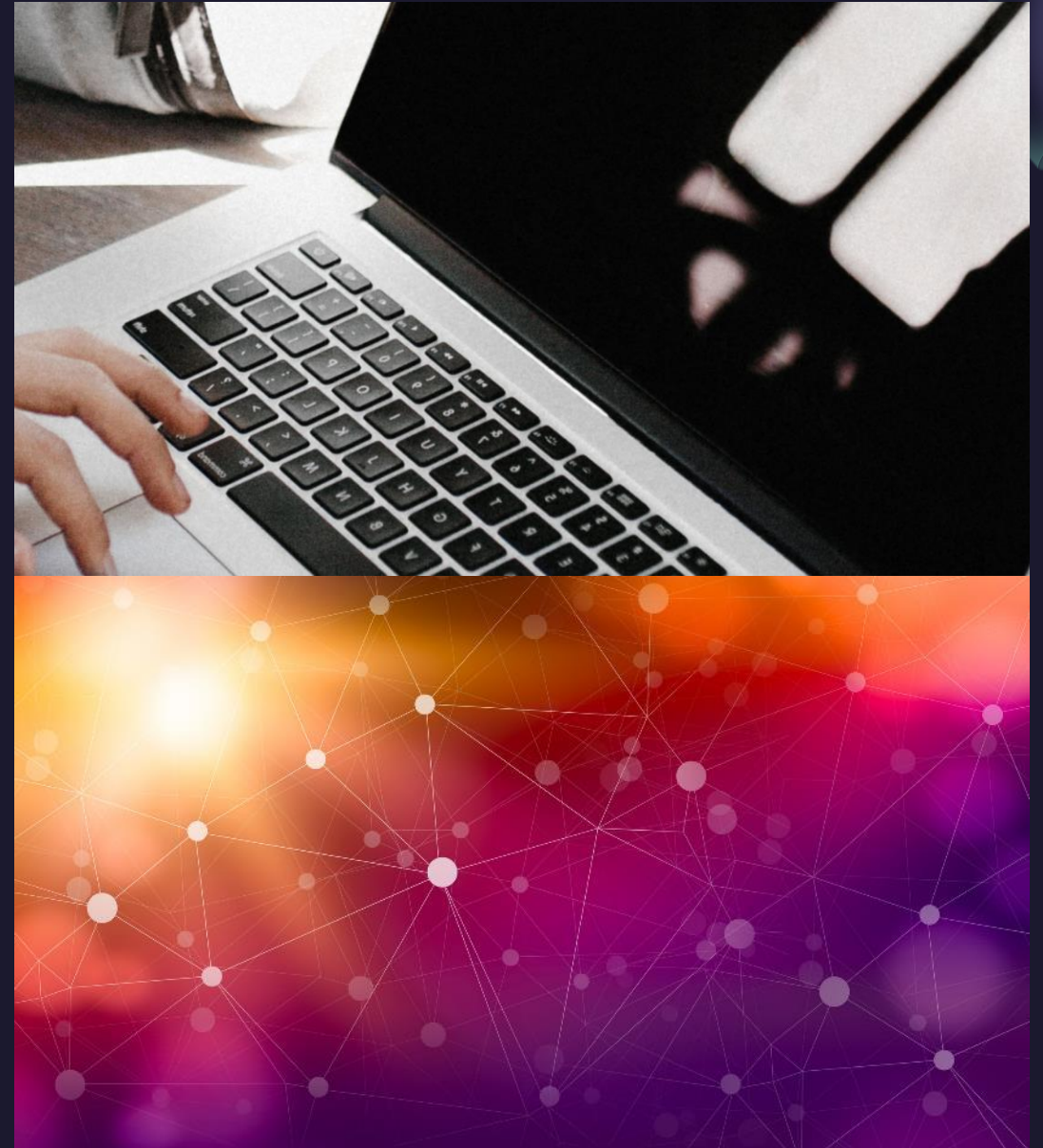
Building a Cultural Skill Set

# Thank You!

David Lawrence

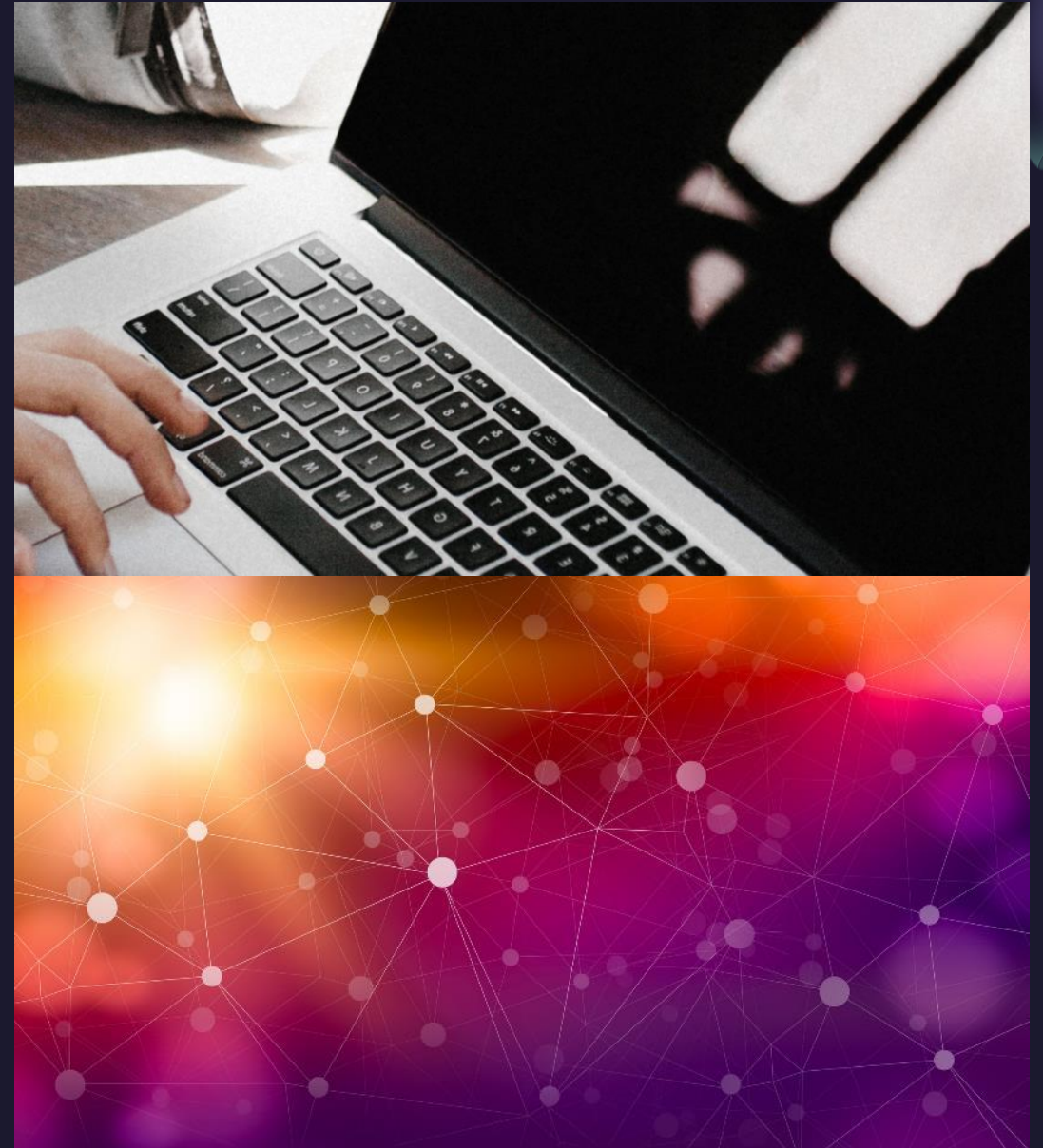
Vice President for Global Campus and  
Continuing Education

[dlawrenc@mtu.edu](mailto:dlawrenc@mtu.edu)





# Questions?







# References / Recommended Reading

Gagliardi, J., Parnell, A., & Carpenter-Hubin, J. (2018). The analytics revolution in higher education. *Change: The Magazine of Higher Learning*, 50(2), 22-29. doi:10.1080/00091383.2018.1483174

Powers, K., & Henderson, A. E. (2018). *Cultivating a data culture in higher education*: Routledge New York.

