



Louisville Kentucky | September 14-18, 2025



Data Analytics Roundtable

Progress through Sharing

Roundtable Agenda

- Why are we here? (5 minutes)
 - Working group experience
 - Higher Education clients / recent projects
- Data Analytics Building Blocks (5 minutes)
 - Process Map
 - Body of Knowledge
- Overcoming common roadblocks (15 minutes)
- Let's do some planning together (40 minutes)
- Next steps / resources (5 minutes)

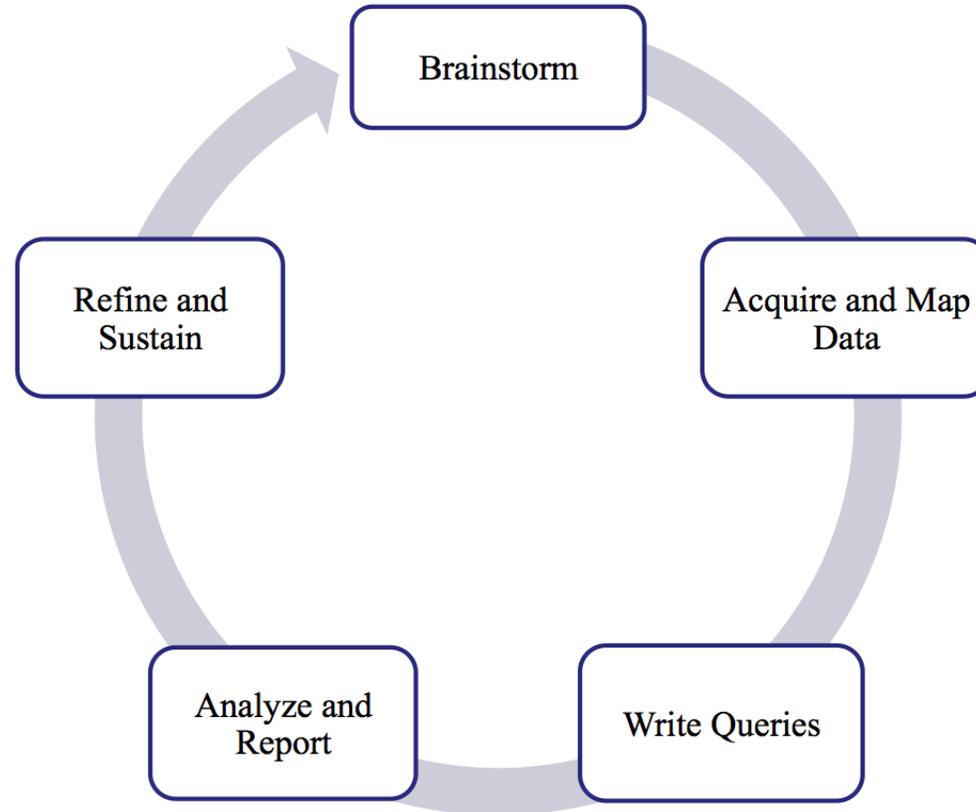
Data Analytics and Artificial Intelligence

Building Blocks

	Past	Present	Future
Information	What happened? Data Analysis as <u>reporting</u>	What is happening now? Data Analysis as <u>alerts</u>	What will happen? Data analysis as <u>extrapolation</u>
Insight	How and why did it happen? Data analysis as <u>modeling / design</u>	What's the next best action? Data analysis as <u>recommendation</u> (value add)	What's the best / worst that can happen? Data analysis as <u>prediction / simulation</u>

This is the foundation of Artificial Intelligence, so if you care about AI use and governance, this session is also valuable for you

A Repeatable Process for Data Analysis QuickStart Methodology (2006 – present)



A Repeatable Process for Data Analysis QuickStart Methodology (2006 – present)

Brainstorm	Acquire and Map Data	Write Queries	Analyze and Report	Refine and Sustain
<ul style="list-style-type: none">• Plan audit objectives• Understand data sources• Review risks and controls• Select audit queries• Prioritize audit queries	<ul style="list-style-type: none">• Export data• Secure• Balance• Transmit• Import• Balance	<ul style="list-style-type: none">• Write and test queries• Review initial results• Refine queries and filter criteria	<ul style="list-style-type: none">• Prioritize by size, age• Prioritize by source• Assess root cause• Prioritize with audit objectives	<ul style="list-style-type: none">• Fix root cause• Refine or add inputs• Lower or raise limits• Determine need for ongoing monitoring

Body of Knowledge – Skills needed for Data Analytics Success

- Project Management
- Data Acquisition and Manipulation
- Statistical Techniques
- Visual Reporting Techniques
- Communication
- (Finance and Audit) Domain Expertise
- Change Management / Strategic Thinking



Who on your teams has some or most of these skills?

How can you supplement these base skills with others at your university?

What are your obstacles?



Let's do some planning together

Intermediate – Insights from Multiple Files



Let's do some planning together

Advanced – Quantitative or Qualitative Analysis



Data Analytics Roundtable

Additional Resources

- ACUA Working Group
- Microsoft Community Gallery
- Tableau Public
- Tableau User Group - Higher Education
 - Appalachian State Data Analytics Day
 - Slack Channel (run by Ohio State)
- ACUA Higher Ed Kickstarter Guides
- Other resources