

Analytics Challenge Data Discovery Process

1. Workshop two possible problems - at the end of the Kickoff Event select one as the focus of your competition entry.
2. Within one Competition Track, identify a question to answer that narrows the focus of the analysis or visualization and that can be addressed with public data.
3. Ideally "Data" would be completed before "Feedback", and two ideas vetted at the end of Kickoff - but this is not required.

DATA Review Inventory and Identify Questions for Agencies/Data Providers		FEEDBACK Responses to Data Questions from Agencies/Data Providers			
PROBLEM Statement	METRICS Measurable Output	DATA Relevant	METHODOLOGY Outline	SCOPE Project Tasks with Timeline	
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Before the Kickoff Event:

1. Look at the Analytics Challenge [Data Inventory](#), and the [Colorado Information Marketplace](#).
2. Review resources in the [Colorado Data Analytics Challenge Knowledge Base](#).
3. Have questions prepared to talk with [Data Providers](#).
 - a. Fill out the “Data” section at the top of the worksheet to prepare for the event.
 - b. Enter answers you receive in the “Feedback” area at the top of the tool.
 - c. If you don’t know where to start, try using these sample questions:
 - i. Ask them about their research - What information do you use? What kinds of specific issues or questions are you facing now that you would like more insight on? What kind of research do you conduct?
 - ii. Ask them about their datasets - How the data was created? How is the data collected and what is the historical context? How frequently the data is updated? What is update process? How many people have contributed to or edited this data since its creation (ie one editor, or many people entering info)? Who are the primary data users, how does the data currently inform decisions?
 - iii. Create descriptive stats on interesting data - What categories are in the data? What stories does the data tell from basic exploration? What datasets can be combined by a theme or direct relation/join?

During the Kickoff Event:

1. At the Kickoff Event, a presentation will be given by representatives of each Competition Track. ****Your work investigating the inventory will help you identify/articulate problems to solve as you listen to the presentations.**
2. Use tool to workshop two possible problems to (1) identify your focus for the competition, (2) get good info from data providers and (3) find a problem that can be solved with public data.

Using the Tool:

Data (top): Fill with any questions you have about available datasets from your discovery research.

Feedback (top): Ask your data questions to the Data Providers and document on the worksheet.

Workshop two possible problems to narrow your focus and build requirements for your analysis

1. **Problem (x2):** Identify a problem or question you want to address with your analysis or visualization. Specifically:
 - a. Within one Competition Track, identify a question to answer that narrows the focus of the analysis or visualization and that can be addressed with public data.
 - b. A single clear compelling message of identified problem and solution.
2. **Metrics/Output (x2):** What is the outcome of your analysis? What measurable indicators?
 - a. Talk with Data Providers about key indicators in datasets.
3. **Methodology (x2):** What methodological approaches can you use to address the problem.
 - a. Outline the method and determine what tools will you use.
4. **Data (x2):** Identify what data you can use to answer your problem
5. **Scope (x2):** Outline the workflow and timeline of your project
 - a. Determine if it can be completed in a month

Pursue the more viable of the two solutions, proceed with analysis and competition entry

Checkpoint: be sure to participate in the [virtual checkpoint](#)