

Zayo / Big Data: Business Intelligence Collaboration

Goal

1. **Develop an understanding of Zayo's dataset landscape**
 - a. What does the data tell you about the current business model?
 - b. What is the general relationship between data points?
 - c. What questions do you have about the data itself?
 - d. What other data attributes would be helpful?
 - e. What can you learn from your classmates' analyses?
2. **Develop experience with scalable methods and tools**
 - a. What methods and tools do you use to ask questions and share insight on the data?
 - b. What are the pros and cons of these methods and tools?
 - c. What methods & tools did your classmates' employ and how effective are they?

Day 1

- Make sense of the data.:
 - Get a basic understanding of the data landscape and **relationships between data points**. For instance, use basic statistical methods to get an understanding of the current landscape as represented by the datasets.
- Challenge yourself to derive meaning in a way that is:
 - **Reproducible**. Your steps should be reproducible (programmatic) in the sense that you can easily tweak variables or add analysis without manually re-performing all of your previous steps.
 - **Scalable**. Your steps should be scalable in the sense that the analysis can be performed effectively and/or efficiently as the dataset size grows.
- While digging, what questions about the data arise?
 - Is there any additional contextual understanding that would help you make sense of this data? Are there any other data attributes (columns) that would help you gather insight?
 - **Make note of your top questions**. These will be sent to the Zayo Big Data team.
- Present an understanding of the data to your classmates.
 - What method is best for presenting this information?
 - A data visualization, a narrative, a quantity?
 - Have an understanding of *why* you chose this method.
- As an audience member during each presentation:
 - Did the presenter deliver any new insight that you had not derived?
 - Did the presenter give you a more complete understanding of the data?
 - How *reproducible* was the presenter's data analysis approach?
 - How *scalable* was the presenter's data analysis approach?

- How *effective* was the presenter's method of information presentation?

Deliverable

1. Create a 1 page profile of Zayo's data by exploring the relationships between the data points. This should be an overview of the business as described by the data.
 - a. You can profile their data using data visualizations, metrics, narratives, or a combination of methods
2. Additionally, submit a script that shows how you programmatically run the data analysis.
 - a. Use a method that can handle the analysis as the data size grows.