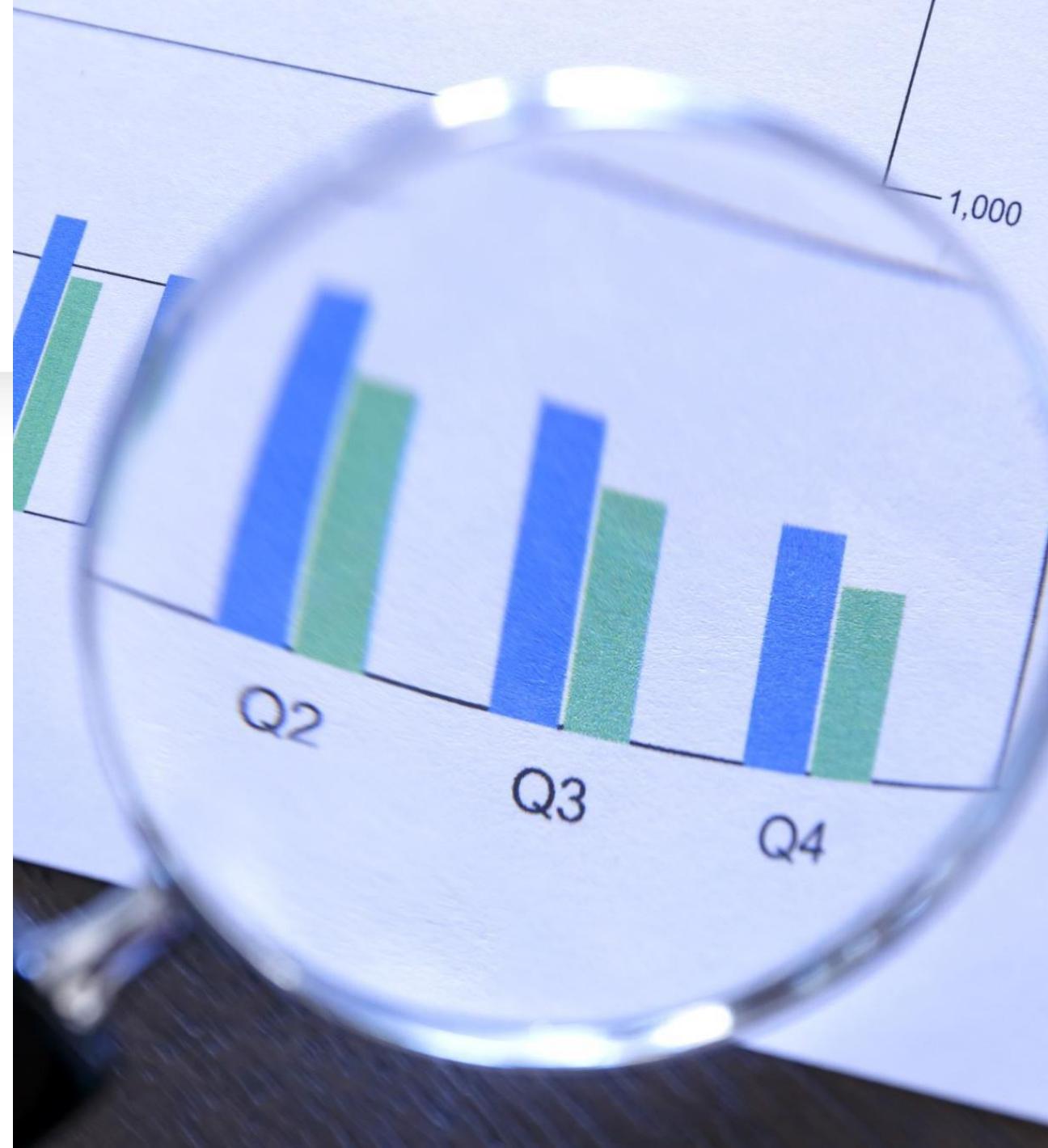


Week 11

Manual Data Labelling

- Challenges automatically classify session
- Attempted initial logic to use average speed, rpm, throttle position.
- Second attempt using ROC, requires more testing

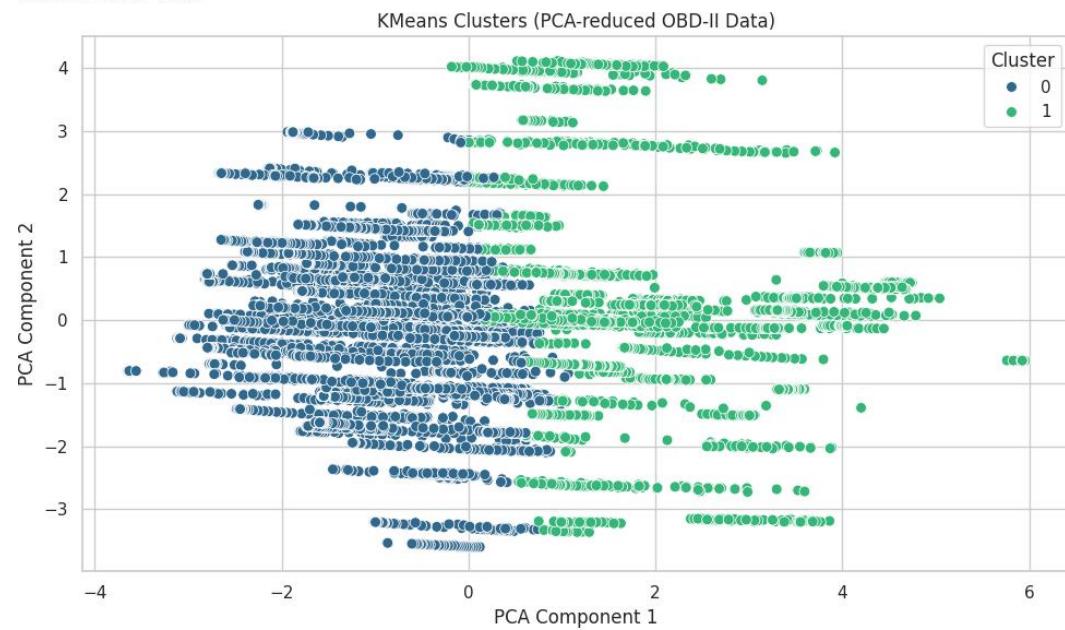


Unsupervised Learning Exploration

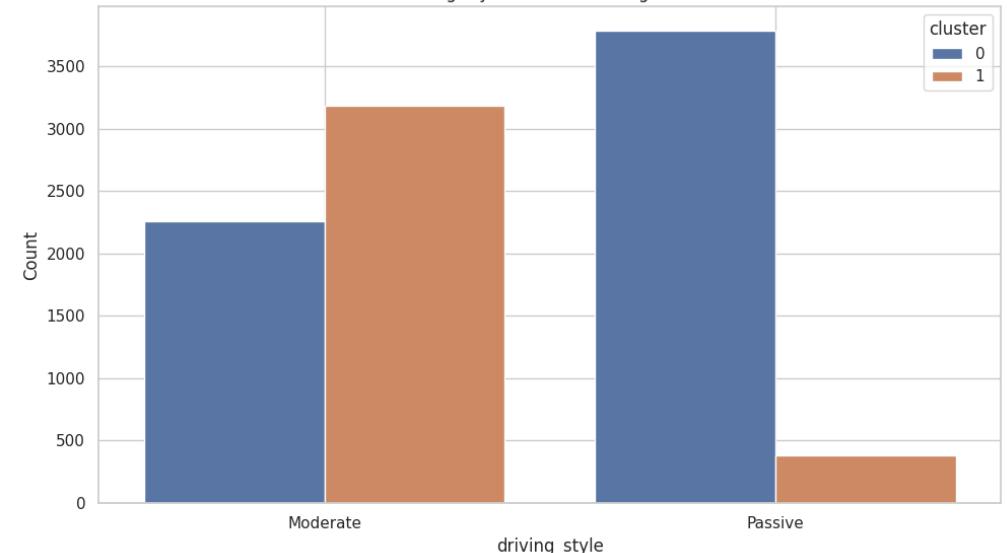
Proposal

- Use unsupervised learning to identify natural clusters in data
- Classify clusters manually by assigning labels from cluster statistics
- Less subjectivity
- Scalable to much larger datasets

Silhouette Score: 0.169



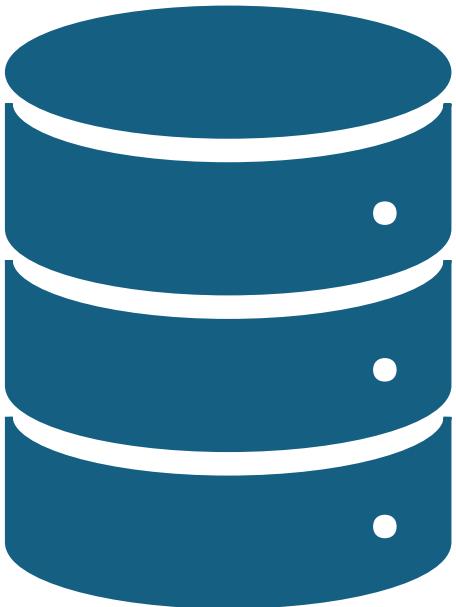
Driving Style vs. Cluster Assignment



Automation Cloud Service

Dashboard was implemented this week
on the server, deployed on Hugging Face,
containerized in Docker





Data Cleaning Pipeline & Output

Removed Fully Empty Rows

Dropped rows with no sensor or timestamp data.

Dropped Rows with >50% Missing Values

Ensured integrity by removing sparsely populated entries.

Filtered Out Rows Without Driving Style Labels