Engineering a Model

Demand Prediction - Machine Learning Team

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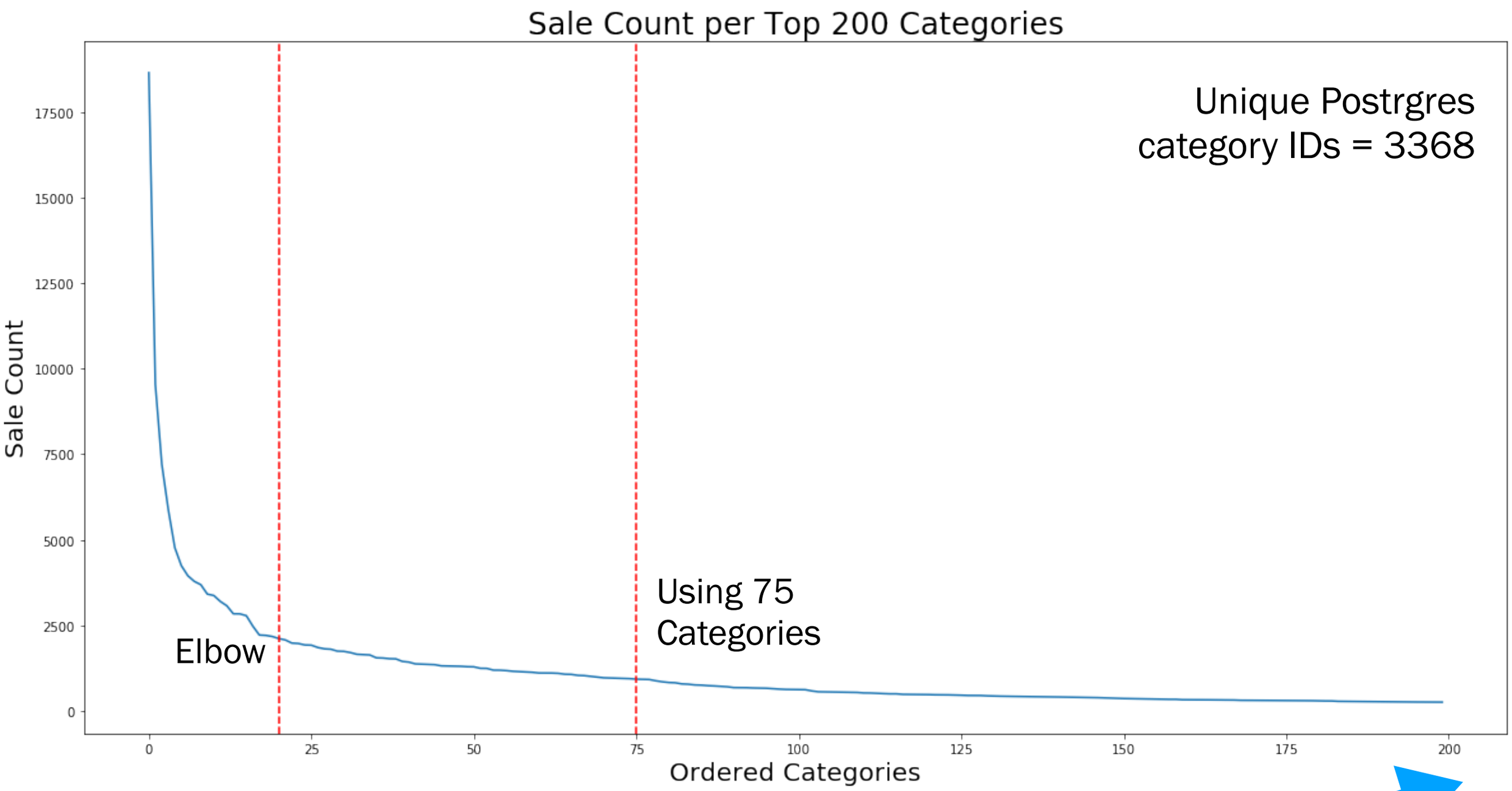
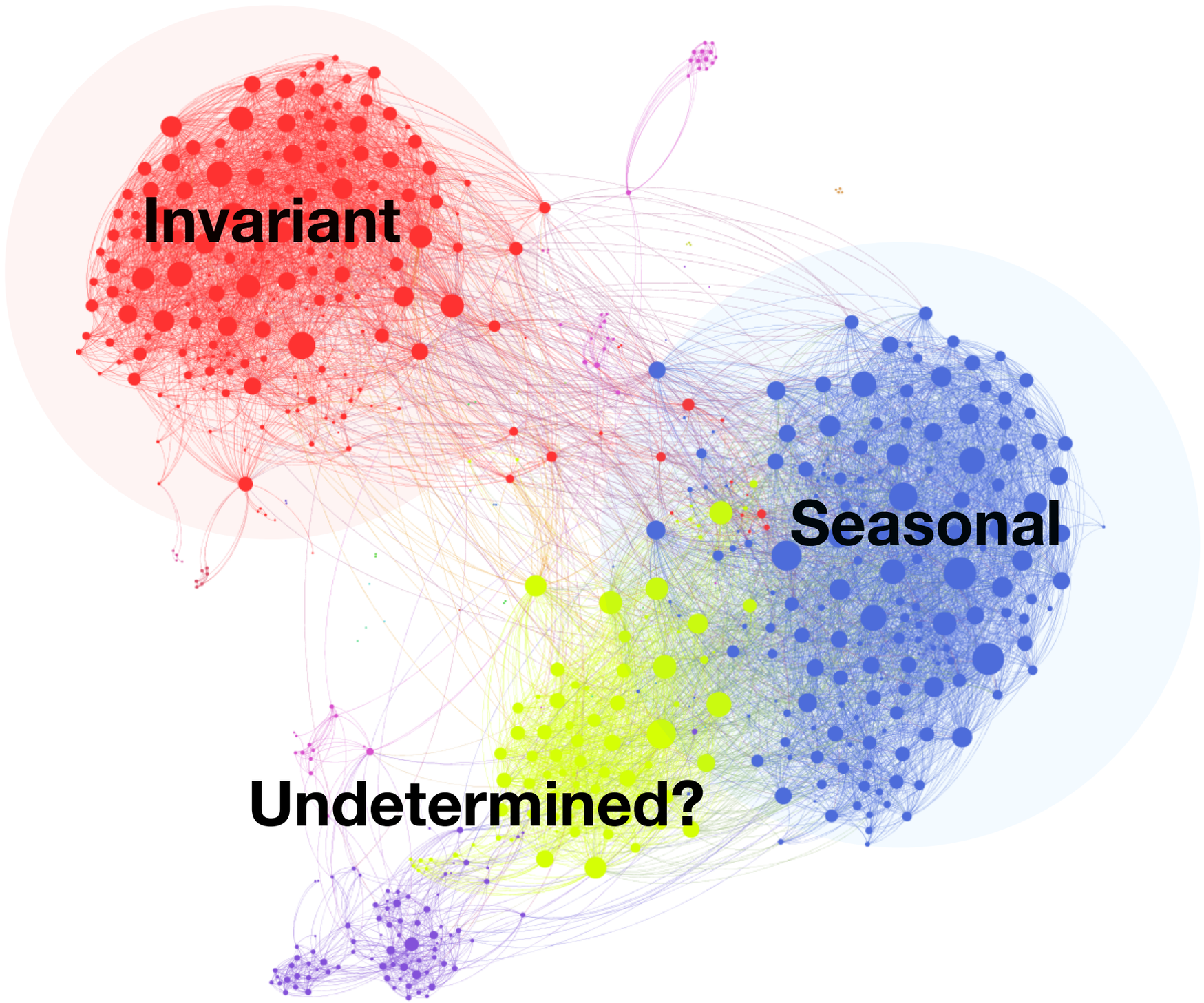
Model Constraints



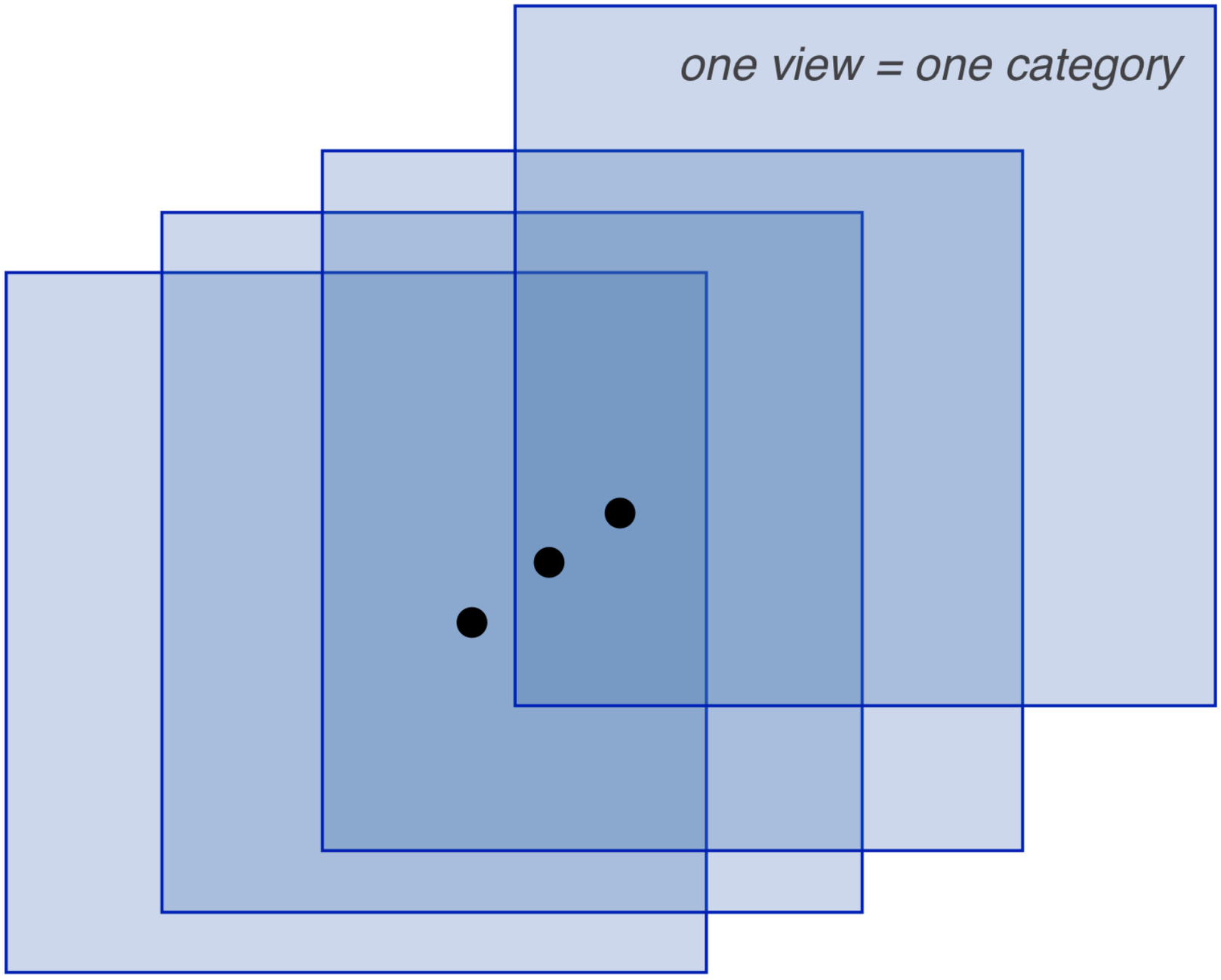
Remaining 3168 is the long tail

Cluster Top 75 Categories



How we would like Data?

cols = x Features + response var *y* + [MM/YYYY] DateTime



Features

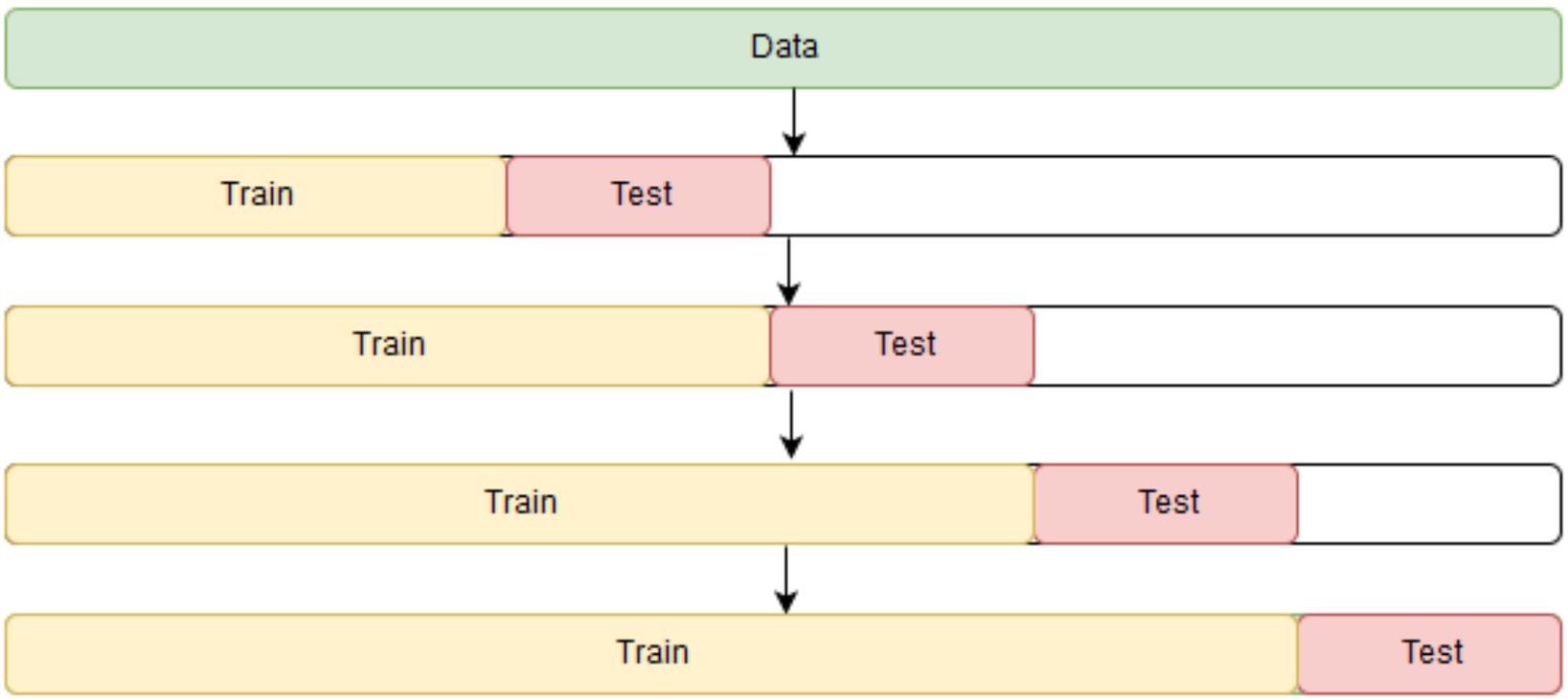
inventory_sold_ratio
dollar_sold_ratio
volume_moved
product_rating_average
product_rating_delta
total_sales
contains_sold_out_product
large_inventory_drop
is_pos_sentiment
is_neg_sentiment
is_neutral_sentiment
count_of_nodeIDs
is_in_campaign

Testing Training Regimens

The Problem. Latent Temporal Components.

The Solution. **Walk-Forward Validation**.

Does not assume independence or identical distributions.



Therefore… `sklearn.model_selection`.TimeSeriesSplit

Collaborations

- EDA team
  - Cluster Analysis of Top 75 Categories
  - Correlation heat map matrix
- Schema & Query Team
  - Given accepted/answerable queries, ensure mediated schema will return from wrappers/ source DBs in the correct format.

Thank You