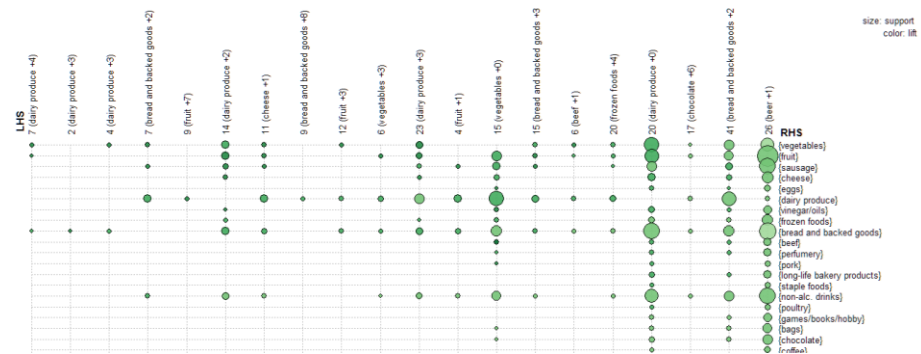# CUSTOMER ORDER PREDICTION

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Agenda

- Model Demonstration
  - Order Prediction
  - Association Rules
  - Features:
    - Single-line command interface
    - CSV I/O – ready for any pipeline integration
    - Robust forecasting algorithms
    - Analysis on multiple scales
    - Forecast results from multiple models
    - Vast output of auxiliary data (useful for further analysis)
- Discussion for adjustments in I/O
- Future Model possibilities

Model

- Order Prediction
  - How many orders expected in the next 7 days?
  - Results from multiple prediction algorithms

- Association Rules
  - Which items are being frequently ordered together?
  - Can lead to better pricing strategy

- Note:
  - Input data format:
    - Dates to be in 'YYYY-MM-DD' format
    - CSV files to be clean
  - Input Order data
    - Reasonable order quantity to get accurate predictions

Future Extensions

- Item-wise sale predictions
  - Cost-cutting
    - Drop the low sale items from menu for specific days
  - Inventory management
    - Right levels of stock reduces waste, improves quality
  - Labor schedules
    - Improves customer satisfaction, increases work-life balance for employees
- Customer churn analysis
  - Who are the customers mostly likely to stay, who are to deflect
  - Design custom loyalty programs to increase sales
  - When is the next customer visit most likely?
  - Price analytics: what would be the effect of price increase on each?

THANK YOU

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