

# Home Appliance Demand Forecasting

Tiger Analytics Case Study



# **BACKGROUND**

A US based consumer durable goods company wants to project total US industry demand for its 13 product categories. You are required to predict the industry sales for the 13 product categories for two quarters (2015-Q3, 2015-Q4). A reasonably accurate demand projection will enhance client's decisions on investment, marketing support, and other resource allocations.

### **OBJECTIVE**

Generate quarterly forecasts for Industry Shipment Demand for Q3 and Q4 of 2015 for each of the 13 product categories - 2 Door Bottom Mount, Front Load, Built-in Ovens, French Door, Dishwasher, MHC, Top Mount, Freezer, Free Standing Ranges

### DATA

You have been provided the following data:

- Historical weekly shipment information from 2010
- Macro-economic data like GDP, interest rates, etc.

## **SCOPE**

- Explore and understand the data provided, Process the data to derive metrics as required.
- In addition to the Shipment data, you may choose to explore provided macro-economic factors
- Use analysis and visualization tools of your choice
- Evaluate accuracy, model fit etc. by holding out a sample for testing.

### **DELIVERABLES**

Provide the forecasts for 2015-Q3 and 2015-Q4 in the specified format (file provided). These will be compared against the actuals we have for this period. Include a well-documented code that you used for the analysis.