Technical assignment
Task: Sales Forecast and Drivers Analysis
Time to Complete: 3 hours
Data: Input.csv
Language : Python 2.7 /3.5+
IDE : PyCharm and Jupyter Notebook

Packages: Feel free to use any package you are comfortable with and have on your machine. We highly recommend that you factor time into account and not spend time in long installations.

In the following 3 hours, you are required to solve a sales forecast problem given what the ecommerce merchant believes is driving the sales of their product. You have 3 years of available data in the supplementary file.

Please answer the following questions:

1. How much will the seller sell on Aug-2019, Sept-2019 and Oct-2019 according to your model? What are the MAPEs (Mean Absolute Percent Error) for these months using your model?

2. What are the most impactful drivers in your model? Show evidence for that.

3. What will you recommend the ecommerce merchant to do in order to increase their sales?

Please also provide:
1. Any piece of code you have created, either in Pycharm and in Jupyter-Notebook

2. Data Preparations steps, if any.

3. A Model that solves the problem (e.g. if we run your code it will produce the model object with which you derived your answers, with seed).

4. Your model's accuracy

5. A .ppt file, that answers the above questions, with evidence in the code.

*Please Note: We should be able to run your code.

Data Description:

- You are provided with data in a CSV file called input.csv
- The file contains daily sales data for a US manufacturer's online store of one of their products. The relevant column name is ' units_sold ' – dependent variable.
- The file also contains features the seller has collected such as daily price, daily inventory, marketing investment indicators, holidays and date related indicators (independent variables).
- Most features are grouped with their names group such as: grp_A_1 to grp_A_xx, grp_B_1 to groupB_xx etc.

Thank you for your time and attention on this assignment. Looking forward to the results and good luck!
Chad