Name: Andrea Perez

Email: apereza1@asu.edu

Country: United States

College/Company: ASU/Department of VA

Specialization: Data Science

GitHub Repo link: https://github.com/aperezace20/Data-Science-Retail-Forecasting/tree/main/Week%2010:%20Deliverables

Problem description:

The large company who is into beverages business in Australia. They sell their products through various super-markets and also engage into heavy promotions throughout the year. Their demand is also influenced by various factors like holiday, seasonality. They needed forecast of each of products at item level every week in weekly buckets.

ML Problem:

The time series data showed a range of patterns, some with trends, some seasonal, and some with neither. At the time, they were using their own software, written in-house, but it often produced forecasts that did not seem sensible. Company wanted to explore power of AI/ML based forecasting to replace their in house local solution.

Steps taken:

1. Group sales by month.
2. Create a bar graph of sales and months.
3. Separate week into its own column in the database.
4. Group sales by weeks.
5. Group month by in-store promo, catalogue promo, and end promo.
6. Group store end promo by weeks.
7. Analyze sales with catalogue promo, store end promo, and in-store promo using a bar graph.
8. Find the max of sales and the max of sales for each month.
9. Create a week by week analysis of sales trend.
10. Write final recommendations.

Deadline:

Deliverables	Date
Week 9: deliverables	2 March 2023
Week 10: deliverables	9 March 2023
Week 11: EDA Presentation and proposed modeling technique	16 March 2023
Week 12: Model Selection and Model Building/Dashboard	23 March 2023
Final Project Report and Code	30 March 2023

Data Intake report

Project Name: Data Science Retail Forecasting

Internship Batch: LISUM17

Data Intake by: Andrea Perez

Data Storage: GitHub link

Meta Data:

Number of Observations	1219
Number of files	1
Number of features	12
Formal of file	.csv
Data Size	1.09 MB