

Data Science Assignment

The background is a dark blue gradient. It features several abstract elements: three large, semi-transparent blue arrows pointing upwards and to the right; a bar chart with vertical bars of varying heights on the right side; and a line graph with circular nodes connected by lines, also trending upwards. In the top left corner, there are three vertical, rounded rectangular shapes in shades of gray and blue.

Zhongyang Hu

zhongyang.hu.rs@gmail.com

Context

> Data Insight

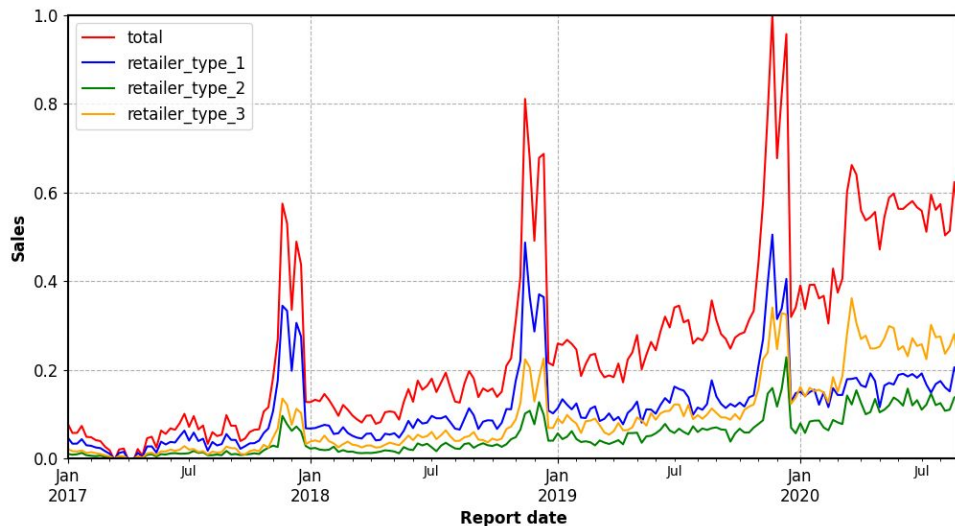
Characteristics of the data

> Forecast

Upcoming 12 weeks (not included in the dataset)
for all 4 levels.

> Learning from Machines

Extra knowledge said by the machine learning
forecast model

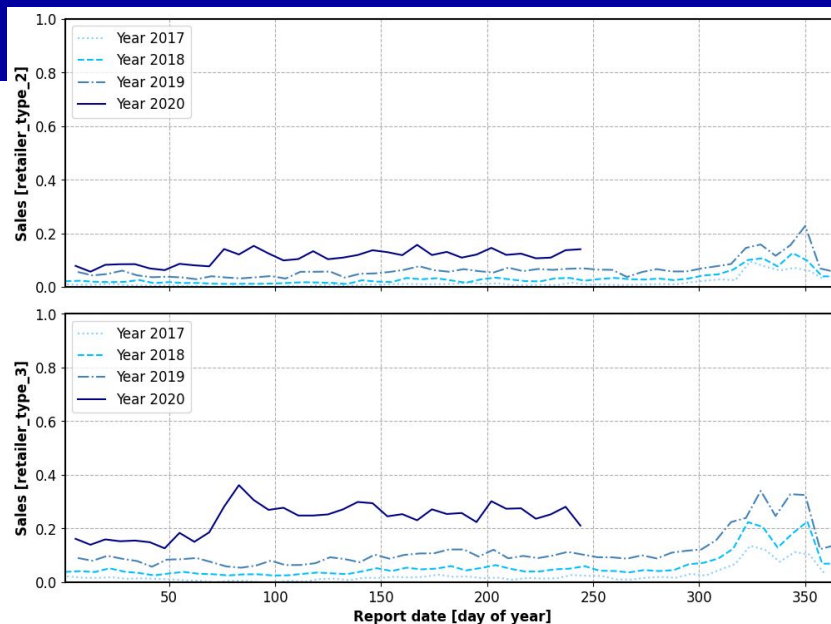
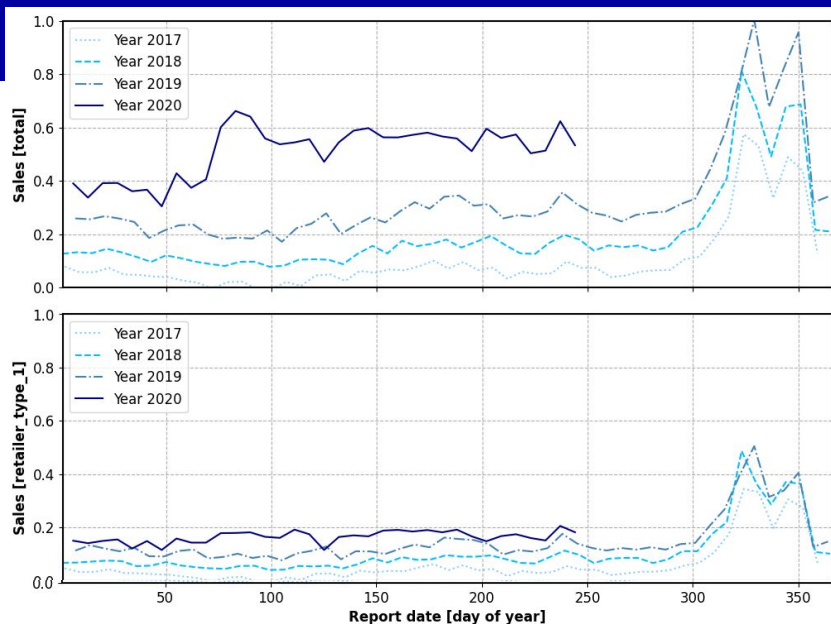


- > The dataset contains **weekly data** from **January 2017 to August 2020**
- > The dataset contains **4 levels**, total and three `retailer type` levels
- > The `retailer_type` levels as subsets of the total sales

Sales Data

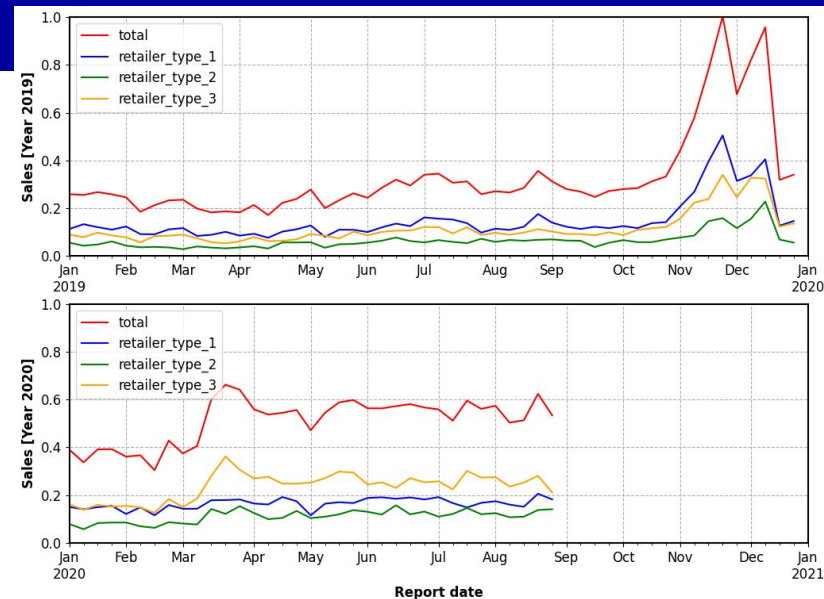
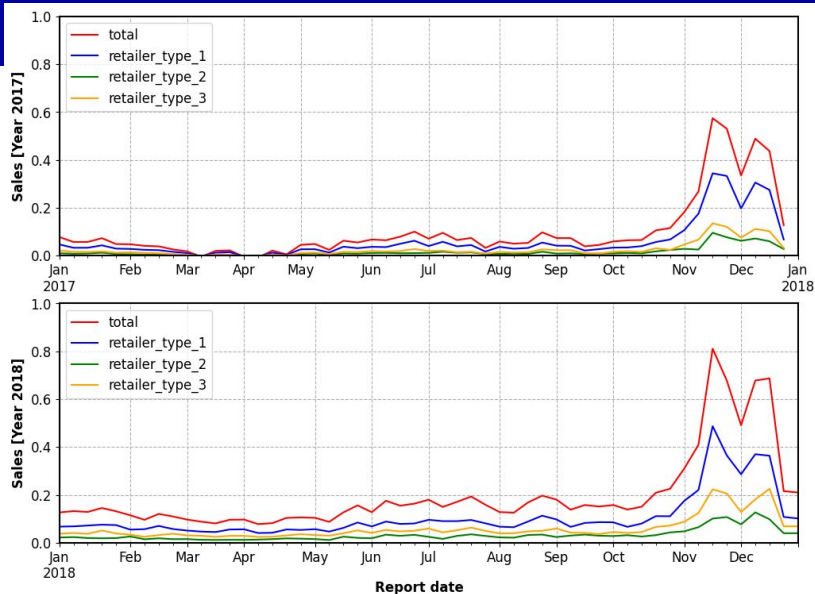
Data Insight

- > Increasing year by year
- > peak seasons during November to December
- > pattern change in Year 2020

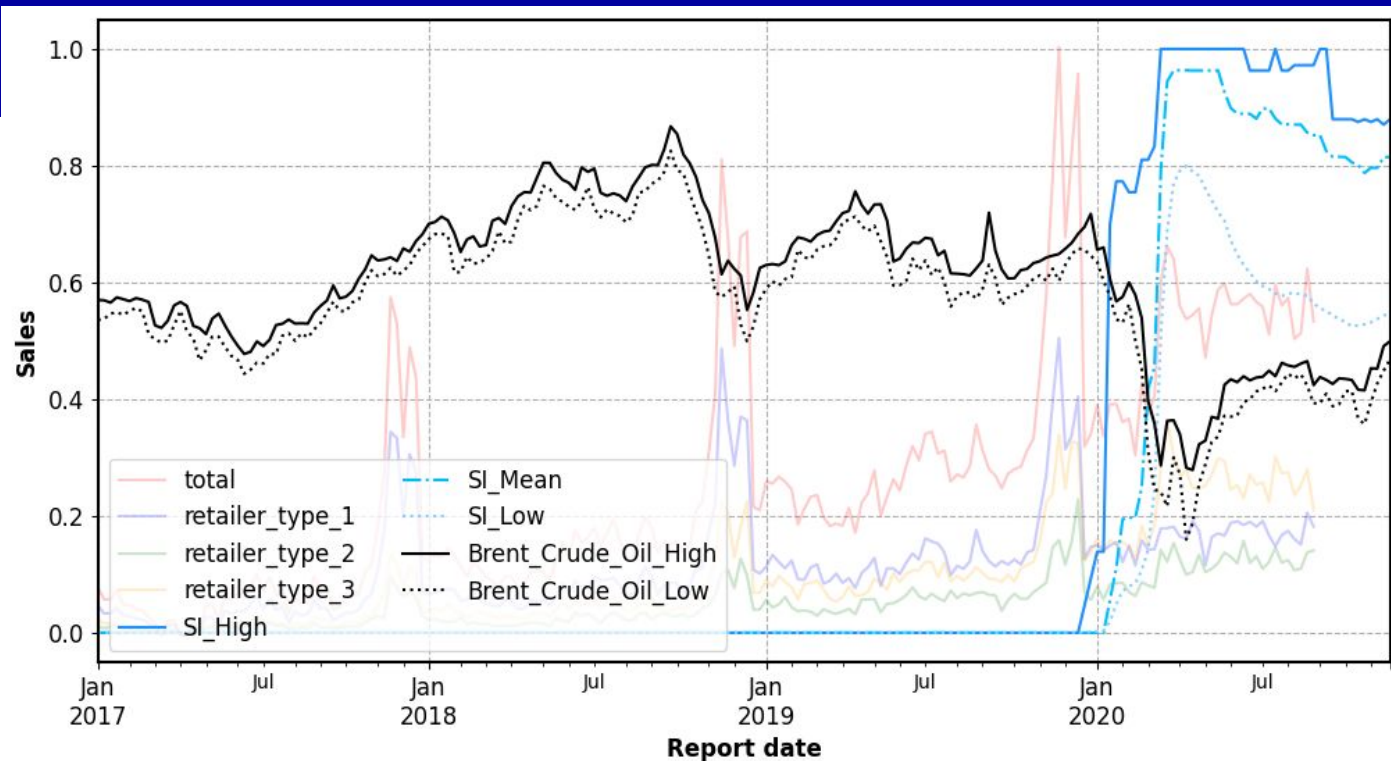


Data Insight

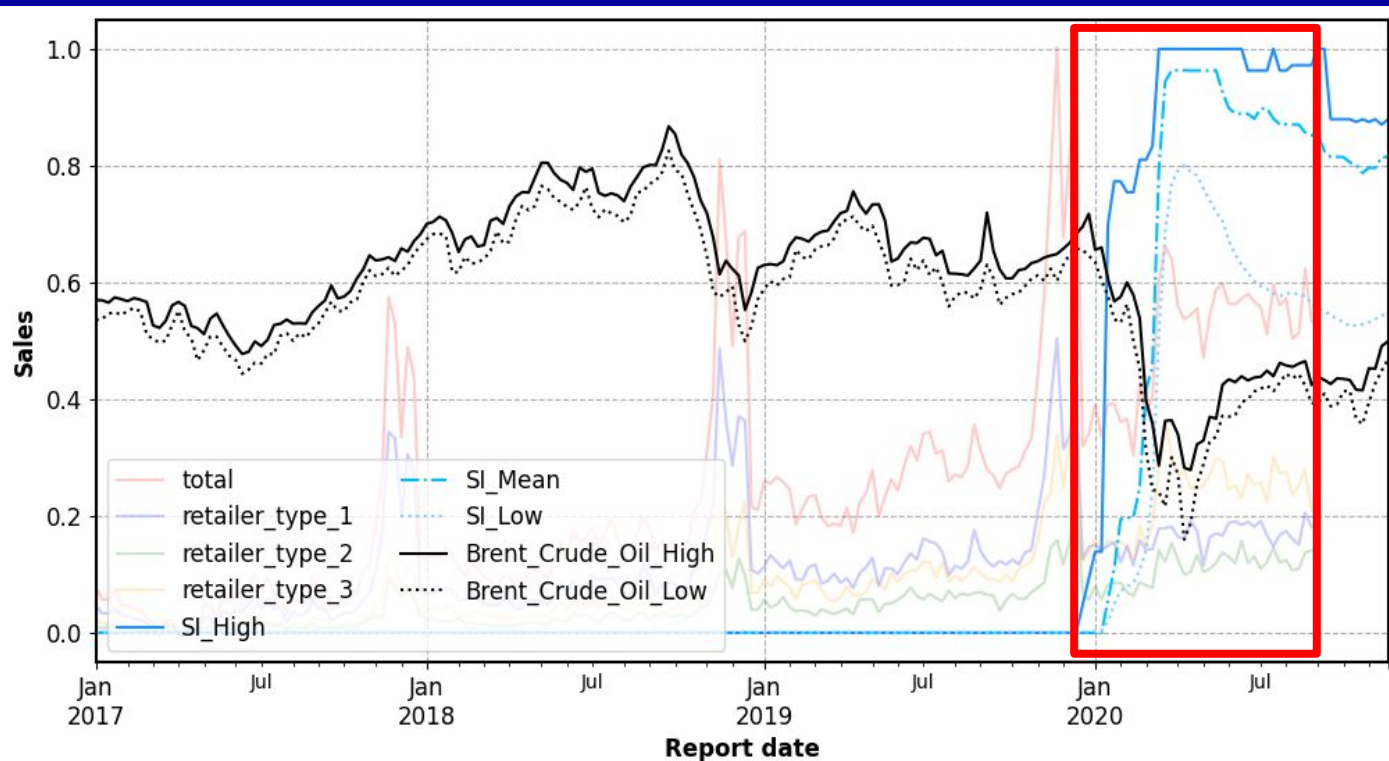
- > Retailer Type 1 dominated sales prior to 2020
- > Retailer Type 3 experienced a surge in sales during 2020
- > Retailer Type 2 exhibits a consistent and stable sales pattern

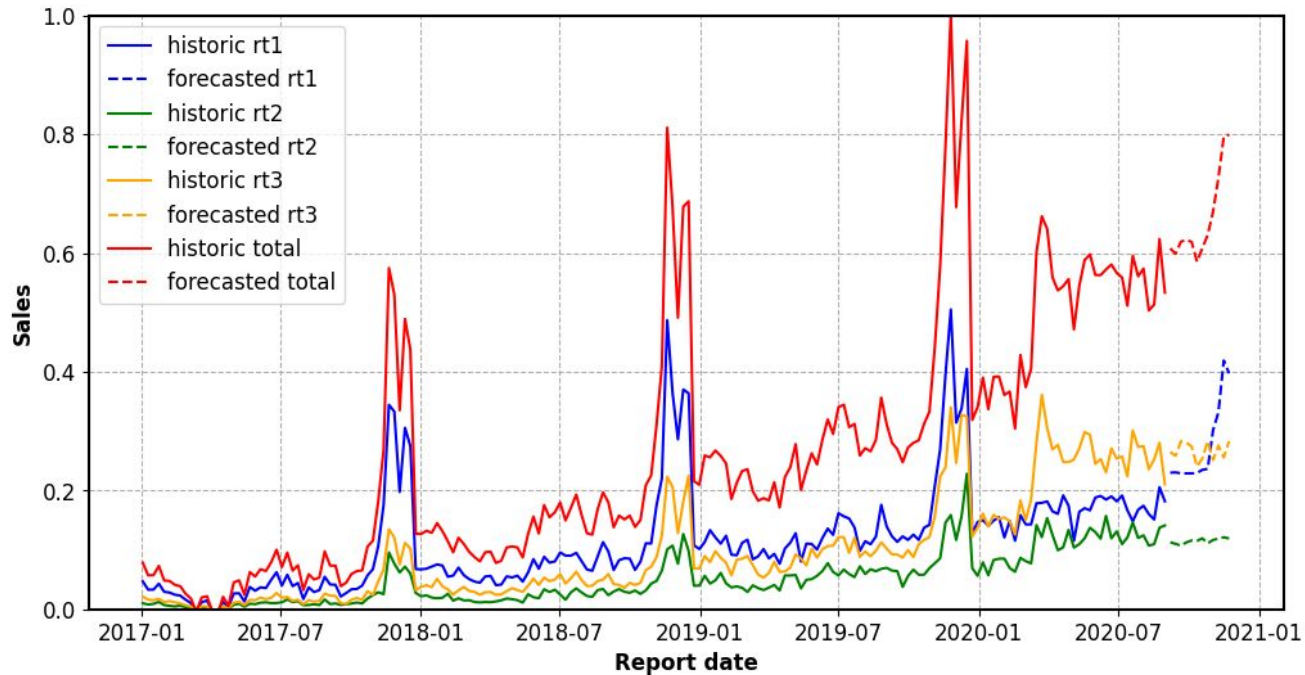


Data Insight (External Data)

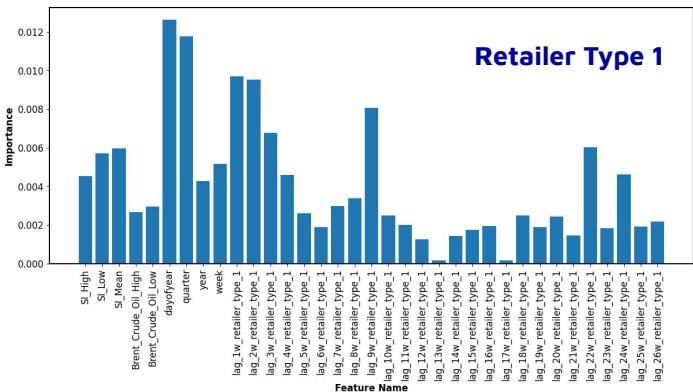
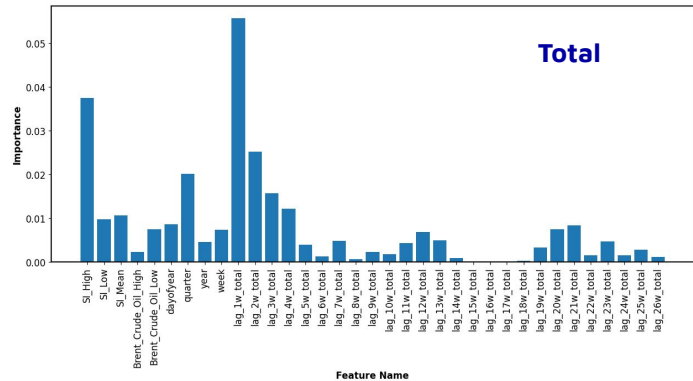


Data Insight (External Data)

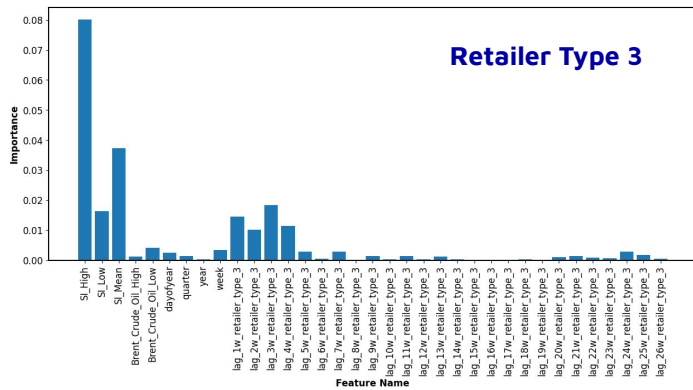
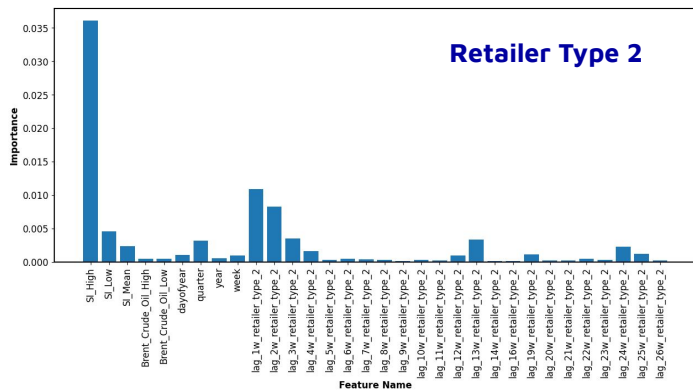




Forecast



Learning from Machines



Questions?

Thanks for your attention.

Additional questions can go to:
zhongyang.hu.rs@gmail.com

