

Project outline: Store Sales forecasting

Project details:

Predict sales at Favorita stores located in Ecuador.

Description:

Ecuador is an economy dependent on Sales from the oil reserves. Favorita, one of the country's biggest retailers, must have a robust Demand Forecasting model to streamline its Supply chain operations, Customer support channels and develop its marketing campaigns.

Objectives:

- Building a model to accurately forecast sales, seasonality, and general trends associated with it.
- The factors that affect sales could be promotions, holidays, oil prices, and natural disasters.
- Understanding the factor importance would also help in building effective campaigns.
- Leveraging statistical methods to identify the effectiveness of future holidays and promotions.

Data:

- Our dataset is from Kaggle and is part of the Time series competitions.
- We chose this dataset as it could have seasonal aspects and significantly impact holidays and the country's economic dependence on oil prices.
- The period also includes a major earthquake and would add insight into the impact of uncontrollable variables.

Hypothesis:

- We assume that the significant contributing variables to in-store sales are holidays, oil prices, promotions, store type, geography, pay frequency, and natural disasters.

Authors:

- Harikrishna Dev - HXD220000
- Jaswanth Reddy Yanumula - JXY210004
- Abhiram Mane - AXM220137
- Amit Mishra - AKM220000
- Soumyajit Mishra - SXM220133