

Project Proposal:

Forecast Sales for Favorita and Deploy a User Forecasting Tool

Problem Statement

Can we build a time series model to predict sales in the future for Favorita stores? And if so, is it possible to build an app that allows us to check forecasts as and when we need to?

Context

Corporacion Favorita is a large Ecuadorian-based grocery retailer, with thousands of items sold at different Favorita stores. If Favorita were able to forecast demand for its products better it would benefit in a number of ways, for example, for grocery stores, more accurate forecasting can decrease food waste related to overstocking and improve customer satisfaction.

Criteria for Success

The development of an accurate forecasting model for Favorita sales and an accompanying app that helps us check forecasts whenever we need to.

Scope of Solution Space

The model and app will be developed using the data provided by the company.
The code for the model and all related work will be available in Jupyter notebook format.
The app will be developed using Anvil.

Constraints

We are limited in our forecasting model to only use the data provided by the company. We don't yet have a relevant benchmark model to judge our new model against.
The data provided is for the time span between the years 2013 and 2017, this will be a limit to our ability to forecast past a certain time period.

Stakeholders

Corporacion Favorita.

Data Sources

<https://www.kaggle.com/competitions/store-sales-time-series-forecasting/overview>