



Corporación Favorita

Forecasting the Future of Grocery Sales in Guayas

By Victoria Finch



Why Forecasting Matters

- Errors can cost thousands
- Planners need fast, accurate tools





Modeling Approaches



0
1

SARIMA

for classic time series modeling.

XGBOOST

for structured ML with custom features.



0
2

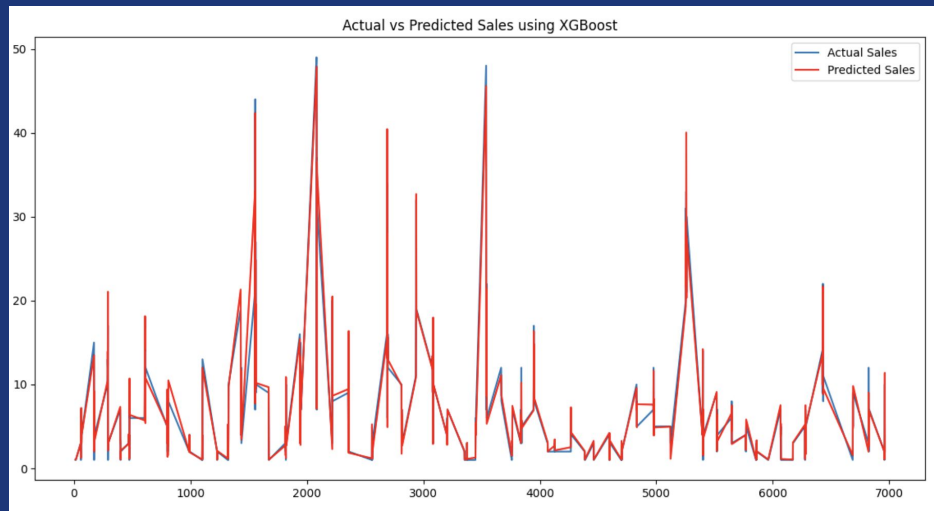


0
3

LSTM

to experiment with deep learning.

XGBoost: The Star Performer



R^2 Score

0.978

Mean Absolute Error
(MAE)

~0.65

Mean Squared Error
(MSE):

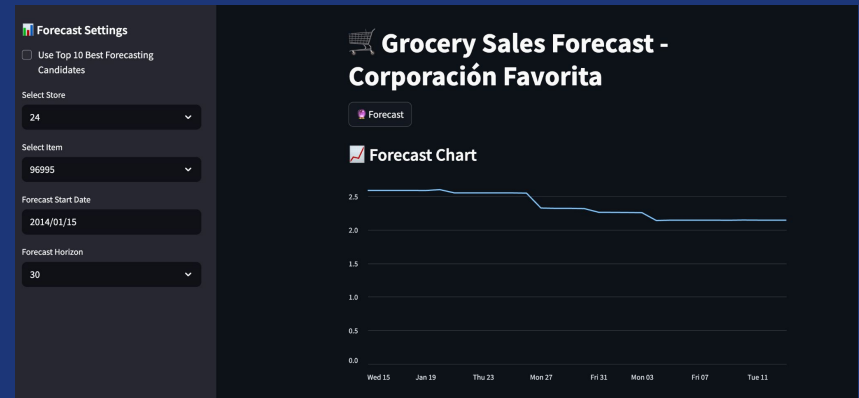
3.02

The App

Created by Streamlit

1. Select stores and items
2. Choose forecast range
3. View charts and tables
4. Use the Top 10 best forecast combos

[Launch the App](#)





What's Next

Forecasting by
category

Export to CSV

Real-time updates

Auto-generated
reports



Thank you!

Links:

[Kaggle](#)

[Github](#)

