

IS 6813

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Group 8:

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Business Problem Statement:

Maverik, a leading gasoline and retail convenience store chain in the western US, is expanding its footprint with plans to construct 30 new stores annually for the foreseeable future. In order to make sure these expansions are profitable Maverik predicts the revenue of new locations for its first year using a number of factors. Our challenge will be to improve this model. We will attempt to generate accurate daily sales forecasts and a sum total for these new establishments during their first year of operation. Such precise forecasting is critical for robust financial planning and ROI calculations.

To accomplish this, we will employ a blend of statistical methods, time-series analysis, and machine learning techniques. We will analyze various data streams, including historical sales data, qualitative insights from recent store launches, and seasonality patterns. A successful project will be marked by the close alignment of our forecasts with actual sales data and ROI, minimizing any variance and thereby affirming the model's accuracy. The project is focused strictly on sales forecasting for the new stores during their first year, leaving other business aspects and future projections out of its scope. This project will be completed by November 29th, and along the way we will be checking in at milestones including data cleaning, feature engineering, model training, and evaluation.