

Maverik New Store Sales Forecasting

Predicting Annual and Daily Segment Sales

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Business Problem

As Maverik continues to expand operations and open new locations, it is important both for planning as well as for evaluation of ongoing business operations to be able to accurately identify expected revenues at new stores. Of primary importance is to have an accurate forecast of the sales within the four key sales segments (Diesel, Unleaded, Inside Sales, and Food Service) for the first year of an individual store's operation. Secondly, is to have an accurate daily performance forecast for each of the 4 key sales segments.

In order for this project to be successful, a few tasks need to be accomplished by the final model(s):

1. *Correct Prediction of the First Year Annual Sales*

Models will be developed to accurately forecast the annual sales in each of the 4 key sales segments, taking into account store characteristics.

2. *Correct Prediction of Daily Sales*

Models will be developed to accurately forecast the daily sales in each of the 4 key sales segments, taking into account seasonality (both annual and weekly), store characteristics.

3. *Adjustment of Forecast of Daily Sales to Account for Past Performance*

The current model is naive and does not take into account past performance at a location to help forecast future daily sales. A key improvement of the planned solution will be to derive a solution whereby the predictions of daily performance adjust as actual sales data becomes available.

Implementing this forecasting solution will empower Maverik with the ability to make informed and strategic decisions regarding new store openings. Accurate sales predictions will enhance financial planning, enabling the company to allocate resources efficiently, create precise ROI documents, optimize inventory management, and improve overall operational efficiency. This, in turn, will bolster investor confidence, streamline store operations, and ensure Maverik's sustained growth for customers, all while maximizing profitability and minimizing risks associated with expansion.

The success of this project will be determined by several critical performance metrics. The accuracy of the forecast of the sales will be a primary indicator. Success will be measured through the financial impact, comparing forecasted sales to actuals and their alignment with financial plans and ROI projections. Furthermore, improvements in operational efficiency, illustrated by optimized inventory management and staffing levels, will play a significant role. The ability to create more reliable ROI documents and garner investor confidence is another key metric.

The project will deliver a fully functional forecasting model capable of generating accurate daily and annual sales forecasts for inside sales, food service sales, and fuel sales. It will integrate with Maverik's data sources and provide a reporting and visualization tool for decision-makers. However, out of scope are physical store operations and marketing strategy adjustments.

The project will be executed by a dedicated team of three experts, working collaboratively to develop and implement the forecasting solution. The project's deadline is set for 29th November, emphasizing the commitment to deliver precise daily sales forecasts and meet predefined success criteria within the given timeframe. This timeline allows ample time for comprehensive data analysis, model development, and thorough testing to ensure the solution's effectiveness in providing valuable insights for Maverik's strategic decision-making process.