BUSINESS PROBLEM STATEMENT

Maverik plans to open/build 30 new stores each year to continue with the high growth it is currently experiencing. Maverik must have accurate **first-year sales forecasts** for the new stores it plans to open, which will help it build the financial plan more effectively.

The firm stands to gain significantly from accurate daily sales estimates. These forecasts would enable well-informed financial decision-making, assist in optimizing resource allocation, and serve as a benchmark for evaluating the store's performance against projected outcomes.

The **benchmark for success** on this project will be if stakeholders

1. Get the **ROI** approximately matching the **forecasted ROI.**
2. Get the sales metrics forecasts accurately as new sales data become available.

Depending on the complexity of the sales patterns, different forecasting techniques ranging from traditional time-series models to advanced neural networks may be employed. We will be utilizing the Qualitative and Time series data available in developing a **Time series forecasting model** in Python. This model will consider the provided qualitative data for recent new stores, network-wide seasonality patterns, and multiple sales metrics. We will employ various ML algorithms on the business problem and the data provided to generate daily-level forecasts.

The project's scope encompasses the complete development of the **time series forecasting model**, incorporating the provided **qualitative data and network-wide seasonality patterns.** The final deliverable will be accurate forecasts for the first year of sales for the new store. However, it's essential to note that the project will not extend to detailed financial planning beyond sales forecasting, real-time data integration, or in-depth ROI calculations.

We are the analytics **Team 9** from University of Utah that will be executing the project. We anticipate the project completion for review by **Nov 20th, 2023**. The deployment of the project will be on **Nov 28th,2023**. Outlined below are the Important project milestones:

1. Data understanding, cleaning, and EDA by 10/01/2023.
2. Model development & Evaluation by 10/29/2023
3. Final project completion and presentation on 11/28/2023.

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