MSBA Capstone Project

**Bi-Weekly Progress Report**

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**Project Title:** Optimizing Growth: Sales and Market Expansion for GIFCO

**Elevator Pitch**

This project aims to optimize GIFCO’s sales and market expansion strategies by leveraging historical sales and shipment data. The focus is on creating a dashboard, forecasting sales trends, and identifying potential expansion opportunities. The project has progressed through data cleaning, feature engineering, and exploratory data analysis to prepare for predictive modeling and optimization.

**Tasks Done During the Previous Two Weeks**

After completing my three forecasting models (ARIMA, Prophet, Exponential Smoothing), I am currently exploring other forecasting model that can go well for my data:

* First, I fine-tuned the previous models to make the RMSEs have a smaller margin (some improved their accuracy by around 15%).
* Second, I am currently exploring SARIMA, Hot Winters and Theta models to implement.

In parallel, I am currently working on Tableau dashboards where I completed half of the visuals needed for the stakeholders.

**Difficulties and Challenges Encountered**

* Not many difficulties were encountered here, however I am checking the possibilities of my dashboard being through Streamlit directly rather than doing it in Tableau first.

**Tasks To Be Completed**

* Further models to be implemented to check for better forecasting accuracy.
* Then, I will continue with my Tableau dashboard adding more interactive visuals to highlight key trends and insights for stakeholders.