1. Did you find any type of seasonality to be helpful in assuring the best forecast from your model? Why or why not?

**Answer:**

No, because patterns were not occurring at a consistent interval.

2. How far into the future did you observe your forecast to be working? What is the effect

of adding a longer baseline of training data?

**Answer:**

The more you forecast far, the less precision. Adding a longer baseline of training data can potentially improve the model's accuracy, especially if there are long-term trends or seasonality patterns. However, it may also make the model less responsive to short-term changes.

3. What do you estimate to be a “reasonable” baseline of data to use this type of Prophet

model in an actual running production system? Would that length of training time pose

any operational challenges?

**Answer:**

To use this type of prophet mode, you do not need much historical data compared to when seasonality is a significant factor. The length of training time may pose operational challenges in terms of data storage, model training time, and computational resources. It's advisable to conduct thorough experimentation to determine the optimal training data duration for a particular use case.

4. Do you think such a Prophet model should be allowed to retrain continuously in a production setting or require some manual review/approval? What could be some pitfalls of

allowing a fully automatic operation?

**Answer:**

Such a Prophet model requires some manual/approval due the following pitfalls of allowing a fully automatic operation:

**Overfitting:** Frequent retraining can risk overfitting the model to noise in the data, especially if there is limited historical data.

**Resource Consumption:** Continuous retraining can be resource-intensive, straining computational resources, and potentially affecting the stability of production systems.

**Data Quality Issues:** Without manual review, the model may not detect data quality issues, outliers, or erroneous inputs, potentially leading to inaccurate forecasts.