**Next Steps**

***Musts***

1. Clean up code
   1. Organization
   2. Decide STL decomposition vs. moving average de-seasonalization and model-based de-trending
   3. Better selection process for VAR model
   4. Better Hyperparameter optimization for LGBM
2. Implement new protection method – obtain forecast results
   1. Use distance based on time series characteristics
3. Calculate distributions of forecast errors – probabilistic forecasts, error measures for these, how to quantify which ones are better (need to be compared relative to the real test data)
   1. Measure the change in distributions before/after protection, be sure to see how model rankings change
4. Decision tree/random forest to classify judgmental (privacy adjusted) forecasts
   1. Feature extraction/model estimation
   2. Results interpretation
5. Statistical model interpretations (do it well)
6. Paper draft
   1. Come up with very strong storyline – write in intro to reflect the rest of the paper
   2. In the intro – state that we are assuming the forecaster does not know how the data has been protected
   3. Discuss how better forecast distributions could lead to better rewards in data markets

Complete the above by September 9th.