**Technolgies used:**

Initially we will be using excel and if that does not mee the requirements we will be used for frontend: Dash for the UI/UX and NumPy, Scikit learn, MatPlot lib and Pandas for the data models and visualization.

**Requirements:**

Functional Requirements:

* The app will show the analytics of the company sales.
* The application will show when the sales of the company fall. (Contingent on a real time data set)
* The dashboard will show insights that are easy to read by anyone with or without technical knowledge.
* The model we build will have an accuracy of greater than 70%
* The app will show the gross revenue of the company.
* The average monthly sales of the company will be shown and the revenue per selected time.
* The app will be showing the sales projections based on past sales for the next year.
* The app will show the performance of each store/department.
* The app will show methods to improve the sales of the company based on existing sales.
* The stores/departments will be clustered together based on performance.

Non-Functional Requirements:

* The model will be able to predict from a range of time periods.
* The Sales of the company will not dip below a certain level.
* The model will be able to predict on a large dataset.
* The time will extend to about a year in the past.
* All dashboard information will be privileged and not accessible publicly.
* The Data insights shown will include:
  + Bar graphs
  + Scatter plot
  + Line charts
  + Histogram
* The sales projections time periods will be broken down into:
  + Monthly
  + Quarterly
  + Half-yearly
  + Annually

Showing customer interactions.

Showing agent outreach time periods.

News showcasing information that affects the market or the economy of the country.