CPTS 575 Project Progress Report

Project Topic: Uncovering "The Great Resignation"

Team members: Kunal Sanghvi, Priyanka Ghosh Dastidar, Nithyashree

Senguttuvan

Problem Statement: To visualize the great resignation scenario. Our implementation of the solution will include: - Predictive model to foresee probable future occurrence of the event and the extent to which it could affect an organization. Furthermore, it would take stances at data such as: - Time charge of employees who have resigned, their designation, performance, compensation, pay increased or not and training opportunities provided to those employees. With an insight from the predictive model and visualizations in hand, organization will be able to predict beforehand the possible risk of attrition. It will enable them to form strategies to hold back employees thereby reduction employee turnovers. So, uncovering correlation derived from data will benefit organizations across globe.

Dataset to use: After careful study and research across web on "The Great Resignation," we found a dataset on Bureau of Labor Statistics. It has data on people quitting from firms. Digging deeper through this data, we could bring things into perspective about "The Great resignation." Data from various sectors have been laid out in this dataset.

U.S. BUREAU OF LABOR STATISTICS

Progress made: -

- 1. We have had several meetings to discuss the problem statement and ways to frame the model and visualizations
- 2. Have been through a rigorous search to find a valid dataset to work on.

3. Working on models for prediction of "Great Resignation".

Technology to use: Python and R for prediction models and Power Bi/ Tableau and R for visualization.

Machine Learning Models: At present we are exploring the models that we have learnt in our class to generate a meaningful prediction and achieve the maximum accuracy possible. The best model will be taken in to progress further with the prediction.

Visualization: We have planned to visualize the data geographically and through plots in R, which would support the prediction in identifying the possible predictors and denoting the extent of resignation.

Analysis: The analysis will bring in and depict how the event of resignation has happened which has led to our prediction and furthermore provides insight into the data.