

Group 2: Visualizations and Feedback

November 9, 2021

Below are the initial drawings for visualizations to demonstrate our research. It consists of an industry overview (Image 1), a line graph depicting closing prices of stocks over time (Image 2), and another line graph predicting the percent change in returns over time compared to the S&P 500 (Image 3).

We wanted to provide context to our research, hence the industry overview. It shows the total number of establishments in the industry as well as total revenue in the year 2017.



Image 1. Industry Overview Using Census Data

For our “Closing Price” graph, we will demonstrate how prices change over time and how recessions and other events impact the industry as a whole.

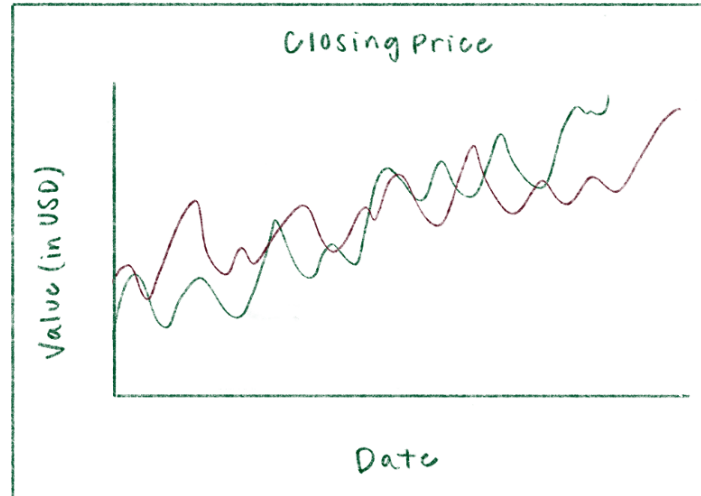


Image 2. Closing Prices of Stocks Over Time

For our final visualization, we planned to incorporate our machine learning into a line chart showing how the industry performs in comparison to the S&P 500.

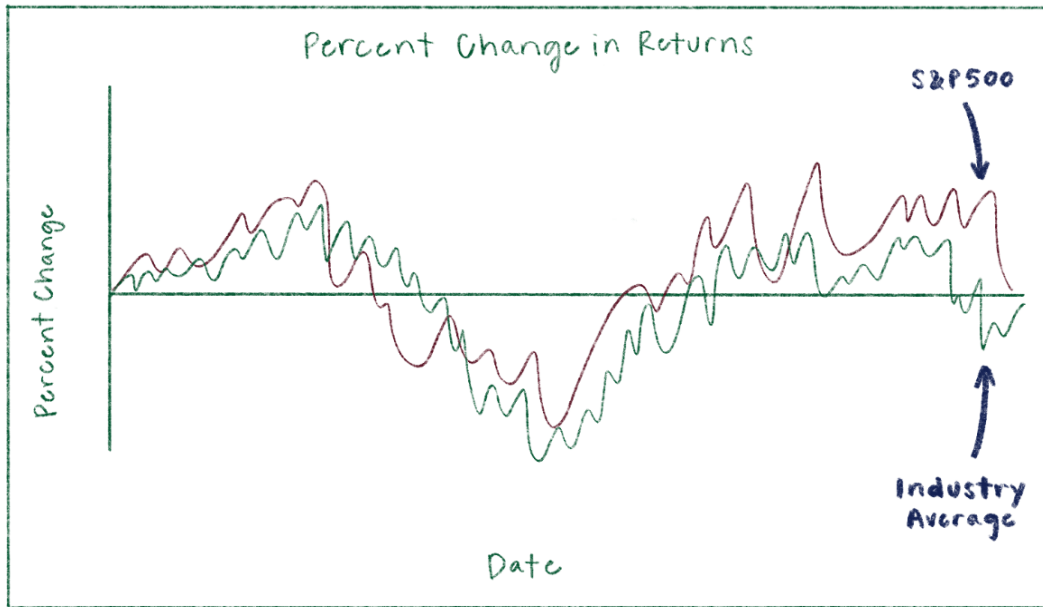


Image 3. Percent Change in Returns Over Time

These drawings were sent over to two peers for feedback, and the feedback was mainly concerned with how Image 3 is able to display the predicted values relative to the training data. While it appeared to be an interesting idea to implement, we found some difficulty in executing this plan. As a result, we decided to have the graph in Image 3 simply display the changes in the finance and insurance industry relative to the S&P 500 and have separate regression graphs reflect our predictions in the machine learning model.

In addition to that, we have added additional contextual visualizations in our industry overview, including the breakdown of revenue by category. All of these changes are reflected in the DashboardNapkinsAndFeedback file contained in the GitHub as well as the completed dashboard.