

Original Proposal:

Motivation: Currently I've been spending a lot of time trying to figure out where I want to work after school. With so many variables, it's hard to figure out why companies are ranked the way they are and I think it would be useful to see this represented visually.

Objectives: What are the factors that consistently cause companies to be ranked higher? Are there areas in the country that reign in the "best companies" category consistently? How can my company become a "best company"?

Data: Not sure which rankings to use. I am going to do more research into how sites like Fortune, Glassdoor, and US News come up with their rankings and how much they differ. Once I do this, I will select a single source and pull the top company data from the last ~10 years. I will then do research into specific factors for each company: location, average salary, maternity leave, and other benefits (some of this data can be found on glassdoor). If you have any suggestions of other resources I am open!

Visualization: Much like the visualization for Obama's proposed 2013 budget, I want to make a visualization that displays the information in a variety of ways so that the user can explore the data set based on the factors important to them. I might do some of the following 1. a map with the locations of the jobs with a gradient of colors to denote the ranking 2. A bubble chart (not sure what this is called) showing the size of all the companies with the same gradient ranking indicator 3. a line graph of how companies rankings have changed over time 4. a linear depiction of how higher maternity leave effects company rankings 5. a linear depiction of how diversity in the workplace effects company rankings 6. some visualization of the consistent features that persist throughout all top rated companies

Features: Must have a multi-faceted way to look at the data so that it can be useful to both people looking for jobs and companies that want to improve their rankings. Optional animations between each state.

Schedule:

Week of 3/20 - Project Proposal due. Figure out team and data source.

Week of 3/27 - Compile data into a spreadsheet and define different views.

Week of 4/3 - Work on view #1

Week of 4/10 - Project Milestone due. Work on view #2

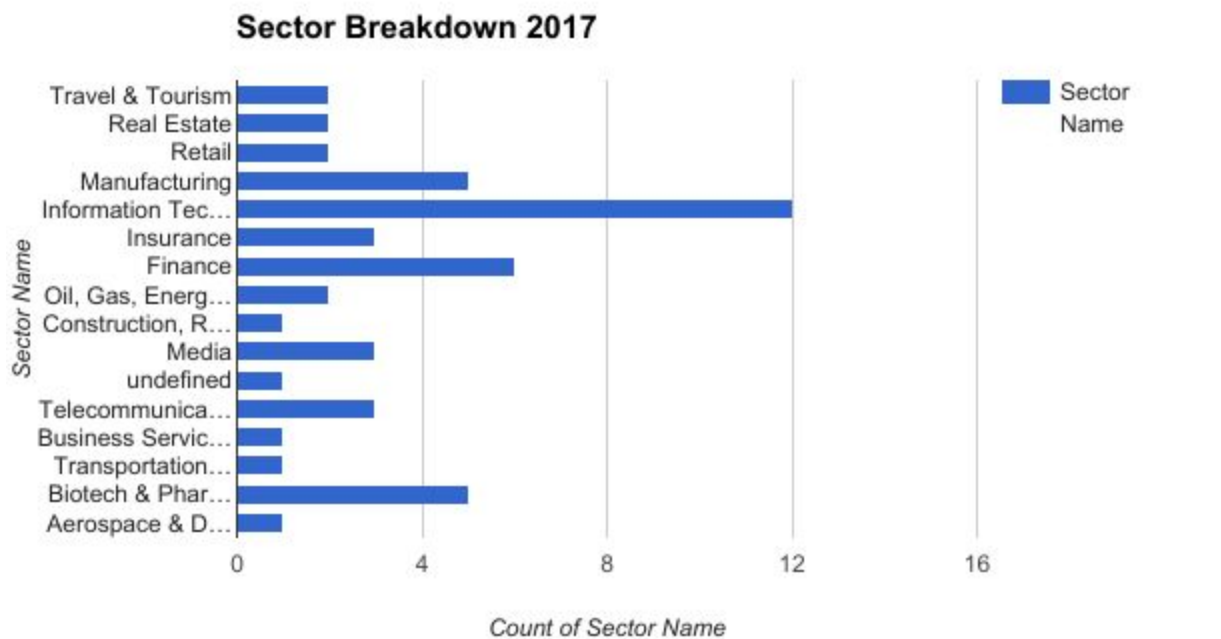
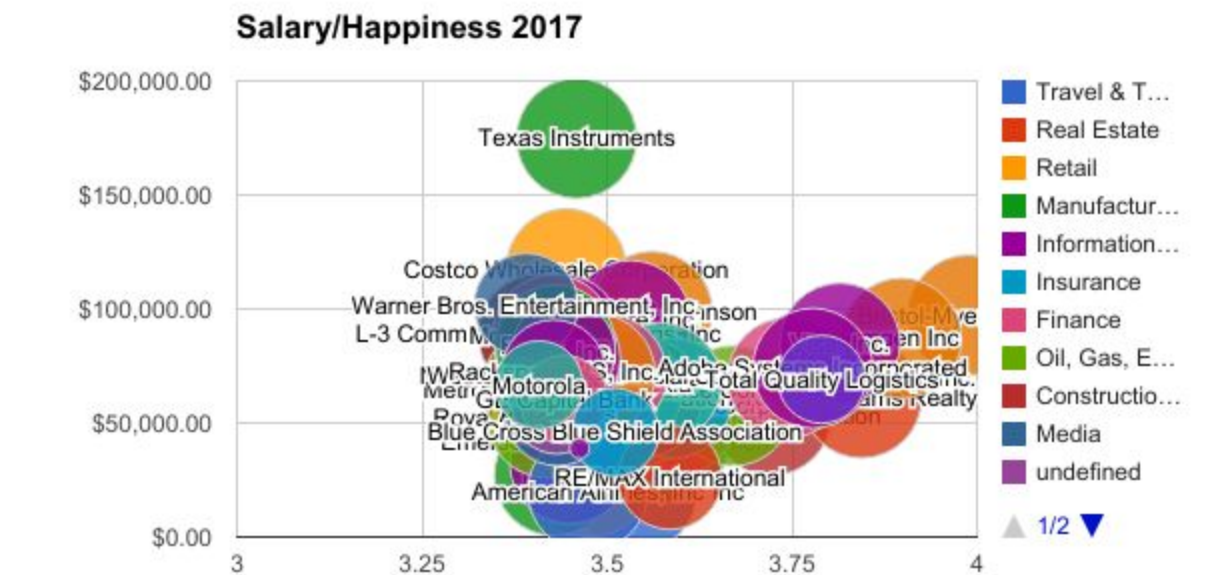
Week of 4/17 - Work on view #3

Week of 4/24 - Clean up views and refine visual appearance

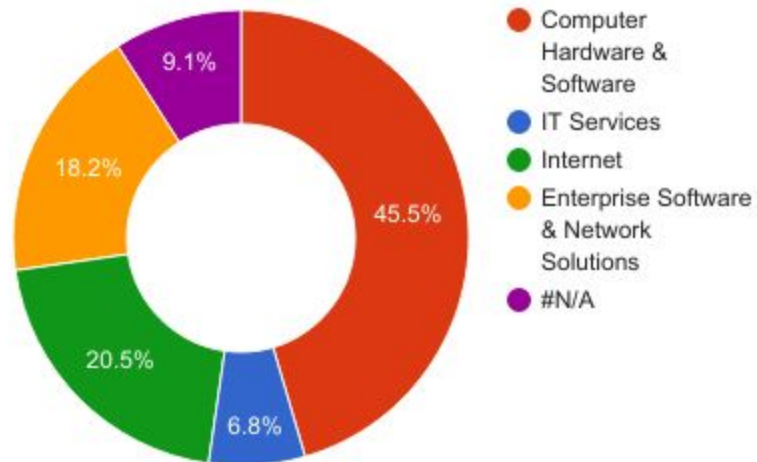
Week of 5/1 - Final Project Presentation due.

Exploratory Visualizations:

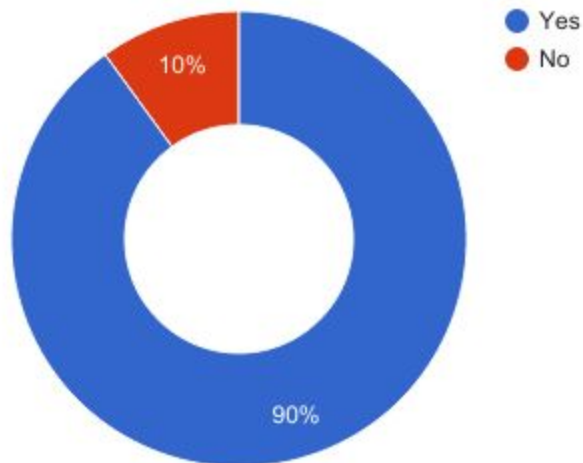
2017 Charts



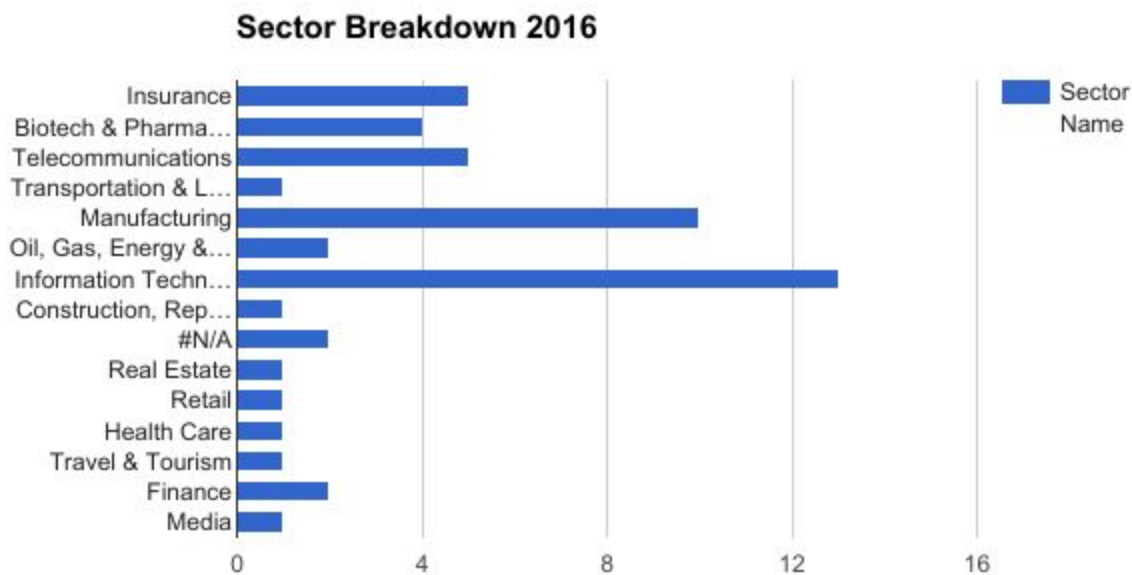
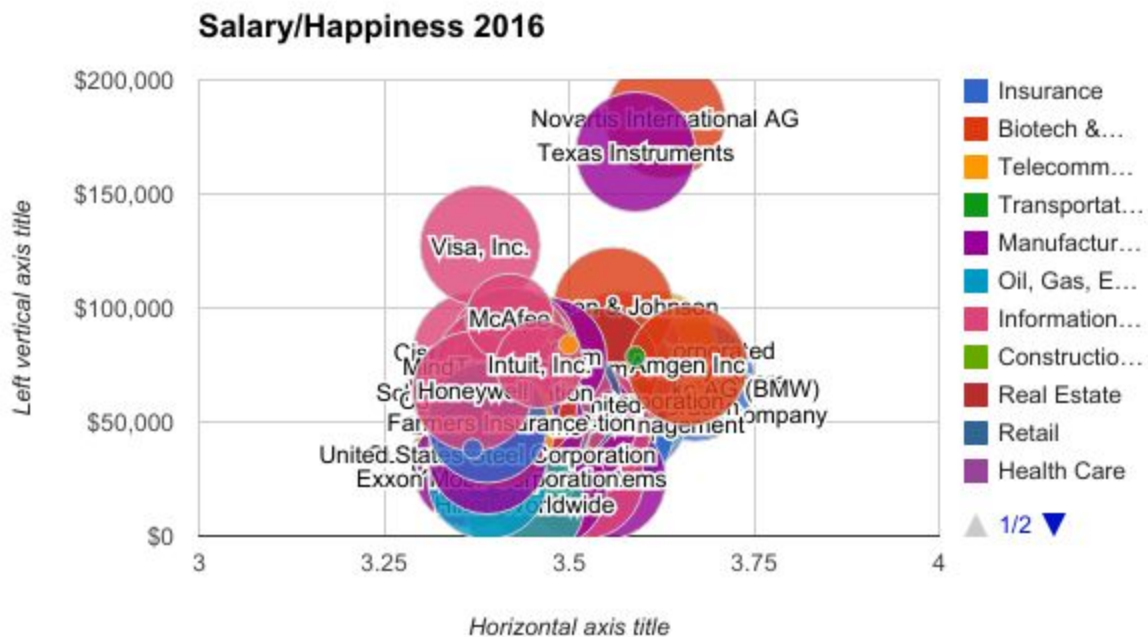
IT Breakdown 2017



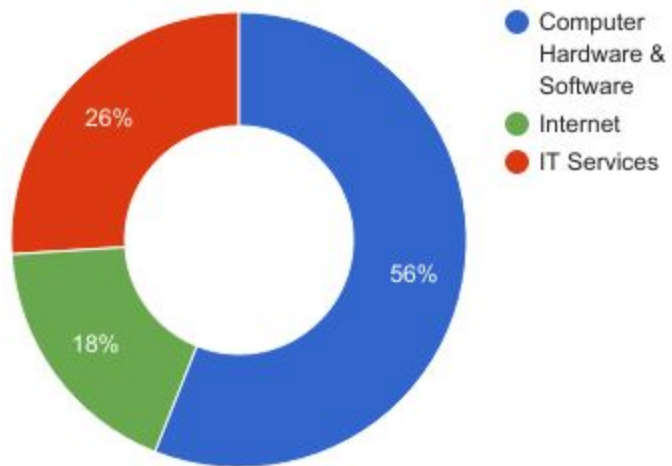
Headquarters in USA? 2017



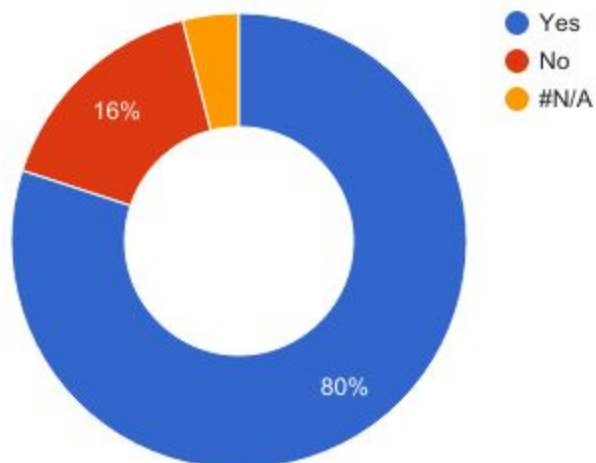
2016 Charts



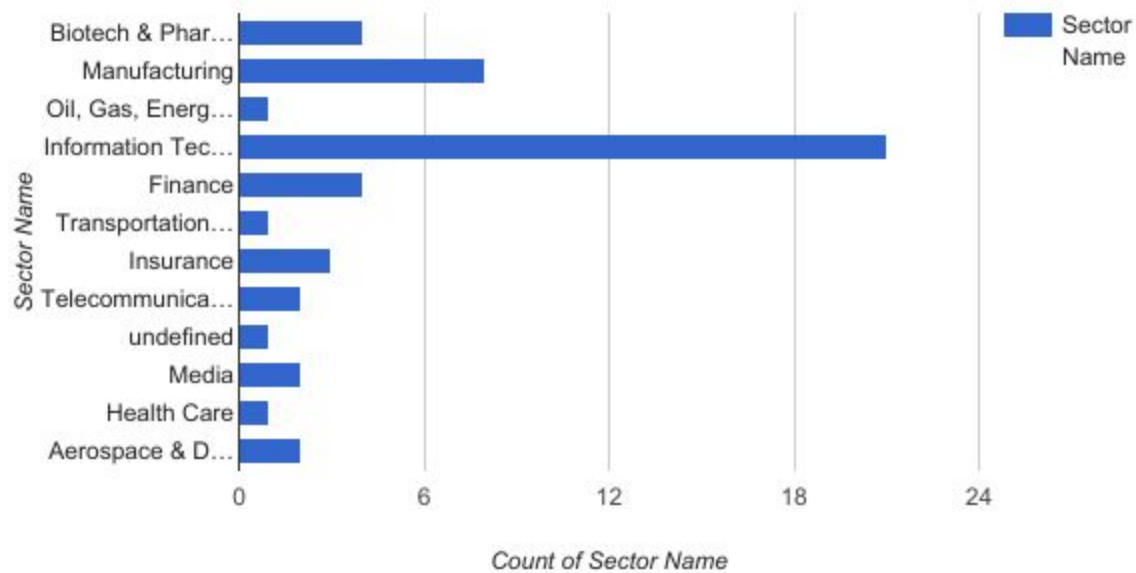
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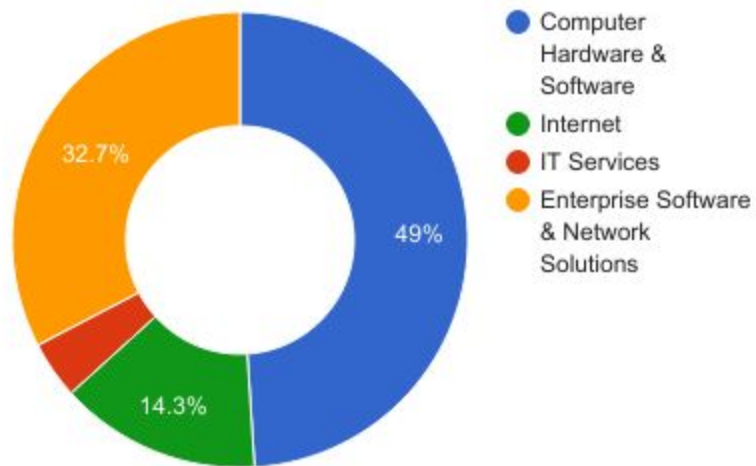
Headquarters in USA? 2016



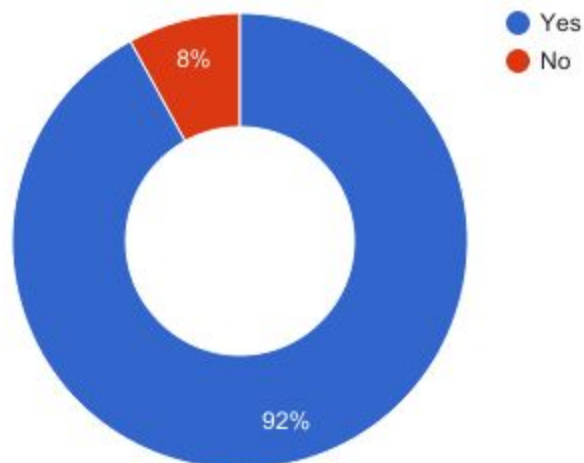
Salary/Happiness 2015



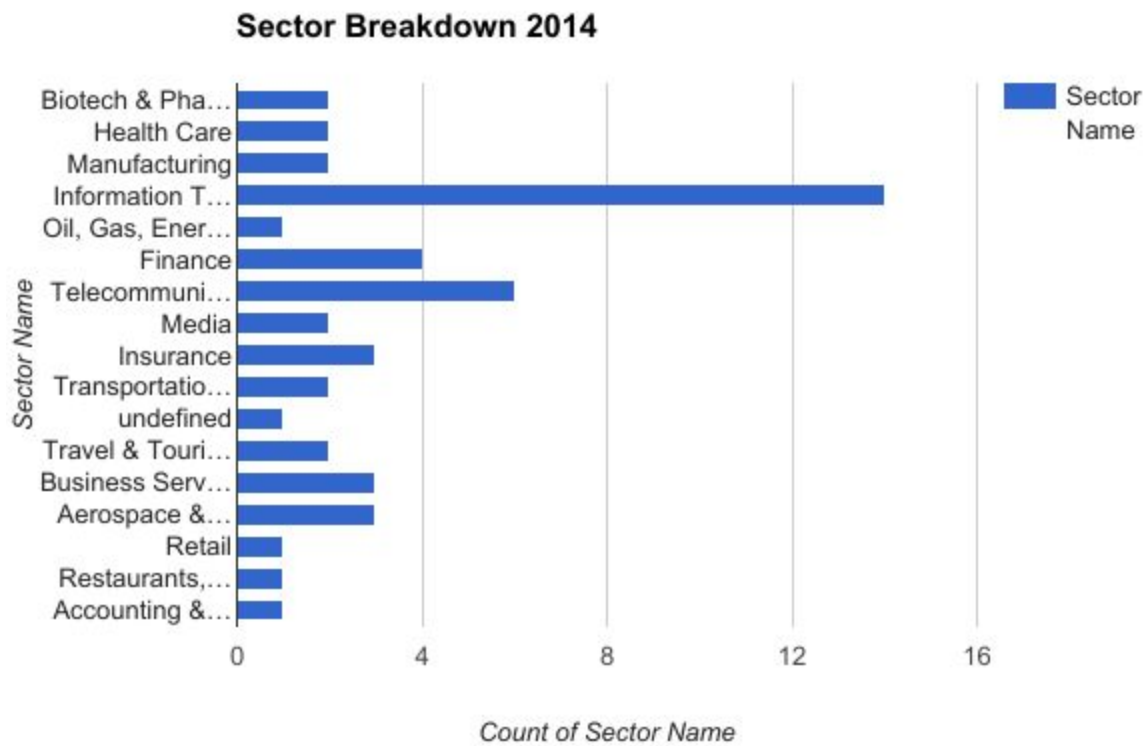
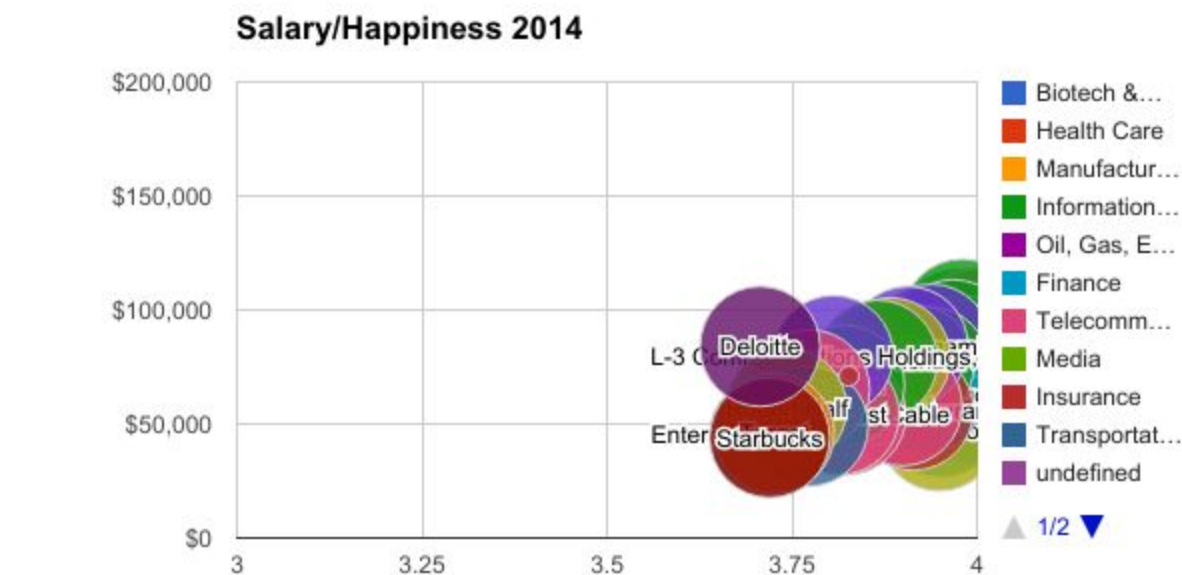
IT Breakdown 2015



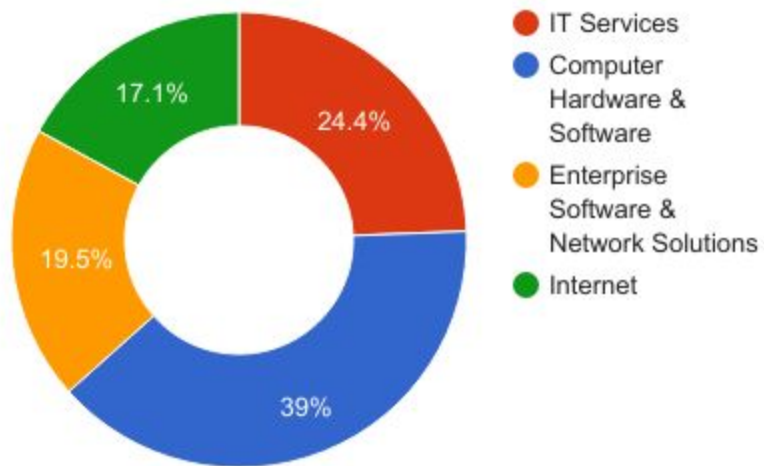
Headquarters in USA? 2015



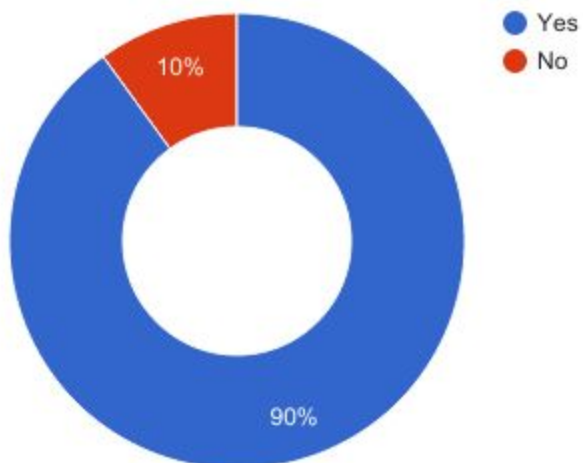
2014 Charts



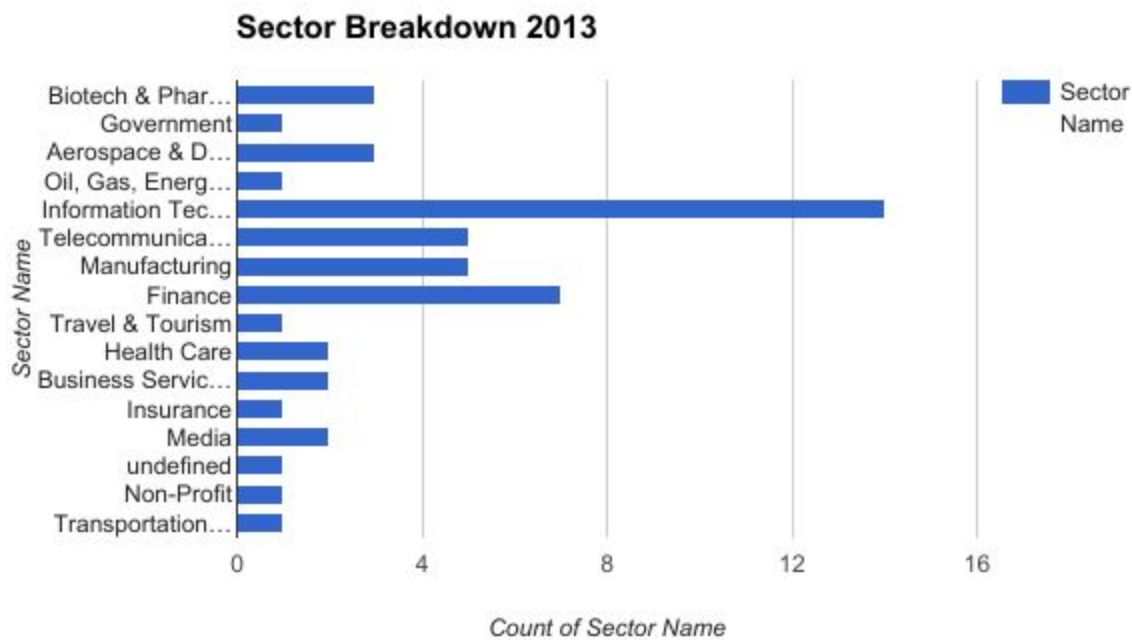
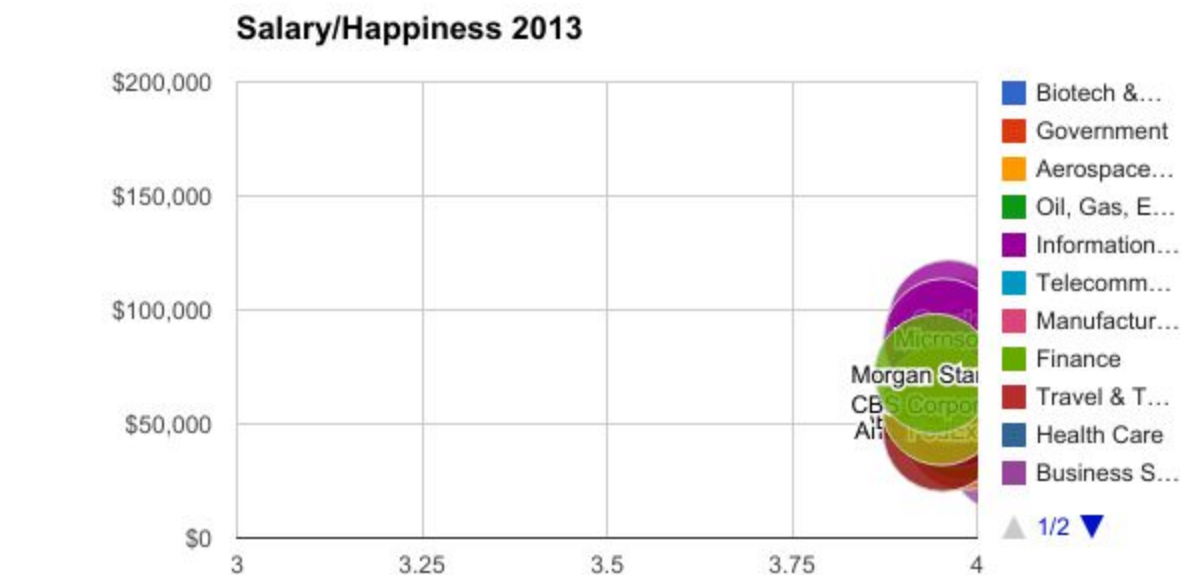
IT Breakdown 2014



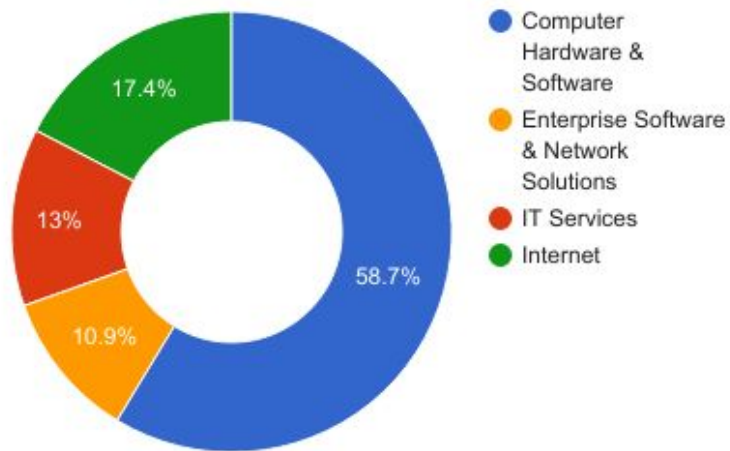
Headquarters in USA? 2014



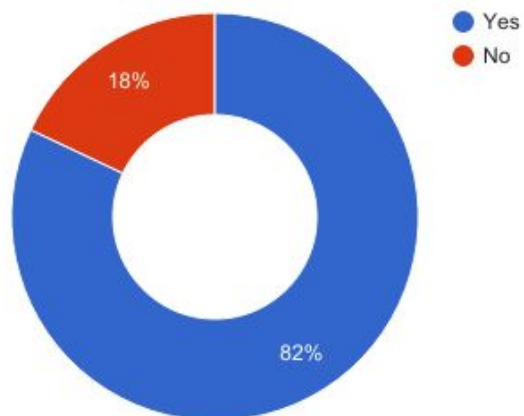
2013 Charts



IT Breakdown 2013

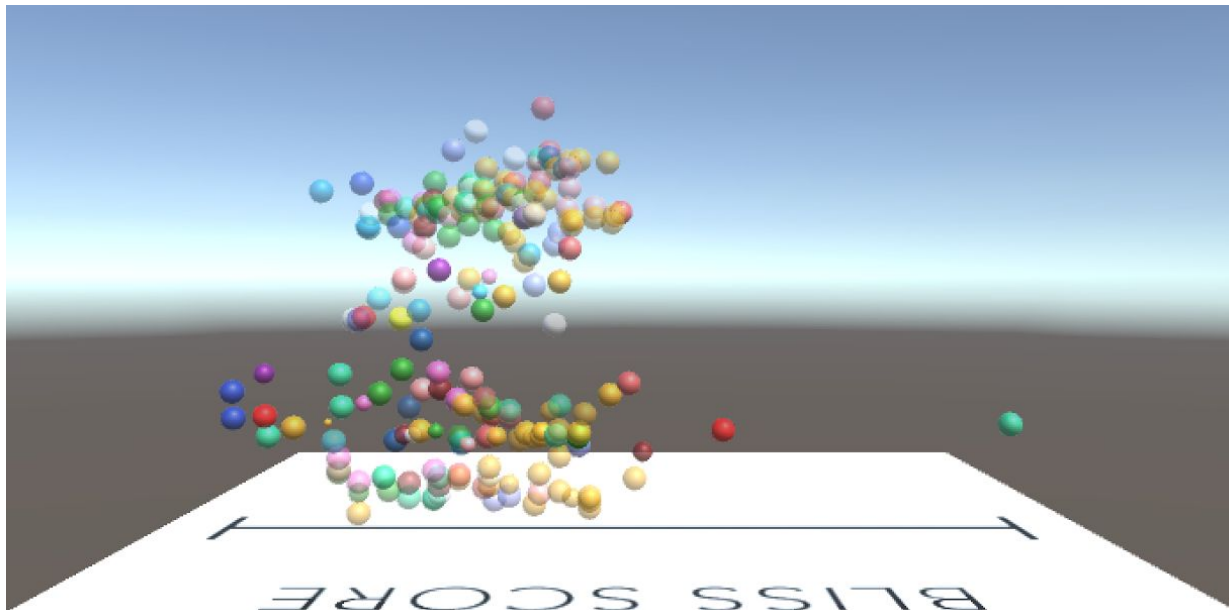


Headquarters in USA? 2013



Trends Over Time

Unity Project



All years

- Left to Right: Avg Salary
- Bottom to Top: Happiness

On Click

- Return Data about Comany
-



Final Goal: use 3D to make exploring bubble and line graphs together easier in the context of happiness rankings

Visualization Tools

- D3 + Three.js

Questions: Why are these companies happy? How can we use 3D to show this?

Data Sets

- [Bliss Scores](#) - copy paste
- [Global RepTrak Scores](#) - copy paste
- [Glass Door Data](#) - copy paste, glassdoor api

Exploratory Data Analysis: The bubble charts and line graphs were the most interesting, but hard to read. I wanted to recreate these in a way that utilized the x-axis for readability.

Design Evolution: I wanted to use Unity and the HTC Vive, but the aliasing on the text and the lack of real estate made this version difficult, so I switched to three.js and d3

Implementation: I used three.js to show a bubble chart of salary and bliss rating with a randomized z-axis for readability. I used D3 to show a line graph of the company's rank over time. If you click on any of the bubbles in either graph, it will highlight the corresponding bubble in the other graph. Selecting the year in the dropdown on the bubble chart will change the year view, selecting a bubble in a different year column on the line graph will also change the year view. Selecting a different option from the view dropdown will change the perspective. Any company selection will change the corresponding data at the bottom of the page.

Discoveries:

- Things that have two axes of similarity will likely have a similar third axis.
- Companies don't play by the rules: they tend to break trends rather than follow them
- 24 different colors is really hard to distinguish