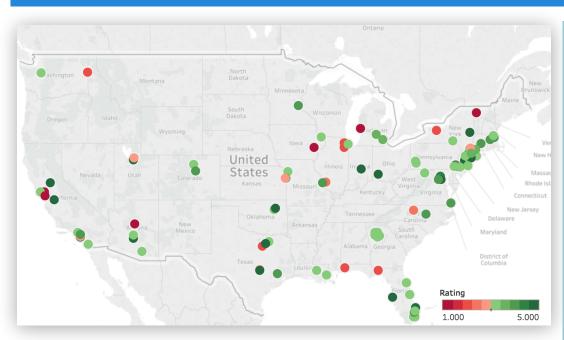


IBM Glassdoor Reviews

What do people really think about?



To begin with...

In general, employers at IBM gave a 3.8/5.0 overall ratings.

Ratings is one of a critical index one might look into when consider overall satisfaction of employees at one company. But in this analysis, I want to know the details about IBM's corporate culture, benefit, work-life balance, senior management and career opportunity by the Glassdoor review. Also, I would see whether those analysis matches IBM mission statement.

4 Approaches



WORD CLOUD

Get a general idea of what's the highest frequency words appear in the review.



LIFT SCORE

See the association between pros words, cons words and 5 rating categories.



TOPIC MODELING

Base on those review. generate topics that people are talking about.



THINK

IBM values innovation and creativity a lot in every aspect of their corporate culture



INCLUSION

Diversity makes them stronger thus IBM value inclusion in their mission statement.



SENTIMENT ANALYSIS

See the sentiment of employers from different positions, locations.

Let the data talk...

PROS TOPICS: TRAINING, OPPORTUNITY, SMART PEOPLE & TECHNOLOGY

People at IBM talks a lot about their training and career opportunity at pros review. Also, it's not hard to imagine an IT-based company to leverage some smart-ass people and start of the art technology. It also appears in the pros topic modeling results.

Decent v.s. Company Benefit 2.12 Smart v.s. Culture & Value 2.68

New v.s. Opportunity 2.13

CONS TOPICS: LOW SALARY AND MANAGERIAL ISSUE

In the cons review, topic modeling returns words like management, salary, process and long hours. Base on that, we could take a rough guess that IBM has some issue related to those topics. But still, these issue could vary across



different positions, functions and locations that need more sophisticated analysis to find out.

"No matter where they work, have a role in client success."

Mission statements of IBM shows a relatively high similarity with the pros review. This shows that the not only the company set the goal for employees, but they could actually feels and reflect that into their daily work.

Happiest Office Atlanta, GA 0.52 Avg Sentiment Score 0.47

Happiest Position: Software Engineer Washington, DC 0.96

METHODOLOGY

In this analysis, I scrapped down 30k reviews starting from 2012 to present from Glassdoor. I use a lot of NLTK which is a natural language toolkit that could do text processing like classification, tokenization, stemming,

lemmatization...etc. Take the Lift Score for example, I first tokenize the reviews, then lemmatize. Then count the frequency of those words in order to generate a list of pros words and cons words to use in calculating lift score. For topic modeling, I use gensim module to do Latent Dirichlet Allocation (LDA) model. As For sentiment analysis, I use SentimentIntensityAnalyzer from NLTK to calculate the sentiment score.

One things to mention, text analysis need to base on human experience. For the analysis, we have to constantly do sanity check to see whether the results make sense.

To see my code, please refer to my github.

