Glassdoor Consulting Reviews

Using unstructured data to assess employee satisfaction

Group 11

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Overview

Problem statement

What are we answering, and why does it matter?

How do employees truly feel about the company they work for? Are company values being practiced and upheld?

These insights, derived from employee reviews, can be utilized by consulting firm applicants (BCG, Deloitte, EY, KPMG, PwC) to gain a better understanding of what working at a particular company is like.

Ultimately, this knowledge aids the applicant in validating if the company practices what it preaches.

Overview

How did we tackle this?

Scrape Consulting Firm Reviews: BCG, Deloitte, EY, KPMG, PwC

Calculate Lift Scores: Pro's & Con's attributes V.S. Company Attributes

Work-Life Balance, Culture/Value, Career Development,
Benefits Offered, Senior Management

Topic Modeling & LDA: Identify what employees perceive to be
the pro's and con's of their organization

Cosine Similarity: Comparing company values to pro's and con's in Glassdoor reviews
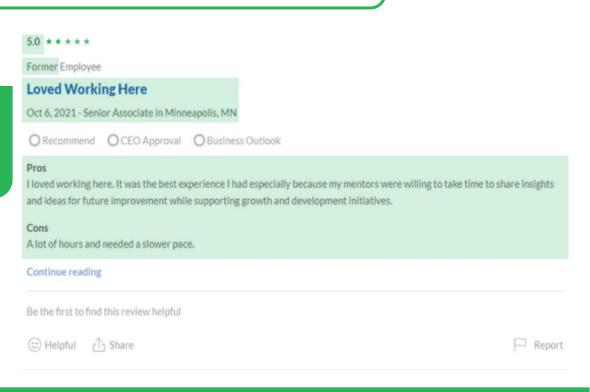
Sentiment Analysis:
How do employees across job titles and locations feel about their company?
Combine pro's and con's ratings to get a true assessment of employee sentiment

Scrape Consulting Firm Reviews

Collecting Relevant Information

Building the Webscraper

Employee comments, characteristics and ratings were collected for 200-300 pages of reviews

5.0 ★★★★★

Former Employee

Loved Working Here

Oct 6, 2021 - Senior Associate in Minneapolis, MN

○ Recommend   ○ CEO Approval   ○ Business Outlook

Pros

I loved working here. It was the best experience I had especially because my mentors were willing to take time to share insights and ideas for future improvement while supporting growth and development initiatives.

Cons

A lot of hours and needed a slower pace.

Continue reading

Be the first to find this review helpful

☺ Helpful   ⬆ Share   ⚑ Report

Company Values

Comparing keywords

KPMG

Our Values guide our behaviors day-to-day, informing how we act, the decisions we make, and how we work with each other, our clients, companies that we audit, and all our stakeholders. Our values are:

Integrity: We do what is right.

Excellence: We never stop learning and improving.

Courage: We think and act boldly.

Together: We respect each other and draw strength from our differences.

For Better: We do what matters.

pwc

PwC Global > About us > Purpose and values
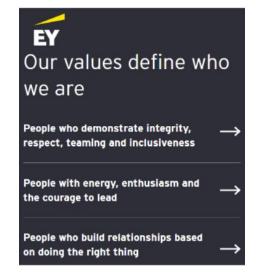
Our Values and Behaviors

Act with integrity	Make a difference	Care	Work together	Reimagine the possible

EY

Our values define who we are

People who demonstrate integrity, respect, teaming and inclusiveness →

People with energy, enthusiasm and the courage to lead →

People who build relationships based on doing the right thing →

Calculate Lift Scores

BCG

Work-Life Balance:
Sustainability

Company Benefits: Ethics

Deloitte

Company Benefits: Excellence

Culture Value: Excellence

Career Opportunity:
Relationships

Senior Management:
Relationships

KPMG

Lift Calculation Results

Work-Life Balance: Strength

Career Opportunity: Strength
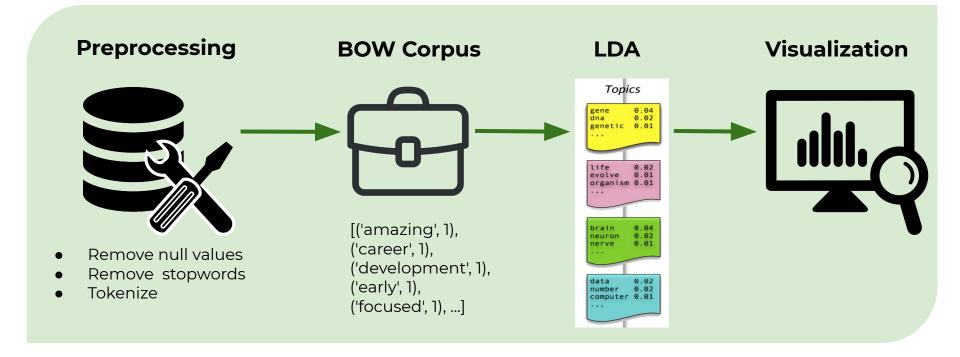
PwC

Work-Life Balance &
Company Benefit: Together

Culture Value: Trust

Topic Modeling & LDA

Process

Preprocessing

- Remove null values
- Remove stopwords
- Tokenize

BOW Corpus

[('amazing', 1),
('career', 1),
('development', 1),
('early', 1),
('focused', 1), ...]

LDA

Topics

gene	0.04
dna	0.02
genetic	0.01
...	

life	0.02
evolve	0.01
organism	0.01
...	

brain	0.04
neuron	0.02
nerve	0.01
...	

data	0.02
number	0.02
computer	0.01
...	

Visualization

BCG

PROS:

1st topic: **great office**
(work, good, great, office)

2nd topic: **great people**
(good, company, employees, people)

3rd topic: **learning opportunity**
(great, learning, good, people)

CONS:

1st topic: **bad management**
(work, cons, management, people)

2nd topic: **long work hours**
(hours, long, work, working)

3rd topic: **bad culture**
(work, team, consulting, culture)

Deloitte

`LDA Results`

PROS:

1st topic: **great team**
(People, work, great, team)

2nd topic:**care employee**
(deloitte, job, cares, employee)

3rd topic: **career opportunity**
(opportunities, great, career,
experience)

CONS:

1st topic: **bad management**
(get, time, like, management)

2nd topic: **long work hours**
(hours, long, work, busy)

3rd topic: **low salary**
(pay, salary, low, high)

EY

LDA Results

PROS:

1st topic: **great people**
(work, great, people, client)

2nd topic: **learning opportunity**
(opportunities, experience, learning, great)

3rd topic: **good pay**
(good, experience, pay, new)

CONS:

1st topic: **bad management**
(people, employees, mismanaged, many)

2nd topic: **long travel**
(hours, cons, long, travel)

3rd topic: **bad work life balance**
(hours, work, long, balance)

KPMG

LDA Results

PROS:

1st topic: **big 4**
(big, 4, kpmg, firm)

2nd topic: **smart people**
(people, work, firm, smart)

3rd topic: **good benefits**
(good, work, great, benefits)

CONS:

1st topic: **bad work life balance**
(work, balance, hours, life)

2nd topic: **bad management**
(people, company, management, staff)

3rd topic: **busy season**
(hours, busy, long, season)

PwC

LDA Results

PROS:

1st topic: **great people**
(great, work, good, people)

2nd topic: **great opportunity**
(good, great, experience, opportunities)

3rd topic: **good work life balance**
(work, balance, life, good)

CONS:
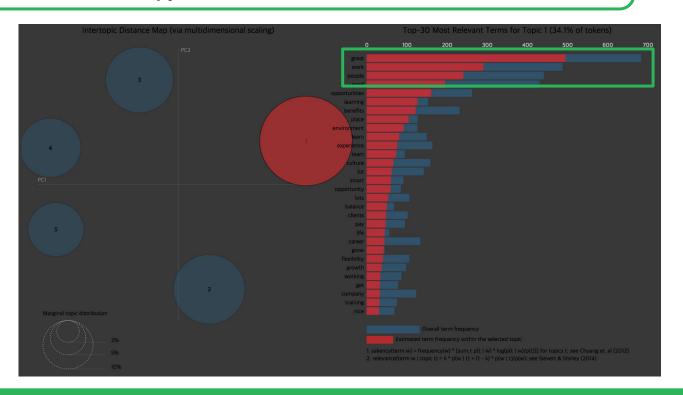
1st topic: **busy work sometimes**
(work, high, big, sometimes)

2nd topic: **long work hours**
(hours, long, work, working)

3rd topic: **busy season**
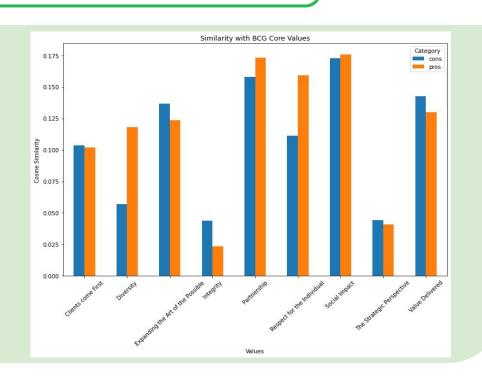(hours, busy, long, season)

LDA Visualization Example - PwC

LDA Visualization - pyLDAvis

Cosine Similarity

BCG

Cons with higher similarity:

- **Clients come First**

- **Expanding the Art of the Possible**

- **Integrity**

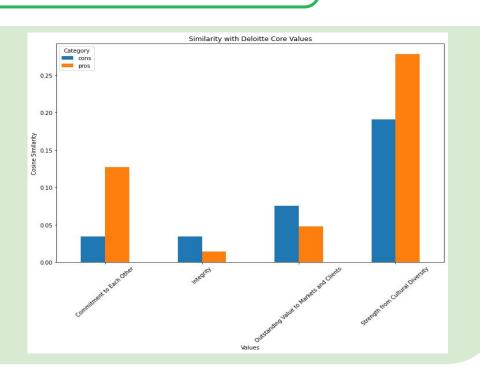- **The Strategic Perspective**
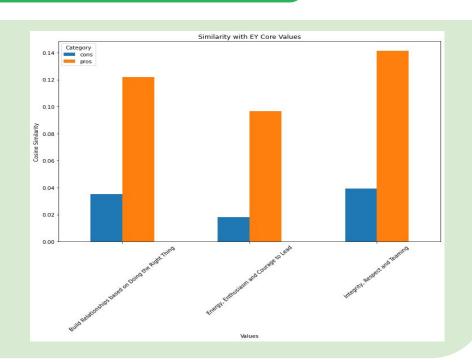

Similarity with BCG Core Values

Deloitte

Cosine Similarity

Cons with higher similarity:

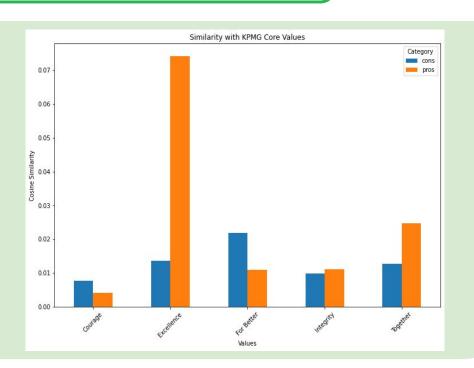- **Integrity**

- **Outstanding Value to Markets and Clients**
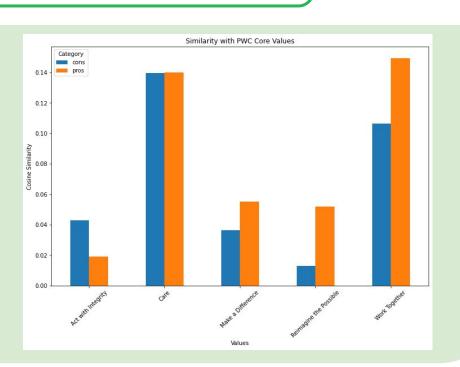

Similarity with Deloitte Core Values

EY

Higher similarity with pros for all core values

Similarity with EY Core Values

KPMG

Cosine Similarity

Cons with higher similarity:

- **Courage**

- **For Better**

Similarity with KPMG Core Values

PwC

Cons with higher similarity:

- **Act with Integrity**

Similarity with PWC Core Values

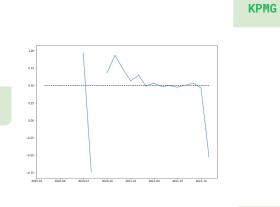# Sentiment Analysis

Process

What steps did we take to get here?

- **Data Cleaning:** stemmed and normalized the text by removing punctuation and making all letters lowercase

- **Columns:** 'title', 'date_written', 'rating', 'current_former', 'job_title', 'location', 'recommendation', 'outlook', 'main_text', 'pros', 'cons'

- **Methods:** SentimentIntensityAnalyzer() to get the individual scores by current_former, outlook, recommendation , and overall compound score

- **Calculations:** used a df of the pros and cons and mapped the sentiment analyzer to get the scores as well as a function to get the + or - direction of the score, and then took the average
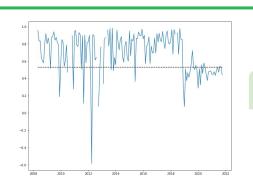
Results
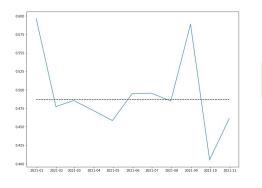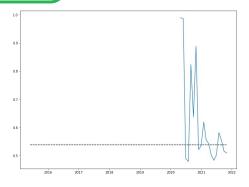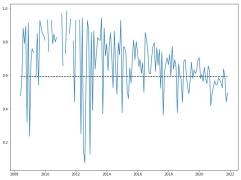
What did our analysis yield?

KPMG

Deloitte

PwC

EY

BCG

Results

What did our analysis yield?

PwC

Average sentiment score: 0.50369

	sent_score
current_former	
Current	0.514582
Former	0.474375

	sent_score
outlook	
Business Outlook	**0.503692**

	sent_score
recommendation	
Recommend	**0.503692**
Senior Associate	240
Associate	182
Anonymous Employee	121
Manager	111
Accountant	15

job title	
Senior Associate	**0.613353**
Tax Senior Associate	0.580567
Accountant	0.571047
Senior Manager	0.567318
Consultant	0.554081

KPMG

Average sentiment score: 0.53116

	sent_score
current_former	
Current	0.540789
Former	0.514310

	sent_score
outlook	
Business Outlook	**0.532943**

	sent_score
recommendation	
Recommend	**0.532943**
Senior Associate	347
Audit Associate	254
Associate	216
Manager	165
Audit Senior Associate	114

job title	
Senior Associate	**0.683402**
Advisory Associate	0.663542
Advisory Senior Asc.	0.621620
Anonymous Employee	0.611227
Director	0.570254

EY

Average sentiment score: 0.48675

	sent_score
current_former	
Current	0.501172
Former	0.439367

	sent_score
outlook	
Business Outlook	**0.486751**

	sent_score
recommendation	
Recommend	**0.486751**
Senior Consultant	193
Manager	112
Senior Manager	73
Senior Associate	70
Consultant	55

job title	
Associate Director	**0.720936**
Consultant	0.587216
Technology Consultant	0.587014
Senior Manager	0.535149
Senior Auditor	0.520789

Deloitte

Average sentiment score: 0.53867

sent_score	
current_former	
Current	0.547375
Former	0.507101

sent_score	
outlook	
Business Outlook	**0.538673**

sent_score	
recommendation	
Recommend	**0.538673**
Consultant	300
Senior Consultant	264
Manager	158
Analyst	86
Senior Manager	78

job title	
Business Analyst	**0.637573**
Senior Solution Spec.	0.637505
Audit Assistant	0.637346
Audit Manager	0.628604
Solution Analyst	0.613950

BCG

Average sentiment score: 0.59348

	sent_score
current_former	
Current	0.598501
Former	0.583811

	sent_score
outlook	
Business Outlook	**0.59349**

	sent_score
recommendation	
Recommend	**0.59349**
Consultant	563
Anonymous Employee	554
Associate	315
Project Leader	208
Principal	109

job title	
Administrative Assistant	**0.733079**
Partner	0.711254
Senior Knowledge Analyst	0.702080
Research Associate	0.676270
Principal	0.645666
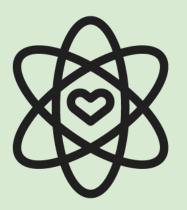
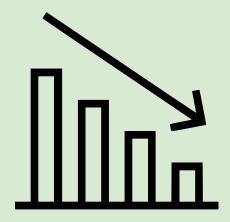**Only showing top 5**

Insights & Recommendations

Insights and Recommendations

Employer core values don't necessarily resonate with employees

Overall sentiment for each company is slightly decreasing as time goes on

Thank You! Questions?