

Research Proposal

FOUR Elements of “Framing”

Working Title: *Comparative Sentiment Analysis in Traditional vs. Digital Banking: The Case of Deutsche Bank and N26*

Research Question: How do employee reviews reflect the differences in job satisfaction and organizational culture between traditional banks (Deutsche Bank) and FinTech companies (N26)?

Key Papers:

- **Primary/Most Critical Paper:** Uchida, E., Kino, Y. (2021). *Study on the relationship between employee satisfaction and corporate performance in Japan via text mining*. Procedia Computer Science. ([Link](#))

The paper involves the relationship between employee satisfaction and company performance through textual analysis of anonymous employee reviews on Glassdoor. The study confirms a significant correlation between overall employee satisfaction and corporate performance, highlighting negatively correlated categories such as safety, communication, and integrity. This research could be particularly useful for my project by providing a methodological framework for analyzing job reviews and understanding how specific aspects of employee sentiment relate to corporate performance in the German financial service industry.

- **Secondary Paper:** Feng, S. (2023). *Job satisfaction, management sentiment, and financial performance: Text analysis with job reviews from indeed.com*. International Journal of Information Management Data Insights. ([Link](#))

The paper focuses on extracting meaningful information from reviews, particularly regarding management sentiment, using advanced text mining and sentiment analysis methods. This paper can be highly beneficial for my project by offering a detailed methodology for analyzing sentiment in employee reviews at Deutsche Bank and N26, enabling a comparison of how sentiment towards management correlates with company performance within the German financial service industry.

- **Supporting Paper:** Bordoloi, M., & Biswas, S. K. (2023). *Sentiment analysis: A survey on design framework, applications and future scopes*. Artificial intelligence review, 1–56. Advance online publication. ([Link](#))

The paper provides me with a comprehensive overview of sentiment analysis techniques and frameworks. It discusses the process of developing an efficient sentiment analysis model, highlighting the importance of factors such as relevant word extraction, sentiment classification, and data preprocessing. The paper reviews various approaches to sentiment analysis at different granularity levels and proposes potential application areas based on content data. This could guide me on a methodological approach in comparing employee sentiments at Deutsche Bank and N26, particularly regarding the selection and application of NLP techniques and sentiment analysis models.

Motivation:

The motivation behind this research comes from the rapid evolution of the financial sector, where traditional banks and emerging FinTech companies represent divergent organizational structures and cultures. Employee satisfaction can have a significant impact on the operational efficiency and reputation of banks. With the financial service industry in Germany undergoing rapid digital transformation, understanding employee sentiment is crucial for maintaining a competitive edge.

On the other hand, the second motivation is my career journey within the FinTech industry and a forward-looking aspiration to intern at a financial services company in the summer semester of 2024. Faced with the choice between traditional and digital banking environments, I would like to understand how different organizational structures impact employee sentiment and any financial institution's operational success and reputation.

With interests spanning both traditional and digital banking, this research is critical for considering which organizational structure fosters a work environment aligned with my professional goals. By analyzing employee reviews from Deutsche Bank and N26, this study is beneficial not only to enhance industry knowledge on talent retention and organizational development but also to inform my choice of internship, shaping my future career in the financial services industry.

THREE building blocks

Idea:

The core hypothesis is that analysis of employee reviews will reveal distinct sentiment trends and themes related to job satisfaction, management practices, and work-life balance across traditional and digital banks. As mentioned, I can refer to the Maslow theory which describes 5 hierarchy stages of needs (psychological needs, safety needs, social belonging needs, esteem needs, and self-actualization needs) which can help me identify the direction of employee sentiment within the organizations. Regarding my assumption, FinTech companies (N26 in my case), given their more agile and innovative organizational structures, will exhibit more positive employee sentiment such as job and organizational culture satisfaction in job reviews compared to traditional banks (Deutsche Bank in my case). Contrasting predictions might come from theories suggesting that the stability and established hierarchies of traditional banks could foster a different but equally positive employee sentiment. On the other hand, this project could provide actionable insights into the internal culture and potential areas for improvement within organizations.

Data:

The primary qualitative data source will be a collection of 200 employee reviews extracted from the Glassdoor platform for each company (Deutsche Bank and N26) to mitigate potential bias in the data due to the imbalance in quantity. I intend to analyze only the most recent Glassdoor reviews to ensure that my findings reflect the organization's current status. The dataset includes employee titles, pros, cons, and ratings. Core sampling characteristics include the review's sentiment, specific mentions of organizational aspects, and overall employee satisfaction. Potential obstacles include the normalization of review formats and ensuring the anonymity of respondents. Another limitation of my project is that Glassdoor reviews may not be representative of all employees, as they can be skewed toward those with extreme opinions.

Tools:

To examine the nuances of employee sentiment and organizational culture within Deutsche Bank and N26, my analysis will leverage Natural Language Processing (NLP) techniques. Sentiment analysis, topic modeling, and keyword extraction will be performed using Natural Language Processing (NLP) techniques, with tools such as Python's NLTK or spaCy libraries. This will involve categorizing the sentiments expressed in the reviews into positive, negative, or neutral classes. On the other hand, it can highlight the most significant concerns or praises mentioned by employees. Additional analysis will involve thematic coding of qualitative data to provide deeper insights by identifying recurring themes related to the organizational structure's influence on employee sentiment. Moreover, data visualization such as word clouds and sentiment distributions will be applied to present key findings and illustrate the sentiment and themes within the employee reviews.

TWO Key Questions

What's New?:

This research proposes a direct comparison of employee sentiment between a traditional bank and a FinTech company, specifically focusing on the influence of organizational structure. This comparative approach, especially within the context of the financial sector, offers a novel insight into the evolving dynamics of workplace satisfaction.

So What?:

The findings will provide valuable insights for both academic and industry stakeholders, highlighting the organizational factors that most significantly impact employee sentiment trends which contribute to the broader discourse on work culture within the banking industry. This research can also guide organizational policy and strategy, improve employee satisfaction, and enhance organizational performance, which is crucial in the competitive financial sector.

ONE Bottom Line

Contribution:

This proposal framework lays out a clear path for exploring the sentiment and themes within job reviews of Deutsche Bank and N26, leveraging text analysis and NLP techniques. The primary contribution of this study lies in its comparative analysis of employee sentiment across the traditional bank and FinTech company sectors (bank and non-bank comparison), revealing the impact of organizational structure on employee satisfaction. The research aims to offer evidence-based insights that can inform both theoretical frameworks and practical applications in organizational development and contribute meaningful insights to both academic and industry discussions on employee satisfaction in the financial service sector.