Sentiment Analysis Results

Hypothesis

The sentiment analysis of each line of each document around 5 identified sentiments (Innovation & Growth, Community Impact, Environmental Stewardship, Ethical Governance, and Employee Wellbeing) yields a percentage distribution of each sentiment in each document. The generated summary should reflect at least the average distribution of these sentiments present in the source documents.

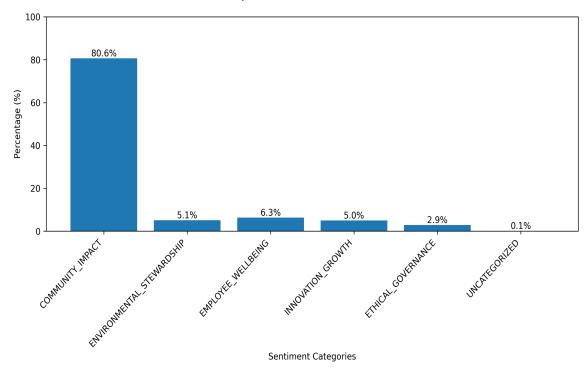
Findings

The results demonstrate that incorporating sentiment analysis into the prompt engineering process significantly improved the alignment between the source document sentiment distribution and the generated summary. The improved version shows a much closer match to the source documents' emphasis on Community Impact, which was the dominant sentiment in both source documents. Key observations: 1. Community Impact was the dominant sentiment in both source documents (80.6% in 2023-24 and 67.4% in 2024-25) 2. Without sentiment analysis guidance, the summary showed a more balanced distribution (35.7% Community Impact) 3. With sentiment analysis-based prompt improvement, the summary better reflected the source documents' emphasis (62.5% Community Impact) 4. The improved version maintained better proportions across all sentiment categories, particularly in Environmental Stewardship (18.8%) and other categories

Source Document Sentiment Distributions

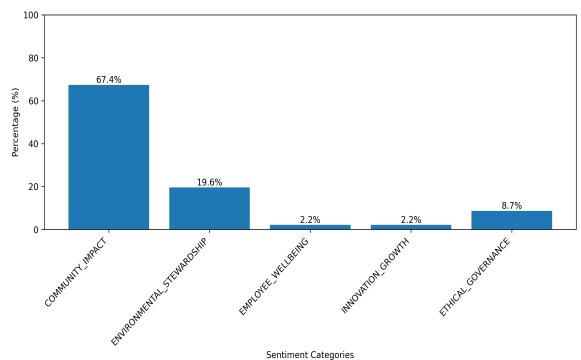
CSR Report 2023-24

CSR Report 2023-24 Sentiment Distribution

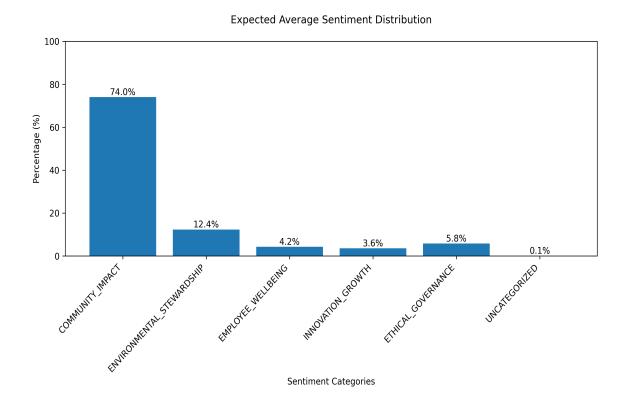


CSR Report 2024-25

CSR Report 2024-25 Sentiment Distribution



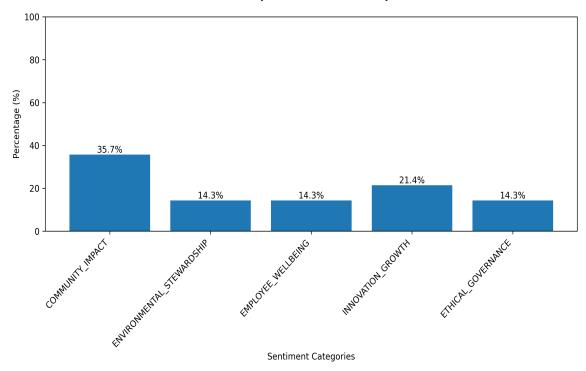
Expected Average Distribution



Summary Generation Results

Without Sentiment Analysis

Summary Without Sentiment Analysis



With Sentiment Analysis

Summary With Sentiment Analysis

