Employee Sentiment Analysis - Final Report

# 1. Overview

This project analyzes sentiment in employee messages using natural language processing and statistical techniques.

# 2. Methodology

We used VADER to classify messages into Positive, Negative, or Neutral. Exploratory Data Analysis was conducted to uncover patterns in sentiment across time and individuals.

# 3. Scoring & Ranking

Each message was scored (+1, -1, 0). Monthly aggregation enabled rankings and flight risk detection (>=4 negative messages in 30 days).

# 4. Predictive Modeling

Linear regression was used to predict sentiment scores based on message length, frequency, etc.

# 5. Conclusion

Insights from this analysis help identify disengaged employees and improve morale tracking.