

# Sentiment Analysis of Popular Songs' Lyrics: A Strategy for Optimizing Music Investments and Retention

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## Goals

1. Analyze sentiment trends in popular song lyrics by year.
2. Understand how lyrical content impacts listener preferences and investment decisions.
3. Identify key topics and keywords that maximize advertising returns and increase subscriber retention.
4. Investigate the influence of major historical events on popular music sentiment and lyrical themes.

## Objectives

1. Extract and process lyrics data from popular songs across various years.
2. Conduct sentiment analysis to identify trends in emotional content.
3. Perform topic modeling using Latent Dirichlet Allocation (LDA) to discover recurring themes and keywords.
4. Investigate the relationship between lyrical sentiment and subscription discontinuation patterns.
5. Provide actionable recommendations for music companies regarding song selection and advertising investments.

## Data source

Spotify Million Song Dataset from Kaggle