

**NAAN MUDHALVAN PROJECT(IBM)**

**IBM AI 101 ARTIFICIAL INTELLIGENCE-GROUP 1**

**Title : Sentiment Analysis For Marketing**

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**Problem Statement** : The problem is to perform sentiment analysis on customer feedback to gain insights into competitor products. By understanding customer sentiments, companies can identify strengths and weaknesses in competing products, thereby improving their own offerings. This project requires utilizing various NLP methods to extract valuable insights from customer feedback.

# Data Collection: Gather data from social media, online reviews, or surveys related to your marketing materials.

# Preprocessing: Clean and prepare the data, removing noise and irrelevant information.

# Sentiment Analysis: Use Natural Language Processing (NLP) tools to analyze the text data. Common sentiment analysis techniques include:

# Lexicon-based: Assign sentiment scores to words and calculate an overall sentiment score for the text.

# Machine Learning: Train a machine learning model to classify text as positive, negative, or neutral sentiment.

# Visualize Results: Present the sentiment analysis results in a visually digestible format, such as charts or graphs, to help stakeholders understand the sentiment trends.

# Iterate and Improve: Use the insights gained from sentiment analysis to refine your marketing design techniques. Identify aspects that are positively received and areas for improvement.

# Competitor Analysis: Compare sentiment analysis results with those of your competitors to gain a competitive edge.

# A/B Testing: Conduct A/B tests with different design variations to see which one elicits a more positive sentiment.

# Continuous Monitoring: Implement continuous sentiment monitoring to stay updated on how your design techniques are perceived over time.