SENTIMENT ANALYSIS FOR MARKETING

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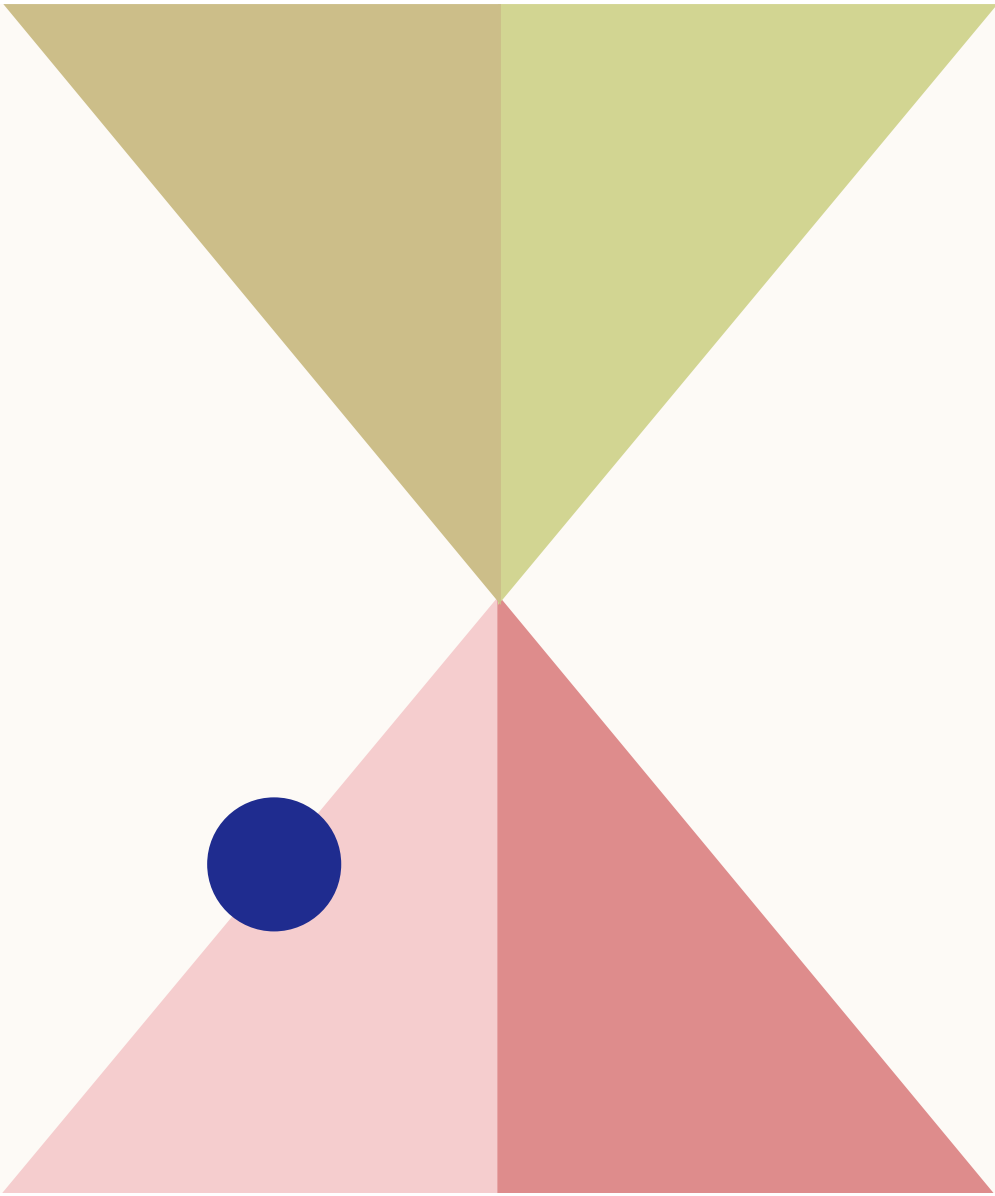
AGENDA

Problem Statement

Problem Explanation

Design Thinking

Solution



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.

PROBLEM EXPLANATION

Objective: Perform sentiment analysis on customer feedback about competitor products.

Purpose: Gain insights into customer perceptions of competitor products.

Improvement: Identify competitor product strengths and weaknesses for enhancing our own offerings.

Methodology: Utilize Natural Language Processing (NLP) techniques for text analysis.

Value: Harnessing customer feedback for informed, data-driven decisions.

Applications: Relevant to marketing, product development, and customer service across industries.

DESIGN THINKING

1)Data Collection

•Identify relevant sources of customer feedback data, such as online review platforms, social media, surveys, and customer support channels.
•Gather a diverse set of reviews covering various competitor products to ensure representative data.
•Ensure data integrity and privacy compliance

2) Data Preprocessing

- Perform data cleaning by removing irrelevant information such as special characters, URLs, and non-alphanumeric characters.
- Tokenize the text data, breaking it into individual words or tokens.
- Remove stopwords (common words that don't carry much sentiment) to focus on meaningful content.
- Consider lemmatization or stemming to reduce words to their base form for consistency

3) Techniques

•Explore and select suitable sentiment analysis models or algorithms based on the dataset size and complexity.
•Consider using pre-trained models like BERT or GPT-3 for improved accuracy and efficiency.
•Fine-tune the selected model on the dataset to adapt it to specific business requirements.

4) Feature Extraction

- Extract relevant features from the preprocessed text data, such as n-grams, sentiment lexicon scores, or word embeddings.
- Calculate sentiment scores for each review, categorizing them as positive, negative, or neutral.
- Explore the possibility of identifying key topics or themes within the reviews.

5) Visualization

•Generate visualizations such as bar charts, word clouds, and time series plots to illustrate the sentiment distribution.
•Use color coding to distinguish between positive, negative, and neutral sentiments.
•Visualize changes in sentiment over time or across different competitor products.

6) Insight Generation

•Analyze the sentiment scores in the context of competitor products to identify common themes and trends.
•Highlight strengths and weaknesses of competing products based on customer feedback.
•Provide actionable recommendations to improve the company's own products or marketing strategies.
•Collaborate with relevant teams within the company to implement suggested improvements.

THANK YOU