

**PROJECT REPORT ON**  
**SENTIMENT ANALYSIS: ANALYZING CUSTOMER REVIEWS AND FEEDBACK**  
**TO PREDICT CONSUMER SENTIMENT TOWARDS CASHEW PRODUCTS**

**Submitted by**  
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**Submitted to**



**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAVI**

**In partial fulfilment of the requirement for the award of the degree of**

**MASTER OF BUSINESS ADMINISTRATION**

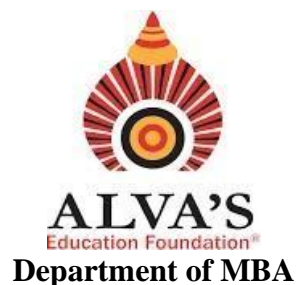
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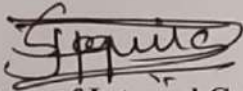


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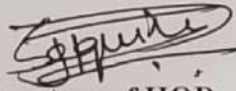
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## CERTIFICATE

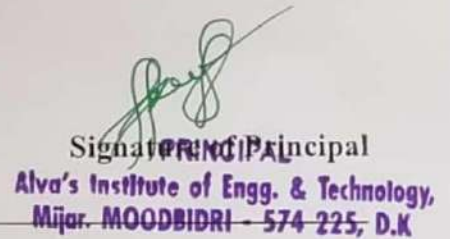
This is to certify that **Shrutha D Shetty** bearing **USN 4AL22BA101**, is a bonafide student of Master of Business Administration course of Alva's Institute of Engineering and Technology, Moodbidri for the batch 2022-2024, affiliated to Visvesvaraya Technological University, Belagavi. The Project report on "**Sentiment Analysis: Analyzing Customer Reviews and Feedback to Predict Consumer Sentiment Towards Cashew Products**" is prepared by her under the guidance of Mrs. Priya Sequeira, Associate Professor, in partial fulfilment of the requirements for the award of the degree of Master of Business Administration of Visvesvaraya Technological University, Belagavi, Karnataka.



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## DECLARATION

I **SHRUTHA D SHETTY**, hereby declare that the Project report titled "**Sentiment Analysis: Analyzing Customer Reviews and Feedback to Predict Consumer Sentiment Towards Cashew Products**" prepared by me under the guidance of **Mrs. Priya Sequeira**, Dean, PG Dept. of Business Administration, Alva's Institute of Engineering and Technology.

I also declare that this Project work is towards the partial fulfilment of the university regulations for the award of degree of Master of Business Administration by Visvesvaraya Technological University, Belagavi.

I have undergone a summer project for a period of six weeks. I further declare that this project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other university/institution.

Place: **MIJAR**

Date: **10.09.2024**



Signature of the Student

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## **Executive Summary**

The document's research centres on utilizing sentiment analysis to gain insights into consumer behavior and opinions regarding cashew products by evaluating customer reviews. Sentiment analysis, a key aspect of machine learning, is critical for detecting emotions in textual data, whether positive, neutral, or negative. This study focuses on consumer feedback for cashew products and employs machine learning algorithms and natural language processing (NLP) techniques to identify patterns within extensive datasets. By training models on labeled data, where reviews are categorized by sentiment, the algorithms learn to associate specific linguistic features with certain emotions. Once trained, these models can efficiently analyze new, unlabelled reviews, offering valuable insights into customer sentiment.

The objective of this study is to help cashew businesses better understand market dynamics, customer concerns, and product strengths through sentiment analysis. This enables companies to respond promptly to customer feedback and make data-driven choices regarding product innovation and marketing. In a competitive market like cashews, understanding consumer sentiment is essential for maintaining customer interest and addressing issues effectively.

India, as one of the leading producers and exporters of cashews, has a long-standing tradition of cashew farming that began in the 16th century with the arrival of Portuguese traders. Today, states such as Maharashtra, Karnataka, Kerala, and Tamil Nadu are key contributors to India's cashew output. The industry is crucial for millions of small and marginal farmers, particularly in rural regions. Indian cashews are renowned worldwide for their high quality, rich flavor, and nutritional benefits. However, despite advances in processing technology, the industry remains labour-intensive, with tasks like shelling and packaging still heavily reliant on manual labour. The research also emphasizes the importance of the cashew industry in Dakshina Kannada, Karnataka, where cashew cultivation holds significant economic and cultural value. While the industry faces challenges such as fluctuating prices and increased competition, the region's cashews maintain high quality, ensuring strong demand both domestically and globally.

Through this sentiment analysis, the research seeks to identify key factors that drive both customer satisfaction and dissatisfaction. By examining frequently mentioned keywords in reviews, the study aims to highlight aspects that shape consumer

preferences. These insights allow producers to gain a clearer understanding of what customers appreciate or criticize, enabling them to adjust their products accordingly. The analysis evaluates model performance using metrics such as precision, accuracy, recall, and F1-score to ensure accurate sentiment classification.

The study's results provide actionable insights for cashew producers, helping them enhance product quality, improve customer service, and fine-tune marketing strategies. By continuously tracking sentiment trends, producers can better align their products with consumer expectations and ensure market relevance. Ultimately, the research equips businesses with tools to drive continuous improvement, foster customer loyalty, and maintain a competitive edge in the cashew market. Through sentiment analysis, businesses can make more informed decisions and uphold a positive brand reputation.