PROJECT REPORT

"A study on Sentimental Analysis on Amazon considering mobile product on Vivo"

SUBMITTED BY:

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Submitted to:

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI

In partial fulfilment of the requirements for the award of the degree of

MASTER OF BUSINESS ADMINISTRATION

Under the guidance of

INTERNAL GUIDE:

Mrs. Archana D P

Assistant professor

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ALVA'S
Education Foundation

DEPARTMENT OF BUSINESS ADMINISTRATION ALVA'S INSTITUTE OF ENGINEERING PG AND TECHNOLOGY, SHOBHAVANA CAMPUS, MIJAR MOODBIDRI 2023-24

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
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Affiliated to Visvesvaraya Technological University, Belagavi
Approved by AICTE, New Delhi & Recognised by Government of Karnataka
Accredited by NBA (CSE & ECE)

Date: 09/09/2024

CERTIFICATE

This is to certify that **Shushank Jain** bearing **USN 4AL22BA102**, 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 **"A Study on Sentimental Analysis on Amazon considering mobile product on Vivo"**, is prepared by her under the guidance of Archana D P, Professor, in partial fulfilment of the requirements for the award of the degree of Master of Business Administration of Visvesvaraya Technological University, Belagavi Karnataka.

Signature of Internal Guide **Signature of HOD** **Signature of Principal**

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DECLARATION

I, **Shushank Jain(4AL22BA102)**, here by declare that the Project Title entitled **"A study on Sentimental Analysis on Amazon considering mobile product on Vivo"** prepared by me under the guidance of **Mrs. Archana D P**, faculty of MBA Department, Alva's Institute of Engineering and Technology and

I also declare that this Project is towards the partial fulfillment 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.

Signature of the Student

Shushank jain

(4AL22BA102)

Place:

Date:

ACKNOWLEDGEMENT

I would like to express my special thanks to my Internal Guide **Mrs. Archana D P**. Who gave me the golden opportunity to do this positive Research on the topic - **"A study on Sentimental analysis on amazon considering mobile product on vivo"**

I would like express my sincere thanks to Principal **Dr. Peter Fernandes**, AIET, Moodbidri. And I express my deep sense of gratitude to my internal guide **Mrs. Archana D P**, Professor of MBA Department, for the constant support and encouragement to carry out my report successful without much difficulty. I express my heartfelt thanks for their constant encouragement and support during the entire report.

This project has helped me to explore and learning new concepts. I am thankful to them for their invaluable support and guidance throughout this journey.

I express my deepest gratitude to my parents and family members for their active role in my professional development without which my higher studies would have been just a dream.

Finally, I thank my friends for their valuable suggestions offered to me to complete this study successfully.

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EXECUTIVE SUMMARY

In this project, I conducted an analysis of customer reviews for Vivo mobile products on Amazon. The first step involved collecting data using web scraping techniques, specifically through Python's Beautiful Soup library. After gathering the reviews, I proceeded with data cleaning and preparation, addressing missing values and ensuring the data was suitable for analysis.

Next, I utilized Natural Language Processing (NLP) to classify the sentiment of the customer reviews into positive, neutral, or negative categories. This process allowed me to explore how customers felt about the products they had purchased.

I then applied three machine learning models—Logistic Regression, Support Vector Classifier, and Random Forest Classifier—to predict customer sentiment based on the reviews. Each model was trained on the data to evaluate its effectiveness in predicting sentiment.

Finally, I visualized the data to explore key patterns such as price distribution, ratings, and customer sentiment, helping to identify insights into customer preferences and product performance. Through this structured approach, the project aimed to offer a comprehensive analysis of Vivo products based on customer feedback.