

Sentiment Analysis using Logistic Regression

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OUTLINE

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- OBJECTIVES
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Introduction

- Sentiment Analysis is a method for judging somebody's sentiment or feeling with respect to a specific thing. It is utilised to recognise and arrange the sentiments communicated in writings
- Textual information in the world can be broadly categorised into two main types: facts and opinions.
- Facts are objective about entities, events and their properties. Opinions are usually subjective expressions that describe people's sentiments, appraisals or feelings toward entities, events and their properties

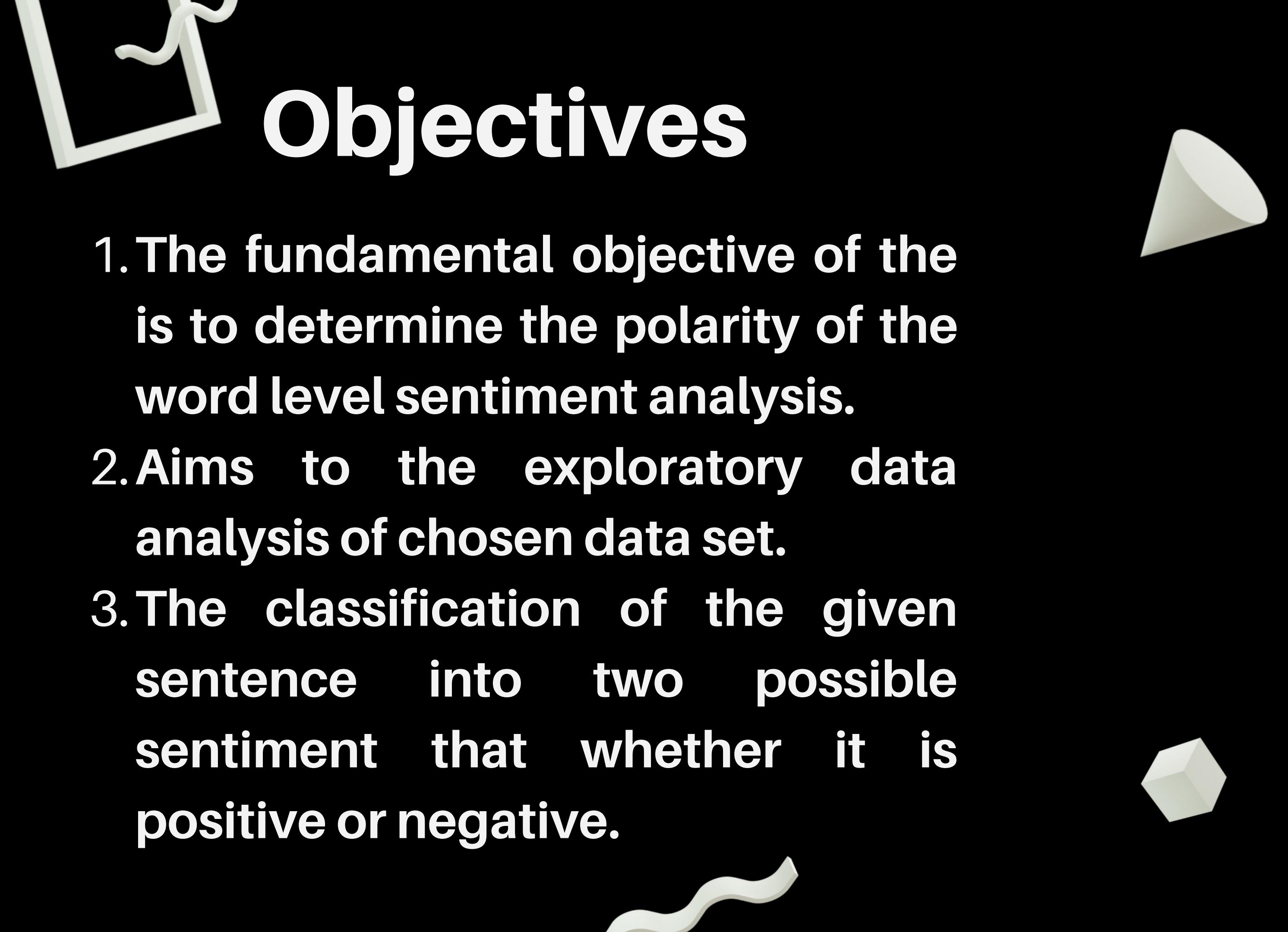


What is Sentiment Analysis?



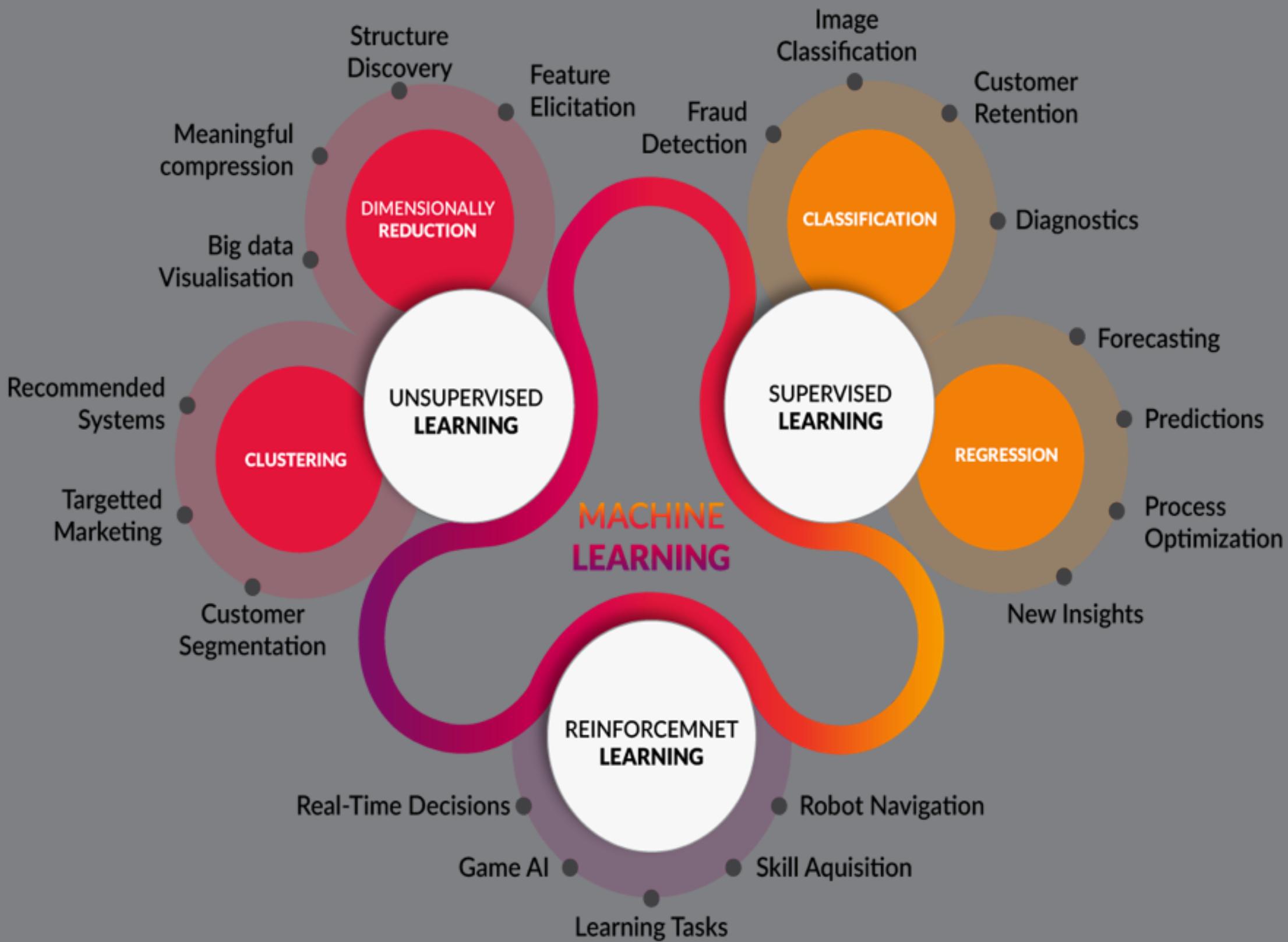
- The process of computationally identifying and categorising opinions expressed in a piece of text, especially in order to determine whether the writer's attitude towards a particular topic, product, etc. is positive, negative, or neutral.
- Logistic Regression is a Machine Learning method that is used to solve classification issues. It is a predictive analytic technique that is based on the probability idea.





Objectives

1. The fundamental objective of the is to determine the polarity of the word level sentiment analysis.
2. Aims to the exploratory data analysis of chosen data set.
3. The classification of the given sentence into two possible sentiment that whether it is positive or negative.

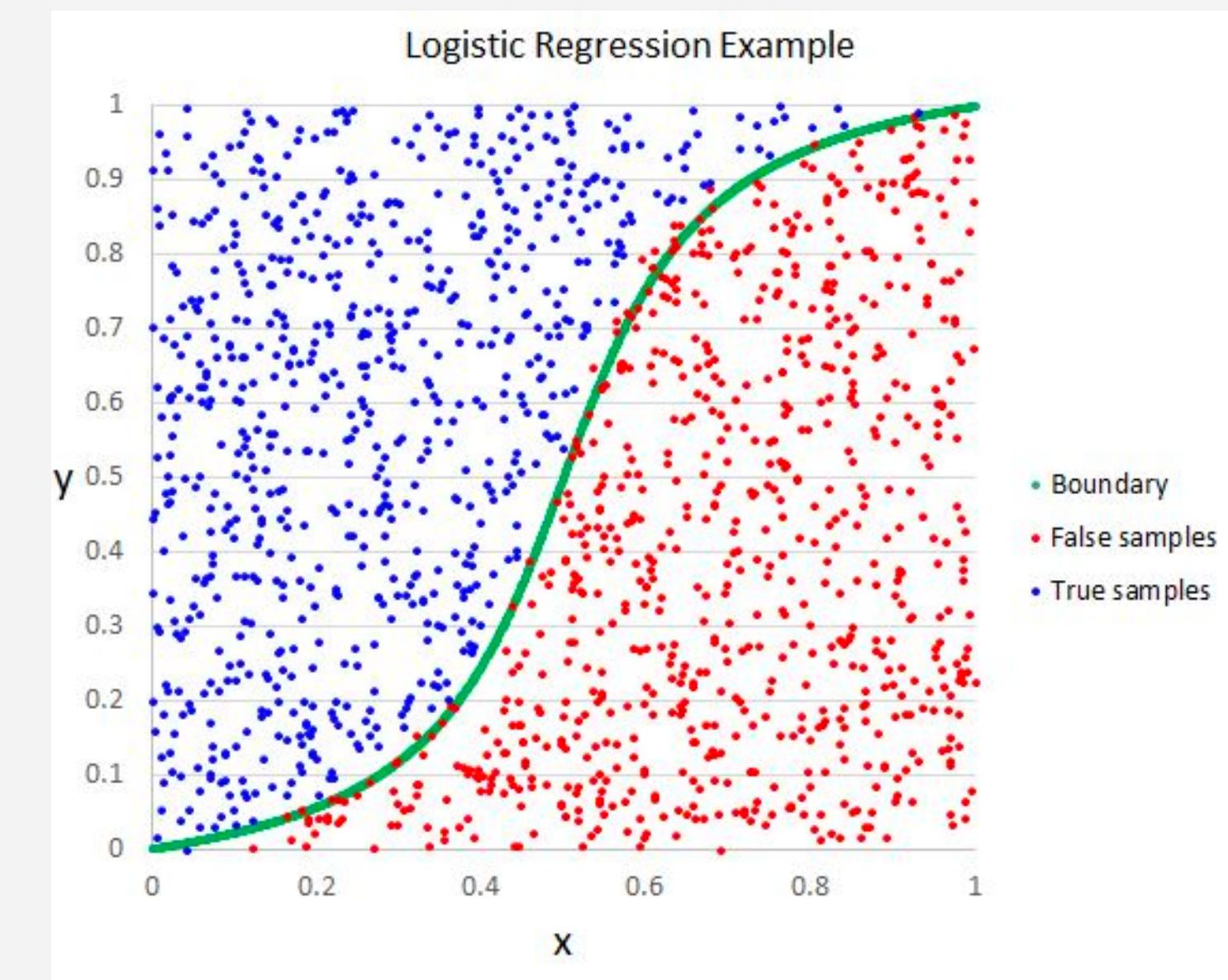


Algorithm & Domain



Logistic Regression

- Logistic Regression is a “Supervised machine learning” algorithm that can be used to model the probability of a certain class or event. It is used when the data is linearly separable and the outcome is binary or dichotomous in nature.
- That means Logistic regression is usually used for Binary classification problems.
- Binary Classification refers to predicting the output variable that is discrete in two classes.
- A few examples of Binary classification are Yes/No, Pass/Fail, Win/Lose, Cancerous/Non-cancerous, etc.



Images

Fig. 1

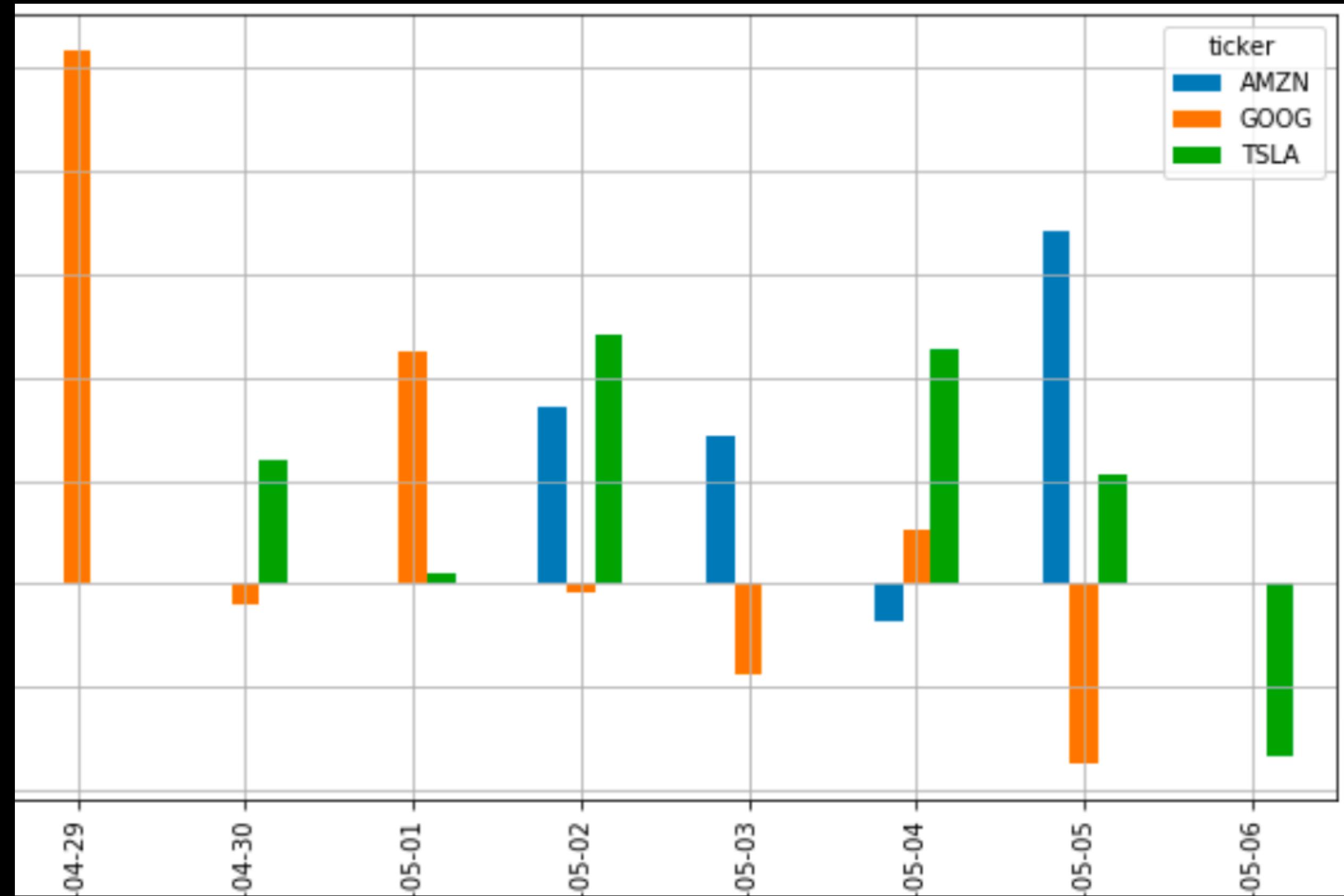
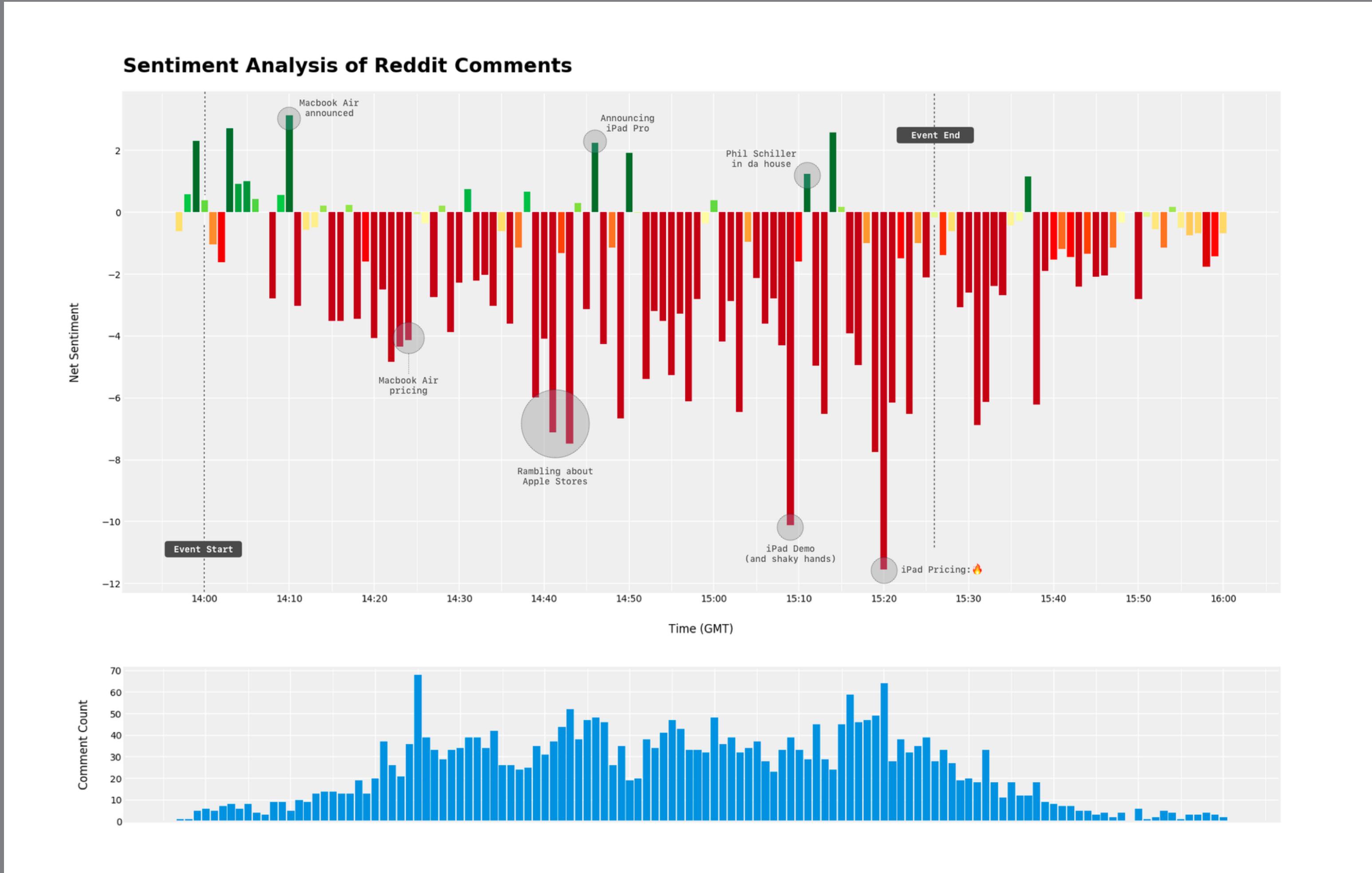
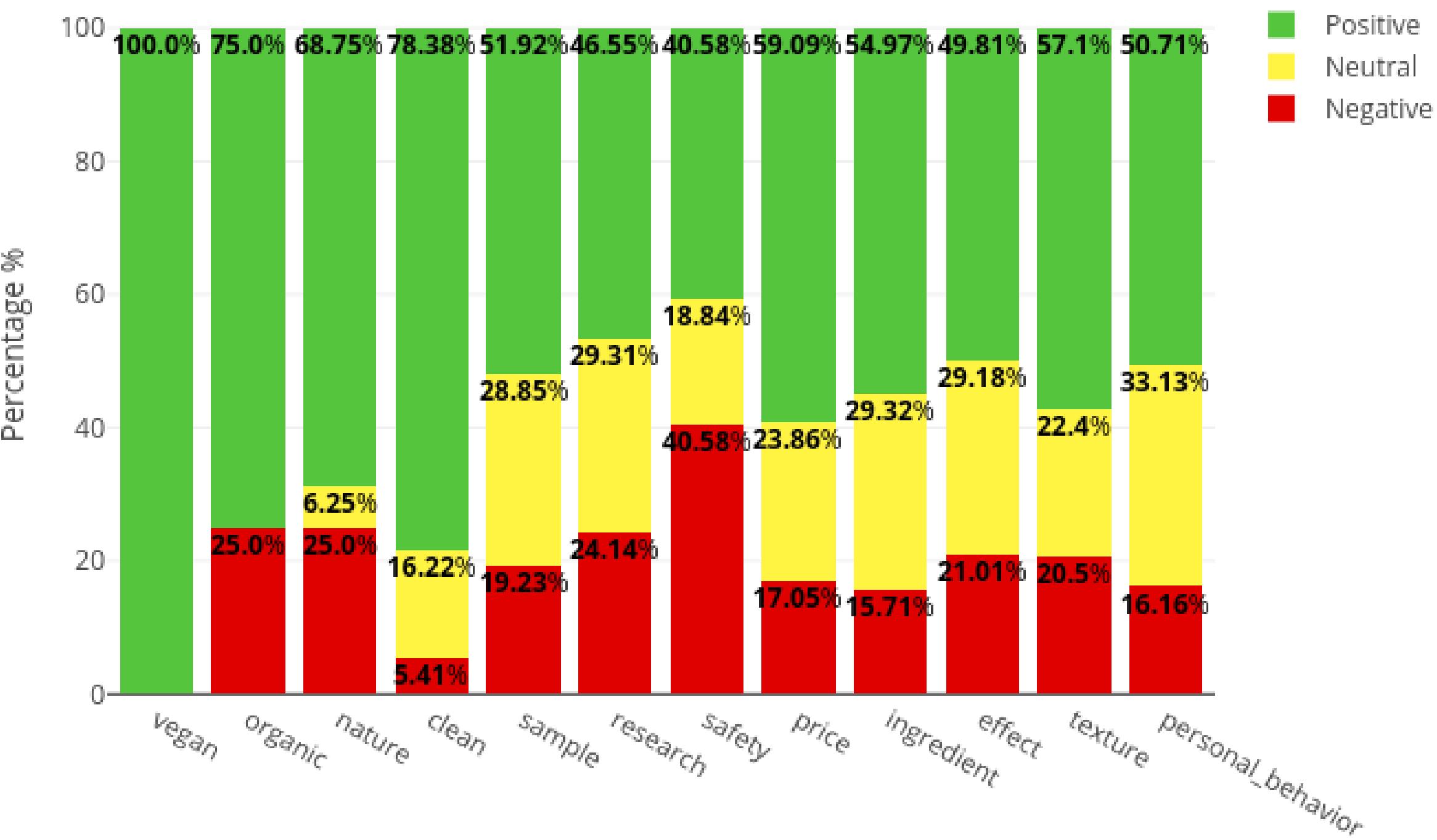


Fig. 2

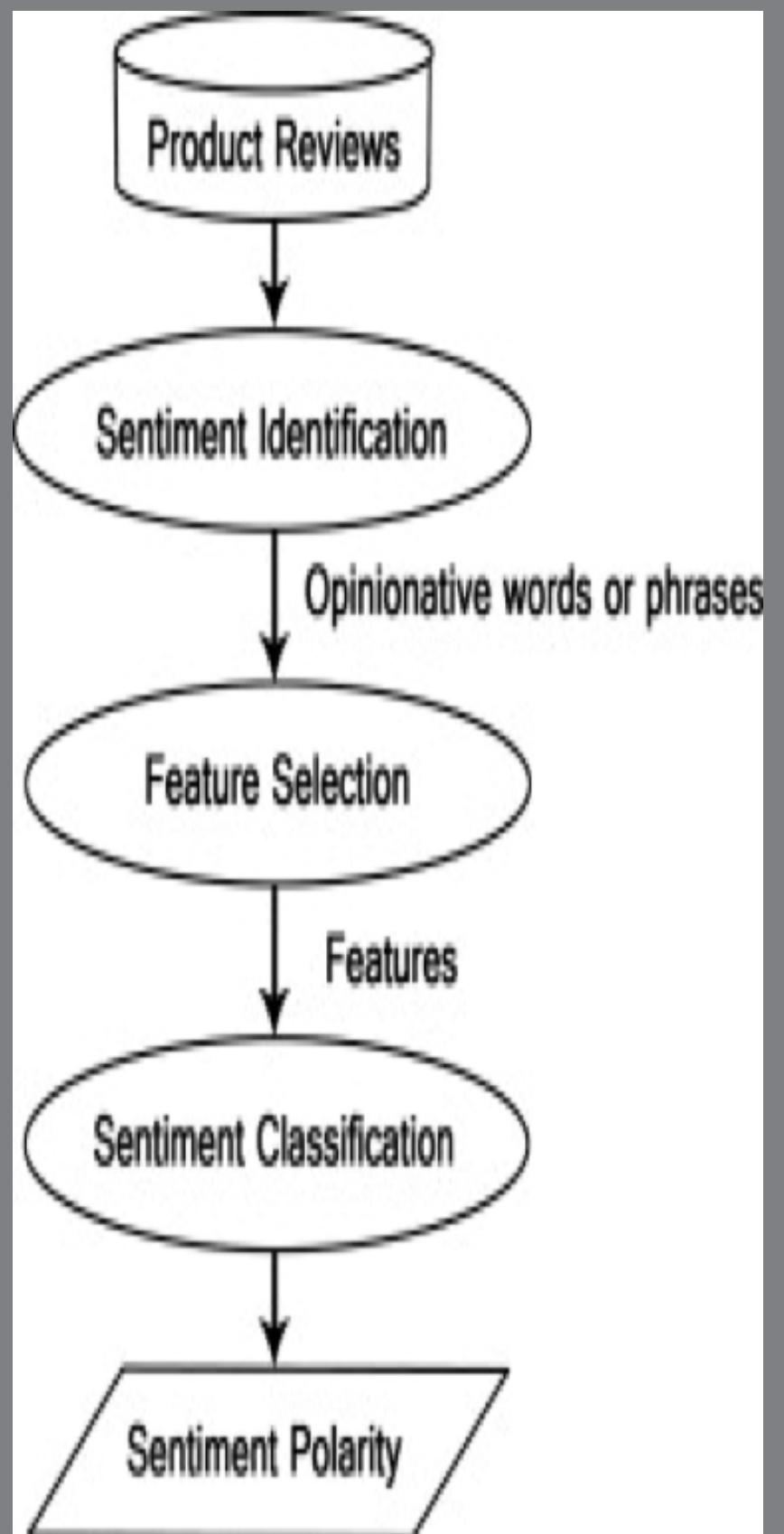


La Mer - Sentiment Analysis By Topic

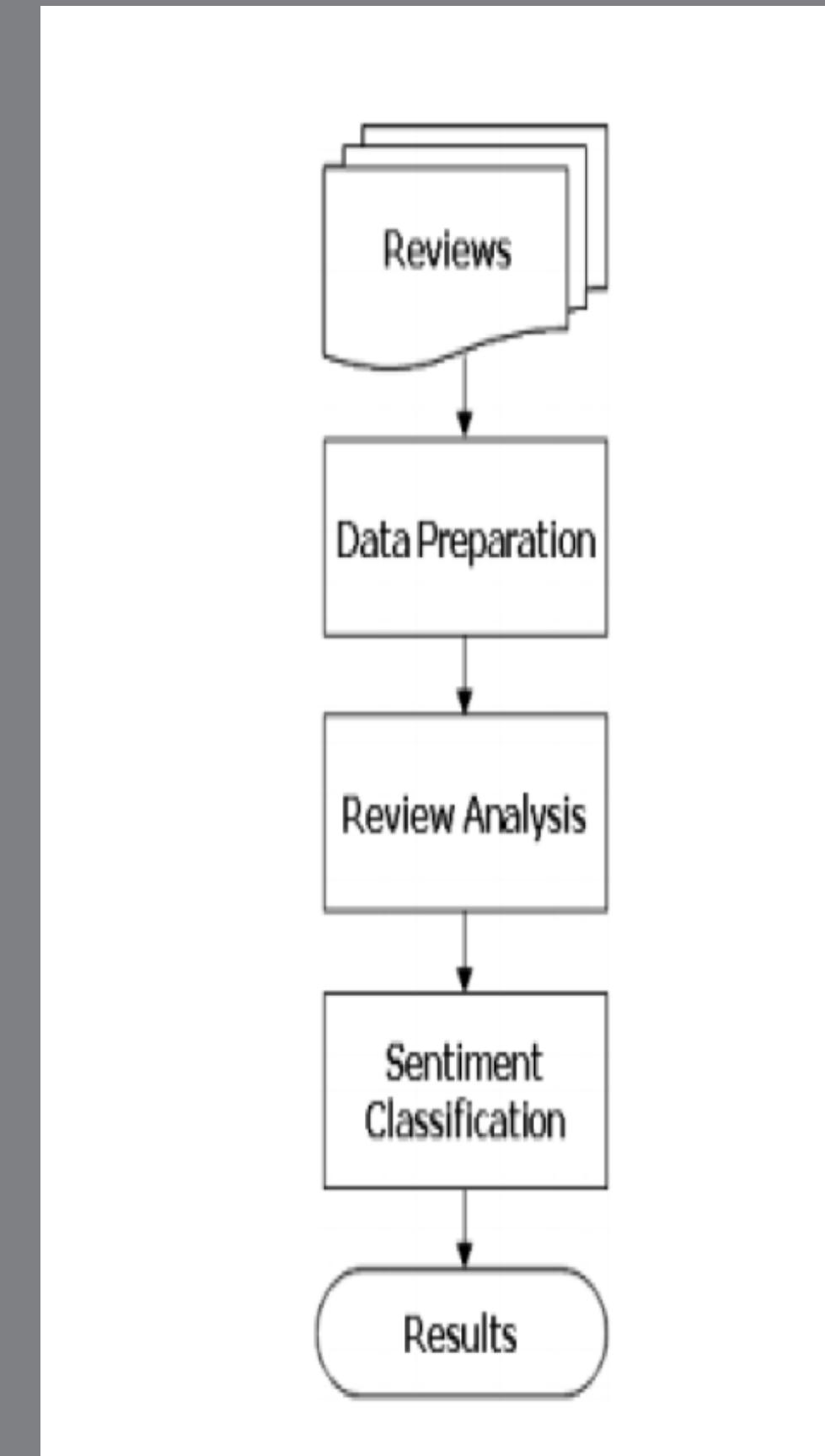
Fig. 3



STUDY DESIGN

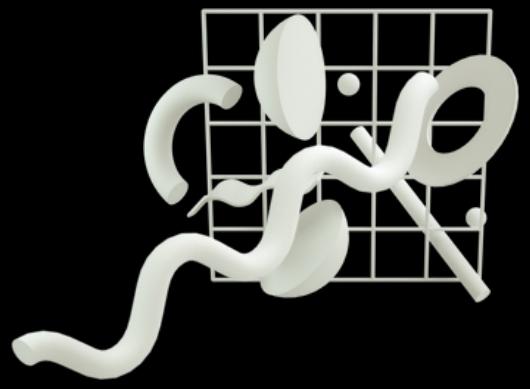


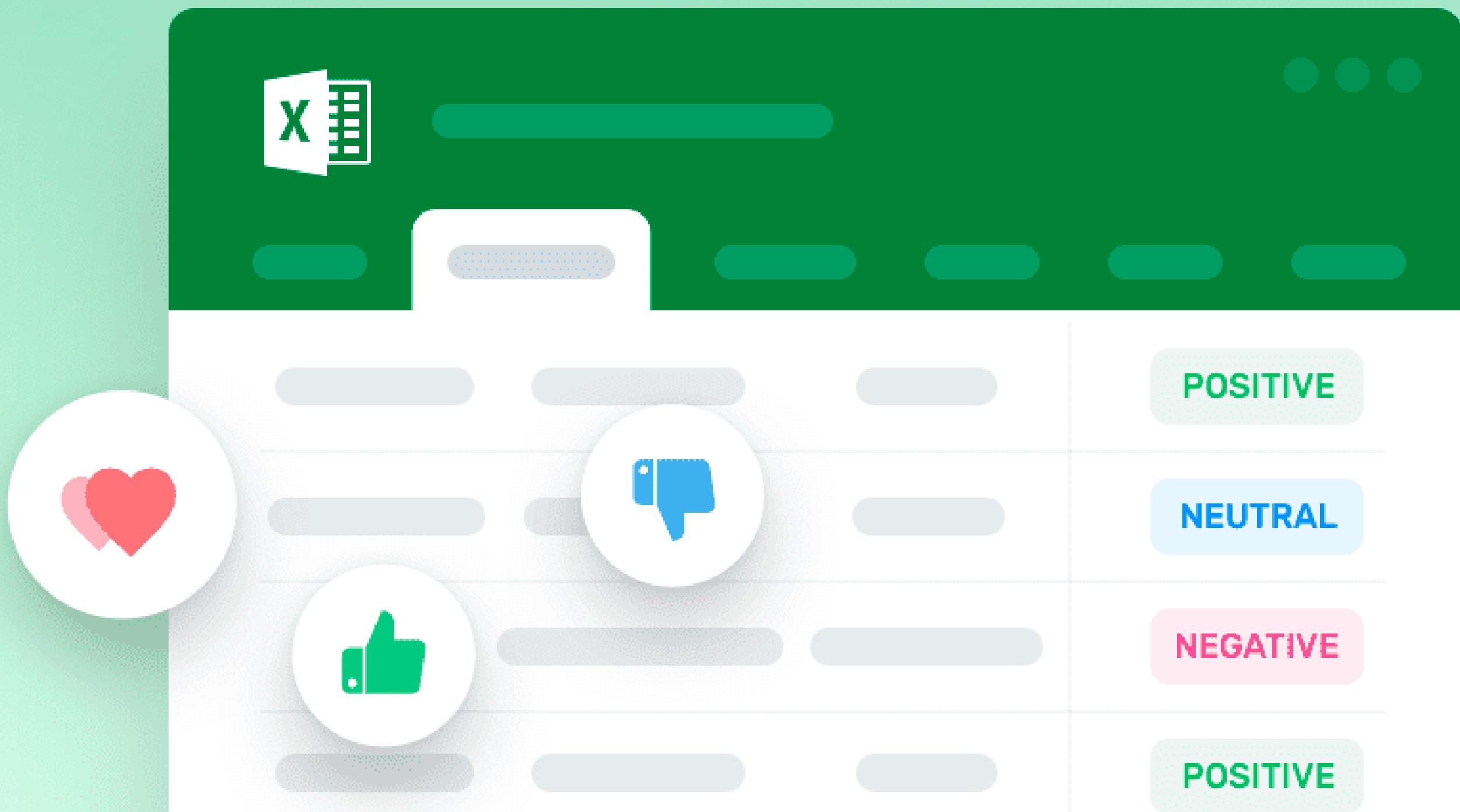
OR



Benefits of Sentiment Analysis

1. Improves the customer experience
2. Agent Monitoring
3. Training chatbots
4. Identifying key emotional triggers
5. Handling multiple customer
6. Adaptive Customer Services





Challenges of Sentiment Analysis

WHAT ARE THE CHALLENGES IN SENTIMENT ANALYSIS?

TONE
POLARITY

SARCASM
EMOJIS

IDIOMS
NEGATIONS

COMPARATIVES
EMPLOYEE BIAS

MULTILINGUAL DATA
AUDIO-VISUAL DATA



THANK YOU!

