Sentiment Analysis on Hotel Reviews

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I. INTRODUCTION

Sentiment analysis plays a key role in the field of Natural Language Processing, and it is a technique that extract emotions from the raw texts. Most of the E-Commerce sites like Amazon, Flipkart and Google etc., has wide range of applications built on this. Say, for example think about google translator application. It performs brilliantly in understanding, analyzing and translating the data. Also, it is effectively used on social media post and customer reviews in order to know the opinion of the customers whether they are happy or not with product, service and other factors which will play key role in enhancing their businesses.

II. BACKGROUND

Sentiment analysis, commonly referred to as opinion mining, is a process that uses machine learning, statistical methods, and natural language processing to recognize and extract subjective information from textual data, such as views, attitudes, and emotions. To ascertain the general attitude or sentiment that is being represented in a text is the main objective of sentiment analysis.

A hotel review is a written assessment of a guest's stay at a hotel that is often published on an internet platform such as a travel website or social media. Hotel evaluations may include details about a guest's experience with the rooms, staff, and facilities, as well as their overall happiness with their stay.

III. PROBLEM STATEMENT

The objective of the project to perform sentimental analysis on a hotel review dataset. Given a review by its customers, we need to predict whether the review is good or bad review in other words say it is positive or negative. For each textual review, we want to predict if it corresponds to a good review (the customer is happy) or to a bad one (the customer is not satisfied).

IV. WHY IS IT IMPORTANT

As it enables organizations to analyse massive volumes of unstructured data effectively and economically, sentiment analysis is proven to be a useful tool. As a way to divide reviews, it is becoming more and more popular. It is easy to use and can be occasionally simply adjusted. It gives facts and quantifiable data for upcoming decision-making, and when done well, it delivers value to a business. Sentiment research should be used by businesses that want to improve their goods and services, increase sales, and outwit their rivals.

V. PLANS TO IMPLEMENT

To swiftly determine whether a review is good or negative, sentiment analysis is required. This paper offers a solution by utilizing the Random Forest Classifier, Word2Vec approach to categorize positive and negative opinion reviews, and by comparing models using preprocessing, feature extraction, and feature selection. Due to their communities' stronger inclination toward data science, such as NLP and Deep Learning for Sentiment Analysis, open-source libraries in programming languages like Python and Java are particularly well suited to creating specialized Sentiment Analysis solutions. But, this demanded a lot of time, money up front, and resources.