

# **ANALYSING REVIEWS OF HOTELS AND RESTAURANTS IN NIGERIA TO DETERMINE CUSTOMER SENTIMENT**

## **INTRODUCTION**

From financial services to the little shops on our streets, everyone loves a good customer experience. While businesses like restaurants and hotels tend to get more out of good [customer retention](#), customers getting a great service do not necessarily want to spend time going elsewhere.

The internet and its 5-star rating system have been helpful in providing recommendations based on past [reviews](#). However, some businesses manipulate this system by posting fake reviews to boost their ratings. To identify the quality of service provided, it is important to focus on the content of the reviews and not just the star ratings.

This study aims to help Nigerians and tourists choose quality hotels and restaurants based on the average customer sentiment.

## **PROJECT DESCRIPTION**

In an era predating the internet, discerning the quality of service and reputation of a business was a formidable challenge. This typically required extensive research to gather sufficient information about it. According to data from The National Bureau of Statistics, in 2019, Nigerians collectively spent a substantial 4.6 trillion naira on dining out, constituting a significant portion of the national household expenditure.

Furthermore, real-world experience illustrates that the decision-making process for the average individual in selecting hotels and restaurants can span hours, days, and even weeks. In a quest for the best quality of service and satisfaction, prospective customers increasingly turn to online reviews authored by prior guests to make more enlightened choices. This endeavour can be overwhelming, particularly for larger

hotels or restaurants, where the volume of reviews may include instances of manual manipulation by company management, intended to influence prospective customers.

Our aim is to empower the typical Nigerian in making well-informed choices when confronted with the decision to select a hotel or restaurant to visit. Simultaneously, we want to help restaurants and hotels in enhancing the quality of their services by heeding feedback from past guests. The outcome of our study also holds promise for extension into other domains within the hospitality industry, including tourism, travel, recreation, and entertainment.

## **PROPOSED METHOD**

- **Data Sourcing and Scraping:** Data would be scraped from Google and TripAdvisor reviews of popular restaurants and hotels in Nigeria.
- **Data Cleaning and Preprocessing:** Data would be manually labelled by volunteers and cleaned using Excel and Pandas to remove noise or meaningless data that could affect the accuracy of the model
- **Machine Learning Model:** After data curation, we would first of all analyse the results to understand data customer perceptions of hotels or restaurants. Then, we will proceed to train a classifier to predict the sentiment of the customer reviews.
- **Model Deployment:** The model would be deployed using a web app for use by everyone particularly Nigerians.

## **PROPOSED SPLIT**

- Data Sourcing sub-team - Daniel Otulagun, Olatunde Ogunboyajo and Sarah Akinkunmi.
- Data Cleaning and Preparation sub-team - Daniel Otulagun, Olatunde Ogunboyajo and Sarah Akinkunmi.
- Modelling sub-team - Daniel Otulagun, Olatunde Ogunboyajo and Sarah Akinkunmi.
- Model deployment sub-team - Daniel Otulagun, Olatunde Ogunboyajo and Sarah Akinkunmi.

## **CONCLUSION**

The team plans to release a demonstration version of the project to the general public, primarily aiming to assist Nigerians in making more informed choices. The ultimate goal is to enhance customer satisfaction and service quality when individuals dine at restaurants and stay in hotels within their specified budgets.

## REFERENCES

- [1] Singh, H. (2006) *The importance of customer satisfaction in relation to customer loyalty ...*, *The Importance of Customer Satisfaction in Relation to Customer Loyalty and Retention*. Available at:  
<https://www.van-haaften.nl/images/documents/pdf/The%20Importance%20of%20Customer%20Satisfaction%20in%20Relation%20to%20Customer%20Loyalty%20and%20Retention.pdf> (Accessed: 15 October 2023).
- [2] Nowak, A. (2022) *The history of online reviews*, *Expert Reputation*. Available at:  
<https://expertreputation.com/the-history-of-online-reviews/#:~:text=The%20First%20Online%20Reviews,by%20Yellow%20Pages%20in%202001.> (Accessed: 15 October 2023).
- [3] Editor (2021) *Sentiment analysis in Hotel Reviews: Developing a decision-making assistant for Travelers*, AltexSoft. Available at:  
<https://www.altexsoft.com/blog/sentiment-analysis-hotel-reviews/> (Accessed: 15 October 2023).
- [4] Nwakanma, Cosmas & A.C, Ogbonna & Etus, Chukwuemeka & Nwifor, Emmanuella & Onyebuchi, Jennifer & Ugwueke, Esther. (2019). *Predictive Analytics of Customer Sentiments towards Nigerian Hospitality Industry: Case study Approach*.
- [5] *Nigerians spent n4.6 trillion eating out in 2019, says NBS* (2020) *TheCable*. Available at:  
<https://www.thecable.ng/nigerians-spent-n4-6-trillion-eating-out-in-2019-says-nbs> (Accessed: 15 October 2023).