

Sentimental Analysis Of Customer Service Delivery Of Zomato Food App Using Nvivo In Retail Food Chains.

Hridayama Dev Varma^{1*}, Dr S Senthil Kumar²

^{1*}Research Scholar, Faculty of Management, SRM Institute of Science and Technology, Kattankulathur, India. Email: hd7680@srmist.edu.in

² Professor, Faculty of Management, SRM Institute of Science and Technology, Kattankulathur, India.

Citation: Hridayama Dev Varma, Dr S Senthil Kumar, (2024) Sentimental Analysis Of Customer Service Delivery Of Zomato Food App Using Nvivo In Retail Food Chains., Educational Administration: Theory and Practice, 30(5), 2065-2072

Doi: 10.53555/kuey.v30i5.3224

ARTICLE INFO

ABSTRACT

Purpose: The purpose of this research is to understand the Service delivery using sentimental analysis of the food delivery service of Zomato delivery services. The research objectives are to identify the customer service, satisfaction of the customers and the service dimensions and sentimental analysis and thematic analysis of the Zomato food app delivery services.

Design/Methodology/Approach: This research is qualitative research. In this research we have taken reviews from social media using NVivo software and the data we have collected from the customer feedback was analyzed using NVivo software for sentimental analysis and thematic analysis. The data was collected from the customers who have given review about the service quality of the Zomato Delivery service.

Findings: In this research, we have identified about the likes and dislikes and customer satisfaction of the people who use Zomato food app delivery and how to improve the areas in business and create customer retention. There is a huge gap between the positive and negative sentiment and Zomato should take certain measures to improve certain areas in service delivery and improve brand image to enhance customer retention and prevent customer churning.

Originality: This is the first Study on sentimental analysis and thematic analysis in the Zomato food delivery app in India.

Keywords: Sentimental analysis, Customer satisfaction, Food delivery, CRM , Retail food chain

Paper type: Research paper

Introduction: Sentiment analysis, also known as opinion mining, is the technique of identifying the emotional tone of a group of words to obtain insight into the attitudes, ideas, and feelings represented within them. Sentiment research helps organizations understand how their customers perceive their products, services, or brand. Analyzing consumer reviews, comments, and feedback on social media, forums, or review websites allows firms to find areas for improvement, resolve customer issues, and capitalize on positive feedback. Sentiment analysis is critical for market research reasons. It allows businesses to track public opinion and evaluate consumer sentiment towards their own products or services, as well as those of their competitors. This data can be utilized to spot new trends, evaluate market demand, and make sound business decisions. Companies can proactively manage their online reputation by monitoring sentiment surrounding their brand name or specific industry-related keywords. They can detect and resolve negative sentiment before it worsens, interact with unsatisfied customers, and leverage positive sentiment to boost brand loyalty and perception. Attitude analysis can help financial institutions and investors assess market attitude towards specific assets, industries, or economic indicators. By analyzing news stories, social media chatter, and other textual data, they can detect potential hazards, market patterns, and sentiment-driven investing opportunities. Sentiment analysis is often used in political campaigns and governance to assess public support for political candidates, policies, or issues. It enables policymakers to analyze voter emotion, modify their messaging, and predict public reaction to policy changes or political events. Sentiment analysis can be used in customer service platforms to automatically route and prioritize customer questions based on

sentiment scores. This allows businesses to detect and address critical or high-priority issues quickly, resulting in increased customer satisfaction and loyalty. Companies can learn about client preferences, pain spots, and unmet needs by analyzing sentiment towards existing products or features. This data can be used to guide product development, allowing businesses to design items that better meet the expectations and preferences of their customers.

Overall, sentiment analysis is critical for businesses and organizations in a variety of industries to derive actionable insights from textual data, improve customer experience, reduce risks, and make informed decisions. In this research we have also used thematic analysis to identify the themes and patterns of customer feedback and the services ensured by the provider. Thematic analysis is a qualitative research approach that identifies, analyses and interprets patterns or themes in textual material. It is frequently used to investigate and comprehend the underlying meanings, experiences, and opinions conveyed by individuals or groups in interviews, focus groups, surveys, or other kinds of qualitative data. Thematic analysis is especially effective for exploratory research, which seeks to create hypotheses, investigate new areas of inquiry, or obtain a better understanding of phenomena. It enables researchers to remain open to unexpected findings and investigate emerging themes that could influence future research approaches.

LITERATURE REVIEW

1. Rajat Sharma et al (Bharat towards atmanirbharta: a Twitter-based analysis using NVivo) In this research the author extracted various themes under the Atmanirbhar Bharat and the top five themes are related to defense and products. The majority of the tweets are on the positive side as shown by the sentiment analysis. Most of the tweets are moderately positive followed by moderately negative. It is visible that only a few tweets are very positive. Overall, it is visible that Atmanirbharbharat is viewed positively by Twitter users.
2. Ana Reyes-Menendez et al (Understanding #WorldEnvironmentDay User Opinions in Twitter: A Topic-Based Sentiment Analysis Approach) This study analyzed tweets with the hashtag #WorldEnvironmentDay to discover global concerns about sustainable development, public health, and the environment.
3. Bhatt V et al(2023). "Qualitative Analysis of Psychological Framework of Online Classes during Covid-19 using NVIVO". The paper mentions that sentiment analysis was conducted using NVivo to analyze the positive and negative sentiments of students towards online learning during the interviews.
4. Ari Nurfikri(2022). "Sentiment Analysis Telemedicine Apps Reviews Using NVIVO". The paper discusses the use of NVIVO software for sentiment analysis in telemedicine app reviews. It mentions that NVIVO is commonly used for sentiment analysis and data visualization.
5. Mahadiansar et al(2023). "Disaster Management of Pandemic COVID-19 toward Tourism of Bintan Regency by NVivo Analysis. This study will look into the feasibility of deploying the Travel Bubble. The study also discussed the policy, the government's role, and strategic policies affecting the performance of the travel bubble. The outcomes of this study resulted from qualitative data collected using the NVIVO 12 software programme.
6. Luana Tonin et al (2023)"Use of NVivo 10® software in concept analysis study" correlation between the use of the NVivo 10® software and the stages of concept analysis using the Walker & Avant method. Method: this is a theoretical-reflective essay, based on the stages of concept analysis by Walker and Avant, constructed after a bibliographic survey and discussion with peers who apply the methodological framework and data analysis software in their practices.
7. Suparta Rasyid et al (2022). "Can the tahfidzul-qur'an education system (T-QES) create leadership with integrity? NVivo 12 analysis". In this research, the author discussed in this paper is about the Tahfidzul Qur'an Education System (T-QES) and its role in creating leaders with integrity. Data was analyzed using percentages and mapped with the NVivo 12 programme. The findings indicate that the T-QES plays a significant role in developing leaders with integrity. Thus, the T-QES can be one of the recommendations that can be implemented in an educational system.
8. Meshal Alzaid (2022). "Sentimental Analysis of Fears, Psychological Disorders and Health Issues Through NVIVO During Second Wave of Covid-19". The researcher in this paper discusses the use of NVIVO-12 for sentimental analysis of fears, psychological disorders, and health issues during the second wave of Covid-19 among millennials.
9. Shalin Hai-Jew (2017). "Employing the Sentiment Analysis Tool in NVivo 11 Plus on Social Media Data: Eight Initial Case Types". The paper discusses the use of sentiment analysis in NVivo 11 Plus for various applications such as profiling egos and entities, analyzing groups, and examining brand reputation.
10. Catarina Brandão (2017). "Using NVivo to assess a program of goal-corrected empathic attunement skills: a case study in the context of higher education". In this research the author discusses in this paper about the use of NVivo10 in evaluating a program in goal-corrected empathic attunement skills in the context of a Psychology master's program.
11. Ahmad Daholu(2021). "The influence of professional competency of service officers on service quality dimensions in public services" In this paper the author discusses about The service quality dimensions

include tangible dimensions, dependability dimensions, responsiveness dimensions, assurance dimensions, and empathy dimensions.

12. Marilou Delfin Junsay(2023). "Service Quality Dimensions as Predictors of Customer Satisfaction in the Civil Registry" In this paper the author discussed about The paper mentions that the service quality dimensions in the Civil Registry include reliability, responsiveness, empathy, assurance, tangibility, ease, and timeliness.

13. Hitesh Arora (2015). "Service quality dimensions: an empirical investigation of commercial banks in India using SERVQUAL" In this research the author discusses about the measures and evaluates service quality dimensions in commercial banks in India using the SERVQUAL framework. The dimensions identified are customer-friendliness, trustworthiness, assurance, and tangibles.

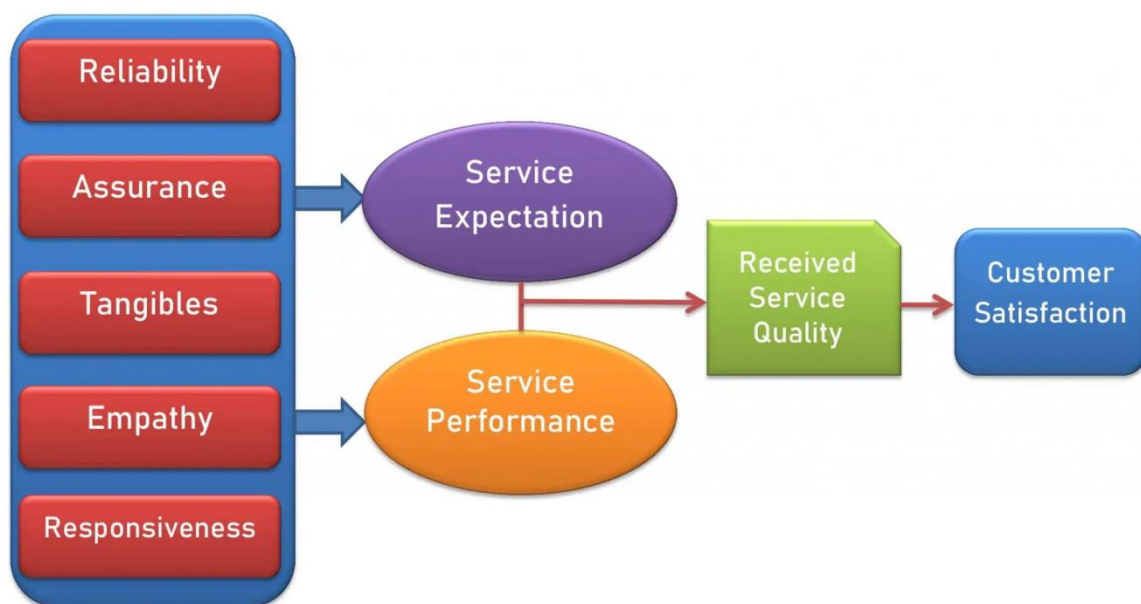
14. Muhammad Ahmad urRehman(2020). "The Impact of Service Quality Dimensions on Customers' Trust" The paper discusses the impact of different dimensions of perceived service quality on customers' trust. The dimensions mentioned in the paper are reliability, assurance, responsiveness, empathy, and tangibility.

Research objectives:

To identify the customer service of the Zomato food app through sentimental analysis. Through this qualitative analysis, we can analyze the perception of customers about the product and services, track public opinion in business, and find areas to improve our business from the customer data.

Research Gap: Previous researchers have discussed service quality in the Zomato food delivery service but they have not discussed sentimental analysis and how to find out the positive and negative sentiments and improve the areas in business where we can understand and track public opinion in business which will help us in customer retention rather than customer churning.

The Five Key Service Dimensions of the Servqual model

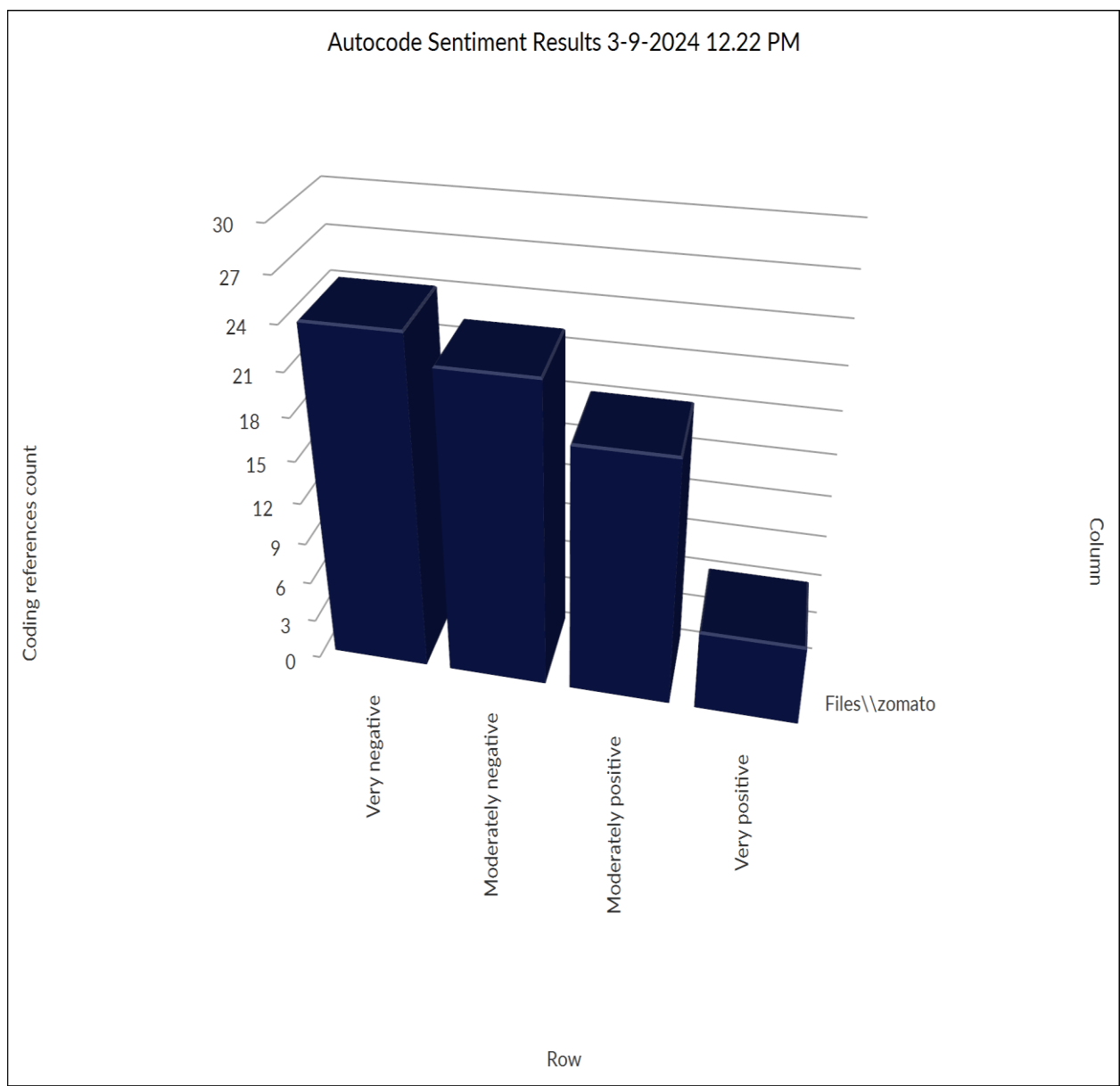


Author: Five-service quality dimension model in Services Marketing was introduced in 1988 by A Parsu Parasuraman, Valarie A. Zeithaml, and Leonard L Berry.

This is a diagrammatical expression of service dimension model which explains about the 5 dimensions and how it influences service expectation and service performance which leads to received service quality and finally leads to customer satisfaction. In the Zomato service delivery we need to ensure that service performance should meet service expectations and received service quality should meet customer satisfaction. If service performance is bad and not well accepted it can result into customer churning and customer loss. To prevent customer churning we analyze a qualitative approach by collecting customer feedback on Zomato and implementing sentimental analysis.

Research methodology: In this research, we have collected the data from social media and how customers have given feedback about the Zomato service delivery and they have rated according to the scale. Here are the list of customers who have given customer review about the services of Zomato based on ratings of service, value, shipping, returns and quality.

Findings: Here in this research since it is qualitative research, we have collected data from 36 customers and their reviews from social media analysis of the data was observed using NVivo software from the data collected from customers and by observing and analyzing their reviews and comments we have interpreted that Twenty-five customers have rated the delivery service of Zomato as very bad which is marked and shown as red in the tree map. Three customers have rated excellent which is marked as green colour which indicates excellent. Six customers have rated poor service delivery which is indicated in the tree map as yellow. Two customers have rated good and others have rated neutral. The tree map is a visualization tool in NVivo, a qualitative data analysis software, that shows how coded segments are distributed among different nodes or categories in your data. Visualizing the distribution of coded segments allows users to see patterns or links between distinct nodes or categories, providing insights into the data's underlying themes or issues. The tree map can be used to communicate results or ideas to others, such as collaborators or stakeholders, in an understandable and visually appealing manner. From this tree map, we can identify that most of the delivery service given by Zomato and the customer feedback we conclude that negative feedback has been given by customers. In this research we can come to a solution that if Zomato takes certain measures and initiatives to improve delivery service and service quality it can help them to enhance customer retention.



In this graph, the sentimental analysis has been observed and it has been divided into two classifications that is very negative and moderately negative and very positive and moderately positive after coding, we have run the sentimental analysis of the data collected from customers and it has been observed that very positive sentiment was less than 9, moderately positive is less than 21, moderately negative is more than 21 and very negative is also equal to 24. From these results, we have concluded that very negative and moderately negative feedback is higher compared to moderately positive and very positive.

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