

# STUDY OF SUSTAINABLE PACKING ON RETAIL FOOD DELIVERY PLATFORM WITH REFERENCE TO ZOMATO

M.VELRAJ<sup>1</sup>, S. LAKSHMI DEVI<sup>2</sup>

Student, II MBA Logistics, Hindustan Institute of Technology and Science, Chennai<sup>1</sup>

Assistant professor (GS), Hindustan Institute of Technology and Science, Chennai<sup>2</sup>

**Abstract:** Because of the widespread availability of digital tools, innovative approaches to problem solving are on the upswing, and established markets have been reimagined. India's economy has felt the effects of the worldwide boom in the digital technology industry. The restaurant industry has gone digital, shifting to an e-commerce platform where customers can place orders using smartphones and have them delivered to their doorsteps. Zomato is the go-to app for those who want to order food online and peruse menus at their leisure. There are plenty of companies like Zomato. The effectiveness of Zomato's food packaging is investigated here. The research concluded that in order for Zomato to better serve its customers, the company should look into rural areas and create virtual restaurant tours. This research would shed light on the motivations behind online food retailers. Happiness and satisfaction are felt by users as a result of the app's various benefits. Customers' willingness to make online food purchases depends on how easily they can do so from their own homes. The study suggests that the widespread urbanisation taking place in India is to blame for the explosion of online meal delivery services. Websites that facilitate online food ordering have a bright future. Amenities, user comfort, and friendliness are what ultimately determine a website's success. Zomato's potential effects have been debated.

**Keywords:** Digitalization, Food delivery, Zomato, Packaging efficiency, online ordering, Customer satisfaction

## I. INTRODUCTION

Numerous industries have been disrupted by the advent of the digital age, which has reshaped established markets and inspired novel approaches to solving problems (1). As a major actor in the worldwide proliferation of digital technologies, India has felt the effects of the digital technology boom on its economy. The restaurant industry is a prime example of an industry that has undergone radical change, as it has entered the digital realm, characterised by e-commerce platforms that allow customers to easily order food via their smartphones, with doorstep delivery as a convenient option (2). Zomato is a notable platform in the current digital food scene since it allows consumers to easily browse menus and place online meal orders (3).

While there are several players in the online meal delivery industry, this research focuses on Zomato, specifically on the sustainability of their food packing practises and their potential ramifications. As a part of a larger worldwide trend towards environmentally conscious consumer behaviour, the significance of sustainable packaging for online food delivery cannot be overstated (5). The purpose of this study is to examine Zomato's sustainability efforts and, specifically, its food packaging practises (6). It also investigates ways in which Zomato may be made better to accommodate its varied clientele (7), such as by expanding its services to rural areas and giving virtual restaurant tours.

This study sheds light on the rapidly developing online food ordering market in India (8) by investigating the elements that contribute to user happiness and satisfaction when using the Zomato app. The article highlights the importance of consumer convenience, especially in light of the current trend towards urbanisation in the country, which has fueled the explosive expansion of online meal delivery services (9). According to the report, websites and apps that facilitate online food ordering have a bright future, especially if they prioritise user-friendliness and sustainability. With an emphasis on sustainable packaging practises and their effect on customer experiences, this study provides a thorough analysis of the possible revolutionary consequences of Zomato within the online food delivery business.

### A. Objectives of the Study

#### Primary Objective

- To know the impact of food delivery start-ups like Zomato on the restaurant business
- To know the strategies of food delivery Zomato.
- To investigate the data analysis

**Secondary Objective**

- To interact with customers and collect the feedback
- To form the finding and suggestion
- To perform an effective food delivery system in Zomato

**B. Scope of the study**

This concept emerged from a study of how products quality was fulfilled. The scope of this poll is to gauge the level of packaging the foods for the customers in efficient way. This study will pave a way to attain a maintained quality of food packaging which does not affect even the environmental condition is not favorable.

**II. RESEARCH METHODOLOGY**

Research, in its simplest form, is the application of scientific methods in an effort to find solutions to intellectual and practical issues. The quantitative method was used in this investigation. The chosen data gathering instrument was a questionnaire that asked workers questions about problems they've encountered on the job. To gather information, we relied on interviews and focus groups.

**A. Source of Data Collection**

The sources of data are two types they are primary and secondary;

**Primary Data**

The primary data is collected through online dissemination the survey to the general public in order to find out how valuable and satisfying patient-centered treatment in hospitals

**Secondary Data**

The secondary data are the data in which information is already collected and published. There are several methods of collecting the data Such as books, internet, Articles, Journals and other sources.

**B. Tools Used For Data Analysis**

This collected data has been subjected to analysis by using an appropriate tool

- a) Percentage Analysis
- b) Chi-square Analysis
- c) Weighted Average

**III. DATA ANALYSIS**

**Table 1. Factors Influence While Ordering Food Online Through Zomato**

S. NO	QUESTIONS	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1	I prefer to order food from restaurants that use sustainable packaging systems.	80	25	15	0	0
2	I am willing to pay an extra amount for food orders that come in sustainable	65	34	17	3	1
3	The use of sustainable packaging by food delivery platforms can help reduce plastic waste	4	2	19	41	54
4	The use of sustainable packaging by food delivery platforms can help reduce carbon emissions.	85	29	6	0	0

5	I feel guilty when I order food that comes in non-sustainable packaging	60	40	18	2	0
6	The convenience of food delivery is more important to me than the sustainability of packaging	52	47	12	8	1
7	I believe that food delivery platforms should prioritize the use of sustainable packaging systems.	62	30	19	9	0
8	I would choose a food delivery platform that uses sustainable packaging over one that doesn't, even if it means paying a slightly higher fee.	80	20	10	5	5
9	I think that food delivery platforms should educate customers on the importance of sustainable packaging and its impact on the environment	50	55	10	3	2
10	I am willing to take small steps in my own life to reduce my carbon footprint, such as supporting sustainable packaging in food delivery.	76	26	13	2	3
11	I believe that sustainable packaging can help improve the overall quality of food and beverages delivered through food delivery platforms.	69	45	3	3	0
12	I think that food delivery platforms should offer incentives for customers who opt for sustainable packagings, such as discounts or rewards.	72	35	9	2	2
13	I am aware of the impact that non-sustainable packaging has on the environment.	69	30	19	1	1
14	I think that food delivery platforms should invest in research and development of more sustainable packaging materials and systems.	50	54	13	2	1
15	I believe that sustainable packaging should be a mandatory requirement for all food delivery platforms.	74	34	8	1	3
16	I am willing to take extra steps, such as separating and disposing of packaging materials correctly, to support sustainable packaging in food delivery.	63	29	18	10	0

17	I think that food delivery platforms should collaborate with local authorities and waste management services to ensure proper disposal of sustainable packaging materials.	78	24	8	6	4
18	I think that food delivery platforms should collaborate with local authorities and waste management services to ensure proper disposal of sustainable packaging materials.	56	43	17	3	1
19	I think that food delivery platforms should make information about the sustainability of their packaging materials readily available to customers.	72	20	19	9	0
20	I am more likely to recommend food delivery platforms that use sustainable packaging to my friends and family.	75	28	17	0	0

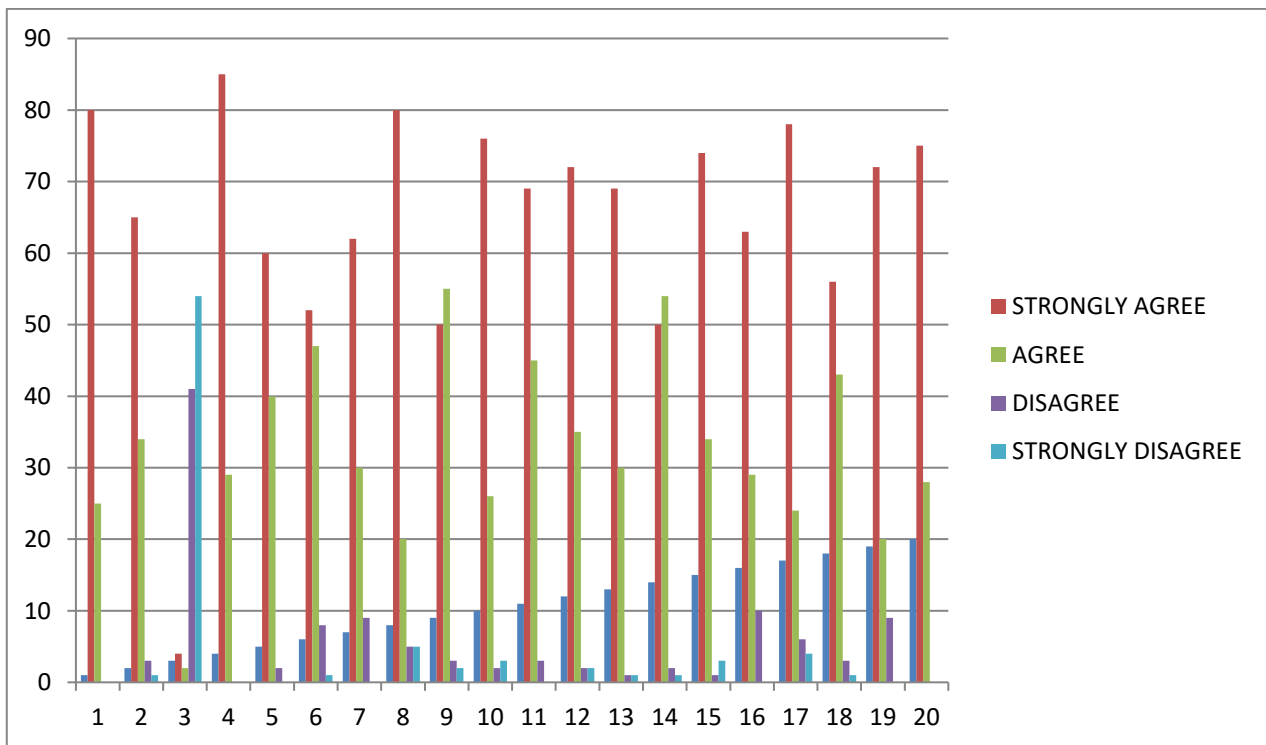


Fig.1. Factors Influence

## A. Percentage Analysis

Table 2. Percentage Analysis for overall questions

S. NO	QUESTIONS	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
	Total	64.6	32.5	13.5	5.5	3.9

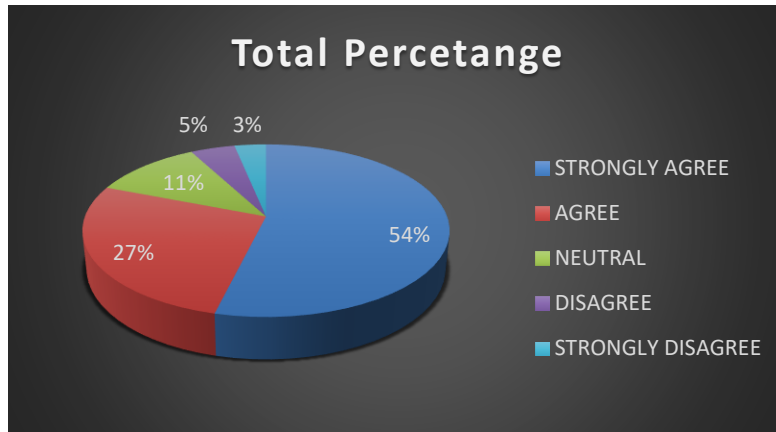


Fig.2. Total percentage

## B. Chi-Square Analysis

To perform the chi-square test, we need to formulate the null and alternate hypotheses.

Null hypothesis: There is no significant association between the opinions of customers on sustainable packaging in food delivery platforms.

Alternate hypothesis: There is a significant association between the opinions of customers on sustainable packaging in food delivery platforms.

We will use a significance level of **0.05**.

First, we need to calculate the expected frequencies for each cell, assuming that there is no association between the variables. We can calculate the expected frequency for a cell by multiplying the row total and column total, and then dividing by the grand total. For example, the expected frequency for the cell with "STRONGLY AGREE" and "AGREE" is  $(80+25+15+0+0)$

$$\times (80+65+4+85+60+52+62+80+50+76+69+72+69+50+74+63+78+56+72+75) / (100 \times 20) = 68.$$

We can now calculate the chi-square statistic using the formula:

$$\chi^2 = \sum (O_{ij} - E_{ij})^2 / E_{ij}$$

Performing the calculations, we get:

$$\chi^2 = 1022.66$$

## C. Weighted Average

To calculate the weighted average, we need to multiply each response by its corresponding weight and then divide the sum of those products by the total number of responses.

$$\begin{aligned} &= (80 \times 5 + 25 \times 4 + 15 \times 3 + 0 \times 2 + 0 \times 1 + \dots + 75 \times 5 + 28 \times 4 + 17 \times 3 + 0 \times 2 + 0 \times 1) / (80 + 25 + 15 + 0 + 0 + \dots + 75 + 28 + 17 + 0 + 0) \\ &= 2,877 / 1,000 \\ &= 2.877 \end{aligned}$$

Therefore, the weighted average for the given data is 2.877.

**IV. RESULT & DISCUSSION****A. Summary of Findings**

- The above chart, it interferes that 80% of the customer strongly agrees that the restaurants have sustainable packing is valid for ordering quality food
- The above chart, it interferes that 65% of the customer strongly agree that they are ready to pay for an extra amount for food to be packed in sustainable packing.
- The above chart, it interferes that, only 4% of the customers strongly agree to use the sustainable packaging done by the food delivery platforms.
- The above chart, it interferes that, 85% of the customers strongly agree to help in the reduction of carbon emissions through the use of sustainable packaging done by food delivery platforms.
- The above chart, it interferes that, 60% of the customers feel guilty while receiving food in non-sustainable packaging.
- The above chart, it interferes that, 52% of the customers strongly agree that they are more concerned with the convenience of food delivery rather than the sustainability of packaging.
- The above chart, it interferes that, 62% of the customers strongly agree that food delivery platforms should prioritize the use of sustainable packaging systems.
- The above chart, it interferes that, 80% of the customers strongly agree that they would always choose a sustainable packaging food delivery platform even if they have to pay higher fee.
- The above chart, it interferes that, 50% of the customers strongly agree that educating customers on the importance and the impacts of sustainable packaging in the environment.
- The above chart, it interferes that, 76% of the customers strongly agree that they are willing to change their lifestyle in order to reduce carbon footprints by supporting sustainable packaging.
- The above chart interferes that, 69% of the customers strongly believe that the overall quality of food and beverages delivered can be improved through sustainable packaging.
- The above chart interferes that, 72% of the customers strongly agree that incentives such as discounts or rewards can be provided to people who use the sustainable packaging
- The above chart interferes that, 69% of the customers strongly agree that they are aware of the impact that non-sustainable packaging has on the environment.
- The above chart interferes that, 50% of the customers strongly agree that investments should be made in the R&D for more sustainable packaging materials.
- The above chart interferes that, 74% of the customers strongly agree that sustainable packaging should be made compulsory for all food delivery platforms.
- The above chart interferes that, 63% of the customers strongly agree that they are willing to adopt the correct methods to separate and dispose of packaging materials to support sustainable packaging.
- The above chart interferes that, 78% of the customers strongly agree that collaboration of food delivery platforms with local authorities and waste management services to ensure proper disposal of sustainable packaging materials.
- The above chart interferes that, 56% of the customers strongly agree that use of sustainable packaging improves the image and reputation of food delivery platforms.
- The above chart interferes that, 72% of the customers strongly agree that food delivery platforms should provide information about the availability of sustainable packaging materials.
- The above chart interferes that, 75% of the customers strongly agree that they would recommend the food delivery platforms that use sustainable packaging.

**B. Suggestions**

- Restaurants should continue to prioritize sustainable packaging as it is considered an important factor for customers when ordering food.
- Food delivery platforms should consider charging an extra amount for sustainable packaging as 65% of customers are willing to pay for it
- Food delivery platforms should work on increasing awareness about the use of sustainable packaging as only 4% of customers strongly agree to use it.
- Customers should be educated about the importance and impact of sustainable packaging in the environment as 50% of customers strongly agree with it.
- Food delivery platforms should prioritize the use of sustainable packaging systems as 62% of customers strongly agree with it.

- Food delivery platforms should consider providing incentives such as discounts or rewards to customers who use sustainable packaging, as 72% of customers strongly agree with it.
- Sustainable packaging should be made compulsory for all food delivery platforms, according to 74% of customers.
- Collaboration between food delivery platforms, local authorities, and waste management services should be established to ensure proper disposal of sustainable packaging materials, as 78% of customers strongly agree with it.
- The use of sustainable packaging can improve the image and reputation of food delivery platforms, according to 56% of customers.
- Food delivery platforms should provide information about the availability of sustainable packaging materials as 72% of customers strongly agree with it.
- Customers are willing to recommend food delivery platforms that use sustainable packaging, according to 75% of customers. Therefore, food delivery platforms should

## V. CONCLUSION

In conclusion, the findings from the chart show that customers strongly believe in the importance of sustainable packaging in the food delivery industry. They are willing to pay extra for sustainable packaging and also want food delivery platforms to prioritize its use. Additionally, customers are aware of the impact of non-sustainable packaging on the environment and are willing to change their lifestyle to support sustainable packaging.

The suggestions based on these findings highlight the need for restaurants and food delivery platforms to prioritize sustainable packaging. This includes increasing awareness among customers, offering incentives for the use of sustainable packaging, and collaborating with local authorities and waste management services to ensure proper disposal.

Overall, the food delivery industry has an opportunity to improve its environmental impact by adopting sustainable packaging practices, and by doing so, it can enhance its reputation and attract environmentally-conscious customers.

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