Perception of Urban Consumers in Mumbai Towards Food Delivery Platforms
Tanishka Goel, Varun Mujumdar, Vreha Surya, Yash Kundlia, Vineet Saraf, Srishti Bhardwaj

Abstract- The delivery of restaurant meals to consumer’s houses is undergoing rapid change as new online platforms race to capture markets and customers. This is in light of the rapidly changing global trends; Indian consumers have also kept up with the pace and have shown a change in consumption patterns since the emergence of these online food delivery platforms. It is thereby of great importance to study the consumer behaviour towards different food delivery platforms and the factors and attributes pertaining to the same. This paper has tried to study the consumer perception towards online food delivery and various food delivery platforms.

The paper studies the various factors responsible for the shift of consumers’ preference towards ordering food online and the challenges faced by them. The study also tries to establish how consumer behaviour has changed after the launch of such food delivery in terms of the change in their eating habits. The study also highlights the factors that lead to consumers making choices between different food delivery apps. It tries to assess the level of importance that consumers assign to various attributes pertaining to different online food delivery platforms and what are the shortcomings of these platforms as perceived by the consumers. The paper also tries to find the most preferred food delivery app among consumers based on various attributes such as price, food quality, variety etc.

Index Terms- Consumer Behaviour, Consumer Perception, Online Ordering, Online Food Delivery, Food Delivery Apps

I. INTRODUCTION

There has been a surge of technological advancement in India. It is on its way to becoming a digitally advanced nation; over 40 percent of the population has an internet subscription. But India is already home to one of the world’s largest and most rapidly growing bases of digital consumers. The country had 560 million subscribers in September 2018. Indians now download more apps—12.3 billion in 2018—than residents of any other country barring China. The average Indian social media user spends 17 hours on the platforms each week (McKinsey Global Institute, March, 2019).

Due to this deep penetration of smartphones and internet connectivity in India, the e-commerce business has seen an exponential growth as the consumer shifts to such online platforms for fulfilling their needs and wants. The Indian consumer uses the internet for a plethora of options such as booking hotels, flight tickets, ordering groceries, online banking, e-learning and even ordering food. The food delivery apps have completely changed the landscape of food industry in India. By partnering with restaurants, these food delivery apps act as aggregators connecting various restaurants to the consumers. They have an easy to use interface from which consumers can select any meal, from any restaurant of their choosing and get it delivered at their doorstep in a few clicks.

According to (Panse, Rastogi, Sharma, & Dorji, 2019), food delivery has become a very competitive market in India. The revenue of online food delivery (restaurant to consumers and platform to consumer) is in the tune of $5867 million in 2017, as reported in a FICCI report.

II. LITERATURE REVIEW

(Migliani & Jenvild, 2014), in their paper “The New Indian Consumer”, have explained the causes for the increase in takeaways and home delivery options as urbanization, increase in number of working women, rise of the younger population and higher disposable incomes combined with increased time constraints. The findings from the paper indicate that the growth of demand for take-away despite slowdown in Quick Service Restaurants (QSR) dine-in, which suggest that consumer preferences are moving away from QSR dine-in. The authors have stated that the tastes of the new Indian consumers are evolving, eating out at QSR outlets is no longer perceived as an occasion in India. The dine-in trends are either fine dining or at café outlets, whereas QSR is demanded in a fast and convenient manner which consumers prefer delivered to their doorstep. Through their paper they have explained the role of internet and the development of apps as a driving force behind the rapid rise in consumer’s preferences towards ordering food online. Social media is guiding the consumption.

(Das, 2018) has discussed the consumer’s perception towards online food delivery services and have concluded convenience while ordering and doorstep delivery to be the most important factors for consumers. They cite that the main reasons people don’t use these apps are because of bad past experiences, as well as influence from their friends and family.

(Karthika & Manojanaranjani, 2018) in their paper have studied that Most of the respondents felt the delivery charges to be very high. The high price is one of the reasons for consumer to not order online ordering food through online.

(Rathore & Chaudhary, 2018) intend to explore the consumer’s perception towards online food ordering. The data for
the study was gathered through two structured sets of questionnaire, and an online survey was used to collect the data for this study. The survey was done by gathering data from students of Indore. The first part of their questionnaire included questions about the factors which make the consumers order food online and have cited as time being the most important factor, because early delivery equals less time wastage and hence it influences the consumer as everyone in this dynamic world no one wants to spend on non-productive things. The 24 by 7 services have a major impact as the consumer is not restricted to the certain time limit. Convenience is the biggest factor driving online food ordering. Consumers do not have to leave their home nor travel to find and obtain food online. Convenience offers the consumer to have a sense of control and an authority over what to buy, the next it also helps in the selection of products on a wide variety on the internet. The other factors include ease of accessibility, multiple payment options and flexibility provided by online food delivery apps.

Similar factors have been studied by (Vinaik, Goel, Sahai, & Garg, 2019) who have concluded that the most important factors are convenience, easy payment method, delivery time and receiving the expected order, good customer service and receiving the right order. However there are still a lot of people who don’t order food online. This is because of factors such as; consumers don’t feel safe sharing their personal and financial information, they face problems while using digital payment options, or are not very comfortable with the technology aspect of it.

(Parashar & Ghadiyali, 2020) analysed the change in consumer behaviour after the development of food delivery apps and the reasons behind the transition. Primary data is collected to study consumer behaviour, whereas secondary data is used to collect information about the types of apps used by consumers. Its findings were that the fast-paced life of individuals and the convenience of ordering food online has led to the boom of food delivery apps. It also found that consumers value the speed of delivery the most, while quality of service and discounts were also important factors affecting the consumers’ behaviour. The main challenge faced by consumer is the prices of food items available on the food delivery platforms are higher than what the consumer pays at the restaurant itself. Another challenge faced by consumers is the non-availability of some restaurants on the apps.

(Jacob, Sreedharan, & K, 2019) have discussed the general views and perceptions of online food delivery apps like Swiggy, Uber Eats and Zomato amongst common consumers. The research was conducted mainly in order to see the impact of these applications on traditional way of food serving, youth and in order to analyse their success in the current market. The information regarding this research was collected through a mixed approach which consisted both of qualitative and quantitative methods, including collection of data from 300 users and 100 non-users of the app which consisted people of different age groups. Even after the limitations regarding the respondent number and consumer perception, it was concluded that online food ordering system has its own benefits and limitations, additionally it was found that youth are more inclined towards these apps with Swiggy being the most successful.

Similar findings have been suggested by Thomas Lim in his paper, the paper states that the competitive world across India was badly hit by the recent economic slowdown. As an attempt to strive towards maintaining at least the style of living, most urban population have changed the food habit, opting for eating out, picking up anything on the way or back from work and lately online food aggregators with special discounts turned out to be a bliss for all sections of urban society during the recession (Lim, 2019).

(Janib, Gayathri, & Shibu, 2019) have discussed the consumer perception towards Swiggy digital food application service by conducting an analytical study. They wanted to find out a relationship between the service provided by the Swiggy app and the consumer’s satisfaction achieved through the usage of this particular app. For the study, approximately 100 respondents were taken as sample and the information was collected from them with help of a series of questions. The questionnaire included inquiries regarding the offers provided by Swiggy, delivery time, price of food, income of consumers, and various other questions regarding the consumers experience till date with Swiggy for analysis and to find out how they are correlated with consumer satisfaction. Even though there were time and respondent limitations, research was enough to extract some findings which lead to the conclusion that Swiggy remains one of the top food delivery food applications but it could be improved by removing minimum order value and improving method of consumer recommendation and feedback process.

III. RESEARCH GAP

When we studied how food delivery apps influenced consumer eating habits, we studied many papers but could not find any conclusive data on how the consumer behaviour such as food consumption and spending patterns have changed after the launch of food delivery apps in India. Therefore, this is the research gap that we found and this is one of the objectives of our study.

1. Research Objectives

1.1 To study the Factors affecting consumers’ behaviour while ordering food online.

1.2 To identify the challenges faced while ordering food online.

1.3 To understand how food delivery apps influence eating habits.

1.4 To determine which is the most popular food delivery app.
IV. FINDINGS

1.5 Factors affecting Consumers’ Preference towards Food Delivery Apps

Chart 1: Reasons for which consumers do not prefer to order online

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Concerns</td>
<td>22</td>
</tr>
<tr>
<td>Taste and Quality</td>
<td>15</td>
</tr>
<tr>
<td>Packaging</td>
<td>10</td>
</tr>
<tr>
<td>Price</td>
<td>11</td>
</tr>
<tr>
<td>Minimum Order Criteria</td>
<td>13</td>
</tr>
<tr>
<td>Non-Delivery Zone</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Primary Data Sample size: 42
Unit of measurement Y-Axis: 1 unit = 1 respondent

From chart 1, we can see that 20% of the total sample size are hesitant to order food online. Six factors were studied to understand why consumers do not prefer online ordering. 52.3% of the respondents cited health concerns as the primary reason for this, followed by poor taste and quality (35.71%). Other factors included minimum order criteria, price and packaging. It has been observed that these food delivery platforms provide a large range of fast food options. Since the Indian consumers have started shifting towards a healthier lifestyle, they tend to avoid ordering food online due to the lack of healthier offerings. The second major reason cited by respondents is taste and quality since they fear that the same taste and quality might not be maintained if the food is delivered as compared to the quality offered at restaurants.
Five main factors that influence people to order food online were studied. From chart 2, we can see that the most important factor is the variety of options available on the food delivery platforms. By bridging the gap between restaurants and consumers the food delivery apps have provided consumers with numerous options of restaurants as well as cuisines to choose from at a tap on their phone. For example, Swiggy is a dedicated food app and it has close to 12,000 partner restaurants in eight cities (Kanteti, 2018). Other factors include convenience and lower delivery time. Few respondents also said that the offers given by these apps also influence them to buy online and while some said that their social anxiety is also a factor that influences their preference because it prevents them going out and hence getting food delivered at their doorstep without having to step out of their house seems like a comfortable option.

Table 1: Importance of various factors while ordering food online

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Price</th>
<th>Food Quality</th>
<th>Delivery Time</th>
<th>Delivery Charge</th>
<th>Discount &amp; offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.82</td>
<td>4.23</td>
<td>3.54</td>
<td>3.54</td>
<td>3.68</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.08</td>
<td>1.03</td>
<td>1.13</td>
<td>1.18</td>
<td>1.15</td>
</tr>
</tbody>
</table>

Source: Primary Data Sample size: 171
Respondents were asked to rank five factors based on the importance assigned to each factor while ordering food. From Table 1, it can be concluded that the most important factor considered by respondents is food quality. It has been considered even more important than the price as the consumers don’t want to compromise on the taste and quality of the food even if it means paying a little extra for the same. Various discounts and offers such as Zomato Gold and Swiggy. It given by apps are also appreciated by the consumers and it tends to influence their purchase decision. For example, if the restaurant of choice is available on more than one food delivery platform, then consumers choose the app which offers a higher discount. Delivery time taken for the food to reach to the consumer’s doorstep and the delivery charges levied by the restaurants are considered as relatively less important.

Chart 3: Occasions at which consumers order food online

Source: Primary Data Sample size: 171
Unit of measurement Y- Axis: 1 unit = 1 respondent

Various occasions at which consumers normally order food online have been studied in this paper. In chart 3, we can observe that mainly, people order food when there is no other option available. The next most common occasion is during a social gathering with friends and family. People like to order food during social gatherings because not only does it provide many options but is much more convenient for people. Some people also order food online to substitute or supplement home cooked meals. Swiggy released a campaign based on a similar
insight called “Ghar Ka Khaana, Saath Mein Thoda Swiggy!” that attempts to strike a chord with most Indian families today, where consumers like their home cooked meals but also look forward to an exciting element that complements their routine (BrandEquity.com, n.d.).

1.6 : Challenges while ordering food online

Online food delivery services are growing rapidly and are set to grow at a rate of 15% in India, but they still face a number of problems which dissuade consumers from ordering food online.

Chart 4: Consumers’ agreeableness on minimum order criteria

![Image]

Source: Primary Data Sample size: 171
Unit of measurement Y- Axis: 1 unit = 1 respondent

One of the major problems faced by consumers is the fact that some restaurants have a minimum order criterion, which states that an order must exceed a certain amount or else it will not be delivered. 43% of the respondents were against this feature. Their opinion was that the minimum order criterion forced them to overspend and buy things they did not want. It also prohibits them from ordering small items, such as desserts or drinks. However, if you look at the app’s point of view, this rule is logical as it reduces the delivery costs of orders which are miniscule.

Chart 5: Major factors influencing consumers’ ordering behaviour

![Image]
Source: Primary Data Sample size: 171
Unit of measurement Y- Axis: 1 unit = 1 respondent Source: primary data

Another major factor that affects consumers is the pricing. Delivery apps often price their food above the normal rate charged by the restaurant. On top of that, there is often a hefty delivery charge and an even heftier packing charge. Over and above that, many restaurants post inexplicable charges that results in a massive bill. Consumers generally feel this is unjustified as they end up paying higher without experiencing the ambience of the restaurant. Also, all restaurants are not available on the delivery apps. This is a major complaint of the consumers, as they can see the restaurant and their app but cannot order as a message saying “Does not deliver” is shown alongside it.

Another worry people had while ordering food online was the maintenance of quality. The time period between when the food is ready and when it is delivered to your doorstep has a ton of potential problems. The first is temperature; if not properly packed, the food can lose its ideal temperature and can become soggy ad unpleasant. The delivery process is another issue; consumers have said that they have no idea how the food is actually transported, and how sanitary the transportation method is. Also, there is no guarantee that the delivery guy will maintain your food; he may sneak a few fries and even sip your drink. Consumers have reported poor experiences in the past which therefore dissuades them from ordering food.

Chart 6: Frequency of dissatisfaction faced by consumers

Although consumers have reported poor condition of the food delivered, our study has shown that a majority of the respondents rarely have problems. Over 80% of the respondents showed dissatisfaction less than once in 5 orders, of which 11% said they have never had a problem with the food delivered. In fact, the leading problem among consumers is that the delivery took too long and came late. Although this is still a problem, it is not as serious as lack of maintenance of quality.

With the explosion of food delivery, things like packaging are constantly improving. Sealed containers are being developed in order to prevent any sort of tampering. In fact, Lamb Weston, a supplier of frozen potato products, has recognised that soggy French fries are unpopular, and is working on creating a new line of fries only for delivery. These fries will be stored in a vented container to reduce the moisture and thus the sogginess (The Official Wasserstrom Blog, 2018). If such solutions are developed, the problems faced by consumers would reduce significantly.

4.3 : How Food Delivery Apps Influence Eating Habits

With the introduction of food delivery apps, almost 65% of the respondents said they have started spending more on food, whereas the same number were of the opinion that these apps led to them ordering midnight feasts and giving in to those late-night pangs of hunger. Hunger sees no time and no location, and ever since food delivery apps launched late deliveries, consumers started ordering more food at these late hours (Bahukhandi, 2018). Indians tend to eat light lunches and then eat a more extravagant dinner, especially if the last meal of the day is very late at night. Therefore, the post-midnight market is also a key market and has been well exploited by the food delivery apps (Bhushan, 2018).
Chart 7.: Influence of online delivery apps on trying more restaurants

Source: Primary Data
Sample size: 171
Unit of measurement Y-Axis: 1 unit = 1 respondent
These consumers also said they used to get to experience a whole new host of restaurants. Since a variety of options are available on these apps, consumers get to browse through a whole list of options, and get to look at places they’ve never seen before. However, at the same time, the respondents said they don’t really get to try new cuisines. This may be because consumers aren’t that open to new types of food, or they don’t want to experiment when it comes to food.

Over 50% of the respondents said that they tend to go out less often, and would rather eat at home. This is mainly because of the convenience factor. The respondents would rather have food delivered to their doorstep than have to take the effort to go out to a restaurant. In fact, restaurants which are not associated with any food delivery apps will eventually end up losing sales, and may even have to shut down over time.

6.4: To determine which is the most popular food delivery app?

In order to determine the most popular food delivery app, we compared various apps on the basis of different factors. These factors included price, discounts and offers, grievance redressal, delivery time and maintenance of food quality in transit. On beginning this study, we found that Zomato and Swiggy are the most popular apps, with 47% and 41% of the population using these two apps respectively.

Chart 8 Preference of Consumers’ Amongst Delivery Apps

![Chart 8 Preference of Consumers’ Amongst Delivery Apps](image)

Source: Primary Data, Sample size: 171
Table 2: Statistical Test on ranking scale of different online food delivery Apps

<table>
<thead>
<tr>
<th>Item Statistics</th>
<th>Mean Rank (Zomato)</th>
<th>Mean Rank (Swiggy)</th>
<th>Rank Mean Rank (Restaurant’s apps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>3.34</td>
<td>3.46</td>
<td>2.9</td>
</tr>
<tr>
<td>Discounts and offers</td>
<td>3.74</td>
<td>2.9</td>
<td>3.56</td>
</tr>
<tr>
<td>Grievance Redressal</td>
<td>2.95</td>
<td>3.51</td>
<td>3.44</td>
</tr>
<tr>
<td>Delivery Time</td>
<td>3.49</td>
<td>3.57</td>
<td>3.42</td>
</tr>
<tr>
<td>Maintenance of food quality</td>
<td>2.98</td>
<td>3.71</td>
<td>3.53</td>
</tr>
</tbody>
</table>

Source: Primary Data Sample size: 171

In the above table, we have calculated the mean of each of the factors and apps we have studied. We collected the data from respondents by asking them to give each app a scale of 1 to 5 on the basis of a particular attribute, which we then used to calculate the values as shown above. When we compare the pricing policies of the respective delivery apps, Swiggy’s prices are comparatively lower than Zomato’s prices because most of the respondents gave a better rating to Swiggy in terms of price i.e., 3.3. However, Zomato offers a lot more discounts and offers to its consumers. Another area where Zomato surpasses Swiggy is the delivery time; Swiggy is perceived to be slower at delivering orders than Zomato. However, Swiggy is better at addressing problems of the consumers, and it also maintains the quality of the food better. Since Zomato is comparatively better than Swiggy on the basis of a majority of factors, it has a slightly higher popularity of 47% compared to Swiggy’s 41%.

However, that being said, Zomato and Swiggy are going through a cut-throat competition in order to be the most popular food delivery app. They are both constantly redesigning and innovating in order to make their app better. They could do this by modifying the design so that it becomes more user friendly. They could also offer GPS systems through which consumers can track their order in real time. The number of restaurants they partner with also makes a difference; consumers would obviously want a wider variety to choose from. If either app makes some significant ground on the other, it may be very difficult to catch up (Hariharan, 2018).

V. CONCLUSION AND RECOMMENDATIONS

1.7 : Conclusion

The paper has identified five factors that influence consumers to order food online, with variety of options that are provided by these food aggregator apps as being the most important factor. By bridging the gap between restaurants and consumers the food delivery apps have provided consumers with numerous options of restaurants as well as cuisines to choose from at one tap on their phone. The food delivery apps have made food ordering convenient. They can select their order on the app which reduces the chances of a wrong order. The apps have multiple payment options available and hence offer great convenient to consumers which is the second most importance factors influencing consumer preference towards online food delivery apps.

The most important factors considered by consumers while ordering food online is the taste and quality, followed by price. In our study we found that the consumers mostly order online when there is no other substitute available but a lot of respondents also order online food as a substitute to home cooked meals or during social gatherings with friends and family.

Only 20% of the total sample size said that they do not prefer ordering online citing health concerns as the primary reason because the food delivery apps predominantly serve fast food options and lack the option for healthier food choices. Other major factor that the respondents cited for not ordering online are taste and quality of the food delivered vis-à-vis the quality provided in the restaurants along with minimum order criteria set by restaurants for ordering online.

There are various challenges faced by the consumers while ordering food online amongst which the major challenge faced by the respondents is the minimum order criteria set by the food delivery apps as it forces them to overspend especially when they are looking for small food items such as a drink or some snacks. Another major challenge is the inflated and dynamic pricing policy of food delivery apps. These apps usually charge a higher price from consumers for items that are available at a cheaper price at the restaurants and these prices tend to go even higher if the demand for a particular order is high. Another challenge is the
maintenance of food quality in transit because the time taken for
the food to reach the consumer’s doorstep can cause various
problems. For example, an incorrect temperature, if the food is not
properly packed or the delivery takes more time than expected, the
food can lose its ideal temperature and can become soggy and
unpleasant. Also, there is no guarantee that the delivery guy will
maintain the quality and hygiene of the food; he may sneak a few
fries and even sip your drink. Consumers have reported poor
experiences in the past which therefore dissuades them from
ordering food (news18.com, 2018).

The paper has also studied how consumer behaviour has
changed after the introduction of food delivery apps. The
consumers have started to spend more after the advent of food
delivery apps because more than half of the respondents (61.4%) agree that they tend to give in to their midnight cravings due to the
availability of various food option even late at night. 71.9%
respondents have also agreed that they tend to try more restaurants and 66.08% respondents have agreed that they try more cuisines
because of food delivery apps.

Among the different food apps studied in this paper, Zomato is the most used app by the consumers having a share of
48% of the sample size, followed by Swiggy (41%) and other
restaurant apps (11%). Zomato also offers more discounts and
offers than other apps which can be the reason as to why most of
the respondents use Zomato. However, the grievance redressal
system of Swiggy is considered to be the best by the respondents.
It has the promptest customer service system and responds to
customer grievances immediately often returning the full amount
in case it fails to satisfy the consumer (your story academy, 2019).

1.8 : Recommendations

- There has been a shift in the consumer preference
towards a healthier lifestyle. People are becoming
more and more health conscious and therefore
are very careful of their diet. This health conscious
consumer segment does not find its need fulfilled
by the food delivery apps as they lack healthy and
low calorie food options. Introducing restaurants
that cater to such needs of consumers can increase
the market share and brand loyalty of the food
delivery platforms.

- Many consumers do not appreciate the restaurants
setting a minimum order criteria and this often
dissuades them from ordering online. Bringing
down this minimum order criterion to a reasonable
amount in such a way that it does not affect the
profitability of the food apps and at the same time
not be a hindrance in consumer’s preference of
online ordering.

- Though more restaurants are available, consumers
are rigid in their food choices and don’t tend to
experiment with cuisines. The various food apps
such as Zomato and Swiggy can encourage customers to try more cuisines by giving
additional offers and discounts on a ‘never tried
before’ cuisine, and can try running an
advertisement or PR campaign such as Twitter
interaction with consumers who have tried a new

- The most important factor cited by consumers for
preferring online food delivery is its ability to
provide a variety of options. The food delivery
apps can work towards bringing more variety in
their services to attract more consumer. There
should be an option of combining two orders from
different restaurants. This will not only provide
more variety but also give more flexibility and
control to the consumer.

VI. LIMITATIONS

1.9 Sampling Limitations

The study has taken a sample of 213 respondents and not
the entire population. Therefore, the findings of this study is based
on the data collected from these respondents and might not hold
true for the entire population. If census or population study had
been used, this problem would have been solved.

1.10 Sampling Method

This study has used Non probability sampling technique.
Convenience sampling method was used to select samples. These
samples selected might not be a true representation of the entire
population and may result in bias on the part of the researcher.

1.1 Cross sectional study

A Single cross sectional study was conducted and data was
collected from the samples only at a particular point of time and
therefore the findings stand true only for this period and might not
hold true in future and may change as time goes.

1.1 Objective Limitation

The research problem identified i.e., Consumer perception
towards online food delivery is a broad area of study and therefore
this research paper has done a limited study on this research
problem covering four objectives under this study.

1.2 Location

The data has been collected only from the respondents
residing in Mumbai and therefore the findings cannot be
generalized for a larger population residing in any other state or
country.

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