

# A Study on Consumer Behaviour and the Impact of Food Delivery Apps on the College Students in Bangalore

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**Abstract:** Food delivery apps are the fastest growing segment in India. Food delivery apps can be restaurant controlled, independent or online food delivery app services. Zomato was the first online food delivery service to enter India. It also provides exclusive services like reviewing restaurants, Zomato Gold, etc. which other food delivery apps do not provide. The other popular delivery apps are Swiggy, Uber Eats, Food Panda, Box 8, Dominos, Pizza Hut, Faasos etc. Dunzo, Freshmenu and various other app services are emerging currently. Food delivery apps are beneficial in various ways. It is very convenient to the consumers due to the growing population having no time to cook or due to tight time schedules. The food delivery app services give a variety of payment options, which helps in the smooth transactions. They even have offers to attract a variety of consumers to use their app service. The apps are easily accessible and gives a 24x7 service depending on each restaurant. They provide customers with the ultimate satisfaction with their user-friendly service and fast delivery. The millennial population are the drivers of the profitability of food delivery applications. Bangalore is known for its diverse culture. More than 50% of the Indian population are under the age of 25 years. This makes it an ideal demography to carry out a food delivery service. The study was conducted considering six colleges in Bangalore and their behaviour towards Food delivery applications. The paper aims at understanding the competition of Food delivery applications in Bangalore and the factors i.e., Restaurant Options, Delivery Time, Offers/Discounts, User Interface and Minimum Penalty that influence the frequency of using Food delivery applications.

**Keywords:** Consumer Behaviour, Food delivery applications, Millennials, Swiggy, Uber Eats, Viable factors, Zomato.

## 1. Introduction

Consumer Behaviour has always been a challenging issue and involves the 'why' and 'how' of what consumers buy including their marketing mix and markets. It is a very interesting field to study. The perception consumer behaviour is of particular importance considering cultural and social diversities. Buying behaviours are the judgment practices and actions of people concerned in the purchasing, use of goods, and are a subtle phenomenon because individuals do not always act overtly. The performance of these consumers are often unpredictable and even unexplainable.

These days, the selection by consumers takes place without the help of sellers and hence the most important factor to attract

customers in today's world is the marketing, the uniqueness of the food delivery app service and the ways in which it satisfies the consumers. Various elements of a food delivery application like the offers, the payment methods, User Interface, etc. play a major role in influencing the consumers to use a certain application over the others that are available.

Swiggy is among the most popular food distribution applications in India. It has over 1million downloads on the Google Play Store alone. The main purpose of Swiggy is to deliver food around the country without having any restriction on the minimum order.

Zomato was the first online food delivery service to enter India. In addition to the food delivery service, it provides other services like viewing the restaurant, its menu, reviews by their customers, and has Zomato Gold, which is a premium subscription, sold at a certain price for a certain number of months. Zomato Gold provides 1+1 or 2+2 option on food and drinks in select restaurants.

Uber Eats operates in major cities like Bangalore, Delhi, Chennai, Mumbai, Hyderabad and many other locations. It is owned by a popular venture, Uber Technologies, Inc. that is well known for its taxi service across the world.

FoodPanda operates in various countries like Zomato. The food delivery business has been struggling to live up to its motto and see growth in itself. It is facing tough competition from the other major delivery apps like Swiggy, Zomato, etc. The contract with ANI Technologies Pvt. Ltd owned Ola was recently terminated after being acquire by it for 18 months. This makes it tougher for FoodPanda to survive.

## 2. Literature Review

(Borkar, 2019) in his article, spoke about the high commission charged by the food aggregators, making the Kerala Hotels and Restaurants Association (KHRA) go on a strike for 10 days. As mentioned in the article, it states this will cause harm to the restaurants in a long run. The food business sector is not protected from its consistency with emergence of competition. The article explains dominance and the abuse of dominance position. The food delivery apps use the strategy of predatory pricing. This kind of pricing strategy Offers food at

unsustainable prices, causing the small cafes and restaurants to shut down. They also face losses due to the same. They have a discriminatory pricing, tie-ups and exclusive sale contracts, etc. In recent news, the deep discounting has caused many restaurants to cancel their agreements with food delivery apps and this would lead to further issues to the food delivery apps.

(Vaghela, 2018) explains how technology has transformed lives of people. Everyone is moving to smartphones to hire taxis or for ordering food through mobile apps. In recent times, the usage of the food delivery apps have increased by 70% since 2014. The current standing is 34%. The food delivery apps are transforming the industry in various ways. By delivering food on demand, giving an option of advance booking and reservations, reviews and ratings, and the various deals and Discounts offered to its customers.

(Mundy, 2018) addressed the issue where the famous Dabbawalas are now facing fierce competition by many food delivery apps. Food delivery apps like Zomato and Swiggy are expanding aggressively. Similarly, Uber Eats has entered into the market making the competition even harder. Applications for food delivery have received billions of dollars from international investors making it one of the fastest growing segments. Orders of over 40 million worth \$135 were made in India as estimated by Mr. Rohan Agarwal. This expects the demand will double by 2020. The generation is filled with busy professionals and people from various cultures. The Food Delivery Apps are facing tough challenges with fierce competition and customer preference. There is still potential for the food delivery apps to beat the competition and stay ahead.

(Kashyap, 2017) addressed the increase in vehicles and population that has therefore increased the traffic in the Tier-1 cities, which has increased the travelling time creating a paucity of time. Rather than cooking at home, many of them prefer ordering food through online food delivery apps. The market for online food supply aggregators and virtual kitchens have expanded by 150 per cent relative to 2015. By increasing order transactions, food supply aggregators have focused mostly on improving operational efficiency and competitiveness in Tier 1 cities only and lesser on the newer towns. The article further explains the entry of Google Aro, which not only enabled customers to order food online but also as home services aggregator. Following this, Uber Eats was launched in India whereas Ola tried to launch Ola Café, which was shut down. The most popular Food delivery App, Swiggy, had started cloud kitchens. Zomato had also acquired the hyperlocal logistics start-up Runnr. Other food aggregators like FoodPanda, FreshMenu are finding out various ways to stay in line with the competition and to deliver tasty food.

(Chakraborty, 2019) Millennials find cooking as a hassle after a long day at work and therefore prefer ordering food through food delivery apps. Food delivery apps provide convenience to a number of Indians, for their hectic schedules and lifestyles. With the above changes, the food delivery apps have become both necessary as well as affordable to the daily

users. This also causes them to overspend. Many individuals live individually and without their families, thereby increasing the responsibilities. Due to lack of time, consumers now prefer going online for every necessary item. Convenience also is a major factor. Experimenting with new cuisine is seen as a trend. Swiggy promotes its brand as Lightning fast delivery, which therefore eliminates the time barrier. The young population is tech savvy and have double the incomes. They do not keep track of their spending while ordering food online. Many millennials are aiming for a healthy lifestyle as well which is influencing the food delivery apps to also focus on providing healthy options to consumers.

(Burnett, 2019) In the generation of growing technology and increase in the number of smartphone users, people use food delivery applications, as they are very convenient. If a quality product is not offered, the restaurants face a threat of losing their customers. Therefore, many restaurants outsource the food delivery services to third-party companies. Delivering hot and fresh food is the main factor, which needs to be followed across various chains. The restaurants must also keep in mind that the delivery service might affect their brand name; thereby crosschecking each food delivery service is necessary through feedback.

(Santra, 2019) People can get anything from a taxi to food using technology with just a tap. Dine-in is replaced with order-in. Many franchises are tying up with food delivery aggregators to increase their reach, which in turn is increasing their customers and revenue. On the other hand, it decreases the footfall. The pros of delivery applications are irresistible offers; convenience increases demand, and increased reach. Moreover, the con is that it effects quality of service and decreases footfall.

(Cheng, 2018) A report titled "Is the Kitchen Dead?" stated the increase of global online food ordering sales. Many restaurants from McDonald's to Buffalo Wild Wings have themselves listed on food delivery platforms. The millennials order-in mostly compared to their parents. UBS has mentioned that budding business models have disrupted various sectors including supermarkets and restaurants. Kitchens may become underutilized in homes thereby making it smaller or not having one. Dark kitchens and increase in restaurants catering to order-ins than dine-ins can affect the appliance sales as well as the commercial real estate markets. On the contrary, many millennials have indulged in cooking at home as well for a healthy and fresh food.

(Alexander, 2019) Ordering food is often remembered with pizza that is lukewarm and the greasy Chinese food. Food delivery companies give customers an option to order from application, websites, etc., which are convenient. The tech-savvy consumers, mainly comprising of millennials, order food online. There are certain strengths and flaws of online food delivery services. While they are known for being convenient, it is not a quick experience as well, because traffic, weather and other factors may increase the wait time. Through the aggregators, customers have a greater choice of restaurants to

order food from whereas it can kill the vibe of the dine-in experience of the restaurants due to fewer customers. Although healthier delivery options are available, the delivery fee and other charges can make it more expensive. Customers can enjoy their privacy and bad weather by staying home and ordering food online but can increase the attitude of isolationism and social disconnect.

(Malani, 2018) The most popular food delivery companies, Swiggy and Zomato have aggressive campaigns to increase the reach of their brand to consumers. Marketing needs to be done both online and offline, which means that effective measures and methods needs to be considered. The cost of customer acquisition is more than the other two players i.e., Food Panda and UberEats. The competitive edge that Zomato has is that it has restaurant discovery as well as food delivery service in its application.

(Chanchani, 2019) The recent acquisition of UberEats by Zomato was not a worry to Swiggy as it claims to have exceeded their target of 360 million a year set for 2020 by crossing 500 million in October. It has seen an increase in loss in FY19 but will further continue investing in their new services such as Swiggy Go and Swiggy Stores. 60% of the revenue share is gained by Swiggy alone in the food delivery market, therefore, being a market leader. They have reduced their discounts but this has only impacted them slightly. Their success in Gurgaon was huge where they grow to 20% of their food business in five months.

### 3. Research Design

The quantitative method is used to understand the trends and statistical truth in the research. Therefore, this study uses a questionnaire, for collecting the data to support the explanation of the problem statement solution.

#### A. Research Objectives

- 1) To assess the competition between the various food delivery apps.
- 2) To examine which food delivery app the customers frequently use.
- 3) To analyse the factors affecting the Consumer Behaviour regarding food delivery apps.

#### B. Data Collection Method

The data for this research paper is collected through two levels:

- 1) *Primary data:* The primary data for this research paper was collected through a structured questionnaire to gather all the information, which is necessary for the research paper and answers the entire question, which is required for analysis. A pilot study of the questionnaire was conducted by handing it out to 10 people and the Cronbach's Alpha was tested for the reliability of the questionnaire.
- 2) *Secondary data:* This level includes articles, journals, books, websites which gives essential knowledge which is necessary for the project

#### C. Sample Size and Sampling Technique

- 1) *Population:* All the universities in Bangalore.
- 2) *Sample Frame:* The questionnaire, which contains 18 questions, was sent across to the students of the 6 colleges in Bangalore i.e., Christ (Deemed to be University), Centre for Management Studies (Jain CMS), Jyothi Nivas College, Mount Carmel College, Christ BGR Campus, Bangalore and St. Joseph College of Commerce
- 3) *Sample Size:* 110
- 4) *Type of Sampling:* Convenience sampling method

#### D. Statistical Design

- 1) Cronbach alpha
- 2) Descriptive analysis
- 3) Chi-Square
- 4) Correlation

#### E. Hypothesis

- 1) Ho: There is no significant relationship between restaurant options and frequency of ordering.  
H1: There is a significant relationship between restaurant options and frequency of ordering.
- 2) Ho: There is no significant relationship between offers/discounts provided and frequency of ordering.  
H2: There is a significant relationship between offers/discounts provided and frequency of ordering.
- 3) Ho: There is no significant relationship between delivery time and frequency of ordering.  
H3: There is a significant relationship between delivery time and frequency of ordering.
- 4) Ho: There is no significant relationship between user interface and frequency of ordering.  
H4: There is a significant relationship between user interface and frequency of ordering.
- 5) Ho: There is no significant relationship between penalties charged and frequency of ordering.  
H5: there is a significant relationship between penalties charged and frequency of ordering.

### 4. Data Analysis and Interpretation

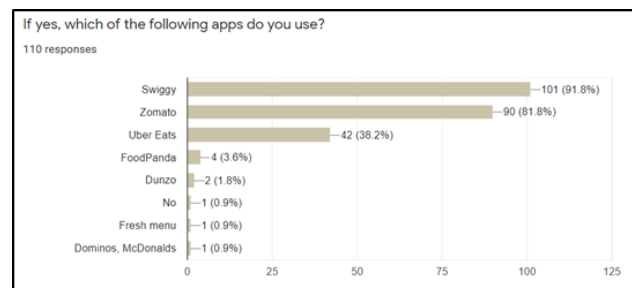


Fig. 1. Graph naming the food delivery apps the respondents use (Source: Author with the help of primary data)

*Interpretation:* The above graph is based on the multiple-choice question. This graph helps understand the various food-

delivery applications used by the respondents. It can be inferred that 91.8% use Swiggy, 81.8% use Zomato, 38.2% use Uber Eats. As on 21 January 2020, Zomato took over Uber Eats in India and gained all their users.

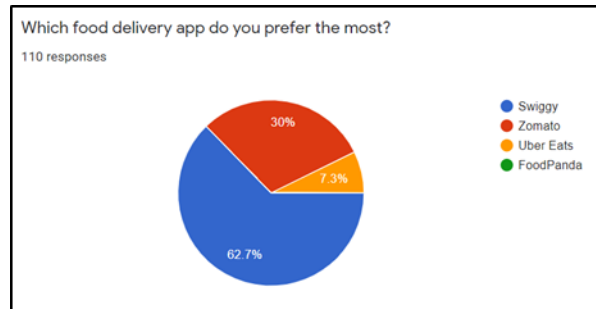


Fig. 2. Graph showing the most preferred food delivery app (Source: Author with the help of primary data)

*Interpretation:* From the above graph, we can interpret that 62.7% of the respondents (i.e., 69 out of 110 respondents) prefer using ordering food on Swiggy when compared to the other food delivery apps. While 30% of the respondents (i.e., 33 out of 110 respondents) use Zomato and the other 7.3% of the respondents (i.e., eight out of 110 respondents) use Uber Eats to order food online. As on 21 January 2020, Zomato took over Uber Eats in India and gained all their users.

A. Correlation

1) Restaurant Options

*Interpretation:* H0 is accepted and H1 is rejected. From the correlation test, it is observed that the significant value for Restaurant Options in relation to the Frequency of Ordering online is 0.098. As the significant value is more than 0.05, it can be determined that there is no relationship between Restaurant Options and Frequency of Ordering.

2) Offers/Discounts

*Interpretation:* H2 is accepted and H0 is rejected. From the correlation test, it is observed that the significant value for Offers/Discounts in relation to the Frequency of Ordering online is 0.000. As the significant value is less than 0.05 and is

perfectly in the middle, it can be concluded that there is a relationship between Offers/Discounts and Frequency of Ordering.

3) Delivery Time

*Interpretation:* H3 is accepted and H0 is rejected. From the correlation test, it is observed that the significant value for Delivery Time in relation to the Frequency of Ordering online is 0.030. As the significant value is less than 0.05, it can be concluded that there is a relationship between Delivery Time and Frequency of Ordering.

4) User Interface

*Interpretation:* H0 is accepted and H6 is rejected. From the correlation test, it is observed that the significant value for User Interface in relation to the Frequency of Ordering online is 0.109. As the significant value is more than 0.05, it can be established that there is no relationship between User Interface and Frequency of Ordering.

5) Minimum Penalty

*Interpretation:* H0 is accepted and H7 is rejected. From the correlation test, it is observed that the significant value for Minimum Penalty in relation to the Frequency of Ordering online is 0.128. As the significant value is more than 0.05, it can be determined that there is no relationship between Minimum Penalty and Frequency of Ordering.

5. Summary of findings

The correlation test established that there was no relationship between Restaurant Options, User Interface and minimum penalties with Frequency of Ordering online. There was significant relation between Offers and Discounts and Delivery Time with respect to Frequency of Ordering. It is well known that every consumer wishes to be given incentives in the form of Offers and Discounts on the food ordered. This is one of the main strategies of the food delivery companies to attract more customers to use their app. Due to this reason, many people tend to order food online very often. Similarly, the Delivery Time also plays a major role. Consumers rather get food from online food apps rather than travel a distance for it. No person would deny any luxury he receives. Therefore, this also acts as an

Table 1  
Correlation of the various factors considered and the effect on frequency of ordering online

Correlations							
Factors that influence preference		Restaurant Options	Offers/ Discounts	Delivery Time	User Interface	Minimum Penalty	Frequency of ordering
Restaurant Options	Sig. (2-tailed)		.000	.000	.000	.000	.098
	N	110	110	110	110	110	110
Offers /Discounts	Sig. (2-tailed)	.000		.000	.005	.107	.000
	N	110	110	110	110	110	110
Delivery Time	Sig. (2-tailed)	.000	.000		.000	.022	.030
	N	110	110	110	110	110	110
User Interface	Sig. (2-tailed)	.000	.005	.000		.000	.109
	N	110	110	110	110	110	110
Minimum Penalty	Sig. (2-tailed)	.000	.107	.022	.000		.128
	N	110	110	110	110	110	110
Frequency of ordering	Sig. (2-tailed)	.098	.000	.030	.109	.128	
	N	110	110	110	110	110	110

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

important factor for the consumers to choose one food delivery app over the other and the frequency in which they order online through these applications.

### 6. Conclusion

Food delivery application downloads and usage is increasing from day-to-day. Millennials are the regular users of food delivery apps and companies need to target them in a smart manner. In India, the online delivery industry is still very much in early phases, with businesses working hard to sustain the business by offering competitive rates, promotions and low delivery fees. However, these companies compete with one another offering quick delivery and timely after-sales facilities.

The recent acquisition of Uber Eats by Zomato has increased the customer base of Zomato, thereby, acquiring a competitive edge over Swiggy. Swiggy has a new feature, which expands its business of just being a food delivery application to a delivery application of household items. Zomato has not ventured into this business but it has a review system and online table booking system, which sets it apart from Swiggy and other delivery applications.

According to the study, Swiggy is doing better than other food delivery applications in the industry and consumers prefer Swiggy the most. From the study conducted, it can be concluded that there is relationship between the influence of Offers and Discounts and Delivery Time with frequency of ordering online. Age plays a major role, as millennials tend to order in more than dine in when compared to the Gen X and Baby boomers. Food delivery applications are also restricted from providing deep discounts, which will cause harm to the restaurant operators. Reducing the lead-time is also an important factor, which every food delivery company tries to handle as increase in lead-time, will decrease customer and brand loyalty and the food will be delayed and served either warm or cold. To conclude, food delivery applications has transformed the way of living of the present generation and competition is increasing day by day to meet the customers' requirements.

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