

# The effect of new-normal on food ordering through food ordering platforms

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## Abstract

As people got busier with the day to day work, food deliveries have become more and more popular. It can be seen that the type of restaurant has been not been a bar to offer food delivery. Key food delivery apps coming to the scenario have played a vital role not only in delivering food to the customers but also in creating great opportunities for the company as well as for society. Quick and timely service, variety in options, changing nature of urban consumers, up-to-date technology and convenience are some of the most important reasons for uprising of food ordering apps. ) Measures like constant temperature tracking for the delivery agent, contact-less deliveries, deliveries of essential commodities have been beneficial for these apps. This paper tries to find out how the new normal rules and regulations have affected the consumer behavior in food ordering through these delivery apps. The study does not include food deliveries done by individual restaurants.

**Key Words :** New normal, food deliveries, food delivery apps, ordering platforms, zomato.

## Introduction

Getting food to the doorstep without even going out of homes is comparatively recent phenomena in food and beverage industry. As people got busier with the day to day work, food deliveries have become more and more popular. It can be seen that the type of restaurant has been not been a bar to offer food delivery. Key food delivery apps coming to the scenario has played a vital role not only in delivering food to the customers but also in creating great opportunities for the company as well as for society. (Moriarty, 2016)

Quick and timely service, variety in options, changing nature of urban consumers, up-to-date technology and convenience are some of the most important reasons for uprising of food ordering apps. The lock down and the new rules and regulations set to tackle the virus pandemic has added to this list of reasons. The service model is technology dependent. Customers place an order using the interface on his/her device. The order is then received by the service provider i.e. restaurant which then prepares the food and hands it over to the food delivery partner who then delivers it to the door-step of the customer. Advanced technology has made the interface easy for the customers as well as for restaurants. This advancement has seen a big jump of increased food orders through food delivery app in recent years. (Chai & Yat, 2019)

This system of delivering food has helped not only customers but also the restaurants in the time of pandemic. It was seen that the behavior of consumers regarding ordering food using food delivery apps has changed due to the restrictions and new normal rules. The demand of the deliveries has rocketed during the pandemic as it was the most convenient way for the customers to order food whenever home cooking was not possible. (Chavan et al., 2015; Keane, 2020) This has made the restaurants to rely on food delivery to a large extent. It has also pushed customers to order more and more using food delivery apps. It was pleasure which was the most significant factor in utilizing food delivery apps to order the food during pandemic. (Kumar & Shah, 2021)

Food delivery apps even operated during the pandemic with few modifications and improvements in their delivery system to adhere the norms and regulations set by the government. It also created the trust in minds of people to order the food from as all the norms were followed by these apps as well as the delivery partners. These apps have been instrumental in survival of smaller restaurants during and post pandemic. (Batra, 2021) Measures like constant temperature tracking for

the delivery agent, contact-less deliveries, deliveries of essential commodities have been beneficial for these apps. Apps like Zomato, Swiggy, Dunzo, etc. have been the front runners in the spectrum.

#### **Objectives of the study**

1. To study the changes in food ordering because of new normal.
2. To study various aspect of food affected by the new regulation in reference with food delivery apps.

#### **Hypothesis**

H<sub>1</sub> New normal regulations have significant effect on food ordering using delivery apps.

H<sub>2</sub> People order healthy food more than fast food or junk food in current scenario using a food ordering app.

#### **Research Methodology**

Typically the research methodology is comprised of the sampling techniques sources of data various method adopted to collect the requirement data, analysis of the data and data interpretation. For this study the data been collected by the primary sources. Primary data was collected from the customers using Google forms.

The primary data has been collected using structured questionnaire. Likerts' skill was used to gather the responses. Simple random technique was used to select the sample size and 224 responses were gathered. Secondary data has been collected through various journals, articles, reports, white papers, news, etc.

#### **LiteratureReview**

The Research paper titled, 'A study of E-payment system on food Delivery industry', by Ghosh and Saha (2018) attempt to check the relation between customer ordering food through food delivery apps and food business. The paper focuses majorly on demographic factors like income, age, professional etc. The data has been collected using structured questionnaire. It also finds out that there is a positive relation between online payment behaviour with respect to demographic variables like age, income etc. The paper does not include the effect of new normal on food delivery app and the study is restricted to Kolkata City.

The Research paper by Botre & Kale(2020) titled, 'A study on the perception of customer for remedial action in QSR to sustain in the hospitality sector post covid-19 in Pune region', focuses on impact of Covid-19 on the QSR and hospitality sector and to identify and propose possible remedial action and confirm sustainability of QSR Post covid-19. Covid-19 is the bad or even worst situation we all seen and it almost to set down, but its huge impact on the QSR come in front of us. The Research paper by Meshram (November-2020) titled 'How covid-19 affected the online grocery buying experience' has been conducted only in Mumbai and Pune to study the preference for online shopping of groceries over the neighbourhood grocery store and the customer experience of online grocery purchase during the lockdown. The research Methodology is comprised of the sampling techniques, source . Gap point needed to include Data various methods adopted to collect the required data, analysis of the data and interpretation. People ordering through the delivery apps have increased drastically. This habit has poised a challenge for local neighbourhood grocery stores.

The Research paper titled, 'An analysis of user convenience towards food online ordering delivery application (food app via platform)', by Preetha & Iswarya (2019) tries to study the influence of demography of people adopting to this technology. The technology outreach along with good support of information quality service and support quality has resulted in the positive outcome of the customer intension to use and order food using platform to consumer delivery app. The food mobile app customer are open to technology adoption in food mobile app as its solve their Time and effort. The Research paper titled, 'A study on consumer satisfaction in online food purchasing during Covid-19' by Manjula et al. (2021) focuses on consumer satisfaction in online food purchasing during this Covid-19 changed the consumer lifestyle dramatically the level of consumer satisfaction with consumer in online food purchasing during covid-19. Data collection has been done using pre-tested interview schedule. Random sampling technique was used to select the sample size. Percentage analysis and Likert's scale are the techniques used to collect information. The methodology in this study the level of satisfaction of consumer in online food purchasing has been investigated. The study states the positive significance

between the regulations and deliveries. It also highlights that the pattern of consumer behaviour is changing more towards ordering food online once they are satisfied with the deliveries. The research paper Titled, 'Review on customer perception toward online food delivery service', by D'Souza &Bhat (2021) concentrates on understanding the main drive of customer perception toward online food delivery service. The paper uses secondary data for reviews of customer perception. The paper focuses on online food delivery service only. There is not primary data included in this study. The research paper by Rane ,Thakur and Raina (2019) titled, 'Popularity of online food ordering and delivery service - A comparative study between Zomato, swiggy, Uber eats in Ludhiana' focuses on studying the customer satisfaction among the people ordering food from Zomato, Swiggy and Uber eats in Ludhiana city the paper use primary data which is the data for this study was collected in form of questionnaire fill by customers from Ludhiana. It was seen that time and conveniences are the deciding factors of popularity. It was also seen that the apps which have more variety to cater are more popular than others. . The results of the study cannot be generalized to each and every part of Ludhiana or its adjacent location. The study was conducted for Ludhiana city only.

### **Data analysis & Interpretation**

It was seen that majority of the respondents (55.8%) are from the age group of 41-50 years 28.1 % people fall under the age group of 18-30 years who prefer ordering food from online delivery apps and only 16.1% are from the age group of 31-40 years. 50% people who order from online delivery apps are from service profession. They hold the majority. Students are on the second rank with 22.8% of the people that order food from food delivery app. Around 11.6% professionals as well as Business Professional like to order from food delivery app and only 4% of the people ordering from online source are government employees. It can be read that 73.7% people are graduates who hold the majority in ordering food online. Under Graduate comes at second place with 20.1%. Post Graduates and Doctorates has less interest in ordering food online with percentage 4% and 2.2% respectively.

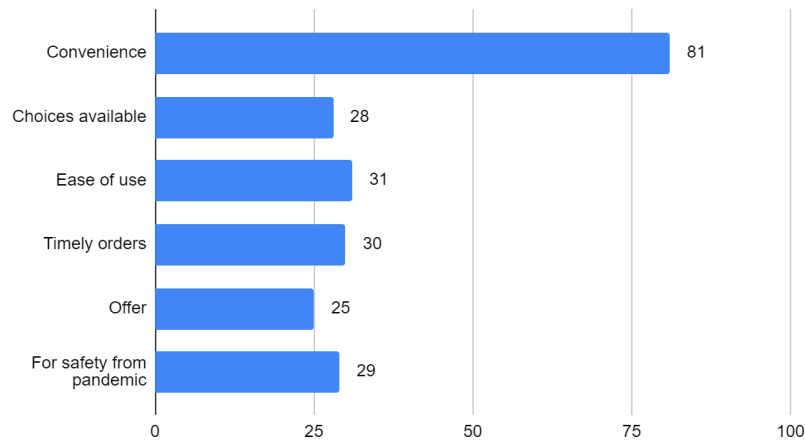
The families which has 2-3 members in family hold majority with 59.8% and on second rank families with 4-5 members like to order food from online delivery app and their percentages are 22.8%. the families which has up to two members or 6-7 members or above 8 members has less percentage i.e., 3.1% , 4.5%, 9.8% Respectively. Here we see that as the families who has more members shows less interest in ordering food from online food delivery app. People who has monthly income up to 20k shows more interest in ordering food online with 49.6% . People who have income up to 20-40k comes on second rank with percentage 23.2%. people who have income between 40k-60k and above 80k are 12.1% and 11.6% respectively. It is clearly seen that people who have higher income like 60k-80k per month are only 3.6% of the sample size. It was understood that the percentage of people ordering food sometimes was 43.3% and people Often ordering food online were 23.7%. Those who always ordered food online were 20.1% whilst There were 8% of people who never ordered food online. Only 4.9% percent of the sample size ordered food rarely. The percentage of people ordering food sometimes was 39.3% and people ordering food online often were 23.7%. Those who always ordered food online. Were 17.4% whilst there were 3.6% of people who never ordered food online only 7.1% of the sample size ordered food rarely.

It can be read that the percentage of people ordering food sometimes from chain restaurants was 39.7%. People often ordering food through chain restaurants were 26.3% and people who always ordered food through chain restaurants using online ordering apps were 17.4%. There were 8.5% of the people who never ordered food through chain restaurants. Only 8% of sample size ordered through chain restaurants using online ordering apps. The percentage of people ordering food sometime through stand-alone restaurants was 35.3%. People often ordering food through stand-alone restaurants were 31.7% and who always ordered food through stand-alone restaurants using online ordering apps were 13.8%. There were 8.9% of people who never ordered through stand-alone restaurants. 10.3% of sample size ordered through stand-alone restaurants using online ordering apps. During pandemic people started ordering food through online food delivery apps more than before. 49.6% people always ordered fast food and 36.6% people use it to ordered healthy meals from online food delivery apps. Only 7.1% & 5.8% of sample ordered street snacks and products respectively. It can be understood that frequency of ordering food using food delivery apps once a week was 69.6% before pandemic. 15.2% of sample ordered food twice a week and people who ordered food online more than three times a week was 9.4% of sample. Only 5.8% people ordered food thrice a week using food delivery apps. The frequency of ordering food using food delivery apps once a week was 39.3% before pandemic. 35.7% of sample ordered food twice a week and people who ordered food online more than three times a week was 12.5% of sample. Only 12.5% people ordered food thrice a week using food delivery apps.

While asking people for their preference to order food through delivery app with new normal regulations during pandemic, 27.7% people always preferred to order food with online apps. While it can be seen that 34.8% people often used online apps to order food during this time and 25.9% people used it sometimes. Adversely 4.5% people never ordered the food

using online apps during pandemic. While asking people for their preference to order food through delivery app with new normal regulations during pandemic, 27.7% people sometimes preferred to order food with online apps. While it can be seen that 22.8% people always used online apps to order food during this time and 37.5% people often used it. Adversely 4.9% people never ordered the food using online apps during pandemic and 7.1% people rarely used it.

Reason of using a food delivery apps to order food.



(Figure 1- Reason of using a food delivery app to order food)

From figure 1 it can be seen that for 81 people from entire sample size convenience is the prime reason to order the food using a food delivery app and choices available on the app was the most apt reason for 28 people. Out of 224 responses 31 responses were noted for the reason ease of use and 30 responded for the timely delivery of orders. 25 responded for offers given by apps on food items as a reason of motivation and for safety from pandemic was the reason for 29 people. So it can be summed up that convenience was the top ranked reason followed by ease of use on the other hand offers was the least preferred reason to order the food using a food delivery app.

### Hypothesis Testing

- $H_0$  New normal regulations has no significant effect on food ordering using delivery apps.

$H_1$  New normal regulations have significant effect on food ordering using delivery apps.

The statistical tool used for testing the hypothesis is T-test. It was used to find whether new normal regulations have significant effect on food ordering using food delivery app or not. The test results are as follow -

Treatment 1

$N_1$ : 224

$df_1 = N - 1 = 224 - 1 = 223$

$M_1$ : 1.87

$SS_1$ : 141.98

$s_1^2 = SS_1 / (N - 1) = 141.98 / (224 - 1) = 0.64$

Treatment 2

$N_2$ : 224

$df_2 = N - 1 = 224 - 1 = 223$

$M_2$ : 3.66

$SS_2$ : 250.21

$s_2^2 = SS_2 / (N - 1) = 250.21 / (224 - 1) = 1.12$

T-value Calculation

$s_2^2 p = ((df_1 / (df_1 + df_2)) * s_1^2) + ((df_2 / (df_2 + df_1)) * s_2^2) = ((223 / 446) * 0.64) + ((223 / 446) * 1.12) = 0.88$

$s_2^2 M_1 = s_2^2 p / N_1 = 0.88 / 224 = 0$

$$s2M2 = s2p/N2 = 0.88/224 = 0$$

$$t = (M1 - M2)/\sqrt{(s2M1 + s2M2)} = -1.79/\sqrt{0.01} = -20.25$$

The null hypothesis is rejected if the p-value is less than 0.05. It can be seen that the t-value is -20.25362. The calculated p-value is 0.00001. The result is significant at  $p < .05$ . So it can be further concluded that new normal regulation have significant effect on food ordering using delivery apps.

- $H_0$  People order junk food more than healthy food in current scenario using a food ordering app.

$H_2$  People order healthy food more than fast food or junk food in current scenario using a food ordering app. This hypothesis has been tested using Z-test. The results of the test are as follow -

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	2.316964286	3.53125
Known Variance	0.85424	0.95866
Observations	224	224
Z Value	-13.49764403	
P(Z<=z) two-tail	0.00001	
z Critical two-tail	1.959963985	

(Source: Primary Data)

It can be seen that the calculated p-value is 0.00001 which is less than 0.05. Hence, the null hypothesis is rejected and alternate hypothesis is accepted. It can be further concluded that people order more healthy food than fast food or junk food in current scenario using a food ordering app.

### **Limitations of the study**

The study was conducted in Pune city and no other geographical location. It study does not include the psychological and financial factors which motivate food ordering. Similar study can be conducted in other cities across world.

### **Conclusion**

Though the concept of food delivery is not so new, the pandemic has boosted the utilisation of the apps used for food delivery significantly. More and more restaurants are utilising the services by these apps even by paying some amount as commission. It was concluded that people have started ordering food more from stand-alone restaurant than chain restaurants. It was also seen that many chain restaurants have their own ordering apps which they promote more than the consortium apps. The type of food ordered using food delivery app also have a significant role in the consumer behaviour. The new normal has also played a major role but still customers have faith on these apps and a lot of customers are still ordering food using these ordering apps than going out for dining.

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