Research Article

A study on impact of COVID-19 on online food delivery industry with special reference to Chennai city

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Abstract

The global pandemic has brought a varied effect on economy as a whole whereby affecting each and every sector both in terms of finance and customer retention. These two criteria stand as a pioneer when it comes to the food delivery industry. An online food delivery industry stands as a middle man between the customer , restaurants and food delivery services thus the sustainability not only depends on customer retention but also listing of standard restaurants in the mobile apps. In this paper we will study a detailed list of what are the various factors that had an impact the online food delivery business during the COVID -19 period and lockdown. The variables involved in the selection the mobile application, the economic and the environmental pressure that forces the consumers to take up online mobile delivery as the only choice. With the help of survey that was conducted among various consumers in the Chennai city and through the analysis using various statistical tools it is concluded that the sustainability of the online food delivery industry in the near future.

Key Words–Online food,Delivery, M-apps, Sustainability

1. Introduction

The online food delivery business erected as one of the supreme booming and commercial business indication during the year 2018-2020. It multiplied its momentum with the assistance of the high internet usage and intensification in the use of high tech gadgets midst the wide mass of population. The millennial groups are individuals who where highly induced by these mobile apps and the food delivery business, as this specific industry clearly understood the beat and the need of this precise generation group. Due to COVID-19, people whereterrified to visit swarming restaurants or any other food joints. This revolutionin consumer behavior has occasioned in an ever-increasing demand for online food delivery solutions like Swiggy, Zomato ,Dunzzo etc .

At the dawn of the pandemic, the online food delivery business providers were going through the dejection, however, once the amount of induced lockdown sustained the demand increased. Restaurants and other food joints propelled their online food delivery software decided to furnish with the varying customers demand. During April 30, 2020 – The COVID-19 lockdown has restricted and confined the movement of people across inter states and nations. It has also led to many behavioral changes amid

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consumers as they limit the number of trips outdoor and increasingly struggle to preservehygiene of their households over limiting to what approaches into their home.

Though the E-commerce industry has been on the rise in a strong phase, but due to the emergence of Covid 19 it was accelerated to a wide level in all areas. The online food and beverage industry has seen an quick-tempered growth in the previous decade for example Instacart a popular food and grocery service saw a year over year increase of 500% in April 2020 (CNBC, 2020). E-commerce and home delivery industry has also formed a great impact on the transportation sector and the environment. The number of packages supplied across the world has crossed billion across the nations , hence understanding the magnitude of increase in changes that exceed single digit numbers results in significant changes in travel and transportation sector .(Figliozzi,2020)

The Food consumption pattern and shopping behaviour moved massively because of Covid-19. With a large number people ordering their food and groceries online, retailers found themselves tested to accomplish orders. Through restaurants remaining closed, the delay for online grocery ordering slots broadening and households growing exhausted of home cooking, individuals started to opt for takeout .As anoutcome, online food delivery services like Swiggy ,Zomoto and others , saw a big growth and popularity and hence it didn't take long for them to realise the occasion of leveraging its network to partner with retailers to deliver groceries and food .

2. Review of literature

Nick Johns (2002), the study observed the foodservice, an under-represented zone in relations of four section, debating survey work, experimental studies, and inquiries of consumer behaviour that occur in the food service industry. Ahmad Al – Tit (2015), the study examines that the service quality and food quality ensure a positive effecton customer fulfillment. In addition to that service quality dimensions also play an important role in customer satisfaction and retention. CarstenHirschber et al (2016) estimated that online foodsupply broke 30 percent, which creates alterationsin the market condition of food delivery for food delivery. Sainath Reddy K, Chaitanya KGK,(2016), the authors detected that the system was positive in overcoming the difficulties by cost effective progress in the field of online food delivery services. Anh Kim Dang (2018), the study recommended the consumers whenever they purchased the craving food products on the Internet, it is important for online food retailer to device appropriate legislation regarding transactionthrough legitimate ways.

According to the Federal Highway Administration the urban population of the country is more likely to prone to online delivery system of purchase than the rural counterparts. Approximately 56%of the urban household purchased online at least monthly to 51% of rural residents and this may be attributed to the relatively limited and less awareness about recent shopping trends. The rare accessibility to the broad band connectivity and the low technological apprising has also served as one of the reasons.According to Ganapathi.P in the restaurant industry the online food delivery services are an emerging wave to new trends and also serve as a boon to the depriving restaurant industry during Covid conditions. The demand and the need for the online food delivery application have rapidly increased due to its ease from the innovative technology and timely service. This system satisfies the need of the individuals and families residing in urban areas by delivering quickly and convenient food to their door step during their long working hours

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Objectives of the study

➢ To understand the attributes those affect the consumers in selecting the online food delivery apps during Covid -19 condition
➢ To study the repetitive willingness to purchase in online food delivery .
➢ To clearly differentiate the age group of population who are highly interested in the purchase of food from the restaurants through online mobile apps.
➢ To study the spending capacity of different income groups on the online food delivery options

3) Data collection and Methodology

The current study is an empirical research and it is grounded on the survey method. The primary data have been collected astructured interview schedule was used to collect information. The secondary data has been collected through books, magazines, journals and research reports. The samples have been collected based on the Convenient Sampling Method. A total of 100 respondents of the consumers have been selected in South zone of Chennaicity. The questionnaire was circulated through an online Google form for data collection. For the purpose of analysis suitable mathematical and statistical techniques such as percentages have been used. The percentage analysis tool was used in making comparison between two or more series of data. This method is used to determine relationship between the series of data.

$$\text{Percentage} = \frac{\text{No.of Respondents}}{\text{Total no.of Respondents}} \text{ X } 100$$

4) Analysis and Interpretation

There has been a drastic change in the economy due to the presence of this pandemic condition. In order to have a detailed study it is important to analyse the data collected in depth under various variables. The data collected is alalysed under four main categories such as frequency of ordering, income groups, age group and attributes for selecting online food delivery.

4.1) Frequency of ordering through online food delivery apps during COVID-19 lockdown in Chennai

Due to strict government orders and safety reasons people have started to take up online food delivery option in their day to day life. The frequency of ordering food has drastically increased due to this reason and hence the percentage of increase of food delivery has taken it to a new dimension in the field of online delivery.
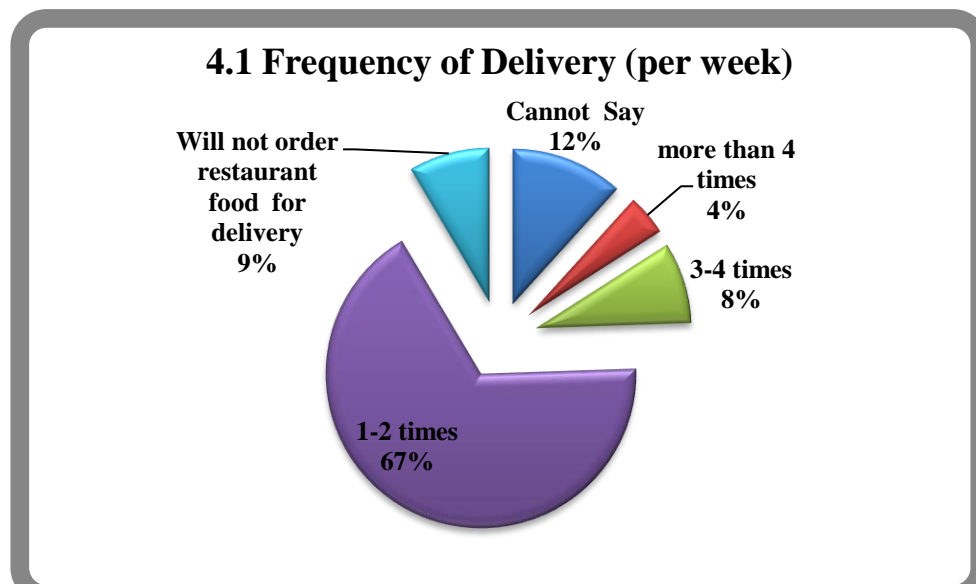
4.1 Frequency of Delivery (per week)

- Cannot Say 12%
- more than 4 times 4%
- 3-4 times 8%
- 1-2 times 67%
- Will not order restaurant food for delivery 9%

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Figure 4.1: Frequency of delivery

Interpretation

 In the study conducted the major group of the population has opted for one to two times of online delivery per week as shown in chart 4.1.Nearly 67% of the population order food at least 2 times a week after the COVID -19 pandemic condition , 8% of the population orders more than 3-4 times in a week. 4% of the populations choose online food delivery more than 4 times in a week and 9% of the population stated that they will not order online food from any restaurant. Hence from the study conducted we can see a huge increase in percentage for online food delivery.

4.2 Important attributes for selecting online food delivery after extended lockdown

 The online food delivery industry have started to take up customer need and perception as the most important aspect in order to increase their profits .they have started adopting new techniques and methods in the delivery bearing in mind the safety of the customers during the pandemic season .speed and safe delivery, health and hygiene during the point of contact of the delivery stands as an important criteria. The delivery industries have also started creating user friendly apps based on the needs and preferences of the customer. The mobile application has also started following new trends in pricing such as providing discounts, coupons and offers in their apps. The following table will show a clear picture of the various attributes that attract customers in selecting online food delivery. The selection of wide option of restaurant's with different cuisines also stand as a key point.
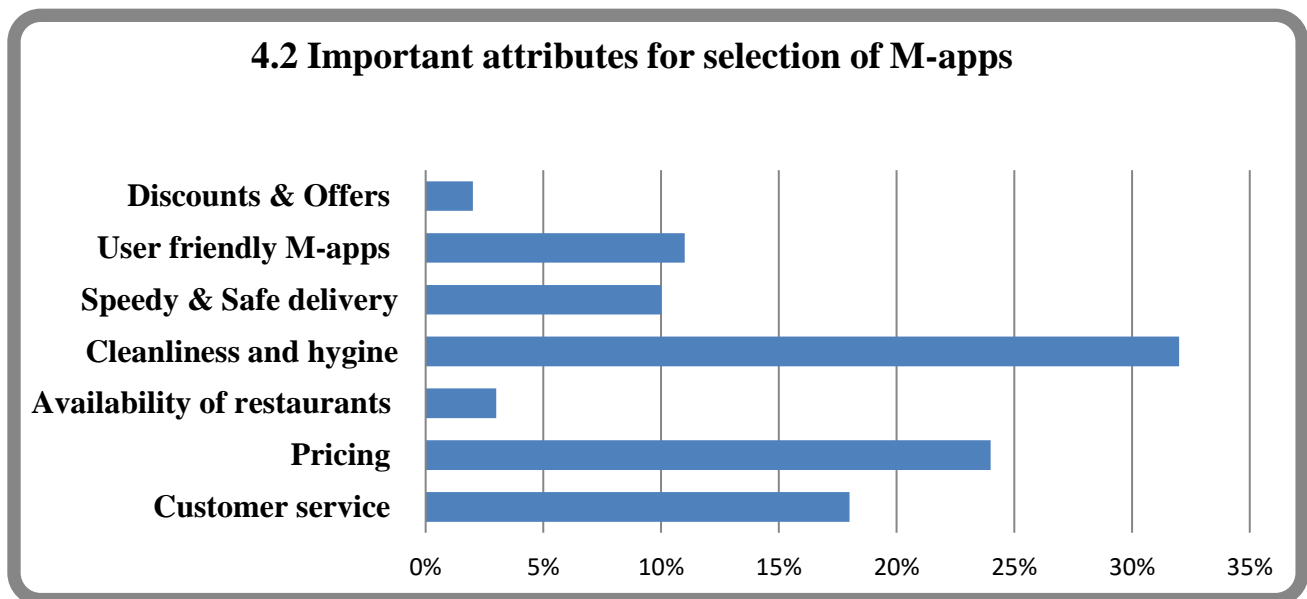

4.2 Important attributes for selection of M-apps

Figure 4.2: Important attributes for selection of M-apps

Interpretation

From the above chart 4.2, it is clear that more than 30% of the people have selected mobile delivery application for cleanliness and hygiene reason during the covid condition. More than 20% of the respondents have selected pricing as an important attribute; more than 15% have opted for the customer service that is provided by these applications. 10-15% of the respondents have chosen M-apps due to their user friendly application and for their speed and safe delivery system. Finallyless than 5% of the respondents have selected for their discounts and offers and multiple restaurant option that they provide. Hence it is clearly understood that cleanliness and hygiene stand as a top priority for customers to select m-apps.

4.3 Different age group of users attracted towards online food delivery

With the introduction of internet and smart phones online deliveryhas started taking a huge leap. The tech savvy population has become highly addicted to the use of various applications online and hence online delivery has become the top option. The new set of millennial population who fall between the age group of 18 -38 years have been treated as a target audiences for theses mobile delivery apps. The age group of population that fall above the category of 35 years uses online option for necessity and daily needs alone.The work from homeconcept that has been adopted by most of the companies today due to the pandemic condition has given way for them to choose online food delivery through mobile apps which makes their work easier.
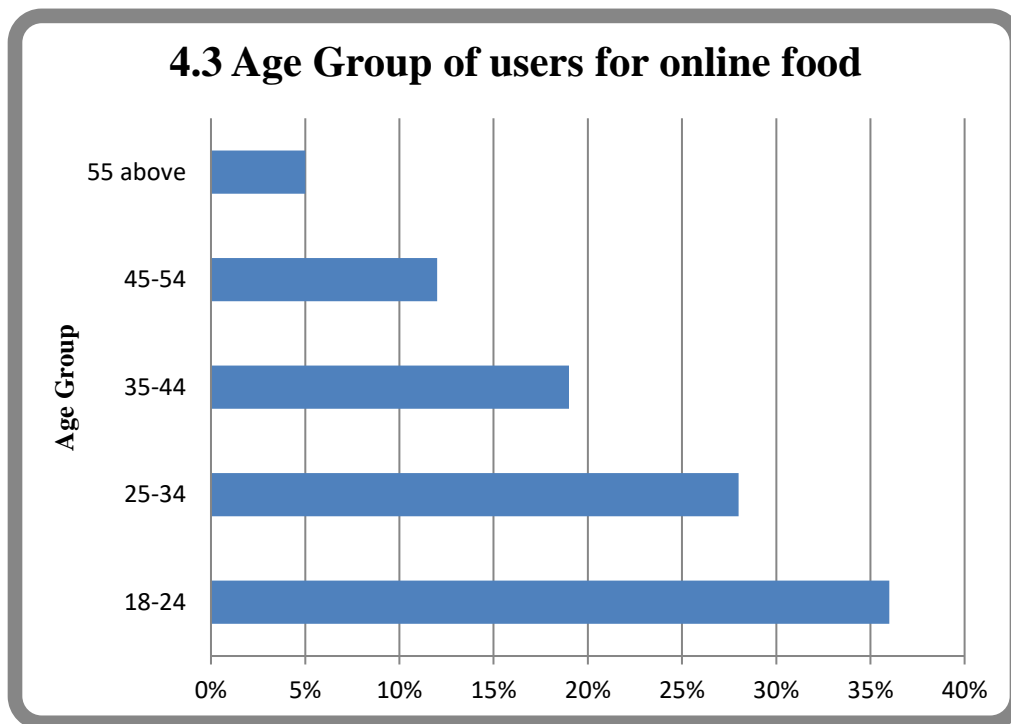

Figure 4.3: Age group for online food ordering

Interpretation

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From the above chart 4.3,it is clear that more than 35% of the respondents to fall under the age group of 18-24 use mobile food delivery excessively in the recent years .27% of the respondents fall between the age group of 25-34 years. More than 15% of the respondents fall between the age group of 35-44years .12% of the given respondents who fall under 45-54 years use mobile application. And finally only five percent of the respondents use M-apps for online delivery of food.

4.4 Analysis Based on Income Groups

The online delivery system has mainly attracted the attracted the urban population in the cities and the metros. The middle class and the upper middle class group stand as major target audience for these mobile application services in the recent years in orderto attract the young and the millennial population they have started introducing low price and low cost based options and combo offers . These applications have also begun to add small and local food courts and cafeterias into their delivery list without compromising o the quality and hygiene factors. Thus there by these M-apps have started more space in their application for people of all groups.
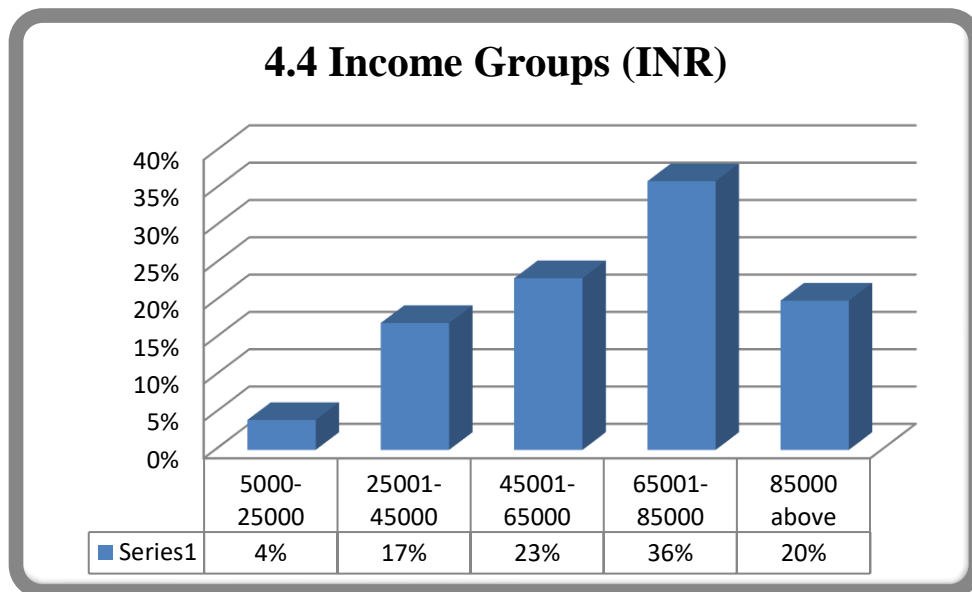

4.4 Income Groups (INR)

	5000-25000	25001-45000	45001-65000	65001-85000	85000 above
Series1	4%	17%	23%	36%	20%

Figure 4.4: Income groups

Interpretation

From the above chart 4.4, one can identify that more than 36% of the respondents fall between 65001-85000 salary based income group, more than 20% of the respondents fall under 85000 and above salary based income groups .23% of the respondents fall under 45001-65000 salary based income groups and 17%of the respondents come under 25001-45000 salary. Finally only less than five percent of the respondents who earn 5000-25000fall under this income category. Hence from the following analysis it is clear that spending capacity of the individual plays a major part in selecting M-apps

Suggestions

- ➢ Even though digital wallets have become the order of the day, it is vital for the food delivery apps to maintain the privacy and the security of the customer details. Hence it is the responsibility of these apps to establish secure methods of payments
- ➢ It has become imperative that the consumers have started adopting online food delivery method due to the pandemic conditions. The sudden shift from the age old conventional to the contemporary method may be difficult for the consumers to adapt. Hence it is significant task for these apps to incorporate more interactive virtual methods about the product to the consumers.
- ➢ It is also become a fact that these types of online delivery options are concentrated mostly in the metros and the cities of the urban areas. It is the responsibility of the service providers to make it available even in the remote and the rural areas

5. Conclusion

The sudden commencement of the COVID-19 crisis has surprised consumers, companies, and governmentagencies. With the federal, state, and the local governments everywhere around the world are imposing lockdowns of varyingdegrees of stringency, there has been anextensive increase in e-commerce and house deliveries. Household income is a critical variable to comprehendthe variations during the lockdown. Founded on marginaleffects, higher-income households and households with delivery subscriptions have aadvanced likelihoodof getting more than five house deliveries in 30 day period during the COVID-19 lockdown. Higherincome households also started spending more money on home deliveries.

During the COVID-19 lockdown, the tendency offamilies which expect the same- or next-day service for groceries towards ordering five or moredeliveries almost quadruples.Cost at the store is a crucial factor which reduces the likelihood of more deliveries as well as theexpenditures. People who are concerned about health are also more likely to spend more money andmake more home deliveries during COVID-19 lockdown, and health concerns are also linked to higherincome levels. From an equity perspective, the results specify that lower-income households are lesslikely to use online delivery systems, but the COVID-19 pandemic is disproportionately affecting lowerincome communities. This suggests that government policies may becompulsory to progress the access of low-income households to e-commerceand grocery deliveries. Thus it is clearly understood that online food delivery is on the rise and has a stable future for the years to come.

References:

1. Nick Johns. (2002).Consumer Behaviour in the Food Service Industry. International Journal of Hospitality Management, 21(2), 110 – 134 ,June 2002
2. Ahmad Al, &Tit. (2015).The Effect of Service and Food Quality on Customer Satisfaction and Hence CustomerRetention. Asian Social Science,11(23),129-139,October 2015
3. Sainath Reddy K, Chaitanya KGK, Abhinav M and Feiroz Khan,TH.(2016).An Online Food Court Ordering System.Open Access Journal.
4. Anh Kim Dang.(2018).Consumer Preference and Attitude Regarding Online Food Products in Hanoi, Vietnam. International journal for Environment Research and Public Health May, 15(5).

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5. CNBC 2020. https://www.cnbc.com/2020/05/13/coronavirus-making-grocerydelivery-services-like-instacart-popular.html last Accessed: July 2020

6. Figliozzi, M.A. 2020. Carbon Emissions Reductions in Last Mile and Grocery Deliveries Utilizing Autonomous Vehicles. Forthcoming Transportation Research Part D.

7. Ganapathi, P. Abu Shanab, E.A. Customer satisfaction with online food ordering portals in Qatar. Int. J. E-Serv. Mob. Appl. 2020, 12, 57–79.

8. FHWA. (2018).Federal Highway Administration FHWA NHTS Brief. Changes in Online Shopping Trends. https://nhts.ornl.gov/assets/NHTS BriefOnline Shopping081018.pdf (Accessed: 28 June 2020).