

Impact of COVID-19 on Restaurants & Food Delivery System in India

Ms. Mayuri Doifodeⁱ

Faculty of Management, Department of General Management, MIT World Peace University, Pune

Mr. Nitish Kumarⁱⁱ

Faculty of Management, Department of General Management, MIT World Peace University, Pune

Ms. Manali Singhⁱⁱⁱ

Faculty of Management, Department of General Management, MIT World Peace University, Pune

Prof. Dr.MeenalPendse^{iv}

Faculty of Management, Department of Marketing, MIT World Peace University, Pune

Abstract

The study of the Impact of COVID-19 on Restaurants & Food Delivery System in India investigates how the COVID-19 pandemic has disrupted the prospering Restaurants & Food Delivery System in a significant way. The instant lockdown has affected all the sectors, with thousands losing their jobs. The pandemic has hit the restaurant industry and food delivery system hard, with many restaurants permanently shutting down and food delivery system reimagining their business model to cope up with the new degree of hygiene and safety measures. Reopening is complicated as the industry has to cope up with new norms and standards and prepare themselves for the post COVID world. The study revolves around how the restaurants and food delivery industry are managing to

accept the new normal, the challenges they are facing and the changing consumer behaviour.

The primary data was collected using the non-profitability convenient sample technique. A sample of 100 questionnaires was used in which all 100 responses were collected within a period of two week. The findings show that consumer behaviour is changing, they are more discerned about hygiene, digitalization will be the embraced and safety will replace price as the biggest differentiator.

Keywords – Restaurants, Food Delivery System, COVID-19, Consumer Behaviour, Digitalization.

1. Introduction

The COVID-19 pandemic has completely flat-footed the food industry in India. The imposed lockdown forced the restaurants and delivery system to remain shut for a period of almost three months. The pandemic created havoc and brought in many uncertainties. When will the lockdown end? Will there be another wave of COVID-19? When will the public have access on the COVID-19 vaccine? And the list goes on. Many restaurants owners in metros were shelling out on rents, employees, electricity, and maintenance, also the cost for re-opening included social distancing and hygiene measures, so they decided to shut down permanently. Some of the high-end dining chains of Delhi like The Olive Group, Smoke House Deli, and Indigo Deli as well as other eateries like Mirchi& Mime, Indigo Delicatessen, Café Turtle, and Forage in Mumbai are shut down permanently. One of the famous cafés, the Le15 Café in Mumbai owned by Macaron Queen Pooja Dhingra was also shut permanently in the wake of coronavirus. The ripple effect caused by nationwide lockdown has damaged the food industry.

With the ease in lockdown, restaurants started functioning with 25-30% in their monthly service maintaining social distancing and adopting government norms. But it was difficult for the restaurants to function as COVID-19 has disrupted the food supply chains – affecting

production, processing, transport, logistics, and thus the final demand. Employees in restaurants work in close proximity to each other, making it difficult to respect social distancing requirements. With schools and colleges being shut and corporates opting for work-from-home the lunchtime crowd in traditional restaurants and quick-service-restaurants (QSR) like McDonald's, Burger King, etc. has got eliminated.

Chefs mainly performed food innovations in the kitchen but the digital revolution has hit the food sector too. The pandemic has facilitated the food delivery system, it has largely recovered with 75-80% of pre-COVID GMV (gross merchandise value). The delivery-driven restaurants might recover faster than the dine-in restaurants. The food joints have quickly adopted safety standards like double-layered packaging, disposable utensils and cutlery, delivery persons equipped with PPE kits, and cashless payments.

Food delivery companies that sacked hundreds of employees since the outbreak are now facing a shortage of employees for delivery. The food delivery volumes have bounced back significantly since the ease of lockdown. Food delivery seems to be the new normal, restaurants need to have multichannel distribution facility to keep their business functioning.

2. Literature Review

According to recent studies, the total revenue of the online food delivery service was \$700 million in 2018. It is currently anticipated that it will grow at a CAGR (compound Annual Growth Rate) of 17.25% by 2030. The restaurants were deserted for a period of three months due to the enforced lockdown caused by the pandemic. But by mid-June restaurants having a good delivery system have recovered their 75-80% of services.

As per the McKinesy& Company (April 2020) due to COVID-19, most of the restaurants have been converting as Quick Service Restaurants (QSR). In India, QRS is opening for only limited seats where they are offering only takeout, pickup, delivery, and drive-through. It is being estimated that the consumer sentiments towards restaurant food and dine-in are going to reduce with an estimated increase in in-home delivery and cloud kitchens.

A study conducted by P. Niharika (IJRESM, March-2020) shows that the online food delivery service is most popular in gen Y and Z compare to other Gen. The consumer behaviour is changing and the ease of getting service delivered at the doorstep is favoured. Earlier delivery apps mostly targeted the young generation of the country, but with the pandemic creating havoc most of the consumers relying on the food delivery industry. Even restaurants that were earlier not having delivery service are

collaborating with third-party food delivery service to keep their business functioning. Online food delivery is a great example of e-Commerce. It is like a flood in the online market, which is going to change the traditional mortar and brick restaurant industry.

The food delivery app builds a great bond with their consumers and with safety and hygiene the priority, these apps are a great source of information about the product, these apps also give an opportunity to consumer to customize their food and delivery experience. The pandemic has increased the need for home delivery service with consumers working from home, a major segment of the restaurant industry. Restaurants still have restrictions to operate at full potential are mostly relying on food delivery, the delivery-driven brands will recover fast than the dine-in restaurant. Mergers & Acquisition among restaurants and food delivery service is increasing as a result of COVID-19 lockdown.

2.1 New Trends

Restaurants are reopening with 40% capacity, with a bunch of safety standards that have found creative ways to enforce social distancing. Restaurants in metros are providing large individual shields to their customers and some are even opting for plastic dividers in order to maintain social distancing. Many QSRs have marked the seats for their customers, some of

them have even placed soft toys and mannequins to ensure customers respect safety measures.

Restaurants are operating multi-channel – as the delivery service is up trending, restaurants are collaborating with food delivery services and are ready for-profit sharing. QSRs are opting for their own delivery channels, like Domino's, McDonald's, and Faaso's are having their own delivery apps. Over the years the pizza industry has perfected its time of less than 30 minutes of delivery and the minimal touchpoints in the preparation of pizza have led to the growth of pizza delivery service during the pandemic.

The food delivery industry has quickly adopted safety standards also ensuring the safety of their employees by providing PPE kits and regular check-ups of the restaurant staff and delivery person. Making use of double-layered packaging, contactless delivery, and emphasizing cashless delivery has accelerated the growth of the delivery joints.

The ongoing demand for healthy food has facilitated the growth of cloud kitchen or ghost kitchens. These are commercial spaces that function as delivery-only kitchens. Many chefs are operating in such a way of providing the customer with a customized food experience. Meal-kits by these restaurants will be a potential competitor.

There is a significant growth in bulk orders, the ordering frequency has reduced as compared

with the pre-COVID situation. Earlier customers use to order a single dish for oneself but now while staying at home customers are ordering in bulk for the entire family.

Communication from brands is a necessary element to reassure customers and retain their trust. Food chains are using social media platforms to showcase the precautions and safety measures. Local restaurants are using social media platforms like Facebook and Instagram to directly contact their consumer for delivery. Franchises like Ribbons & Balloons and Monginis using Instagram to directly contact their customer.

Agile businesses will come out stronger post-COVID situations as health, hygiene and happiness are the central keys of recovery.

3. Research Methodology

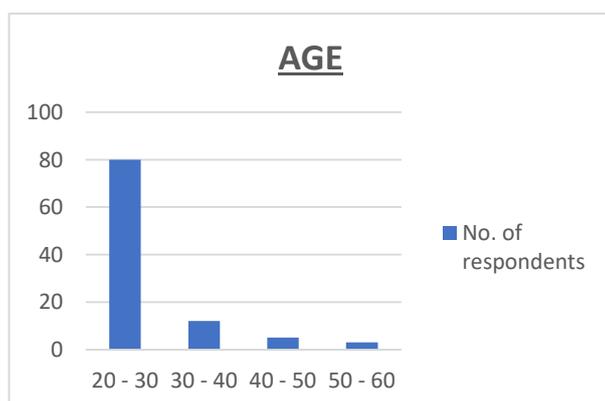
The study is an activity including the assessment of boundaries as respect to hierarchical prerequisites. It was planned to get important data that can be utilized for different hierarchical purposes. The examination included gathering both primary and secondary data. Primary data incorporated a questionnaire, which was set up to accumulate data so as to decide the changing customer conduct towards eateries and the food delivery framework in India. Optional information for this investigation was accumulated through publications, articles, organization sites, the web, and so on. The

information assortment method was none other than survey method, incorporated for the collection of raw information. The sample survey taken to arrive at the ideal objective, was painstakingly intended to change the operations using selected sample activities utilizing chosen tests. A structured questionnaire was administrated and designed in the view, both major and minor objectives of the study. The respondents were individuals utilizing distinctive food delivery applications belonging to different professions and age-groups. They were approached to fill the questionnaire, after which the information was gathered. It was tabulated and findings of the research were presented trailed by analysis and interpretation to arrive at specific conclusion.

3.1 COVID-19 Impact Analysis and Interpretation

(i) What is your Age?

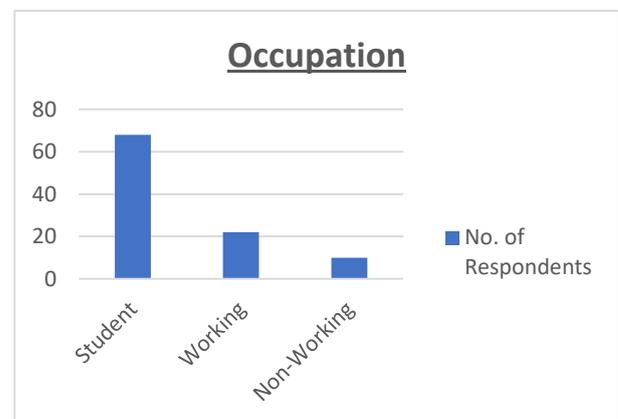
| Age Group | No. of respondents |
|--------------|--------------------|
| 20 - 30 | 80 |
| 30 - 40 | 12 |
| 40 - 50 | 5 |
| 50 - 60 | 3 |
| Total | 100 |



80% of the respondents are in the age gathering of 20 – 30 years and the remaining above 30 years. Youthful age is among the lion's share who visits eateries and avail food ordering services.

(ii) What is your occupation?

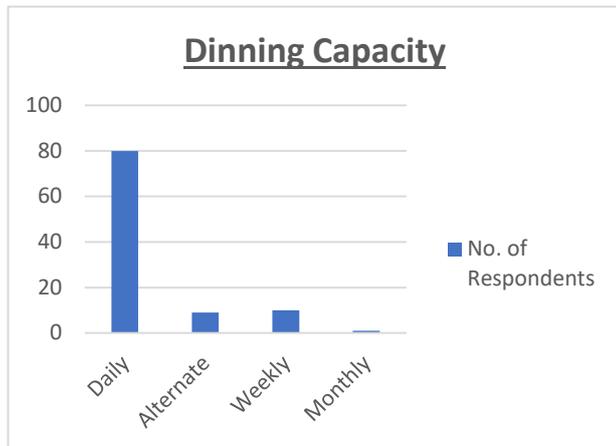
| Occupation | No. of Respondents |
|--------------|--------------------|
| Student | 68 |
| Working | 22 |
| Non-Working | 10 |
| Total | 100 |



Students and working experts represent the lion's share. Students staying away from home for studies are significantly depended on eateries and food delivery services. Working experts are additionally one of the significant clients of restaurants during lunch hours.

(iii) Before Lockdown, how often do you visit a restaurant?

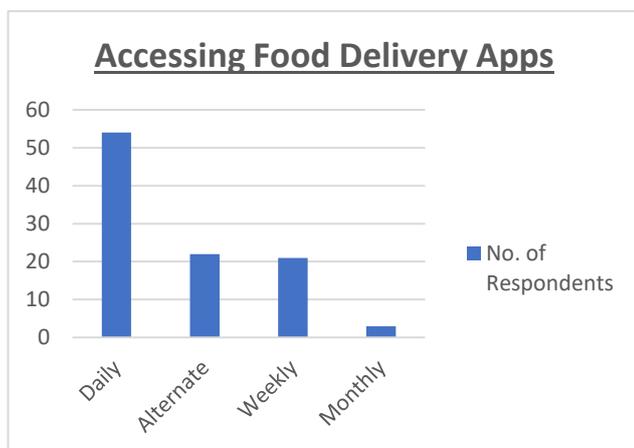
| Dining Capacity | No. of Respondents |
|-----------------|--------------------|
| Daily | 80 |
| Alternate | 9 |
| Weekly | 10 |
| Monthly | 1 |
| Total | 100 |



In light of whether the client visited a restaurant, 80 out the 100 respondents were daily visitant. Larger part of the consumers was reliant on restaurants for their dinners.

(iv) Before Lockdown, how often were you using food delivery service?

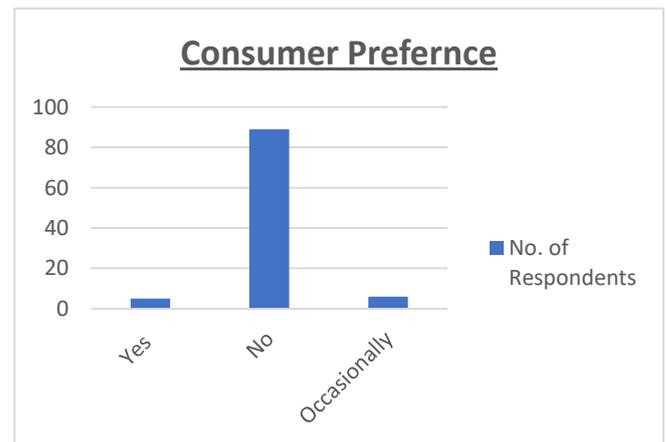
| Access | No. of Respondents |
|--------------|--------------------|
| Daily | 54 |
| Alternate | 22 |
| Weekly | 21 |
| Monthly | 3 |
| Total | 100 |



54% of the population were accessing to food delivery applications on regular schedule. The food delivery applications were largely famous and consumers were availing the facility on a large-scale way before the pandemic started.

(v) Have you visited a Restaurant during the pandemic?

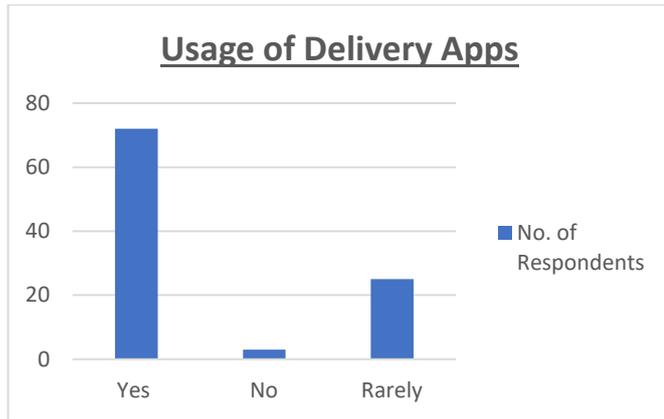
| Preference | No. of Respondents |
|--------------|--------------------|
| Yes | 5 |
| No | 89 |
| Occasionally | 6 |
| Total | 100 |



Out of the 100 respondents 89 of them haven't visited a restaurant since the lockdown, the virus has caused a fear among the consumer and the consumer are not willing to dine-out.

(vi) Are you using the any food delivery app during the pandemic?

| Usage | No. of Respondents |
|--------------|--------------------|
| Yes | 72 |
| No | 3 |
| Rarely | 25 |
| Total | 100 |

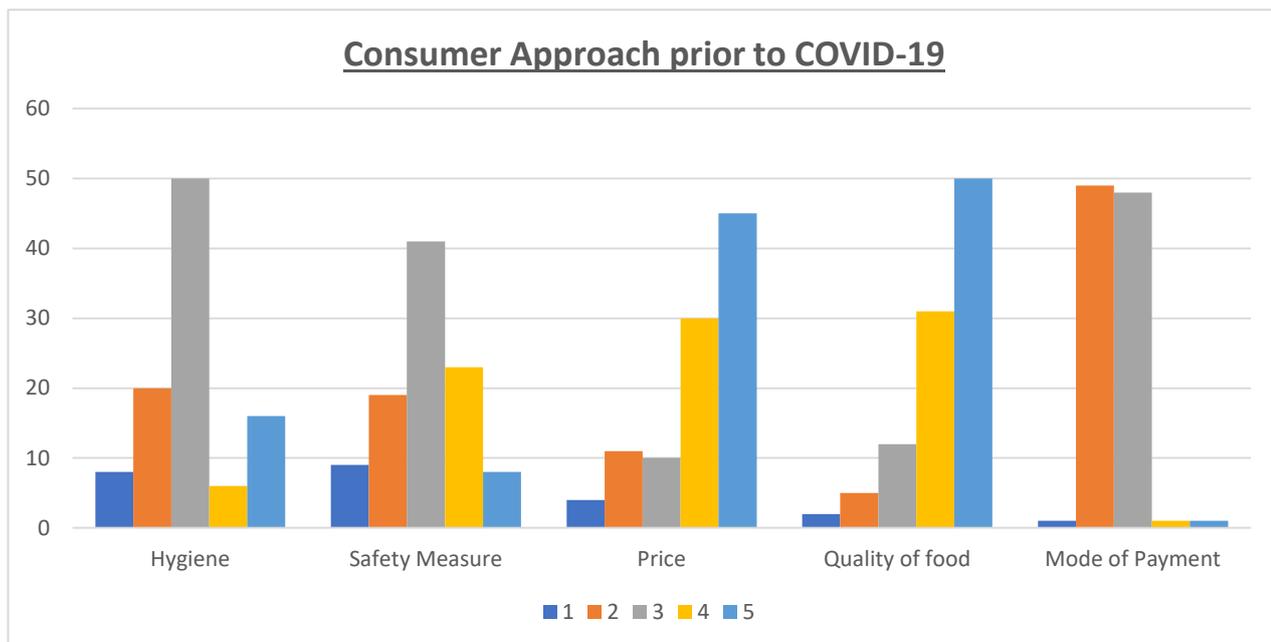


classes and working professionals too are authorized to work from home. This has prompted the expansion of food delivery services. 72 respondents are opting for home delivery and take-out services. It can likewise be seen that 25 respondents are only occasionally utilizing food delivery framework, the reasons may be accessibility, availability and handiness of the home-prepared food.

The pandemic has constrained the consumers to remain at home. Students are attending online

(vii) Before pandemic, how much importance were you giving the below mentioned factors when you visited a restaurant? (1 being the lowest and 5 being the highest)

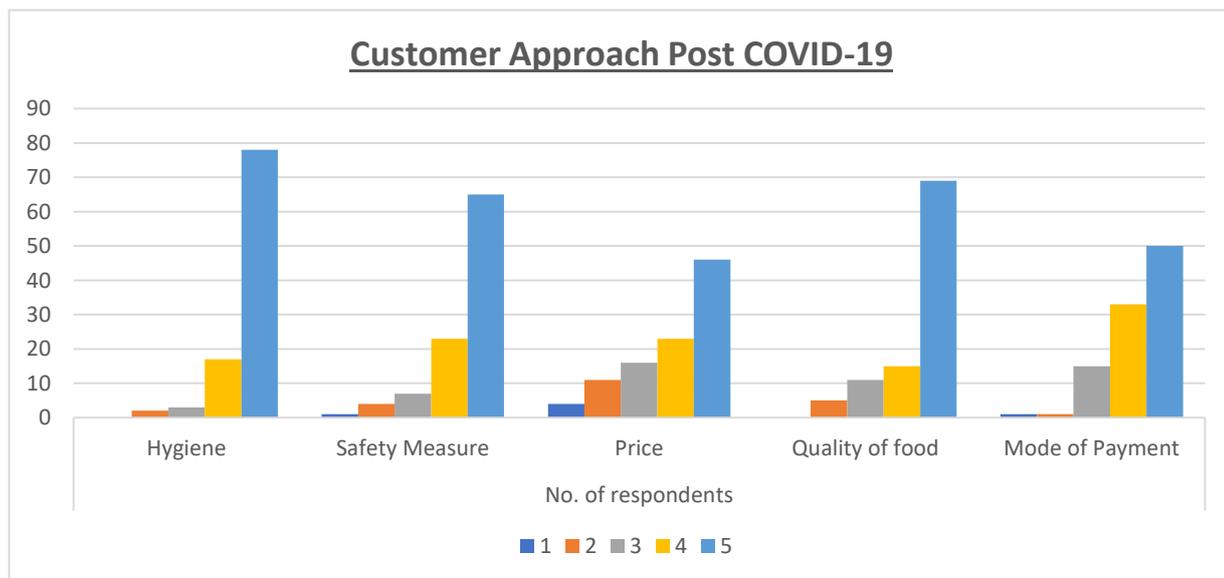
| Rating | 1 | 2 | 3 | 4 | 5 | Total no. of respondents |
|------------------------|---|----|----|----|----|--------------------------|
| Factors | | | | | | |
| Hygiene | 8 | 20 | 50 | 6 | 16 | 100 |
| Safety Measure | 9 | 19 | 41 | 23 | 8 | 100 |
| Price | 4 | 11 | 10 | 30 | 45 | 100 |
| Quality of food | 2 | 5 | 12 | 31 | 50 | 100 |
| Mode of Payment | 1 | 49 | 48 | 1 | 1 | 100 |



Preceding lockdown, in response to various factors which were considered before going to a restaurant - hygiene, safety measures and mode of payments have an average response though price and quality of food were the main considerations among the buyer before choosing a restaurant.

(viii) Post pandemic, how much importance will you give the below mentioned factors when you visit a restaurant? (1 being the lowest and 5 being the highest)

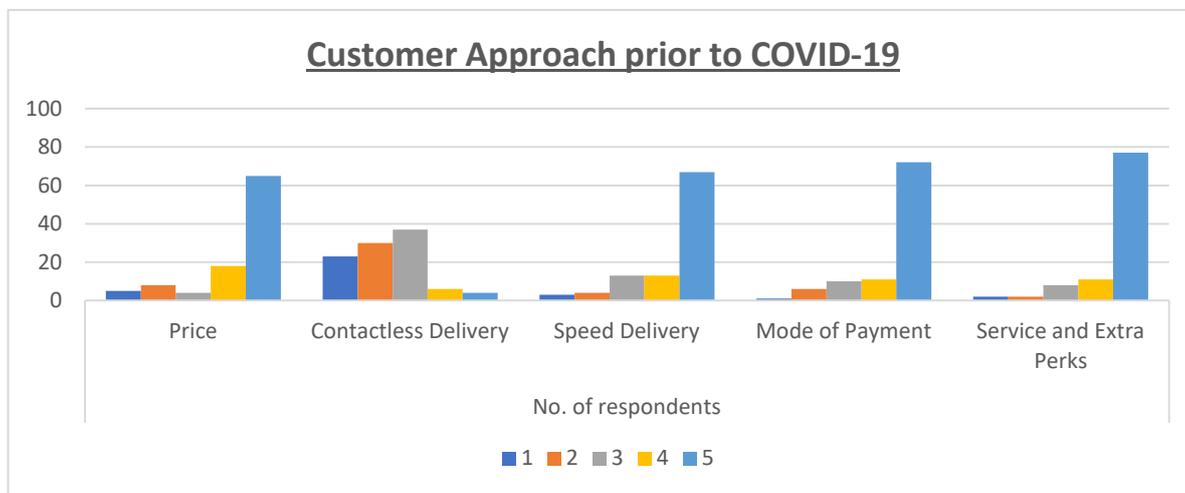
| Rating | 1 | 2 | 3 | 4 | 5 | Total no. of respondents |
|------------------------|---|----|----|----|----|--------------------------|
| Factor | | | | | | |
| Hygiene | 0 | 2 | 3 | 17 | 78 | 100 |
| Safety Measure | 1 | 4 | 7 | 23 | 65 | 100 |
| Price | 4 | 11 | 16 | 23 | 46 | 100 |
| Quality of food | 0 | 5 | 11 | 15 | 69 | 100 |
| Mode of Payment | 1 | 1 | 15 | 33 | 50 | 100 |



The lockdown has entirely changed consumers perception, as from the above chart it can be perceived that hygiene, safety measures, too have started to receive extreme reactions as price, quality of food and mode of payments. Individual safety and hygiene will be considered as significant factors even after the pandemic.

(ix) Before pandemic, how much importance were you giving the below mentioned factors when you ordered food online? (1 being the lowest and 5 being the highest)

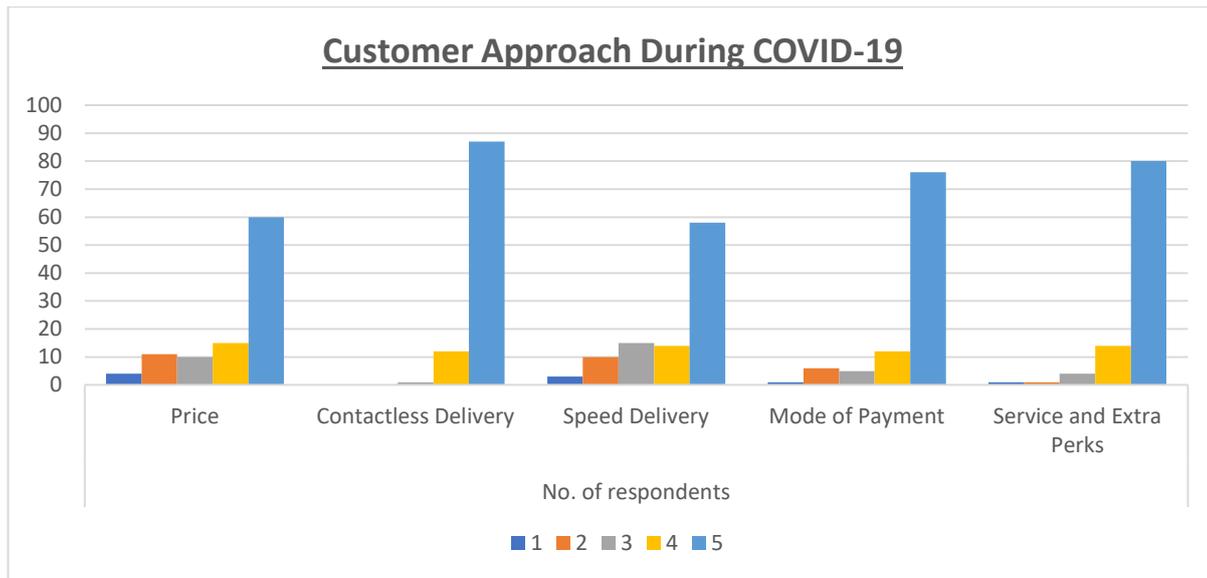
| Rating | 1 | 2 | 3 | 4 | 5 | Total no. of respondents |
|--------------------------------|----|----|----|----|----|--------------------------|
| Factors | | | | | | |
| Price | 5 | 8 | 4 | 18 | 65 | 100 |
| Contactless Delivery | 23 | 30 | 37 | 6 | 4 | 100 |
| Speed Delivery | 3 | 4 | 13 | 13 | 67 | 100 |
| Mode of Payment | 1 | 6 | 10 | 11 | 72 | 100 |
| Service and Extra Perks | 2 | 2 | 8 | 11 | 77 | 100 |



Contactless Delivery is among the least considered factor preceding pandemic. Food delivery applications furnish a customer with various prices for the same commodity, the consumer is aware of the delivery speed, likewise the consumer gets wide choices for the mode of payment. Food delivery applications likewise offer various services like discounts and coupons to keep the client connected with and engaged.

(x) During pandemic, how much importance are you giving the below mentioned factors when you order food online? (1 being the lowest and 5 being the highest)

| Rating | 1 | 2 | 3 | 4 | 5 | Total no. of respondents |
|--------------------------------|---|----|----|----|----|--------------------------|
| Factors | | | | | | |
| Price | 4 | 11 | 10 | 15 | 60 | 100 |
| Contactless Delivery | 0 | 0 | 1 | 12 | 87 | 100 |
| Speed Delivery | 3 | 10 | 15 | 14 | 58 | 100 |
| Mode of Payment | 1 | 6 | 5 | 12 | 76 | 100 |
| Service and Extra Perks | 1 | 1 | 4 | 14 | 80 | 100 |



Contactless delivery is one of the significant factors considered during this pandemic situation in order to maintain safety. Mode of payment is likewise one of the significant criteria as consumers incline toward online payment mode and not the customary cash/pay on delivery. Simultaneously food delivery applications are reconsidering their plan of action to recuperate the business. Price, delivery-speed, and different services additionally stay significant components.

3.2 Hypothesis Testing

Test 1: Comparing customer perception regarding hygiene when selecting a restaurant before and post the pandemic using paired sample t-test.

Paired Sample t-Test

| | <i>Pre-COVID</i> | <i>Post-COVID</i> |
|------------------------------|------------------|-------------------|
| Mean | 3.02 | 4.47 |
| Variance | 1.11071 | 0.75667 |
| Observations | 100 | 100 |
| Pearson Correlation | 0.49648 | |
| Hypothesized Mean Difference | 0 | |
| df | 99 | |
| t Stat | -14.82163 | |
| P(T<=t) one-tail | 0.00000 | |
| t Critical one-tail | 1.66039 | |
| P(T<=t) two-tail | 0.00000 | |
| t Critical two-tail | 1.98422 | |

Null Hypothesis: H_0 : Hygiene is not an important factor while selecting a restaurant

Alternative Hypothesis: H_1 : Hygiene is an important factor while selecting a restaurant

Since $p < 0.05$

At 5% level of significance, the Null Hypothesis (H_0) is rejected.

Hygiene is an important factor while selecting a restaurant.

So according to the analysis we understand that people consider hygiene as an important factor when selecting a restaurant.

Test 2: Comparing how essential is contactless delivery while delivering food to customers before and during the pandemic.

Paired Sample t-Test

| | <i>Pre-COVID</i> | <i>During-COVID</i> |
|------------------------------|------------------|---------------------|
| Mean | 2.38 | 4.86 |
| Variance | 1.06626 | 0.14182 |
| Observations | 100 | 100 |
| Pearson Correlation | -0.22547 | |
| Hypothesized Mean Difference | 0 | |
| df | 99 | |
| t Stat | -21.08494 | |
| P(T<=t) one-tail | 0.00000 | |
| t Critical one-tail | 1.66039 | |
| P(T<=t) two-tail | 0.00000 | |
| t Critical two-tail | 1.98422 | |

Null Hypothesis: H_{01} : Contactless Delivery is not essential

Alternative Hypothesis: H_{11} : Contactless Delivery is essential

Since $p < 0.05$

At 5% level of significance, the Null Hypothesis (H_{01}) is rejected.

Contactless Delivery is essential

According to the analysis we understand that contactless delivery is absolutely necessary during the pandemic situation and will be an important factor even after the pandemic.

4. Findings

Consumers are now more concerned about hygiene and safety, and are moving away from street food to organized sector. Delivery which was once questionable can now become a necessity to continue the restaurant business. Nationwide survey conducted by Zomato concluded that among the 83% restaurants that are closed 10% have permanently shut down and it is being anticipated that more 30% of restaurants will not open. The rest 43% will eventually open as the situation becomes better. QSRs are opting for multichannel service so as to continue their business and recover the losses due to the lockdown. Ghost or virtual kitchen providing meal kit might become a hit in near future.

5. Conclusion

While the impacts of the pandemic are still unfolding, it is causing many exciting trends in restaurants and food delivery system to accelerate. The fear of contagion is driving consumers to opt for services that are safe, hygienic, and contactless. Restaurants are collaborating with food delivery apps so keep their business going. The food industry is a fragile sector where cutting, cleaning, cooking, serving and delivery are all interdependent, and with the uncertainties exposed by the pandemic, the model for future is profit sharing. Creative ways to enforce social distancing adopted by restaurants will have a positive impact, but the

road to recovery for the dine-in seems painful whereas the delivery service is taking an upswing. QSRs are pushed to prioritize digital adoption or to collaborate with delivery apps. With Amazon entering the food delivery service, it will give a tough competition to Zomato and Swiggy, presently the top food delivery services.

The pandemic and the year 2020 are trials by fire for food delivery services. The coming year will either see them reduced to ashes or rise like a Phoenix to rule the Indian Market.

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