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Online food delivery portals during COVID-19 times: an analysis of changing consumer behavior and expectations

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Abstract

Purpose – This study aims to understand the consumer behavior in the context of online food delivery services that has become crucial for all the players in the market to meet their bottom line, especially given the fact that COVID-19 has altered the mindset of consumers. The current perception was addressed and analyzed to understand the trends. So, this study examined various parameters such as e-services quality, food quality (FQ), safety measures (SM), customer satisfaction (CS) and customer loyalty (CL) in correlation to each other.

Design/methodology/approach – An online survey was conducted for users of the online food delivery services to understand the intentions during the month of June 2020. The total number of responses gathered were 201. The responses collected were analyzed based on the constructs formed for the following tests: reliability, convergent and discriminant analysis. Also, principal component analysis was performed to ensure that the variables are correlated to each other. This ensured that the structural equation model built is valid and of best fit. The hypotheses were tested for the discussed variables, and the results were presented accordingly.

Findings – The research has indicated that FQ plays a vital role for CS which indirectly influences CL. Also, the SM adopted by a restaurant and delivery service will help retain their customer base, thus ensuring loyalty.

Practical implications – The study will help managers of restaurants and online food platforms reorient their business model and framework according to the parameters that affect the mindset of the consumer and also help improve the retention of their customer base.

Originality/value – This study is original in nature and takes onto account the COVID-19 situation. The study provides insights for online food platforms to touch mainly the pain points and insights by the consumer which will aid in developing new strategies for business development and customer retention in the future.

Keywords Development, Business model, Business essentials, Customer growth

Paper type Research paper

1. Introduction

Online food industry has grown at an incredible pace all over the world because of the convenience, cost and the variety of cuisines available at the expense of a single touch. Because of the internet-led business space, major metropolitan and urban centers have been the epicenter of growth. In the past five years, this industry has received funding which has

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increased 35× (Boston Consulting Group, 2019). Trends such as increasing internet penetration, favorable consumer purchasing power, rising order frequency, increasing availability in all the cities and increasing connect of business on the online food space have given the industry a big boost and caused growth. Consequently, the outreach of the online food industry has grown 6× between the years 2017 and 2019. Hence, in a burgeoning market with favorable market conditions with regard to procurement of raw materials, the online food space industry is predicted to grow from $4bn to $8bn by 2022, resulting in a growth rate of 25% (Boston Consulting Group, 2019).

There are two types of online platforms that have risen with different business models. First were the "aggregators," that initiated 15 years ago; the other are the "new delivery" players, which began back in 2013. In either case, customers have the visibility to view menus, ratings, grade and pass comments and have a good interface allowing ordering food at the click of a button. The aggregators operate in a traditional manner, that is, the order is placed by the customer through an online platform which is forwarded to the restaurant that also takes care of the delivery. The aggregators charge on the basis of a predecided margin that is paid for by the restaurant, and the restaurant handles the delivery and the charges that come with it. The customer does not have to pay any additional cost. Using this approach, aggregators have the potential to earn an earnings before Interest, tax, depreciation and amortization (EBITDA) margin of 40%–50% after looking at the balance sheet (McKinsey and Company, 2016).

Investment into the food tech space continues to rise, with the rise in competition creating a competitive and sophisticated environment. As a result, the market entry player has started to vertically integrate their business or have decided to let someone else handle it for them in case they have already an original setup, especially dine-out and cloud kitchens.

The new delivery players generate revenue with a fixed margin of the order deposited by the restaurant, along with a minor cost from the customer. Although we know to some extent that it is a high-cost industry considering the logistics, the EBITDA margins are more than 30%, as well as with a small flat fee of convenience from the customer. Although the fixed costs of maintaining delivery vehicles and drivers are high, the online food delivery players get EBITDA margins greater than 30%. The addressed market for new delivery is estimated to reach more than €20bn by 2025 (McKinsey and Company, 2016).

The global online food delivery market surpassed $82.04bn in revenue in 2018 and is estimated to touch $199.35bn by 2025. Asia is probably the biggest market in the world, in terms of revenue, was worth $46.63bn in 2018 and is expected to surpass $112bn by 2025. The European market is expected to grow the fastest at a compounded annual growth rate (CAGR) of 14.5% to reach $32.37bn, whereas North America would mature earlier than other regions, growing at a CAGR of 11% to reach $41bn. Uber Eats accounts for 1.8% of the global online food delivery services, with revenue of almost $1.46bn in 2018 and more than 800 million deliveries. However, Chinese delivery companies, Meituan Dianping and Ele.me, dominate the global landscape, in terms of annual deliveries with 6.39 bn and 3.28 bn deliveries, respectively, because of China's enormous economically advanced population (Frost and Sullivan, 2019a, 2019b).

In the Indian context, the money made after sales adds up to approximately US$9,200m in 2019 with an estimated increase in the growth of 9.5% (CAGR) until the year 2024 generating a total segment of US$13,233m by 2024.

Looking at the numbers, the largest share of the pie goes to the B2C segment 2019 with total size of approximately US$5,000 (Statista Outlook, 2020). The industry looks at new avenues to improve and keep in front of the key players and have resorted to the entry of the

dark kitchen setup which is proving to be a good decision because of the consolidation of workspace and reduction in the cost.

Artificial intelligence has dawned over all the industries, and the e-services sector is no different; Big Data analytics softwares consolidate and understand the best technology to be adopted, types of delivery mechanism, draw insights from feedback received, provide payment methods suitable (e.g. in-platform digital wallets, payment methods and cryptocurrency) to ensure faster ordering and improve customer satisfaction (CS). They identify pain points of their consumers and provide loyalty services for customer retention. Customer experience is likely to alter from time-to-time, and the data scientists help promulgate these sentiments for sustaining and penetrating new markets. Swiggy is using data analytics to curate the customer page (list of restaurants) to each user's choices and preferences rather than just on the basis of the user's location. Beyond that, it also uses machine learning for automating customer services. Swiggy is the leader in the fast-growing Indian online food delivery space, with a market share of nearly 50% (Frost and Sullivan, 2019a, 2019b).

The COVID-19 pandemic has wreaked havoc and disrupted certain markets, especially the online food space such as Swiggy and Zomato, as people are set to become over precautious and over pretentious if they decide to stick to the old way of placing a food order. Also, the assurance of safety is now critical for the survival of these businesses. Because of the pandemic, eyebrows have been raised regarding the raw material used in the preparation of food, the assessment or rating of the restaurant partner with regard to safety. To work in the new normal, the online food space has initiated new avenues to help improve the safety measures (SM) adopted and also the rating in general, so the consumer is kept alert with the required information whenever needed and keeping themselves competitive in an aggressive sector. This is all done with the end game of attaining or bringing the trust factor to the consumer in totality. Rebel Foods has taken certain measures to curb the bridge between safety and consumers by providing the temperature of their delivery agents, thereby providing an additional layer of security and crucial information to the consumer. On the other hand, we have seen the use of badges to segregate on the basis of SM adopted such as the wearing of masks, sanitation, temperature check in totality with the packaging also getting a new and safer design. No-contact delivery has also emerged to assure the consumer of the best SM being followed. The fact that the delivery agent and customer interaction eliminated has put consumers at ease significantly. In addition, a page is added on the app featuring the best safety rated partners to promote their business and retain their customer base. The market players who have foreseen this and acted in a proactive manner will maintain their business proposition and create a positive image of the brand in the mental framework of the consumer, thus keeping themselves relevant in the post COVID-19 era.

New regulations imposed by the government because of the COVID-19 pandemic have caused a disruption in the supply chain network forcing many restaurants to temporarily stay shut. To add insult to injury, the timing of the ban comes at a time where the resources have become limited and companies have become cash-strapped because of lack of demand and supply. Most of the restaurants have to find alternate means of procuring the raw materials to prepare the food and also of the packaging material. Because of this pandemic, several delivery platforms are seeking other avenue such as tie-ups with grocery retailers to maintain cash flow.

We know that food is important for the survival of individuals, especially living as migrants in other cities as they have been dependent on this online food space. Most of the online food users are students, migrants and also where both the parents are working and

find it difficult to cook; its ease of convenience has propelled this market in the first place adding to the benefits such as no travel, saving of time and cost.

Food, including cooked food, is an essential service for at least 20% of the country's population such as students, paying guests and young professionals who depend on it, especially at a time like this when the country has advised everyone for medical reasons to stay where they are and not travel back home. Especially because of the COVID-19 pandemic, this is now of paramount importance, and the market players should identify and target these segments as a source of revenue.

Food delivery order volumes have significantly gone down during the lockdown compared to days before the virus outbreak. However, volumes started to grow on a weekly basis. This is primarily because restaurants, main points of social gathering, have been shut.

In this paper, the question that is addressed is in correlation with the impact of the food space industry and the measures adopted to help them stay relevant in terms of CS and customer loyalty (CL) in wake of the COVID-19 pandemic. Beyond that, we will try to understand what the consumer mindset is to help gain insights and create an impression to be followed by the market leaders in this segment consistent with their values. This study will try to sum the attributes of the food delivery services and try answer the trending aspects from the viewpoint of the consumers within India. Finally, this model will be empirically tested against the proposed hypotheses.

The following are the key points that the research will answer:

- to find out the relevant parameters such as e-service quality (SQ), food quality (FQ), etc.;
- to understand the consumer perception with regard to the online food services; and
- to reflect change in consumer loyalty and satisfaction after COVID-19 pandemic.

The outline of the paper follows a structured pattern. Section 2 reviews other literature papers in the past. Then, in Section 3, we propose our hypotheses followed by research methodology. In Section 4, we discuss the model, the data collection and measures adopted. After that, we conduct the data analysis using SPSS for analysis in Section 5. After validating the data, we build the final validated model on AMOS. This is followed by Sections 6 and 7 in which presents details of the test of hypotheses, discussion and conclusion. Finally, In Section 8, have the theoretical, managerial implication along with limitations and future scope.

2. Literature Review

The value of consumer perception is critical in businesses, especially for marketing. Not only it is critical for the survival and growth of the business but also it is a significant tool for competitive advantage (Chandrasekhar *et al.*, 2019).

The development in the online space with regard to hardware and software has triggered a change in the way both the consumers and the industries operate and revolve over the years. This availability of technology has propelled customers to personalize their user experience to shop at their own convenience, compare prices and products and customize their delivery method (Chang *et al.*, 2014). On the other hand, it provides the online food services market, which is a fragmented market, to improve forecasting thereby increasing productivity, develop CL and increase their market share (Ng *et al.*, 2017). As things stand, there is an indication that the growth in this segment is growing in double digits. This exhibits as a double-edged sword for stakeholders, which creates a fierce competition. Therefore, it is imperative for online business to have loyal customers (Pee *et al.*, 2018).

According to the Mckenzie report (2019), customers attracted to the online food tech space have a very different and sophisticated outlook as compared to the old consumers or the previous generation. The literature suggests that new delivery platforms personalize the ordering experience using information management system by storing relevant customer data.

The importance of CL on its various subfactors has been discussed to a great extent in this literature (Abou-Shouk and Khalifa, 2017). CL is still considered as an erudite term with multiple definitions and theories being proposed each year that have made understanding on loyalty itself misunderstood. On the other hand, CL is described as "the future propensity of a customer to stay with the service provider" (Danesh *et al.*, 2012).

With the viewpoint of restaurants, the expectation of the consumer is affected by the quality of food and SQ too. They appear to be a preconceived notion developed because of a variety of factors not restricted to past habits and word of mouth (Kedah *et al.*, 2015). This perception developed created a stigma which needs to be looked at by the companies. They need to touch upon these aspects to ensure that the SQ and FQ meets the required standards. Factors such as CL, SM and FQ are critical for any e-commerce service business. The way the companies should look at the consumer understanding is to find out what the consumer wants and thereby driving CL by reducing switching cost (Chang and Chen, 2009).

Other research papers (Kim *et al.*, 2009) have suggested that loyal customers are more likely to continue purchasing from your brand than the new customers who may come at a high price. Therefore, it is imperative for the brands to establish a good base which is crucial apart from the fact that the profit margins are also likely to increase when the customer stays loyal to one particular brand.

Fandos and Flavián (2006) hinted that the market and the target segment need to be looked at to realize the expectations by providing a personalized experience that meets the demand of the customer. This is also significant if the brand wants to convert a new customer and increase its market share. FQ, customer service and delivery speed are important to ensure that the customer expectation is met (Yeo *et al.*, 2017).

Brand awareness has played an influence on the mindset of the consumer that we understand to affect the perception of the consumers, especially in terms of the SM adopted and the FQ on offer, thus creating a major effect on consumer loyalty (Wu and Lo, 2009). High-quality applications and internet-based website are vital to capture the market as part of the marketing strategy. In technology-based businesses such as online food delivery restaurants where interaction between customer and the firm is virtual, the firm's website and the marketing strategy play a significant role.

To further understand the way the consumer mind operates, studies have looked at their personality. The parameters of influence are the choices made because of the values followed by a consumer. This could be to try something new, avoid risk, to stay loyal to some brand, the mode of communication and the choice of medium. The effect of new methodologies being adopted to create an underlying perception is discussed in Chandrasekhar *et al.* (2019). These platforms have to provide good quality and service to ensure CL.

The customers found to be loyal and willing to pay a premium have to be segmented accordingly and targeted with a specific strategy. Also, the environmental and safety aspect needs to be looked at as a direct relation. More and more companies are striving toward sustainability, especially when they are looking at investing or endorsing with a particular brand (Laroche *et al.*, 2001).

Food SM also affect consumer perception, consequently affecting the purchasing behavior of the consumers. A path flow needs to be created to identify the risk associated with and without the safety aspect to further delve into the mindset of the customer. This would help to

mitigate any kind of contingency that could develop in the future associated with any factor that the consumer looks at during his purchase intention (Yeung and Morris, 2001).

Despite many papers writing on this topic, there is a gap that needs to be looked at from the CS and loyalty point of view because of the COVID-19 pandemic. The SM will start to cause more influence keeping in mind the FQ. There is also an absence on the combined effect of SQ on CS and customer loyal which is important to address. Taking advantage of this gap, this paper looks to establish and relate the following points considering some important constructs or parameters in the online food space. To emphasize, the paper looks to measure: the significance of SQ, SM and FQ directly impacting the CS and CL in the online food space; and the relation between CL and CS. Proposing such a study will put forth various insights for the service providers to implement unique insights for companies to implement and create a framework to enhance the existing consumer loyalty knowledge for the future keeping CS in mind.

3. Conceptual framework and hypothesis development

3.1 Impact of the quality of e-service toward customer satisfaction and loyalty

SQ is "the extent to which a website facilitates efficient and effective shopping, purchasing and delivery of products and services" (Zeithaml *et al.*, 2002). An important discovery study with regard to SQ is proposed by Parasuraman *et al.* (1994). The underlying belief is that SQ can be understood by finding the difference between what the customer might expect against the actual reality conveyed by the customer. This difference is essential to create a map which helps to improve the deliverables of the company. The more important ones need to be focused on depending on the factor which is perceived to be most important by the consumer. They identified and stated that SERVQUAL model is an efficient way of gathering the information required. Jeon and Jeong (2017) added that the value of SQ is significant with respect to CL, to help increase the repurchase intention and ensuring continued usage. Therefore, the quality of an e-service is paramount when establishing an online business. Taking these points into consideration, we propose the following hypothesis:

H1. e-service quality influences customer satisfaction positively in the online food market space.

H2. Customer satisfaction positively influences customer loyalty in the online food services market.

3.2 Impact of the food quality and safety measures on customer satisfaction and customer loyalty

According to Ha and Jang (2010), FQ is crucial for CS. They infer that FQ is as important in the past and view it as an absolute factor contributing to CS. The SM affect the customer's loyalty, especially now considering the current scenario. Consumers might now endorse brands without adequate SM. Consumers are getting more health conscious than they were in the past. Sulek and Hensley (2004) have stated that the SM adopted and the quality of food are more significant than SQ offered by any food delivery service or restaurant. In addition, FQ causes direct increase in customer proclivity to stay loyal and adopt the brand, thus providing overall satisfaction (Namkung and Jang, 2007). Therefore, state our hypotheses as SM impact CL and FQ impacts the satisfaction achieved by use of the service offered:

H3. The safety measures adopted significantly influences customer loyalty.

H4. The food quality positively influences customer satisfaction.

4. Methodology

4.1 Research model

The model of research is conducted by linking our hypotheses and finding the correlation in between the independent variables and the dependent variables. The independent variables are FQ, SM and SQ, and the dependent variables are CS and CL. The conceptual framework assumes that there are relationships between the independent constructs such as SQ, FQ and SM and the dependent variables such as CS and CL.

The various factors are measured using a Likert scale (1–5). A survey was floated online to gather information on the various parameters discussed. The respondents were restricted to Indians only as we are conducting the study in an online food service context, and each International market operates in a different manner. The method of sampling is convenience sampling approach as it would be difficult to do a probabilistic sampling given the extensive list that would be needed which was not possible given the time constraint. Convenience sampling also gives a realistic outlook (Zikmund *et al.*, 2013). The data from the consumers of online restaurant purchasing services was collected during June 2020 by circulating a survey. Total number of responses gathered were 201. For each construct, we had ten respondents. Considering the fact that we are using structural equation model (SEM), the number of responses is adequate. The study uses a propronged approach. First, we try to gather the factors for correlation and communalities to check the reliability and validity. This was done using the help of SPSS. After that, the structural model is to be created on AMOS using path model approach to test the proposed hypotheses. We use AMOS as it is easy to build structural equation models with the help of modification indexes, and we can also check the estimates and model fit.

4.2 Data collection

Table 1 displays the demographic details of the respondents which have a mixture of young and old customers across all ages. Most of the respondents are mostly migrant university students and working professionals which is the target group for most of the online food industry. The larger proportion of respondents are male (Figures 1–3).

Demographic variables	Description	Total	(%)
Gender	Female	75	37
	Male	126	63
Age bracket	21–25	62	31
	26–30	20	10
	31–40	15	7
	40+	66	33
	Less than 20	38	19
Occupation	Homemaker	10	5
	Others	22	11
	Student	111	55
	Working professional	58	29

Source: Authors' own analysis

Table 1.
Demographic details

4.3 Measures

The dimensions for service quality are in combination with SERVQUAL and measuring parameters discussed such as ordering quality, customer service and privacy top our personal information being shared also termed as web honesty (Parasuraman *et al.*, 2005). In addition, FQ is measured using three indicators, namely, variety, taste and healthiness factor, which is in line with most researches. The SM, being an unadopted construct earlier, were subjected to the exploratory factor analysis to assess its dimension. The various measures adopted by the current platforms, such as no-contact delivery, safe packaging, safety rating and safety features adopted, were considered while making the survey. The CL, on the other hand, is measured by intention to recommend, adoption after SM and continued usage even if price increase (Caruana and Ewing, 2010). CS measures the effects of coupons and discounts, reviews and ratings and overall quality on display. The measurement was done on a five-point Likert scale as mentioned earlier (Table 2).

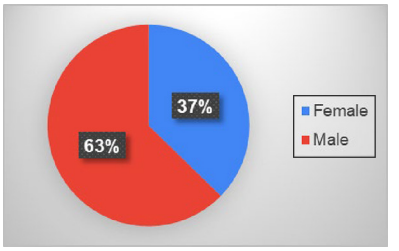

Figure 1.
Gender wise distribution of respondents

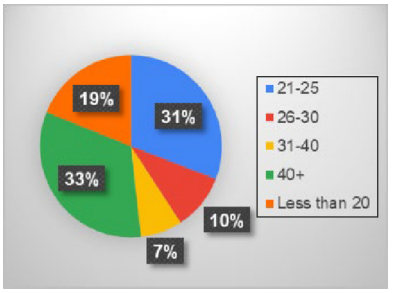

Figure 2.
Age bracket

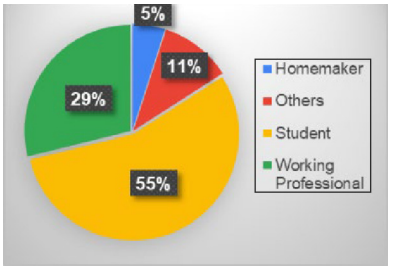

Figure 3.
Occupation

5. Data analysis

The data was analyzed in two stages. First, the variable constructs' reliability and validity were checked and verified. To analyze the construct validity, we calculated and evaluated the factor loading, squared relations and average variance extracted (AVE).

Table 3 displays the values of the above-mentioned parameters. In totality, the indicators of validity met with recommended cutoff values discovered from past papers, with most factor loadings over 0.6 and AVE over 0.5 (Hair *et al.*, 2010). The result of the reliability test for the factor loadings, the value ranged from 0.3 to 0.89, and all are significant at $p < 0.01$.

Variables	Indicators
e-service quality	The items ordered are sent out promptly
	Maintaining privacy of personal information
	Quality of customer service offered
	Delivery status tracking feature
	Time taken by customer service representative to solve the issue
Food quality	Variety
	Taste
	Healthy option
Safety measures	No-contact delivery
	Safety rating
	Safe packaging
	Features adopted such as temperature control, masks, sanitation
Customer loyalty	Continue to purchase
	Continue purchase even when price increase
	Intention to recommend
Customer satisfaction	Cashbacks, discount and offers
	Photos, reviews and ratings
	Overall quality

Table 2. Variables' and indicators

Factors	Items	Factor loadings	Squared relations	AVE
e-service quality	SQ1	0.55	0.30	0.86
	SQ2	0.56	0.31	
	SQ3	0.64	0.41	
	SQ4	0.75	0.56	
	SQ5	0.69	0.47	
Food quality	FQ1	0.57	0.32	0.88
	FQ2	0.67	0.45	
	FQ3	0.64	0.42	
Safety measures	SM1	0.69	0.48	0.94
	SM2	0.72	0.52	
	SM3	0.75	0.56	
	SM4	0.71	0.50	
Customer loyalty	L1	0.64	0.41	0.80
	L2	0.69	0.47	
	L3	0.61	0.37	
Customer satisfaction	CS1	0.71	0.50	0.86
	CS2	0.58	0.34	
	CS3	0.69	0.48	

Table 3. Factor loadings, squared relations and average variance extracted

First, the factor loading was calculated on SPSS for covariance using the rotated component matrix. The values obtained from the communalities represent the factor loadings that are needed to calculate the average variance extracted. With the AVE, the convergent validity can be validated. In Table 3, the values of AVE are presented, and the values are all greater than 0.5 signifying that the constructs have convergent validity (Dedeoğlu and Demirer, 2015). Moving on, we tested the discriminant validity. This is done by calculating the squared relations for the interdependent constructs and checking if the square root of AVE was greater than the squared relations (Ryu *et al.*, 2012). In Table 3, we can clearly see that the values are satisfying the required conditions and meet the criteria.

To verify the construct reliability (C Rel), we subjected the data collected to another reliability test. Reliability test gives a realistic outlook of the data as it indicates consistency and stability of results in a time bound period (Danesh *et al.*, 2012). Using the value of Cronbach's α from SPSS for all the constructs and checking it against a threshold value of 0.7 (Rao *et al.*, 2011), four of the five factors satisfy the requirement indicating good reliability. The items, Cronbach's α and CRel, are shown in Table 4.

The AVE and CRel values are above the threshold values for all the constructs thereby indicating the data obtained is good for creating a model and for further analysis.

6. Validated conceptual model

The final model was built using the relationships stated in the hypotheses mentioned in the earlier sections. The model is a SEM. The model was made on AMOS 18 software to check the causal relationship between the dependent and the independent variables. The model was developed after a series of important steps. First, confirmatory factor analyses were done to check the model on four aspects: unidimensionality, reliability, convergent validity and discriminant validity. After that we created the path model as shown in the figure below and looked at the estimates if they were significant. Using the modification indexes, the model fit values of chi-square and root mean square error of approximation (RMSEA) were checked. Finally, after some trial-and-error approach, we were able to build a satisfactory structural model consistent with the literature. An overview of the final conceptual model is displayed in Figure 1. For the final model, we calculated the average of the subconstructs, the path coefficients and the error values to create the same. The figure shows the independent variables FQ, SM, SQ and the dependent variable CS, CL in relation to each other. The dependent variables are endogenous in nature and thus contain some residual error terms. The path coefficient indicates the relation between the variables.

Once the model was built, the important values representing the model are the chi-square value, the comparative fit index (CFI) and the root mean square residual (RMR). The values for the variables indicate that this is a good statistical model (RMR = 0.010; chi/df = 2.392; RMSEA = 0.000; CFI = 1.000). The chi/df value is between 1 and3 which exhibits a good model fit. Also, the RMSEA and RMR values are close to 0 and CFI value 1 confirming our model fit as good and within the recommended range (Figure 4).

Table 4.
Cronbach's α and composite reliability

Factors	Items	Cronbach's α	CR
e-service quality	5	0.74	0.74
Food quality	3	0.70	0.77
Safety measures	4	0.85	0.88
Customer loyalty	3	0.67	0.64
Customer satisfaction	3	0.70	0.74

7. Results

To review our hypotheses proposed, the value of critical ratio (CR) is essential in signifying that the regression weight in the estimates is significant at 0.05 or better which indirectly states that the estimated path parameter holds good and is significant too. The value of CR should be greater than mod of 1.96. This is usually considered as the recommended value in statistics. If the values are not within range, it shows lack of coherence of that variable with the model and means that the construct is not strong and need to be looked at again. Also, when the *p*-value is less than 0.001, we can support the hypothesis (Tables 5 and 6).

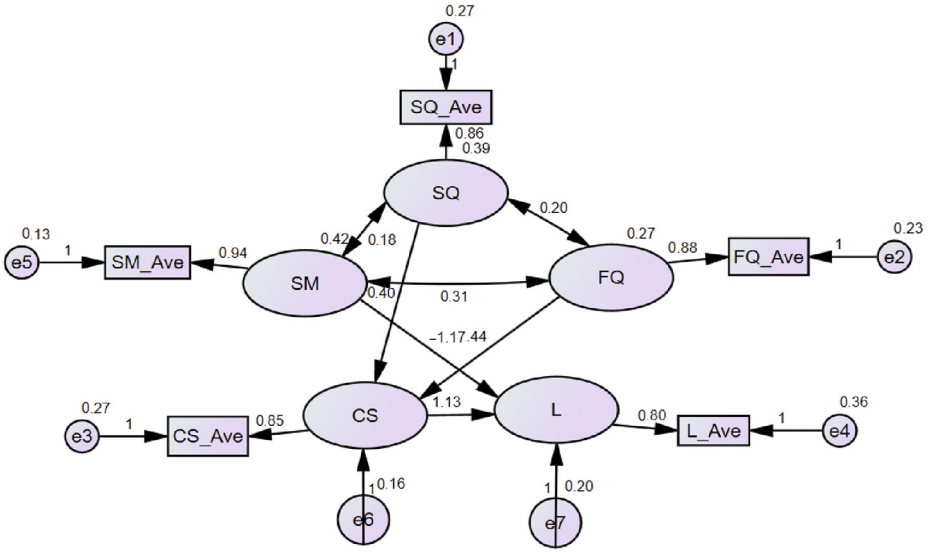

Figure 4.
Conceptual model

Hypotheses			CR	*p*
CS	<—	SQ	2.237	0.025
CS	<—	FQ	2.265	***
L	<—	CS	3.869	***
L	<—	SM	−5.122	***

Note: ***indicates significant at $p < 0.001$

Table 5.
Critical ratio and *p*-value

	p	
H1	0.025	Rejected
H2	***	Accepted
H3	***	Accepted
H4	***	Accepted

Note: ***indicates significant at $p < 0.001$

Table 6.
Hypotheses test

H1 states that SQ influences CS. The structural equation model indicated that the independent variables of SQ do have a significant and positive effect on CS. Therefore, *H1* is partially accepted. The *p*-value is greater than 0.001 with a critical ratio of 2.237.

H2 states that CS positively influences CL. After looking at the values in Table 5, this is indeed the case. The *p*-value is less than 0.001 with a critical ratio of 3.869.

H3 states that SM influence CL. After looking at the values in Table 5, this is indeed the case. Therefore, *H3* is supported. The *p*-value is less than 0.001 with a critical ratio of −5.1.

H4 stated that FQ positively influences CS. The structural equation model indicated that the independent variables of FQ affect the satisfaction of the consumer. Therefore, *H4* is supported. The *p*-value is less than 0.001 with a critical ratio of 2.265.

8. Discussion and conclusion

The goal of the research was to relook at consumer perception after the COVID-19 pandemic, and cross verify if the parameters which were judgmental earlier have the same influence or is there an underlying change that took place. Look at the results, safety has taken precedence in the food space too, and consumers are increasingly conscious after this matter. However, the willingness to pay for the increase in price is low. So, the online delivery services need to be vigilant and proactive to decide their strategy and how they are going to maximize their market share without holding a high fixed cost because of adoption of preventive measures. But there are customers who are willing to pay premium and the promotion focus should be in this segment. The SQ does not hamper satisfaction and loyalty to the extent that FQ and SM do. The results of this study suggest that SQ does not enhance CS. Quality of food has been of importance irrespective of the time period and continues to do so in a significant manner. Also, SM have now started to impact the loyalty derived by consumers because of the COVID-19 pandemic. The dependent variables of CS and CL have a significant relationship. Satisfaction induces loyalty and not the other way round. The relation is unidirectional in nature, and hence we have proved that three out of our four hypotheses are true. Therefore, companies need to satisfy the needs of the customer by understanding their pain points and not just focus on loyalty through various loyalty schemes in the form of discounts, cashbacks and coupons. Rather, safety rating should be published, packaging material and raw material should be verified along with the satiation of the kitchen to ensure the best quality product is delivered to the consumer.

8.1 Theoretical implications

This literature can be applied only to the food delivery service context and not in any other industry. Similar research needs to be conducted on different lines after understanding the consumer needs and perception. Beyond that, the need to include more variables cannot be underestimated. That would provide a complete view of the behavior of consumers, and more information can be extracted for companies to analyze. As technology is a game changer, the subfactors need to also constantly evolve time to aid in keeping the research relevant. Also, the inclusion of qualitative data will allow for a holistic view as many conclusions that are abstract in nature can be drawn which will help understand the psychological aspect. The addition of this data will help the companies prepare better strategies, and the implementation would be easier.

8.2 Managerial implication

The importance of FQ and SM is shown to be of paramount importance, as the hypotheses clearly confirm. Keeping high SM and quality food will be a challenge for small and medium-sized restaurants, which do not have the appetite of large restaurants. This study concludes that restaurants need to be especially focused on their target segment and if that segment is large enough. The introduced adequate SM, such as temperature check of delivery agents, safety ratings of the cloud kitchen and safe packaging to ensure that CS is met, will lead to CL which is very important after the COVID-19 pandemic. This must also be promoted on social media, application or advertisements to customer whether it be photos, videos or reviews.

8.3 Limitations and future scope

The sample population is not large enough to cover the entire geography of India. The probabilistic approach toward sampling will help creating strata and give more even data. This can happen if the time of study is long. Because of time constraints, we were unable to collect more information. Furthermore, the study sample population was majorly from the state of Maharashtra (population of 11.42 Cr) and may not show a complete representation of India. Perceived value should be included to add more value while understanding customer insights. Future researchers can also add to the SM adopted as this is a new construct and in need of development.

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