



Measuring consumer's perception towards online food delivery services in Punjab

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Abstract

In this modern era, advancements in technology have grown rapidly. These advancements have led the e-commerce sector to open new avenues for today's businesses, especially online food delivery services. E-commerce is the buying and selling of goods and services over the internet. A combination of marketing intelligence and technology has resulted in the development of mobile applications which use the internet as a medium to advertise products and services. The extant research purpose is to examine consumers' attitudes toward online food delivery services in Patiala. To know their opinion, data was collected from online questionnaires, questionnaires were sent through the mail. Data for this empirical study was collected online and analyzed using SPSS through a structured questionnaire to achieve the objective. The study identified the factors in the adoption of food delivery services and an attempt has been made to position them in the Multi-Dimensional Matrix. Findings of the study that convenience motivation, service, purchase safety, and security, purchase intention, delivery experience, price value, and service quality of food delivered factors are considered to be directly affecting the success of online food delivery services. Information quality perceived comparability, and perceived usefulness is found to be considered indirect factors. Online food ordering is a rapidly growing industry around in India, as well as city of Patiala is at an immature stage. Due to the growth and reach of the Internet as well as the hectic schedule of the consumer, businesses need to identify the need of the customer and deliver food to the doorstep of the consumer. A better understanding of the consumer market will contribute to realizing the full potential of the e-commerce platform as it has the potential to impact the economy, businesses, and the quality of life of the people.

Keywords: consumer attitudes, online food delivery service, consumer preferences, mobile application

Introduction

Consumers prefer E-commerce platforms as a shopping medium because they can shop in the comfort of their own homes and at the leisure of their own time (Jiang *et al.*, 2019). The rapid growth of the internet and wireless technologies has substantially impacted online retailing and e-commerce advancement (Bressolles *et al.*, 2020). Online retailing minimizes the effort of users in making their decisions by providing more options for selecting and comparing products' information screens. Food delivery services are provided by two types of retailers. The first is retailers themselves, fast-food restaurants such as McDonald's, Pizza Hut, Domino's Pizza, and Kentucky Fried Chicken come under this group. The second category includes many restaurant intermediaries who provide delivery services for a large range of restaurants. Examples include Food Panda, Room Service, Eat24hours.com, Just-eat.com, Delivery.com, and more (Rezaei *et al.*, 2018).

Technology has played a vital role in changing the food delivery operation, and it has led to changes in customer expectations by motivating people to do everything online, including having cooked food delivered to their homes. The demand for food delivery has increased significantly over time. People are shifting their preference to online shopping and food ordering as more technology-driven innovations emerge. The process of ordering food through a website or other application is known as online food ordering. According to a report by Boston Consulting Group (BCG), India's food online ordering market is expected to grow at a compound annual growth rate of 25 to 30% to touch \$7.5\$8 billion by 2022.

The study of consumer attitudes is the most important aspect of personal and professional development. It helps in understanding the tastes and preferences of the consumers. Convenience is the prime factor the consumers, as placing an order is as simple as a few clicks on any mobile device. Customers of online food delivery value ease and convenience as online food ordering eliminated the frustration of bad traffic or weather (Ha *et al.*, 2019). Online shopping has enabled consumers to reduce their decision-making efforts by offering greater options to choose from, screen information, and compare products (Alba *et al.*, 2022). Online food delivery is growing business through its business mobile app.

Mobile applications play a vital role in the online food delivery business. Food delivery platform operators have created a new technology model for food delivery services that allow consumers to connect with a variety of local restaurants and food suppliers through mobile apps. The app is designed for anyone who wants to order food from a variety of cafes and restaurants. After placing an order, users can use the Smart Tracking function in the app to track the progress of their order. It is especially ideal for travelers, as it allows them to order from anywhere in the world. World Wide Waiter, the first restaurant food delivery service in the world, launched in 1995 in the United States and is still operational today as Waiter.com (Jin *et al.*, 2021). An online food ordering system is software that allows restaurants to accept and manage internet orders.

The objective of the study is to analyze the various factors that influence consumers when choosing online food delivery. Consumers may have different attitudes under

different circumstances. We can gain a better understanding of the "Online Food Delivery Service Market" according to this research. We will learn about consumer attitudes toward the services they provide in the Patiala district and the variables that influence their attitudes. Therefore, these findings may help in working on these variables to fill in the gaps in the mindset of the service provider's consumer. Take a look at the literature related to online food ordering and delivery services, which is described below to start this discussion.

Literature Review

Consumers make expectations towards quality at the time of purchase, as well as based on their own experience of how food quality is experienced in the home during food preparation. Various marketing strategies make considerable use of consumer attitudes value. It is considered a competitive edge and is critical to any organization's success. It is necessary to create an integrative configuration. Customer value in exchange, customer value building, and customer value dynamics are the three models in the configuration (Khalifa *et al.*, 2022). Consumer attitudes have generated a lot of attention in the business and marketing worlds. It was regarded as the most critical aspect of any organization's success. It was considered to be one of the most significant tools for gaining a competitive advantage (Lan *et al.*, 2021). Food safety risks have an impact on customer attitudes, which in turn has an impact on consumer purchasing behavior. A framework can be built by integrating food safety and risk attitudes by using the measurement of perceived risk (Jun *et al.*, 2019). Consumer attitudes toward online food ordering and delivery services such as Zomato, Swiggy, and Foodpanda were compared (Saini *et al.*, 2021). Attitudes quality and customer-oriented product development are the foundations of consumer insights (Brunso *et al.*, 2020).

According to Varsha (Chavan *et al.*, 2021), The online food delivery market is still immature; some glaring problems can be seen from the negative comments from consumers. To solve this problem, we can't rely solely on online food delivery restaurants' self-discipline or the monitoring and management of online food delivery platforms. Examined the impact of online food delivery services like Zomato, Swiggy, Foodpanda, etc. on consumers and found that consumers give priority to exclusivity related to price, quality, and delivery (Das *et al.*, 2020). The market for online food delivery is still in its early stages of development. To develop a good internet takeaway environment, online food delivery platforms and restaurants, concerned government departments, consumers, and all parties in society must work together (Lan *et al.*, 2020).

Conducted research to discover the factors that consumers should consider when ordering food from a given program, as well as methods and factors based on related food programs (Chandrasekhar *et al.*, 2021). The influence of OFD services on customers in India was investigated, and it was discovered that online food purchase services helped customers manage their time better by offering easy access to their desired food (Kedah *et al.*, 2021). Much of the research focuses on customer behavior in the context of Indian food delivery applications, such as Zomato Swiggy

and, Foodpanda (Vinaik *et al.*, 2019). Studied the factors that influence customer ordering experiences in Chennai, such as website trust, customer satisfaction, and loyalty (Yat *et al.*, 2022). Only the time factor had a significant impact on behavioral intention to utilize online food delivery intermediaries (FDI) service among Malaysian consumers (Correaa *et al.*, 2019).

Life is getting busy day by day, people are getting fewer opportunities to go out and eat or prepare food at home, and this has created a demand for online food ordering (Chen *et al.*, 2020). Until the early 1990s, going out to eat was considered a secondary activity and thus unnecessary. It was also not a priority in everyday activities, and individuals preferred to cook at home rather than go to a la carte restaurants, which were time-consuming and expensive (Pigatto *et al.*, 2019). One of the factors that often contribute to eating out is growing urbanization, increasing women's participation in work, and increased family income (Bezerra *et al.*, 2019). Youth with higher incomes and living in urban areas have shown an increasing trend in eating outside. Foods with a high-calorie content are among the foods that the general public prefers (Jeng *et al.*, 2020). The goal was to create a single model that looked at the relationship between antecedents and behavioral intent toward OFDS services among Bogota residents of urban. examining clients in the city of Bogota, researchers were able to determine the effect of traffic conditions on key performance indicators of online meal delivery businesses (Yoong *et al.*, 2021).

Consumers play various roles, and the factors vary based on the product category. There are four different consumer characteristics to consider. Price sensitivity, value sensitivity, perceived value variation, and consumer innovation (Suh *et al.*, 2021). Consumers make expectations towards quality at the time of purchase, as well as based on their own experience of how food quality is experienced in the home during food preparation. Various marketing strategies make considerable use of consumer attitudes value. It is considered a competitive edge and is critical to any organization's success. It is necessary to create an integrative configuration. Customer value in exchange, customer value building, and customer value dynamics are the three models in the configuration (Khalifa *et al.*, 2022). Companies that want to offer services and products profitably are using innovative distribution methods as a new basis for differentiation and providing greater value for customers (Chen *et al.*, 2022). Although the review of prior studies has focused on online buying behavior, there hasn't been much light thrown on the online food delivery service (Sethu and Saini, 2021; Yeo *et al.*, 2022). In the Patiala market, there is still a lack of awareness of customer behavior when it comes to online food ordering.

Research Methodology

Primary data has been collected using a five-point Likert scale. A standardized scale has been adapted from (Buvaneswari. *et al.*, 2021) ^[14], which included questions related to online food delivery services. Data was collected through an online questionnaire, Questionnaires were sent by mail to 200 people, out of which 136 people were respondents. As the survey was conducted in Patiala, Patiala is the fifth largest district in Punjab, and people from

different culture lives in Patiala. Due to the small and homogeneous population, all groups of the frame are given the same probability. Non-probability sampling method has been applied. The purposive sampling method was used. Cronbach alpha reliability test was applied to know the internal consistency of the questionnaire. KMO test (0.831) was applied to measure the sampling adequacy and Bartlett’s Test (0.000) of Sphericity was performed to know the appropriateness of Factor Analysis.

Discussion

1. Demographic profile

The respondents' profiles show that 51.5% are female, 48.5 are male and 44.2% are post-graduates in the sample. Interestingly, many of the respondents are students (55.2%) whose marital status is unmarried (80.8%). These demographics revealed that the Zomato application is the most popular OFDS (55.2 percent).

Table 1: Descriptive Statistics

Profile	Frequency	Percentage
Gender		
Female	70	51.5
Male	66	48.5
Age		
18–25	100	73.5
26–30	10	7.4
31–35	11	8.0
Above 35	15	11.1
Occupation		
Private Job	20	14.7
Government Job	15	11
Self-Employed	8	5.9
Student	75	55.2
Unemployed	18	13.2
Marital Status		
Single	110	80.8
Married	26	19.2
Education		
Intermediate	20	14.7
Graduate	40	29.4
Post Graduate	60	44.2
Doctorate	16	11.7
Preferred OFDSs		
Zomato	75	55.2
Swiggy	40	29.4
Food Panda	21	15.4

Source: Primary data

2. OFDS usage determinants

Nine variables were found using factor analysis based on replies to 30 statements showing the respondent’s attitudes toward the factors in the adoption of the OFDS (principal

component technique). The Mean, standard deviation, loadings of the rotated factors, commonalities, percentage of variance, and Cronbach alpha are listed in Table 2.

Table 2: Determinants of Online Food Delivery Services

Items and Indicators	\bar{x}	R	h2	h2i	% of r2	α
Convenience Motivation (CM)					10.589	0.887
I feel good when I am using the food delivery app.	2.82	0.570	0.755	0.672		
I feel favorable towards the food delivery apps.	4.49	0.590	0.675	0.672		
I choose my app to purchase food products.	3.80	0.675	0.586	0.615		
I like purchasing food products through my app.	3.97	0.720	0.582	0.592		
I can enquire towards the delivery of my orders made.	2.89	0.759	0.484	0.558		
I find it easy to use the application. Perceived Safety and Security (PSS)	4.08	0.637	0.455	0.660	7.475	0.754
My app has adequate security features.	3.69	0.773	0.776	0.694		
I feel that my privacy is protected in my app.	4.72	0.698	0.742	0.702		
I feel safe in my transactions when I use it in my app.	3.81	0.687	0.554	0.550		
My app offers diverse forms of contact channels (FAQ, email, toll-free no., etc.)	2.79	0.785	0.473	0.551	7.327	0.767
Purchase intention (PI)						
I would encourage friends and relatives to use the application I use.	2.89	0.642	0.773	0.670		
I like using the application in future.	3.89	0.715	0.665	0.706		
My app is the best retail food delivery apps to do business with.	4.85	0.763	0.640	0.728		
If I had to purchase again, I would be buying from the app.	3.91	0.733	0.454	0.507		
I am satisfied with my decision to use the application. Information Quality (IQ)	4.93	0.723	0.491	0.562	8.335	0.741
The amount of information on the app is sufficient.	2.95	0.676	0.765	0.674		
I don’t waste time on my app.	3.47	0.870	0.790	0.544		

The app which I use provide up-to-date information.	4.26	0.679	0.652	0.557		
The information on the app is updated periodically. Perceived Usefulness (PU)	4.40	0.658	0.525	0.575	5.421	0.725
My app enhances my effectiveness in buying food products.	3.21	0.557	0.465	0.516		
My app enables me to buy food products more quickly.	4.10	0.689	0.586	0.560		
I get what I order from my food delivery app.	2.99	0.500	0.453	0.653	5.181	0.935
Perceived Compatibility (PC) My app offers information towards customers' policies	2.28	0.705	0.600	0.610		
My interaction with the app is clear and understandable. Delivery Experience (DE)	2.89	0.694	0.645	0.416	4.645	0.721
It is quick and easy to complete a transaction in my app.	3.01	0.740	0.700	0.417		
The product is delivered by the time promised by the app. Price Value (PV)	2.53	0.754	0.692	0.516	3.071	0.703
My app is useful for buying quality food products.	2.91	0.731	0.731	0.790		
Products purchased have good value for money Service Quality (SQ)	2.37	0.638	0.676	0.906	3.780	0.707
My app has a good selection of food and restaurants.	3.87	0.678	0.754	0.589		
The product which I receive is perfect.	2.78	0.646	0.668	0.655		

\bar{x} - Mean, r - Standard deviation, h_2 - Rotated factor Loadings, h_2i - Communalities, % of r_2 – Percentage of Variance, α - Cronbach Alpha

We choose to consider factor loading should be higher than 0.60 as recommended by chin (1998) and that every loading less than 0.4 should be eliminated while evaluating factor loading (Henseler *et al.*, 2009) [15]. As a result, the instrument displays good factor loading since every item is greater than 0.40 with Cronbach’s alpha (CA) values, the construct realibility was evaluated. Time 1 show that scale have internal consistency, with Cronbach’s alpha values over 0.70. (Henseler *et al.*, 2009) [15]. The average variance (AVE) was higher than the threshold of 0.50 as suggested by Fornell and Larcker (1981). The results of the measurement model are shown in Table 1.

Conclusions

As per the study conducted, various factors influence consumer attitudes regarding online food delivery. The purpose is to know what are the influencing factors, their attitudes, needs, positioning of various attributes of different online portals in their mind, and overall satisfaction towards online food delivery services. Nine factors were considered in this study, the study found that convivence motivation, service, purchase safety, security, purchase intention, delivery experience, price value, and service quality of food delivered factors are considered to be directly affecting the success of online food delivery services. Information quality perceived comparability, and perceived usefulness is found to be considered indirect factors. Information quality perceived comparability, and perceived usefulness is found to be considered indirect factors. According to the research conducted, it can conclude that Zomato has gained the positive opinion of the majority of consumers in comparison to other service providers. Zomato has been in the first position as an online food delivery service provider and if it includes minor improvements, it will sustain its upper hand in the forthcoming future. The present research has shed light on empirical evidence in identifying the determinants that lead to the adoption of OFDS in Patiala cities in India and mapping them based on a perceptual map. Platform owners, restaurants, delivery people, and customers are the main stakeholders in online food delivery services. Service quality and delivery experience were two aspects that depend on the person who prepares the food well in the restaurant and on the timely delivery, on location, and the delivery personnel. When it comes to customers' buying intentions factors, other than perceived utility and value requires more focus on OFDS. To emphasize purchase intention, to emphasize the intention to buy, the remaining determinants that inevitably lead to the intention to buy must be considered.

Limitations and future scope of the study

Various limitations were encountered at the time of research. The first problem was the lack of time. Time was limited, and many things had to be covered. The second problem was the size of the sample. The study, conducted in the different respondents of Patiala, took a small sample size of 136 respondents, so the findings may not apply to other parts of the due to the district's social and cultural differences. Future research can select more samples and fill the gap of cultural differences. It takes a long time to conduct depth research. Apart from that, many respondents were unwilling to fill out the questionnaire. Furthermore, there is a lack of evidence on the reasons for positioning the determinants which can be an avenue for future research. Additionally, future longitudinal studies could be conducted to comprehend relationships among other variables affecting the attitude and behavior of using online food delivery services.

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