"AN EMERICAL STUDY ON ASSESSING THE IMPACT OF ONLINE FOOD BUYING HABITS ON CONSUMER SATISFACTION"

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Abstract: The mobile application era has thrown open a new pathway for today's marketing. The mobile application has made all traditional modes of business outdated and generated amazing new possibilities in business. Mobile application is a combination of marketing acumen and technology – uses the Internet as a medium to advertise and sell services and goods. Today, more people are getting connected through mobile application and they are ready to trade through it, they can order food from the comfort of their offices, classrooms, hostels and anywhere outside the school campus without queuing. It also affects the operation of companies and organizations. Companies have changed their traditional business strategies into online marketing to suit customer needs and taste at any time.

The purpose is to know what are the influencing factors, their perceptions, needs, positioning of various attributes of different online portals in their mind and overall satisfaction towards online food delivery services. The survey was conducted for a purposeful analysis of the study on around 279 respondents. The research is focused on the study and analysis of data collected from all those users who are already using the online food delivery services.

Keywords: Consumer Satisfaction, Consumer Perception, Online Food, Buying Applications, Expectations of Consumer.

Introduction

With the development of 21st century, we could see India at a rising pace. Youthful personalities of the nation are especially exceeding expectations in the period of most recent innovation and advancements. In this day and age administration part contributes 54.40% in GDP. Swiggy is one of the most famous applications that offer types of assistance to the client to find restaurants. Innovation has assumed a key job in upsetting the food conveyance administration, it has added to the adjustments in customer inclinations as their reliance of innovation has persuaded them to do everything internet including getting prepared suppers conveyed to their doorstep. The ascent of advanced innovation is reshaping the enterprises. With the expanded utilization of innovation, the quantity of individuals drawing in into the computerized part are quickly expanding. Indeed, even Consumers are familiar with shopping or in any event, requesting on the web through applications or sites, with most extreme comfort and straightforwardness, expecting a similar encounter that they would get from the outlet itself. To coordinate with the shopper's desires applications are giving expanded offices and administrations to the clients. This situation doesn't exist just in one nation yet all over the globe. Today, different sorts of organizations are setting up online stores in light of innovation. Different factors, for example, less expensive cell phones and less expensive web information packs, individuals have begun utilizing a greater amount of cell phone applications. ton of things advantageous for the clients. Online food purchasing can be characterizes a procedure of conveyance of food or take out from a café or a neighborhood food joint through a website page or portable App. The clients can arrange food from their preferred eateries, their selection of cooking styles, can conclude whether to get it conveyed to get from the eatery and can decide to pay from different modes, for example, money down, plastic, charge card,

or some other portable wallet.

Figure 1.1 – Online Food Ordering System

India's online food requesting part observed a solid development rate in the quantity of day by day arranges, developing reliably at 15 percent on a quarterly premise from January to September a year ago, as indicated by a report from RedSeer Consulting. The development has brought about the quantity of requests every day timing a normal of 400,000 during the September quarter. It has likewise implied players, including Swiggy, Zomato and Foodpanda, are putting resources into in-sourcing conveyances.

Swiggy, one of the main players, has in-sourced conveyances since its origin and keeps on preparing 100 percent of conveyances. Zomato, which began as a café revelation stage and went to online food requesting, procured Runner, a hyper nearby coordination firm so as to support its own in-house conveyance arm. The development in 2019 is relied upon to proceed at a similar pace. Nonetheless, Ola, India's biggest taxi-flagging down firm, bought Foodpanda that agitates the market. Ola has put $200 million into Foodpanda throughout the following not many years, making a value war in the food-tech space once more.

With all the blast in advanced industry over the globe, it's had its effect on the Indian economy as well. The online food requesting firms have grown up in mass. The market size of food in India is relied upon to arrive at Rs. 42 lakh crore before the finish of 2020, reports BCG. By and by, the Indian food showcase is around $350 billion. The space is thinking of a great deal of advancement taking into account their client accommodation, fulfillment and maintenance. This has likewise constructed space for a great deal of new players, who are focusing on explicit gatherings of individuals. Numerous new players getting the portion together with inventive plans of action, for example, conveying nourishment for wellbeing cognizant individuals, home cooked dinners, and so on. Food tech is the hot talk in the startup town. After innovation new companies have transformed the internet business, taxi and land segments, presently the eager for ever Indian business people are hoping to satisfy the hunger of others. Food tech is an immense market and food conveyance new businesses are only a piece of it.

As of now, players, for example, Swiggy and Zomato have figured out how to keep up the development in spite of charging conveyance expenses for little ticket conveyances. Specialists and industry watchers state the model of conveying food from cafés, which is requested online has been demonstrated, regardless of whether there's some best approach for firms in the space to start making benefits.

Various apps in the Indian market are:

Apps	Originated	Delivery	Online Menu	Expanded	Delivery Charges
Food Panda	Singapore	Yes	Yes	60,000 Restaurants	Yes
Zomato	Portugal	Yes	Yes	80,000 Restaurants	No
Swiggy	India	Yes	Yes	1,40,000 Restaurants	Yes
Box8	India	Yes	Yes	240 Stores	Yes
Fasoos	India	Yes	Yes	325 Centers	No
Dominos	India	Yes	Yes	1,260 outlets	No
Just Eat	Denmark	Yes	Yes	3,050 Restaurants	No
Beer Café	India	No	Yes	100 Stores	No
Pizza Hut Delivery	US	Yes	Yes	1,600 Outlets	No
Fasoos	India	Yes	Yes	400 Stores	No

Table 1.1 - Various Apps in Indian Market

Literature Reviewed

The literature review is the foundation of any research. The literature review provides us the previous knowledge about all these theories that related to our study.

Saqib Ali, Nadeem Khalid, Hafiz Muhammad Usama Javed, Dewan Md. Zahurul Islam (2021): Their study aims to examine the effect of factors such as optimism, innovativeness, insecurity, and discomfort that may motivate consumers' adoption intentions towards online food delivery ordering (OFDO) services. Additionally, this study intends to investigate the moderating role of situational influences (COVID-19) in affecting such an online behavior. By using survey methods, a total of 439 usable responses were gathered through an online survey. Data were analyzed by using Partial least square (PLS) and multigroup analysis (MGA) techniques. The results revealed that optimism and innovativeness have positive influences on adoption intentions while insecurity and discomfort have negative influences on adoption intentions in the use of OFDO services. The results also supported the moderating role of situational influences such as the COVID-19 pandemic. Furthermore, the PLS-MGA results indicate that the effects of optimism and innovativeness are stronger in demographic variables, i.e., young, male, high income, high education, etc. On the contrary, the effects of insecurity and discomfort are stronger for the opposite, i.e., elder, female, low income, low education, etc. Finally, this paper depicts remarkable insights for researchers, practitioners, service providers, and marketers.

Suryadev Singh Rathore, Mahik Chaudhary (2018): "Consumer's Perception on Online Food Ordesring."(2018): The study found out that recent development of the Internet has augmented the e-commerce industries in a country like India. E-commerce development has made online food ordering services seamless for people who want to get food delivered at their doorstep. Although consumers continue to go out for the meals, consumers feel very convenient to order food online since it frees the customer from personally visiting the restaurants. In this study, our main focus was to analyze the perception of consumer towards online food ordering services. In order to understand what factors have played a dominant? Role to attract consumer in the developing country like India towards them, we decided to study on the consumer perception on online food ordering. In this research paper, two objectives were set for study. The first one was to identify the factors which influence the consumer to order food online and the other one was to know the consumer preferences on online food ordering services provider. To achieve these objects survey was held to gather the information. Survey successfully helped to understand the behavior and perception of people for online food ordering. It shows how easily people search for a favorite restaurant, choose from available items and place their orders in just a few minutes.

Anh Kim Dang (2018), the study suggested the consumers whenever purchasing the desire food products on the Internet, to online food retailer to implement appropriate legislation regarding trading through legalized way.

Kanteti (2018) stated that Startups have become the trend setters in India and are ruling the economy since past few years. These companies are started by tech savvy young individuals. These young individuals having fresh brains and mew and innovative ideas starts different kinds of businesses with the help of technology.

J. Das (2018) has studied, analyzed and compared the top 4 food delivery apps namely, Zomato, Swiggy, Foodpanda and Ubereats. Providing better discounts" and "better choices of restaurants", Zomato is positioned at the top by the customers. Zomato is also positioned at the top by the customers while considering on delivery on time and good customers service. In both the situations, customers ranked Ubereats at the last position.

According to **G. See-Kwong (2017),** the food delivery system in India has been growing at a larger pace due to technology. From making orders on call to ordering online and satisfying all the needs of the customers and making changes according to the changing needs of the customers. Now everything can be delivered to the customers at their doorstep.

According to **Adithya R., Singh, Pathan and Kanade (2017),** a food menu is set in the online food ordering system so that the customers can place their orders successfully and with this they can also track their orders. Also, various facilities are also provided by these apps for making its access convenient for the customers.

Dr. Neha Parashar & Ms. Sakina Ghadiyali (2017): "A Study on Customer's Attitude and Perception towards Digital Food App Services". The study found that Services are intangible products where in there cannot be any transfer of possession or ownership, and they cannot be sold but come into existence at the time they are consumed or bought. Services cannot be stored or transported. Eg: accounting, banking, cleaning, consultancy, education, etc. Digital services on the other hand are services that are anything that can be delivered through an information infrastructure such as the internet, in various forms i.e. applications, web pages, social media, etc. In the paper the major focus will be on the various apps that are available either by 3rd party for delivery purpose or by restaurants themselves for various purposes like delivery, pointing system, in house app ordering, etc. Consumer behavior is the study of how individual customers, groups or organizations select, buy, use, and dispose ideas, goods, and services to satisfy their needs and wants. It refers to the actions of the consumers in the marketplace and the underlying motives for those actions. From this research paper we would understand the shift of consumer's behaviors with the introduction of technology and what are the different kinds of applications that consumers are satisfied with and what makes them happy and satisfied about the service. The main objective of the paper is to understand the relation between facilities and the purchase behavior. Secondly to find the most popular app in the food delivery industry and understand as to how have technology played an important role in the restaurant industry. Keywords: Consumer behavior, Food delivery app, zomato, fasso, e-commerce.

Carsten Hirschber et al (2016) evaluate that online's food supply broke 30 percent, which changes the condition of market for food delivery.

Sainath Reddy K, Chaitanya KGK, Abhinav M and Feiroz Khan TH (2016), the authors observed that the system was successful in overcoming the problems by cost effective development in the field of on-line food service.

According to **H.S. Sethu & Bhavya Saini (2016),** their aim was to investigate the student's perception, behavior and satisfaction of online food ordering and delivery services. Their study reveals that online food purchasing services help the students in managing their time better. It is also found that ease of availability of their desired food at any time and at the same time easy access to internet are the prime reasons for using the services.

According to Sethu and Saini (2016), the online food ordering apps were analyzed by the researcher on the basis of certain characteristics. Majority of the consumers were aware about purchasing on the internet and found that it is very convenient to use internet.

Carsten Hirschberg et al 2016: A research on the changing market for food delivery indicates that online's penetration of the total food-delivery market broke 30 percent in 2016. We believe penetration rates will grow further as the market matures, eventually reaching 65 percent per year.

According to gloria food the advantage of online ordering and the reasons for the growth of food delivery app industry are Convenience, Simpler menu to manage, significant savings, no hassles etc.

H.S. Sethu & bhavya saini "Customer Perception and Satisfaction on Ordering Food". (2016): The study revealed that the online food ordering services was used by 100 percent of the respondents, and the buying decisions were largely influenced by opinions of friend's family and discussions on online forums. The study reveals that good word of mouth and experiences by existing customers and online forums decides the success of web based food shopping.

(Shiyin Chan, 2015): FoodPanda is an introduction to the newest food sensation that's here to stay. Foodpanda is a global online food delivery marketplace headquartered in Berlin, Germany. Fun fact - they're also known as hellofood in other places in the world.

Bhavna Singh (2015) said that Foodpanda has been present in the Indian market since May 2012. Foodpanda first major move was acquisition of TastyKhana, which was launched in the city of Pune in 2007.

Together with TastyKhana and JUST EAT, it is now present in over 200 cities and partners with over 12,000 restaurants. She also talked about JUST EAT was launched in Denmark in 2001 and was traded publicly on the London Stock Exchange. Their Indian business was launched as Hungry Bangalore in 2006. It was renamed in 2011 when JUST EAT acquired a majority share in the business. Today, the company partners with over 2,000 restaurants.

According to **Varsha Chavan, et al, (2015),** the use of smart device based interface for customers to view, order and navigate has helped the restaurants in managing orders from customers immediately. The capabilities of wireless communication and smart phone technology in fulfilling and improving business management and service delivery. Their analysis states that this system is convenient, effective and easy to use, which is expected to improve the overall restaurant business in coming times.

According to **Sheryl E. Kimes (2011),** his study found that perceived control and perceived convenience associated with the online food ordering services were important for both users and non-users. Non-users need more personal interaction and also had higher technology anxiety to use the services.

According to **Serhat Murat Alagoz & Haluk Hekimoglu (2012)**, e-commerce is rapidly growing worldwide, the food industry is also showing a steady growth. In this research paper they have used the Technology Acceptance Model (TAM) as a ground to study the acceptance of online food ordering system. Their data analysis revealed that the attitude towards online food ordering vary according to the ease and usefulness of online food ordering process and also vary according to their innovativeness against information technology, their trust in e- retailers and various external influences.

Boyer and Hult(2005) said that the Behavioral Scoring Model which says that the companies analyzes the feedback surveys of the customers, studies their purchasing behavior and patterns and predict the future purchasing behaviors of the customers. This research model comprises of few elements which helps the company to achieve good results.

Vijayasarathy (2004), in his research used a sample of 281 consumers to test a model of consumer intention to use online shopping. The study discovered similarity, handiness, usability, and security to be noteworthy indicators of attitude towards online shopping, however protection was most certainly not. Another finding demonstrated that expectation to use online shopping was firmly influenced by attitude toward online shopping, standardizing convictions, and self-viability.

Research Methodology

The purpose of present research is to explore the impact of online food buying habits on consumer satisfaction in NCR and, also to explore the factors which influence them.

Moreover, there are five objectives of the present research, which are:

- To identify the common factors to explain the satisfaction among the given set of variables.
- To determine the customer satisfaction towards online food ordering.
- To identify the factors which influence his decisions while ordering food online.
- To identify the problems faced by the customers while ordering food online.
- To deduce future prospects of online food ordering sector and offer recommendations to the segment.
  Hypothesis will be the starting point of present research.

H_{01}: The efficiency and cost effectiveness has no significance relationship with consumer satisfaction toward online food buying habits.

H_{02}: The services and updates has no significance relationship with consumer satisfaction toward online food buying habits.

H_{03}: The food buying frequency has no significance association with services and updates toward online food buying habits.

H_{04}: The food buying frequency has no significance association with food quality toward online food buying habits.

H_{05}: The food buying frequency has no significance association with payment options toward online food buying habits.

Research Design

Saunders et al. (2009) mentioned that the research design could be divided into two types: descriptive and explanatory. Descriptive study aims to form an accurate representation of person, events or situation where the problem is well known (Saunders et al. 2009; Ghauri & Gronhaug, 2005). Moreover, as described by Kinnear and Taylor (1996), a descriptive conclusive research design is to illustrate the marketing phenomena characteristics and determine how much the marketing variables could be involved.

(Saunders et al., 2009; Robson, 2002). On the other hands, explanatory study focuses on establishing relationships between variables by studying a problem or a situation

(Saunders et al., 2009). It is also called causal study which explains the cause-effect relation and the extent of it (Ghauri & Gronhaug, 2005).

Therefore, our study will start from descriptive, and then explanatory by gathering and studying the existing theories about our topic in order to understand the related phenomenon, followed by structuring specific theories and information in order to come out with specific hypotheses, test them, and then examine the relationship between the variables studied, as well as to measure outcomes.

Sample Design Sampling

Easterby-Smith, M. et al. (2008:213) states that the purpose of collecting data from a sample is to enable the researcher to make statements about the population that the sample is drawn from, which absolutely depend on the relationship between the target sample and the actual population. The decision of sampling should be considered as an important and very first step of gathering relevant data. Sampling unit and sampling size have to be decided carefully.

Sample Size

Hooley and Hussey (1999) stated that in quantitative analysis the sample size does not have to be measured relative to the population size. The validity of the study will only be increased by the quality and the representativeness of the sample. The sample size does not have to be as large as for frequently purchased products, such as food and drinks, a small sample could also represent the population (West, 1999). Thus, we decided to collect at least 279 questionnaires from the respondents who are the current user of Online Food Buying Platforms.

Sampling Method

Non-probability samples are "a sampling method in which the researchers select specific elements from the population with non-randomness", moreover, "no randomness results when population elements are selected on the basis of convenience – because they are easy of inexpensive to reach". (McDaniel & Gates, 2008:334) Considered its cheaper process and easy and quick to reach and collect than probability sampling (McDaniel & Gates, 2008), non- probability sampling is the sampling method of our study. This non-probability sampling can also save time.

Data can be collected more quickly than with probability sampling. I have considered my target respondents as current online food buying platform users with the age range from Below or 18 to 60 years old. And also designed specific questions in the questionnaire to double check if the respondents are within our selected sample range.

Data Collection

Primary and secondary data collection

Using secondary data is more time efficient (Kerin et al., 2003) and it can "facilitate the decision making for the researchers because as it provides a better understanding of a situation or phenomenon" (Smith & Albaum, 2005). However, Ghauri & Gronhaug (2005) indicated that secondary data refers to all previous collected data within the subject. Because this kind of data is not directly applicable to all studies, it is important to construct secondary data for matching different study purpose before using it to avoid possible information bias.

In our study, a combination of primary and secondary data collection has been used.

The primary data refers to the result which we will be gathered by conducting my own questionnaire. Survey questionnaires composes of 10 close-ended questions. Question format consists of five rating Likert-type scales. The questions consist of multiple choice, check box and Matrix method. The questionnaires are designed in the English language and are divided into two main parts as following;

Part 1 - Ask respondents about their gender, age, house hold and income. It composes of 6 questions (Q 1-6).

Part 2 - Factors influencing consumer satisfaction towards various online food buying formats based on the related theories, Attitude, brand, perception, intention and satisfaction which compose of 3 questions (7-9).

The secondary data refers to the information and data that are gathered from internet and articles regarding to Online Food purchase decision making. They have not been analyzed but are used to conduct our questionnaires.

Data Analysis

H_{01}: The efficiency and cost effectiveness has no significance association with consumer satisfaction toward online food buying habits.

Variables

1. **Satisfaction Score:** Satisfaction score of consumer based on initial 24 variables

Data Type: Ordinal

2. **Efficiency and Cost Effectiveness:** Variable to measure consumer satisfaction

    Data Type: Ordinal

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	252.738[a]	17	.000
Likelihood Ratio	183.495	17	.000
Linear-by-Linear Association	121.522	1	.000
N of Valid Cases	279		

a. 20 cells (55.6%) have expected count less than 5. The minimum expected count is .46.

Table 1.2 – Chi-square test (Satisfaction Score * Efficiency and Cost Effectiveness)

Directional Measures					
			Value	Asymptotic Standard Error[a]	Approxima te T[b]
Ordinal by Ordinal	Somers' d	Symmetric	.360	.026	6.906
		Satisfaction Score Dependent	.220	.031	6.906
		Efficiency and Cost Effectiveness Dependent	.996	.002	6.906

Table 1.3 – Directional Measures (Satisfaction Score * Efficiency and Cost Effectiveness) **Satisfaction Score * Efficiency and Cost Effectiveness:** This table in the final output shows us the observed and expected values for our respective frequencies.

Chi Square Test: This shows us the values of the following terms:

1. **Cross Tabulation**

This provide a basic picture of the interrelation between two variables and can help find interactions between them. This table shows the actual count and the expected count. This shows the various possibilities that can be formed. It contains the summarized information of the sample data.

2. **Pearson Chi-square**

a) **Value:** Value of 252.738 represents our df and significance value in Chi-square table.

b) **Df:** It is the degree of freedom which counts the number of variables.

c) **Asymptotic Significance:** It is the p-value. A value of .000 signifies that as per the given data, association between satisfaction score and efficiency and cost effectiveness is significant.

From the chi-square test we can see that the significance value is .000 which is less than .05. This means that the null hypothesis is rejected. That means there is association between satisfaction score and effectiveness and cost efficiency.

3. **Directional Measures**

d) **Somers'd Value:** A value of .360 shows that satisfaction score and efficiency and cost effectiveness are related by 36% or satisfaction score explain the value of efficiency and cost effectiveness by 36%.

    e)   **Approximate significance:** Value of .000 suggests that our result is significant. In the table depicting directional measures, we can see that the significance value is .000 which is less than .05. Therefore, we reject the null hypothesis.

H02: The services and updates has no significance association with consumer satisfaction toward online food buying habits.

Variables

1. **Food Buying Frequency:** How frequently the customer buys the food through online platform.

    Data Type: Nominal

2. Services and Updates: Variable to measure consumer satisfaction
Data Type: Ordinal

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	144.918[a]	11	.001
Likelihood Ratio	112.354	11	.001
Linear-by-Linear Association	63.893	1	.001
N of Valid Cases	279		

a. 13 cells (54.2%) have expected count less than 5. The minimum expected count is .46.

Table 1.4 – Chi-square Test (Satisfaction Score * Services and Updates)

Directional Measures					
			Value	Asymptotic Standard Error[a]	Approximat e T[b]
Ordinal by Ordinal	**Somers' d**	**Symmetric**	.304	.027	6.450
		Satisfaction Score Dependent	.188	.029	6.450
		Services and Updates Dependent	.797	.044	6.450

Table 1.5 – Directional Measures (Satisfaction Score * Services and Updates)

Satisfaction Score * Services and Updates: This table in the final output shows us the observed and expected values for our respective frequencies.

1. Pearson Chi-square

a) **Value:** Value of 144.918 represents our df and significance value in Chi-square table.

b) **Df:** It is the degree of freedom which counts the number of variables.

c) **Asymptotic Significance:** It is the p-value. A value of .001 signifies that as per the given data, association between satisfaction score and services and updates is significant.

From the chi-square test we can see that the significance value is .001 which is less than .05. This means that the null hypothesis is rejected. That means there is association between satisfaction score and services and updates.

2. Directional Measures

d) **Somers'd Value:** A value of .304 shows that satisfaction score and services and updates are related by 30% or satisfaction score explain the value of services and updates by 30%.

e) **Approximate significance:** Value of .001 suggests that our result is significant. In the table depicting directional measures, we can see that the significance value is .001 which is less than .05. Therefore, we reject the null hypothesis.

H_{03}: The food buying frequency has no significance association with services and updates toward online food buying habits.

Variables

1. Food Buying Frequency: How frequently the customer buys the food through online platform.

Data Type: Nominal

2. Services and Updates: Variable to measure consumer satisfaction
Data Type: Ordinal

Chi-Square Tests			
	Value	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	95.395[a]	33	.003
Likelihood Ratio	108.461	33	.003
Linear-by-Linear Association	2.178	1	.140
N of Valid Cases	279		

a. 26 cells (54.2%) have expected count less than 5. The minimum expected count is .11.

Table 1.6– Chi-square Test (Food Buying Frequency * Services and Updates

Symmetric Measures			
		Value	**Approximate Significance**
Nominal by Nominal	**Phi**	.585	.001
	Cramer's V	.338	.001
N of Valid Cases		279	

Table 1.7 – Symmetric Measures (Food Buying Frequency * Services and Updates)

Food Buying Frequency * Services and Updates: This table in the final output shows us the observed and expected values for our respective frequencies.

1. Pearson Chi-square
a) **Value:** Value of 95.395 represents our df and significance value in Chi-square table.
b) **Df:** It is the degree of freedom which counts the number of variables.
c) **Asymptotic Significance:** It is the p-value. A value of .003 signifies that as per the given data, association between food buying frequency and services and updates is significant.
From the chi-square test we can see that the significance value is .003 which is less than .05. This means that the null hypothesis is rejected. That means there is association between food buying frequency and services and updates.

2. Symmetric Measures
d) **Cramer's Value:** A value of .338 shows that food buying frequency and services and updates are related by 33% or food buying frequency explain the value of services and updates by 33%.
        e)   **Approximate significance:** Value of .001 suggests that our result is significant. In the table depicting Symmetric measures, we can see that the significance value is .001 which is less than .05. Therefore we reject the null hypothesis.

H$_{04}$: The food buying frequency has no significance association with food quality toward online food buying habits.

Variables

1. **Food Buying Frequency:** How frequently the customer buys the food through online platform.
   Data Type: Nominal
2. **Food Quality:** Variable to measure consumer satisfaction
   Data Type: Ordinal

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	249.736[a]	39	.000
Likelihood Ratio	182.279	39	.000
Linear-by-Linear Association	4.664	1	.031
N of Valid Cases	279		

a. 35 cells (62.5%) have expected count less than 5. The minimum expected count is .11.

Table 1.8 – Chi-square Test (Food Buying Frequency * Food Quality)

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.946	.000
	Cramer's V	.546	.000
N of Valid Cases		279	

Table 1.9 – Symmetric Measures (Food Buying Frequency * Food Quality)

Food Buying Frequency * Food Quality: This table in the final output shows us the observed and expected values for our respective frequencies.

Chi Square Test: This shows us the values of the following terms

1. **Pearson Chi-square**
a) **Value:** Value of 249.736 represents our df and significance value in Chi-square table.
b) **Df:** It is the degree of freedom which counts the number of variables.
c) **Asymptotic Significance:** It is the p-value. A value of .000 signifies that as per the given data, association between food buying frequency and food quality is significant.
   From the chi-square test we can see that the significance value is .000 which is less than .05. This means that the null hypothesis is rejected. That means there is association between food buying frequency and food quality.
d) **Symmetric Measures**
e) **Cramer's Value:** A value of .546 shows that food buying frequency and food quality are related by 54% or food buying frequency explain the value of food quality by 54%.
   f) Approximate significance: Value of .000 suggests that our result is significant. In the table depicting Symmetric measures, we can see that the significance value is .000 which is less than .05. Therefore we reject the null hypothesis.

H$_{05}$: The food buying frequency has no significance association with payment options toward online food buying habits.

Variables

1. **Food Buying Frequency:** How frequently the customer buys the food through online platform.
   Data Type: Nominal
2. **Payment Options:** Variable to measure consumer satisfaction

Data Type: Ordinal

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.938[a]	6	.063
Likelihood Ratio	12.542	6	.051
Linear-by-Linear Association	.138	1	.710
N of Valid Cases	279		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is .57.

Table 1.10 – Chi-square Test (Food Buying Frequency * Payment Options)

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	.207	.063
	Cramer's V	.146	.063
N of Valid Cases		279	

Table 1.11– Symmetric Measures (Food Buying Frequency * Payment Options)

Food Buying Frequency * Payment Options: This table in the final output shows us the observed and expected values for our respective frequencies.

1. **Pearson Chi-square**
a) **Value:** Value of 11.938 represents our df and significance value in Chi-square table.
b) **Df:** It is the degree of freedom which counts the number of variables.
c) **Asymptotic Significance:** It is the p-value. A value of .063 signifies that as per the given data, association between food buying frequency and Payment options is not significant.

From the chi-square test we can see that the significance value is .063 which is more than .05. This means that the null hypothesis is accepted. That means there is no association between food buying frequency and payment options.

d) **Symmetric Measures**
e) **Cramer's Value:** A value of .146 shows that food buying frequency and payment options are related by 14% or food buying frequency explain the value of payment options by 14%.
f) **Approximate significance:** Value of .063 suggests that our result is not significant.

In the table depicting Symmetric measures, we can see that the significance value is .063 which is more than .05. Therefore, we accept the null hypothesis.

In the table depicting Symmetric measures, we can see that the significance value is .000 which is less than .05. Therefore, we reject the null hypothesis.

Recommendations:
1. The food delivery apps should explore untapped geographic locations as even today many places do not have sufficient access to such services.
2. Bring in more efficient service personnel to seem into the matter of delay in delivery.
3. A better customer helpdesk and service follow up is essential to resolve any issue on part of the customer
4. User-friendly interface on a mobile application or website would further help establish a convenient food ordering process and increase in number of users who find it tough to handle.
5. Food apps should can improve their payment options so that consumers don't hesitate while making payment online.

6. They should provide more offers as customers are mainly using these apps or platform to avail offers.

7. People with other occupation like Service, Business, and self-employed they lack time to cook and since they have to get back on their busy lives, electronic food ordering should be made convenient for them using various gadgets.

8. Restaurants operators should increase online ordering through simple addition of new distribution channels to attract the customers. Customers face a lot of challenges as the site is slow. Thus the restaurant operators and online food buying platforms must know some techniques to place the order quickly and effectively.

9. Marketers should also design such strategies so that consumers also consider other variables as shown in this study for buying online food. Other age people must be encouraged to buy online food age and such offers must be made available to them.

Limitations & Scope of the Study

This research can present interesting and insight into impact of online food buying habits on consumer satisfaction. However, there are also some limitations.

Firstly, the sample size of online food buyers in this research are only 279 respondents, which might be considered too small number to represent the whole population of online food buyers aged below or 60 Years. If this research could add in more respondents, it would be a better way to represent and generalize the online food buyers aged below or 60 Years in general.

Secondly, when conducting online survey, researchers can encounter the sampling limitation. Since the online questionnaires of this research are sent out via online communities of targeted respondents, aside from demographic information, others information might be questionable. Thirdly, some respondents might fill in the questionnaire without thoroughly read the question. As a result, the validity of the research might be problematic. Thus, in order to overcome of this survey method, replication of the questionnaire is needed. The questionnaires are sent to similar type of online communities (similar communities in Facebook) so that the researchers can gain a reliable picture of online targeted respondents.

Fourthly, this research data was collected from the current online food buyers in different cities of India. This might be too broad for the research findings to represent online food buyers within certain country. If this research could conduct and compare between different cultural backgrounds, the result might be able to illustrate better coverage of online food buyers.

Fifthly, because this research employed quantitative methodology as the tool, the results are shown in quantifications rather than insightful statements. This method of research cannot gain more insights from the respondents, though the research found some interesting figures. If the research combines quantitative with qualitative methodology, the detailed and deeper information could be obtained and used to supports the quantitative findings. Furthermore, the qualitative method might lead to more interesting results that could be useful for both academic and professional use of impact of online food buying habits on consumer satisfaction.

Finally, this research aims to explore the difference between genders of the reference groups within respondents who aged 25 – 34. Even though the research does present some different regarding gender difference, it might be too specific to filter the respondents only by age. If other demographic factors such as income, social class, nationality, and occupation were used to categorize the respondents, since the perception of gender might be different depended on different background of people, the result of the study might come out different and also useful.

Conclusion:

This study has shown that perceived control and convenience are sources to customer use of online ordering which leads to higher satisfaction. The study reveals that youngsters especially students are more motivated by the digital food delivery system as related to elder people. The study poses discount/cashback as the most influencing factor in digital food ordering. The second most influencing factor is door delivery. The changing lifestyle of the consumers and the expansion of digital activity in India has undoubtedly transformed the tendencies in the digital food ordering scenario.

The chief reasons of electronic ordering are efficiency and cost effectiveness, services and updates, food quality and app/website interface. The single most important attribute of electronic ordering is time saving. This study found that online food ordering is reasonably popular among the residents. More than 95 percent of the respondents were aware of the electronic food ordering. Customers between 19-30 years of age ordered more

electron food and it was often ordered as they didn't want to cook especially during the weekends. Customers who evaluate service quality based on interactions with employees won't want to use self- service ordering. Similarly, customers who were uncomfortable with technology may be reluctant to try an electronic self-service site because they may be afraid of getting tangled up in the technology.

This study has shown that perceived control and convenience are keys to customer use of online ordering which leads to higher satisfaction. My findings indicate that restaurant operators should focus on giving their customers higher levels of perceived control and convenience, since these are associated with a higher intent to use online ordering in the future. Young customers are more likely to use online, or mobile ordering. Young customers place a greater value on convenience and speed than older users do.

In the present study mostly students prefer to order food online instead of going out. They feel the ease of Placing Orders and time efficiency as the main reason to prefer it. Similarly, customer satisfaction has a positive influence on customer retention and mediates the relationship between service quality and customer retention. The results of this study suggest that service quality not only enhances customer satisfaction, but also leads to customer retention. The chief reasons of electronic ordering are efficiency and cost-effectiveness, services and updates, food quality, and app/website interface. The single most important attribute of online food ordering is time-saving.

Reference:
1. Ali, S.; Khalid, N.; Javed, H.M.U.; Islam, D.M.Z. Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation. *J. Open Innov. Technol. Mark. Complex.* **2021**, *7*, 10.
2. Suryadev Singh Rathore, Mahik Chaudhary "Consumer's Perception on Online Food Ordering."(2018) ijmbs volume 8, issue 4. ISSN: 2230-9519 (Online) | ISSN: 2231- 2463 (Print).http://www.ijmbs.com/Vol8/issue4/2-suryadev-singh-rathore.pdf
3. Anh Kim Dang (2018) "Consumer Preference and Attitude Regarding Online Food Products in Hanoi, Vietnam" – International journal for Environment Research and Public Health May 2018 15(5).
4. Adithya R., Abhishek Singh, Salma Pathan & Vaishnav Kanade (2017), "Online Food Ordering System", International Journal of Computer Applications (0975 – 8887), Volume 180 – No.6, December 2017.
5. Dr. Neha Parashar & Ms. Sakina Ghadiyal (2017)i, A Study on Customer's Attitude and Perception towards Digital Food App Services, Amity Journal of Management, Jan-2017.
6. Sainath Reddy K, Chaitanya KGK, Abhinav M and Feiroz Khan TH (2016) "An Online Food Court Ordering System" – Open Access Journal
7. H.S. Sethu, Bhavya Saini, "Customer Perception and Satisfaction on Ordering Food via Internet, a Case on Foodszoned.Com, in Manipal", Published by, [Online] Available: http://www.globalbizresearch.org.
8. Serhat Murat Alagoz & Haluk Hekimoglu (2012), "A study on TAM: Analysis of customer attitudes in online food", Procedia - Social and Behavioral Sciences 62 (2012) pp. 1138 – 1143
9. Suhartanto, D.; Helmi Ali, M.; Tan, K.H.; Sjahroeddin, F.; Kusdibyo, L. Loyalty toward online food delivery service: The role of e-service quality and food quality. *J. Foodserv. Bus. Res.* **2019**, *22*, 81–97.
10. Sjahroeddin, F. The Role of E-S-Qual and Food Quality on Customer Satisfaction in Online Food Delivery Service. 2018.
11. Statista, Retail E-Commerce Sales Worldwide from 2014 to 2023. 2020. Available online:
12. Abramovich, G. 15 Mind-Blowing Stats about Online Shopping in 2019. 2019. Available
13. Rahman, M.A.; Islam, M.A.; Esha, B.H.; Sultana, N.; Chakravorty, S. Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh. *Cogent Bus. Manag.* **2018**, *5*, 1–22.
14. Baubonienė, Ž.; Gulevičiūtė, G. E-commerce factors influencing consumers 'online shopping decision. *Soc. Technol.* **2015**, *5*, 74–81.
15. Wen, C.; Prybutok, V.R.; Xu, C. An integrated model for customer online repurchase intention. *J. Comput. Inf. Syst.* **2011**, *52*, 14–23.
16. Jusoh, Z.M.; Ling, G.H. Factors influencing consumers' attitude towards e-commerce purchases through online shopping. *Int. J. Humanit. Soc. Sci.* **2012**, *2*, 223–230.
17. Roh, M.; Park, K. Adoption of O2O food delivery services in South Korea: The moderating role of moral obligation in meal preparation. *Int. J. Inf. Manag.* **2019**, *47*, 262–273.
18. Gao, S.; Tang, O.; Wang, H.; Yin, P. Identifying competitors through comparative relation mining of online reviews in the restaurant industry. *Int. J. Hosp. Manag.* **2018**, *71*, 19–32.
19. Yeo, V.C.S.; Goh, S.K.; Rezaei, S. Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *J. Retail. Consum. Serv.* **2017**, *35*, 150–162.
20. Dospinescu, N.; Dospinescu, O.; Tatarusanu, M. Analysis of the Influence Factors on the Reputation of

Food-Delivery Companies: Evidence from Romania. *Sustainability* **2020**, *12*, 4142.

21. Statista, Online Food Delivery. 2020. (accessed on 15 August 2020).
22. Gunden, N.; Morosan, C.; DeFranco, A. Consumers' intentions to use online food delivery systems in the USA. *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 1325–1345.
23. Wei, L.H.; Osman, M.A.; Zakaria, N.; Bo, T. Adoption of e-commerce online shopping in Malaysia. In Proceedings of the IEEE 7th International Conference on E-Business Engineering, Shanghai, China, 10–12 November 2010; pp. 140–143
24. Digital Pakistan. Digital 2020: Pakistan—DataReportal–Global Digital Insights. 2020.
25. Gallup Pakistan. How did you order/deliver food at home. 2020.
26. Belanche, D.; Flavián, M.; Pérez-Rueda, A. Mobile Apps Use and WOM in the Food Delivery Sector: The Role of Planned Behavior, Perceived Security and Customer Lifestyle Compatibility. *Sustainability* **2020**, *12*, 4275.
27. Ali, S.; Ullah, H.; Akbar, M.; Akhtar, W.; Zahid, H. Determinants of Consumer Intentions to Purchase Energy-Saving Household Products in Pakistan. *Sustainability* **2019**, *11*, 1462.
28. Parasuraman, A.; Colby, C.L. An Updated and Streamlined Technology Readiness Index. *J. Serv. Res.* **2015**, *18*, 59–74.
29. Annaraud, K.; Berezina, K. Predicting satisfaction and intentions to use online food delivery: What really makes a difference? *J. Foodserv. Bus. Res.* **2020**, *23*, 305–323.
30. Ray, A.; Dhir, A.; Bala, P.K.; Kaur, P. Why do people use food delivery apps (FDA)? A uses and gratification theory perspective. *J. Retail. Consum. Serv.* **2019**, *51*, 221– 230.
31. Sultan, P.; Tarafder, T.; Pearson, D.; Henryks, J. Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: Moderating