FACTORS INFLUENCING CONSUMER BEHAVIOR OF SWIGGY & ZOMATO

by

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Abstract: *Process of people choosing eateries and order food changed due to modern technology usage on online food ordering streams. The sector changed as a result of technological advancements, internet penetration, and increased smartphone usage. Zomato's founders introduced a platform that allowed users to easily browse menus of a variety of food from different restaurants, order online, and have orders delivered at doorstep, it was a novel idea in India. Another unicorn followed suit and interrupted the online services for ordering food, and 2014 saw rise of Swiggy as a basic food aggregator, emphasising its tactics and organising. Swiggy prioritises building a robust delivery network and a quick, technologically savvy, logistic prominent growth. It began as a directory of foods and grew in popularity in Delhi NCR. In nine months, website evolved in several cities, like Mumbai, Kolkata, Chennai, etc.. Zomato increased its global footprint in 2012 in numerous nations, including the Philippines, Sri Lanka, the UK, and the UAE.*

Keywords: Online Food delivery Market, Zomato, Swiggy,

INTRODUCTION:

Many companies in the food sector have emerged both nationally and globally in recent years, especially in densely populated countries like India. However, in the aftermath of the recent tremendous urbanisation and globalisation, the food sector restructured itself to provide all public services under one roof, at the convenience of the consumer. India's food industry grew from a modest family job to a full-fledged business. Over the past few years, a number of inventive technological applications have transformed the dining experience. It got simpler for everyone to have meals delivered with just a few clicks thanks to advancements in technology and the emergence of a few internet-based meal delivery businesses. The current situation of the global economy makes sense, given the rising importance and role of the assistance sector in the economies of developing countries. Moreover, countries continuously had an industrialization from horticultural economies shift. They helped to change how people saw work and products, removing the notion that the privileged were only available to a select few. Everyone is currently viewed as almost equal in any goods agreements.

REVIEW OF LITERATURE

1. Rushal Mudgal, Dr. Pooja Rana (2023)[1], A case study comparing Swiggy and Zomato, two of the most popular meal delivery apps in India, examined how people's restaurant and food ordering decisions are impacted by contemporary technology. Online food services have emerged as a result of technology improvements, smartphone usage, and the rise of the internet. After observing a long line for food one day, the founders of Zomato, a website that allowed users to browse restaurant menus and have meals delivered straight to their door, decided to address the issue and launch Foodiebay, the original Zomato brand, which has grown rapidly since 2008. The website gained popularity in just nine months, reaching cities like as Delhi, Bengaluru, Chennai, Mumbai, Kolkata, and so on. It steadily advanced in terms of online table bookings and restaurant location, all the while retaining a growing customer base. In 2014, Swiggy, an online food platform, launched, focusing on strategy and logistics to replicate the success of its predecessor. It prioritises reliable delivery networks and quick, technologically advanced logistics networks; one of its favoured tactics is to offer credit for orders that are cancelled after they are placed. Customers can, however, cancel purchases if they are not delivered on time. Real-time tracking is provided by delivery partners using GPS.

2. Debajyoti Pal, Suree Funilkul, Wichai Eamsinvattana & Saeed Siyal (2022)[2], During the COVID-19 shutdown, internet food delivery applications (OFDA) were utilised. What motivates college students' loyalty and contentment, according to OFDA, a newly developed online-to-offline (O2O) service delivery platform. During the pandemic, apps allowed customers to order food from the comfort of their homes, which helped the restaurant and catering industries prosper. As a result, assessing the overall quality of the service is crucial, from the user's experience utilising the OFDA applications to search for and purchase meals to the last mile of food and delivery quality. Three aspects of mobile applications are used to record users' initial encounters with OFDA apps: information, navigation, and visual designs. Loyalty and customer pleasure are regarded as dependent factors. An online survey is used to gather information from 315 Indian university students who have used various OFDA applications throughout the epidemic. The PLM-SEM technique was utilised for data analysis, and the results indicate that food quality is the second-best predictor of loyalty after satisfaction. Information design, as opposed to navigational and visual design, has the greatest influence on user happiness and loyalty among mobile app qualities. Appropriate theoretical and practical consequences were addressed and proposed in light of the findings.

3. Kian Yeik, Koay, Cheah, Henry, Chang, and Yi (2022)[3], The impact of online food delivery (OFD) service quality on customer satisfaction and customer loyalty was investigated in the study "A model of online food delivery service quality, customer satisfaction, and customer loyalty: A combination of PLS-SEM and NCA approaches." It used a sample of 307 usable data that was gathered from current users in Malaysia to verify through PLM-SEM. analysis of necessary conditions (NCA) was out to determine the prerequisites for

[1] Rushal Mudgal, Dr. Pooja Rana (2023) , Comparison Of Two Most Popular Food Delivery Apps in   India: A Case Study of Swiggy And Zomato, International Journal of Research in Social Sciences, Vol. 13 (2), ²ISSN: 2249-2496 Impact Factor: 7.081,

[2] Debajyoti Pal, Suree Funilkul, Wichai Eamsinvattana & Saeed Siyal (2022) Using online food delivery   Apps in COVID-19 lockdown: What drives University Students' satisfaction and loyalty, Journal of Food service Business Research, Vol. 25:5, pp: 561-605,

[3] Kian Yeik, Koay, Cheah, Henry, Chang, Yi (2022) , "A model of online food delivery service quality, customer satisfaction, and customer loyalty: A combination of PLS-SEM and NCA approaches"

patron loyalty and satisfaction. The five aspects of OFD service quality—assurance, upkeep of food quality and cleanliness, dependability, security, and system operation—have a substantial impact on customer happiness, according to PLS findings. Customer happiness is proven to be significantly unaffected by traceability. Additionally, a key indicator of consumer loyalty is customer satisfaction. The NCA results demonstrate that customer satisfaction is a prerequisite for customer loyalty and that all aspects of OFD service quality are required for achieving customer satisfaction. Prior research has employed the sufficiency logic to comprehend customer loyalty and satisfaction within the framework of OFD. This is the first NCA research to use requirement reasoning to determine the prerequisites for client loyalty and satisfaction.

4. Jha, R. (2022)[4], A new hybrid intelligent method for improving online meal delivery systems' customer relationship management. CRM and multimedia tools have received increased attention as a result of management policies that prioritise customer pleasure. The author suggests a unique Generalised Savitzky-Golay Filter (GS-GF) and Hybrid Self Constructing Neural Fuzzy based African Buffalo Optimisation (HSCFN-ABO) techniques for maintaining customer reviews; the customer's reaction may be positive, negative, or neutral. Nevertheless, customer review maintenance is difficult in the management field due to structured and unstructured data. This innovative method offers a way to categorise consumer feedback according to the topic at hand, such as meal quality, food delivery, or payment concerns. Firstly, the new GS-GF method is used for pre-processing and feature extraction. Following their extraction from the dataset, the features are used in the classification layer by the unique HSCFN-ABO replica to value customer reviews. This research is being carried out using the MATLAB R2018b platform. Using actual datasets from Swiggy, the suggested HSCFN-ABO classification approach in CRM is evaluated. Using several case studies, the suggested technique's CRM performance for customer review data is verified. The relevance of the HSCFN-ABO classifier in CRM applications is further demonstrated by a comparison of the projected HSCFN-ABO method's accuracy, precision, and F measure with many other conventional approaches.

5. Rupinder Katoch and Arpit Sidhu, (2022)[5], A Predilection for Internet Food Aggregators Consumers and the food service industry have adopted food delivery applications (FDAs), which are a continuous progression from offline to web-based portable technologies, in large numbers during COVID-19. Specifically, during the worldwide pandemic of Corona Virus Disease 2019 (COVID-19), they have offered two-way food delivery services at the ground level to protect food firms and attend to the emotional requirements of their clients. Due to its second-largest population, continuous growth of digital infrastructure, and recent improvements in technology adaptation, India is the world's second-largest consumer of food, all of which emphasise the need for more study into the food aggregator industry. This study provides a comprehensive method for measuring customer satisfaction. Research examines the persistent behaviour of 312 rational FDA users in order to quantify crucial elements such as social impact, perceived trust, quality of products and services, and enabling environment during the COVID-19 epidemic in India. The empirical results point to three main variables that drive the continuous usage and customer satisfaction of FDA customers: product

[4] Jha, R. (2022). A novel hybrid intelligent technique to enhance customer relationship management in online food delivery system. Multimedia Tools and Applications, 81, 28583 - 28606.
[5] Rupinder Katoch and Arpit Sidhu, (2022)[5], A Proclivities Towards Online Food Aggregators During Covid-19, Feb'2022, International Journal of Early Childhood Special Education 14(2)

characteristics, perceived trust, and customer satisfaction. The study finds no significant correlations between social influence and facilitating conditions and the other variables mentioned. This research will help educators, scholars, food aggregators, and other relevant patrons evaluate the current exploration and provide direction for future research in the relevant field of knowledge and application of such statistics in any field that can be beneficial.

RESEARCH QUESTIONS

The study aims at analysing the following key points

- What significant factors can influence customers' use of online food delivery services?
- Do customers encounter issues, Challenges, problems using online food services?
- Understand the customer satisfaction levels in using online food delivery services.

RESEARCH METHODOLOGY

The study is based on empirical analysis, data is gathered using primary and secondary sources. Investigation examines consumers' behaviour towards online food delivery apps to understand their behaviour, hence preliminary data analysis is of utmost importance.

Primary Data is collected using a survey method (statured questionnaire) for an overview through conversations to understand the nature and social perception of Demographic profile, Factors influencing consumer behaviour on Traditional and digital forms including the impact of Covid-19, Measurement of consumer satisfaction using the RATER model and To analyze consumer issues and challenges of online food delivery services.

Secondary Data plays key role, and its part is a logical stage. The secondary data is gathered through auxiliary sources like existing articles, reports, sites, Journals, surveys, Statistical locales, Newspapers, and magazines.

Sample Selection includes responses of sample respondents of Hyderabad city, residents of last three (3) years, using internet-based food conveyance applications throughout the last two years of Zomato and Swiggy, as these two are well-known food conveyance apps and are primarily used apps for faster deliveries. They are also reputed and reliable over the other national and local firms in a similar business.

Sampling Technique: Due to enormous size of inhabitants in the geographical area and extensive heterogeneous nature, purposive sampling is considered. Sample is considered from the GHMC area through various modes (like in-person, online consultations, google forms, etc.) through a structured questionnaire consisting of open-ended questions on a 5-point Likert scale to understand better their demographic, geographic, likeliness and unlikeliest use of food delivery platforms for interpreting overall perceptions.

The paper, discusses on the factors that influence consumer behaviour of the online food delivery firms of 474 sample respondents' responses. The study, after a careful pilot study, chose to adopt a preliminary study through a systematic and structured questionnaire distributed among the sample respondents through various modes of communication. It was collected with valid 474 samples for further analysis. Data is codified as necessary and exported to statistical software for further analysis. Tools used are Cronbach's Alpha to check for the consistency of data, factor analysis, Chi-Square test, correlation etc.

FACTOR COMPONENTS:

All factors are tabulated under 4 (four) components, based on characteristics and features,. Cronbach's Alpha coefficients for each component show reliability and consistency of items within that particular categories. Reliability analysis makes sure that survey items accurately capture desired structures and establishes a firm basis for examining customer satisfaction and its drivers across various features of food delivery applications. Components are divided based on the parameter outcomes divided into

A) **Food and Pricing Component:** Food and pricing includes factors of food quality, food freshness, taste, food packaging/handling, payment systems reliability, better price, and offers and discounts. Cronbach's Alpha value of 0.875 indicate strong internal consistency among 7 items/elements, showing that consumer feedback on food quality and cost is trustworthy and credible.

B) **Social Factors Component:** It includes socially related factors like customer influence by friends and family, impulsive buying in response to the Ads and notification pop-ups presentation attractiveness on online platform when browsing. Cronbach's Alpha of 0.892 indicates strong internal consistency among the elements.

A) **Convenience Factor Component:** It includes Convenience factors of 4 parameters; Food delivery Apps are easy to use/Access, Economical and more convenient, and Availability of Variety of food, Availability of more restaurants). Cronbach's Alpha of 0.838, four items.

B) **Time Factor Component:** It includes Working Women at Home, Non-Availability of family members, Food Delivery Apps are Time-saving, Lack of time to prepare/cook food. Cronbach's Alpha is 0.892, indicate items have high degree of internal consistency, demonstrating validity of customer comments on working women's convenience, family members' accessibility, time-saving features, and the limitations of cooking time.

3.1 DEMOGRAPHIC FACTORS

Below tables represent sample respondents' responses of primary study.

Table No: 1.1 Demographic Variables

S NO	Demographic Profile	Particulars	Frequency	Percentage (%)
1	Gender	Male	309	65.2
		Female	165	34.8
		Total	**474**	**100**
2	Age (in Years)	18 to 25 years	128	27
		26 to 30 years	114	24.1
		31 to 35 years	91	19.2
		36 to 40 years	72	15.2
		Above 40 years	69	14.6
		Total	**474**	**100**
3	Education Qualification	Graduation	140	29.5
		Post-Graduation	326	68.8
		Ph.D.	8	1.7
		Total	**474**	**100**
4	Marital Status	Single	247	52.1
		Married	227	47.9
		Total	**474**	**100**

5	Family Size (Members)	2 Members	29	6.1
		3 to 4 Members	275	58
		above 4 Members	170	35.9
		Total	**474**	**100**
6	Occupation	Student	110	23.2
		Home Makers	83	17.5
		Employees	185	39
		Business	96	20.3
		Total	**474**	**100**
7	Annual Income (in Lakhs)	Upto 2 Lakhs	98	20.7
		2 to 5 Lakhs	157	33.1
		5 to 8 Lakhs	128	27
		Above 8 Lakhs	91	19.2
		Total	**474**	**100**

Source: Primary Data Analysis

Gender: 65.2% were male, and 25.74% female. Gender helps identify, address gender bias, examine differences/inequalities and determine disparities contributing to variations in behaviour, preferences, and experiences.

Age Group: 27% in 18-25 years opted online food delivery aggregators, followed by 24.1% in 26-30 years and over 40 years age group constituted 14.6% (69 respondents).

Qualification drives decision-making aspects, understand, view and decide essential factor reflecting knowledge, expertise, impact, behaviours, attitudes to provide insights. Majority pursued Post-Graduate constituting 68.8% (326 respondents) implying being well educated.

Marital Status, critical in understanding economic situation of family to adjust expenditure by prioritising things. While 52.1% were Single (Unmarried), 47.9% were married.

Family Size, provides valuable information and structure of households, provide insights on family dynamics, needs, socio-behavioural, economic planning, education, health factors, etc,. Majority (58%) had 3-4 members, while 35.9% had over 4 members, and 6.1% had two members, probably newlyweds, friends, residing without their parents.

Occupation, crucial factor influencing food type, apps usage, frequency, amount spent. Employees constituted 39%, students were 23.2%, 20.3% were in business, and 17.5% home-makers, i.e., in many situations, even mothers opted food delivery apps.

Annual income, critical indicator of economic well-being of income distribution, often proxy of socio-economic status indicate distribution of earnings. It is found that 33.1% earned up to 2-5 Lakhs, 27% earned 5-8 Lakhs, 20.7% earned up to 2 Lakhs, 19.2% earned over 8 Lakhs annually opting food delivery apps.

Factors of Online Food delivery Responses:

It's necessary to understand food preference distribution of respondents in the study as detailed in Table 1.2.

Food Preference: Nearly 54.5% chose outside food, probably for different taste. About 45.1% (214 respondents), preferred home food.

Frequency of Dining Outside: 40.9% preferred outside food once a week, 44.5% preferred occasionally and 14.6% preferred outside food once a fortnight.

Belief in using Online Food Delivery Apps: 58.5% were aware on online food deliver aggregator apps, while 27% were not sure, about 14.5% denied on the same.

Food Delivery Apps Usage: 48.5%, used online food apps occasionally, 32.9% used at least a month, 7.2% once a week, 5.3% daily. Over half depended on online food delivery apps at least once a month showing apparent change in lifestyle needs of Hyderabad people.

Frequency of Food Orders in a Month: 83.5% respondents used food delivery apps 1-3 times a month, while 8.9% used over eight times a month, about 5.3% used between 6-8 times a month and about 2.3% used the online food aggregator apps 3 to 6 times a month.

Online Delivery Apps Usage Age: About 39.9% used online food delivery aggregator apps since last 2 (two years), while 25.9% used since last 2-3 years, 28% used since last 3-5 years, 6.1% used online food provider aggregator apps for over last five years.

Table: 1.2 Factors of Online Food Delivery Apps

S No	Factor	Description	Respondent Frequency	Percent (%)
1	Food Preference	Home Made Food	214	45.1
		Outside Food	260	54.9
		Total	**474**	**100%**
2	Frequency of Dining Outside	Once a Week	194	40.9
		Once in Fortnight	69	14.6
		Occasionally	211	44.5
		Total	**474**	**100%**
3	Belief in using Online Food Delivery Apps	Yes	277	58.5
		No	69	14.5
		Not Sure (Maybe)	128	27
		Total	**474**	**100%**
4	Frequency of Online Food Delivery Apps Usage	Daily	25	5.3
		Once a Week	34	7.2
		Once in Fortnight	29	6.1
		Once a Month	156	32.9
		Occasionally	230	48.5
		Total	**474**	**100%**
5	Frequency of Food Orders in a Month	1-3 Times	396	83.5
		3-6 Times	11	2.3
		6-8 Times	25	5.3
		Over 8 Times	42	8.9
		Total	**474**	**100%**
6	Online Delivery Apps Usage	Since last 2 Years	189	39.9
		2-3 Years	123	25.9
		3-5 Years	133	28.1
		Over 5 Years	29	6.1
		Total	**474**	**100%**
7	Purpose of Using Online Food Delivery Apps	Breakfast	19	4
		Lunch	83	17.5
		Snacks	44	9.3
		Dinner	215	45.4
		All/Any	113	23.8
		Total	**474**	**100%**
8	Amount Spent on Dining Outside (in INR)	Up to 500/-	168	35.4
		500/- to 1,000/-	207	43.7
		1,000/- to 2,000/-	37	7.8
		2,000/- to 3,000/-	62	13.1

			Total	474	100%

#	Category	Option	Count	%
9	Media Knowledge Source of Online Food Delivery Apps	News Paper	33	7
		Internet	271	57.2
		Outdoor Advertisements	39	8.2
		Mouth-to-Mouth advertising	108	22.8
		Television Ads	23	4.9
		Total	**474**	**100%**
10	Convenient platform of Online Channels for ordering Food	Restaurant's Website	103	21.7
		Restaurant's App	31	6.5
		Third-Party Apps	312	65.8
		Third-Party Websites	28	5.9
		Total	**474**	**100%**
11	Most Preferred Online Food Delivery App	Zomato	241	50.8
		Swiggy	233	49.2
		Total	**474**	**100%**
12	Specific Reason for using Particular App	Ease of Use	132	27.8
		Habituated	110	23.2
		Price	25	5.3
		Discounts & offers	53	11.2
		All of the Above	154	32.5
		Total	**474**	**100%**
13	Electronic Device Used for ordering Online Food	Simple Mobile with Internet	41	8.6
		Smart-Phone	417	88
		Desktop/Laptop	16	3.4
		Total	**474**	**100%**
14	Online Delivery Apps Usage	Since last 2 Years	189	39.9
		2-3 Years	123	25.9
		3-5 Years	133	28.1
		Over 5 Years	29	6.1
		Total	**474**	**100%**
15	Occasion of Ordering Food Online	Business Events	19	4
		Special Events	12	2.5
		General	304	64.1
		Cannot Cook	47	9.9
		All of the Above	92	19.4
		Total	**474**	**100%**

Source: Primary Data

Purpose of using Online Food Delivery Apps 45.4% used online food provider aggregator apps for dinner, 23.8% used for any of the purposes (breakfast/lunch/dinner/snacks), while 17.5% used for lunch about 9.3% used for snacks and a mere 4% (19 respondents) ordered food using online food deliver aggregator apps.

Amount Spent on Dining Outside (in INR): About 35.4% spent up to 500/-, while 13.1% spent between 2,000/- to 3,000/-, followed by 7.8% spent between 1,000/- to 2,000/-used online food deliver apps.

Online Food Delivery Aggregators Media Knowledge Source: About 57.2% major source was from Internet, followed by 22.8% of mouth-mouth publicity or Ad, while 8.2% was through outdoor Ads, 7% through newspapers (regional and National), and a mere 4.9% from TV Ads, most preferred source for knowledge of online food delivery firms.

Convenient platform of Online Channel for ordering Food: Nearly 65.8% felt convenient using Third-party Apps (Swiggy, Zomato etc.), followed by 21.7% for particular dish/dishes or due to loyalty to restaurant, while

6.5% were convenient, a mere 5.9% (28 respondents) using third-party websites as least preferred for food through online food delivery firms.

Most Preferred Online Food Delivery App: Delivery fleet ensures prompt and efficient delivery of orders. Among online food ordering and delivery aggregator firms, Zomato was preferred by 50.8%, and Swiggy was preferred by 40.8%.

Specific Reason for using Particular App: Majority preferred specific app for multiple reasons put together by 32.5%, followed by ease of use by 27.8%, while 23.2% chose for ease of use of app, 11.2% preferred availability of multiple discounts and offers, and only 5.3% chose a particular app for lower prices.

Electronic Device Used for ordering Online Food: 88% used smart-phones, 8.6% used simple mobile having internet access, and only a mere 3.4% used desktop/laptop. Majorly 90% respondents used smart-phones, showing respondent awareness of electronic gadget, and help individuals better decide customer awareness levels on online food delivery firms.

Occasion of Ordering Food Online: 64.1% used online food delivery aggregator firms for general purposes, followed by 19.4% for all reasons, while 9.9%, and 4% and 2.5% used online for being not able to cook, business events and other events respectively.

Factors influencing Online Food Orders

Below factors identified to analyse respondent influence of online food orders from a wide range of restaurants and responses recorded on Likert scale of Strongly Disagree, Disagree, neither agree nor disagree (neutral), agree and strongly agree.

Quality is vital: About 41.8% strongly agreed food quality was outstanding, followed by 21.9% agreed that food quality was good, while 20.7% were neutral 12.4% disagreed and a mere 3.2% strongly disagreed quality being good. Thus, about 63.7% agreed that food ordered from a wide restaurants on online platform firms was up to the standards of quality.

Fresh and Edible Food: About 39% (185 respondents) strongly agreed that food ordered from a wide range of restaurants and delivered at doorstep through online platform. About 24.3% agreed, while 19.4% neither agreed nor disagreed and 13.5% disagreed and a mere 3.8% strongly disagreed. Thus, about 63.3% agreed that food ordered at doorstep through online food aggregator firms was fresh and edible to eat.

Table No: 1.4 Factors influencing Online Food Orders

S No	Factors Description	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
1	Quality of food ordered Online is Good	15 (3.2%)	59 (12.4)	98 (20.7%)	104 (21.9%)	198 (41.8%)	474 (100%)
2	Food ordered Online is Fresh and Edible	18 (3.8%)	64 (13.5%)	92 (19.4%)	115 (24.3%)	185 (39%)	474 (100%)
3	Taste of Food ordered Online is Good	18 (3.8%)	72 (15.2%)	30 (6.3%)	155 (32.7%)	199 (42%)	474 (100%)
4	Packing/Handling of Food ordered Online is Good	26 (5.5%)	76 (16%)	79 (16.7%)	113 (23.8%)	180 (38%)	474 (100%)
5	Payment Systems used for Online Food delivery firms are Reliable	45 (9.5%)	63 (13.3%)	124 (26.2%)	150 (31.6%)	92 (19.4%)	474 (100%)

6	Lower Prices availability of price Comparison	25 (5.3%)	31 (6.5%)	120 (25.3%)	157 (33.1%)	141 (29.7%)	474 (100%)
7	OFA used to Avail offers & Discounts	3 (0.6%)	48 (10.1%)	69 (14.6%)	167 (35.2%)	187 (39.5%)	474 (100%)
8	OFA used due to influence of Friends and Family	123 (25.9%)	97 (20.5%)	65 (13.7%)	86 (18.1%)	103 (21.7%)	474 (100%)
9	OFA used due to influence of Advertisements & Notification	104 (21.9%)	118 (24.9%)	69 (14.6%)	73 (15.4%)	110 (23.2%)	474 (100%)
10	OFA used due to influence of Presentations/Plating Attractiveness	74 (15.6%)	75 (15.8%)	90 (19%)	125 (26.4%)	110 (23.2%)	474 (100%)
11	OFA used due to influence of Reviews and Ratings	92 (19.4%)	96 (20.3%)	57 (12%)	82 (17.3%)	147 (31%)	474 (100%)
12	OFA used due to their easy access/Accessible Ease	43 (9.1%)	58 (12.2%)	88 (18.6%)	174 (36.7%)	111 (23.4%)	474 (100%)
13	OFA used for being Economical & Convenient	50 (10.5%)	71 (15%)	86 (18.1%)	135 (28.5%)	132 (27.8%)	474 (100%)
14	OFA used due to availability of a Variety of Food	39 (8.2%)	69 (14.6%)	83 (17.5%)	155 (32.7%)	128 (27%)	474 (100%)
15	OFA used due to availability of Multiple Restaurants	57 (12%)	88 (18.6%)	170 (35.9%)	93 (19.6%)	66 (13.9%)	474 (100%)
16	OFA used due to Working Women at Home	30 (6.3%)	120 (25.3%)	108 (22.8%)	184 (38.8%)	32 (6.8%)	474 (100%)
17	OFA due to No Family Members at	31 (6.5%)	126 (26.6%)	117 (24.7%)	169 (35.7%)	31 (6.5%)	474 (100%)
18	OFA used as they are Time-Saving	37 (7.8%)	116 (24.5%)	127 (26.8%)	166 (35%)	28 (5.9%)	474 (100%)
19	OFA used due to lack of Time for Cooking Food	72 (15.2%)	144 (30.4%)	166 (35%)	51 (10.8%)	41 (8.6%)	474 (100%)

Source: Primary Data Analysis   OFA-Online Food Apps

Tasty and Good Food: About 42% strongly agreed, while 32.7% agreed, and 6.3% neither agreed nor disagreed, while 15.2% disagreed a mere 3.8% strongly disagreed. Thus, it's clear that about 74.7% agreed that food ordered through online platform was tasty.

Food Packaging/Handling About 38% strongly agreed that food packaging was good, while 23.8% agreed, 16.7% were neutral, 16% disagreed and a mere 5.5% strongly disagreed.

Reliability of Payment System: About 19.4% strongly agreed that online food aggregator firms were reliable on payment systems, followed by 31.6% agreed, while 26.2% responded neutrally, 13.3% disagreed and 9.5% strongly disagreed.

Availability of Lower Prices/Price Comparisons: About 29.7% strongly agreed and 33.1% agreed, while 25.3% responded neutrally, 6.5% and 5.3% disagreed and strongly disagreed respectively. Thus, 62.8% agreed using online food delivery.

Offers and Discounts: About 39.5% strongly agreed, 35.2% agreed, while 14.6% neither agreed nor disagreed, about 10.1% disagreed, and a mere 0.6% strongly disagreed. Overall 74.7% agreed using online food apps and availed app services for offers and discounts.

Influence of Friends and Family: About 21.7% strongly agreed followed by 18.1% agreed, while 13.7% were neutral, about 20.5% disagreed and 25.9% strongly disagreed. Thus, about 39.8% agreed to be influenced by online food orders from among wide range of available restaurants delivered at doorstep through online food aggregator firms.

Influence of Advertisements and Notifications: About 23.2% strongly agreed using online food orders due to influence of Ads and notifications, 15.4% agreed, while 14.6% were neutral, about 24.9% disagreed and 21.9% strongly disagreed. Thus, about 38.6% agreed being influenced by Ads and notifications for online food orders.

Influence of Presentations or Plating attractiveness: 23.2% strongly agreed getting influenced due to presentations and plating of attractiveness, followed by 26.4% due to presentations and plating of attractiveness, 19% neither agreed nor disagreed, while 15.8% disagreed, 15.6% strongly disagreed, and 49.6% agreed on the same.

Influence of Reviews and Ratings: 31% strongly agreed, followed by 17.3%, agreed 12% neither agreed nor disagreed, 20.3%, disagreed and 19.4% strongly disagreed using online food orders influenced by reviews and ratings. Hence, about 48.3% agreed using online food orders through online platform influenced due to the reviews and ratings on the food apps.

Ease of Use of Apps/Ease of Apps Access: About 23.4% strongly agreed, 36.7% agreed, while 18.6% were neutral, 12.2% disagreed and 9.1% strongly disagreed. Thus, about 60% agreed using online food orders from available restaurants through online food aggregator firms for ease of Apps usage, and their interface/platform was much more easily accessible.

Food Apps Used Being Economical and Convenient: 27.8% strongly agreed, and 28.5% agreed, while 18.1% responded neutrally using online food orders through online firms for being economical and convenient, while, 15% disagreed and 10.5% strongly disagreed. Hence, it states that over half respondents, i.e., 56.3%, agreed using online food orders from among available restaurants at doorstep through online food aggregator firms.

Food Apps used for availability of varieties of Food: 27% strongly agreed using online platform depended on availability of food varieties, followed by 32.7% agreed, while 17.5% neither agreed nor disagreed, about 14.6% disagreed and a mere 8.2% strongly disagreed on the same. Hence, about 59.7% agreed using online food orders from available restaurants through online firms upon multiple food varieties availability.

Food Apps used for availability of Restaurants: About 13.9% strongly agreed, followed by 19.6% agreed, while 35.9% responded neutrally, about 18.6% disagreed using these food delivery apps of multiple food needs from various available restaurants as a parameter, and 12% strongly disagreed. Hence, about 33.5% agreed using wide range of restaurants for doorstep deliveries through the platform of online food aggregator firms.

Food Apps used due to Working Women at Home: About 38.8% strongly agreed, and a mere 6.8% agreed using online food orders from comprehensive restaurants due to presence of working women at home, followed by 22.8% neither agreed nor disagreed, while 25.3% disagreed and a mere 6.3% strongly disagreed. Hence, 45.6% agreed using online platform food aggregator firms due to the presence of working women at home.

Food Apps used due to non-availability of Family Members at Home: About 35.7%, strongly agreed using online platform for being alone at home or at times of non-availability of family members, followed by 6.5% strongly agreeing, while 24.7% responded neutrally,, 26.6% disagreed and 6.5% strongly disagreed. Thus, about 42.2% agreed using online food orders during absence of family members at home.

Food Apps used as an option for Time-Saving: About 35% strongly agreed, followed by 5.9% agreed, while, 26.8% neither agreed nor disagreed and 24.5% disagreed followed by a mere 7.8% strongly disagreed. Hence, about 40.9% agreed using online food orders for doorstep deliveries through the platform of online food aggregator firms saving time.

Food Apps used due to lack of time to Cook Food: 10.8% strongly agreed, followed by 8.6% agreed, while 35% neither agreed nor disagreed, about 30.4% disagreed followed by 15.2% strongly disagreed using food apps for lack of time to cook food. Hence, about 19.4% agreed using online food platform for doorstep deliveries for lack of time to cook food.

FACTOR ANALYSIS

Statistical method used to find and examine latent components or underlying structure accounting for correlations between a group of observed variables and comprehend correlations between variables and to lessen data complexity. It is frequently employed in disciplines like psychology, sociology, economics, and market research and is useful technique in a variety of research and analytical situations as it is a potent tool to reveal hidden structures in data and getting insights into the relationships between variables.

KMO and Bartlett's Test: KMO value of over 0.6 or 0.7 is considered acceptable for factor analysis. Lower values suggest that factor analysis might not be appropriate.

- KMO Measure is 0.846, a higher value suggest that variables in dataset are highly corelated, indicating common factors may exist among them, and is a strong potential for factor analysis.

Bartlett's Test of Sphericity:

- Result shows approximate chi-square value 4629.54 with 171 degrees of freedom and associated p-value is 0.000, less than typical significance level of 0.05, indicating a correlation matrix of variables is not an identity matrix, confirming that there are significant correlations among variables.

Based on the results, it is highly appropriate to proceed with factor analysis on the dataset for factors influencing online food ordering. Higher KMO value and significant Bartlett's Test both support, the idea that there underly factors or dimensions that can be extracted from the dataset to help explain the correlations between the observed variables.

Communalities on Factors Influencing for Online Food Orders: Proportion of variance in each observed variable explained by extracted factors, range from 0-1, higher values indicate larger portion of variance in a variable explained by factors.

- Initial" column represents communalities before factor extraction, "Extraction" column represents communalities after extraction of factors using PCA.
- "Before extraction, variables initial communality of 1.00 indicate each variable explains all of its own variance.

Table No: 1.5 Communalities on Factors Influencing for Online Food Orders

Communalities - Extraction Method: Principal Component Analysis		
	Initial	Extraction
Quality of food	1.000	.608
Freshness of food	1.000	.570
Taste of food	1.000	.621
Packing/handling of food	1.000	.616
Reliable payment systems	1.000	.604
Lower Prices/ Price comparisons	1.000	.503
Offers and Discounts	1.000	.517
Influence by friends and family	1.000	.782
Impulsive buying in response to Ads and notification pop ups.	1.000	.777
Presentation/plating Attractiveness	1.000	.722
Reviews and Rating influence my purchase	1.000	.750
Food delivery Apps are easy to use/ easily accessible	1.000	.686
Economical and more convenient	1.000	.721
Availability of Variety of food	1.000	.722
Availability of more no. of restaurants	1.000	.573
Working women at Home	1.000	.805
Non-Availability of family members	1.000	.860
Food Delivery Apps are Time saving	1.000	.827
Lack of time to prepare/cook food	1.000	.565
Extraction Method: Principal Component Analysis.		

Source: Primary Data Analysis

- After extraction, communalities decreased for each variable, as factor analysis attempt to explain shared variance among variables by creating a smaller set of underlying factors. Decrease in communalities reflect portion of variance in each variable that cannot be explained by the extracted factors.

- Communalities can vary in magnitude after extraction, and how much of variance in each variable is accounted by extracted factors. Variables with higher communalities (close to 1) are better represented by extracted factors.

- Variables like "Non-Availability of family members," "Food Apps are Time-saving," and "Working women at Home" have relatively high communalities after extraction, indicating variables are well explained by extracted factors and have a strong association with underlying factors.

- Variables like "Lower Prices/Price comparisons" and "Offers and Discounts" have lower communalities after extraction, suggesting that these variables may have unique variance not captured well by extracted factors.

Total Variance Explained on Factors Influencing Online Food Orders

Table No: 1.6 Total Variance Explained on Factors Influencing Online Food Orders

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.477	23.562	23.562	4.477	23.562	23.562	4.011	21.112	21.112
2	3.421	18.005	41.567	3.421	18.005	41.567	3.067	16.143	37.254

3	2.599	13.677	55.244	2.599	13.677	55.244	3.037	15.984	53.238
4	2.331	12.271	67.515	2.331	12.271	67.515	2.713	14.277	67.515
5	.663	3.492	71.007						
6	.645	3.397	74.404						
7	.613	3.228	77.632						
8	.551	2.902	80.534						
9	.473	2.488	83.022						
10	.441	2.322	85.344						
11	.437	2.303	87.647						
12	.398	2.094	89.741						
13	.388	2.042	91.783						
14	.358	1.884	93.667						
15	.295	1.550	95.217						
16	.273	1.437	96.654						
17	.268	1.413	98.067						
18	.210	1.107	99.174						
19	.157	.826	100.000						
Extraction Method: Principal Component Analysis.									

Source: primary Data Analysis

Total variance of factors extracted through PCA for various items related to 19 factors influencing online food orders, represent extracted components. Each component corresponds to a set of related variables. First component (Quality of food) has an initial eigenvalue of 4.477, and after extraction, it explains 23.562% of the total variance.

CONCLUSION:

Result shows approximate chi-square value 4629.54 with 171 degrees of freedom and associated p-value is 0.000, less than typical significance level of 0.05, indicating a correlation matrix of variables is not an identity matrix, confirming that there are significant correlations among variables. KMO Measure is 0.846, a higher value suggest that the variables in the dataset are highly corelated, indicating common factors may exist among them, and is a strong potential for factor analysis. In PCA, to retain a sufficient number of components that collectively explain a large portion of total variance in data while simplifying structure. First few components (Quality, Freshness) appear to explain a significant amount of variance and may be most relevant for understanding factors influencing online food ordering. Cumulative % of 67.51% indicates that, when considering the first 4 components extracted through PCA, collectively explain approximately 67.51% of total variance in data. These 4 components capture and summarize a significant portion of variability observed in the original variables related to factors influencing online food ordering.

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