CONSUMER'S ONLINE BUYING BEHAVIOUR BEFORE AND AFTER COVID – 19 PANDEMIC IN WESTERN SUBURBS OF MUMBAI

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The COVID-19 pandemic has had substantial effects on society, including changes in purchasing behaviour. The virus originated in Wuhan in December 2019, and India implemented stringent lockdown measures starting on March 23, 2019. Online purchasing, a type of electronic trade, has gained popularity because of its convenience, wide range of options, and competitive prices. This study analyses customer behaviour in online shopping, focusing on how individual or group characteristics are portrayed and the correlation between population tally and social science factors and consumer satisfaction. The study uses primary and secondary sources of data, primarily collected through direct fieldwork with individuals. The study was conducted from August 2022 to October 2022, use convenience sampling procedures. The study is limited by a small sample size of 300, geographical constraints, and a focus on analysing goods transactions exclusively conducted online. Statistical research indicated that there was no significant difference in the average monthly spending on basic items via online shopping before and after the COVID-19 epidemic. More respondents favour the "online mode" for grocery purchases, as shown in the study. UPI emerges as the primary payment method for online transactions post-COVID. The lockout shifted consumer behaviour from physical to online, enabling online businesses to provide improved pricing, quicker shipping, and post-purchase service. This study investigated the online purchasing habits of residents in the western suburbs of Mumbai. Online purchase is impacted by factors such as availability, low pricing, promotions, and perceived ease of use, time awareness, and desire for diversity. Respondents preferred using UPI for online purchasing. Government initiatives, help, and grants have changed how consumers live during the pandemic. Future research should investigate and enhance Covid-related factors to discover more elements and forecast client buying patterns once Covid-19 restrictions are removed.
Keywords: Covid, Wuhan, China, Mumbai, India, Online Purchases

Introduction:
 Covid 19 has had far reaching effects on society and will ensure that the year 2020 is remembered for years to come. After the covid- 19 pandemic broke out in late 2049, it affected many facets of society, including buying habits. COVID19 is a newly emerged virus that was first detected in Wuhan this past December. In January, doctors in India diagnosed the country's first patient with Corona Virus Disease. Since March 23, 2019, our country has been under strict lockdown. Services and production ceased almost entirely on March 23, 2019, the first day of the lockdown. Contact with a corona-positive person is the primary means of transmission, hence avoiding public places is the best approach to avoid contracting the virus. As a result, more people were making purchases via the Internet. It was illegal in some countries for people to leave their houses for any reason other than to go to work, take their dogs for a walk, go to the store, or go to the hospital. Some people, rather than resorting to severe measures, simply limit the size of social events. Some individuals have chosen to refrain from interfering in others' everyday affairs with the

expectation that the nation will achieve immunity collectively. On March 16th, the government of Finland announced a state of emergency. On the same day that E.P.A. took effect. Schools will be closed since the government has stated that all education will be conducted online. There was a widespread closure of public facilities like libraries, museums, and swimming pools. The maximum number of people allowed in a social gathering was lowered to ten. The elderly was urged to seclude themselves completely. People stopped going out as much, did less shopping, and less socialising with those outside their immediate families as a result. The way people's lives were affected by all these variables had a direct impact on their purchasing habits. Consumers' underlying goals and priorities were revaluated.

Review of Literature:

 According to *Charumathi and Rani (2017),* E-buying is a type of e-commerce that allows clients to purchase products or services from an online store using a web browser and Internet connection. The internet is essential for the success of e-commerce due to its numerous benefits. Services are delivered through interpersonal communication, trade, and the distribution of commodities and services. Utilising mobile applications and websites to enhance brand awareness for various products and services is becoming more crucial in marketing plans and policies. Online shopping is the act of buying goods or services using the Internet.

According to *Rastogi's (2010)* The expansion of internet usage has enabled consumers to purchase at any time and for any desired item, utilising secure and dependable payment methods. Consumers can save time and money by comparing pricing and features from various vendors and channels. Online shopping is popular due to the wide range of products, convenience of transactions, reasonable pricing, and diverse payment options.

According to research conducted by *Frank Ulbrich et al. (2010),* Men and women have different preferences when it comes to online shopping. An analysis is conducted on gender disparities regarding three main constructs: information quality, systems quality, and customer-relations quality. Ranking the features of the constructions enabled a comparison to be made. The data indicate that, despite their structural differences, the two constructs are indistinguishable. E-commerce site satisfaction increases when customer requirements are fulfilled, as indicated by the research.

Sanjay Hooda and Sandeep Aggarwal conducted a study in **2012** on how customers in Jaipur responded to and accepted e-marketing. Research indicates that those with greater incomes are more inclined to engage in online shopping due to their appreciation for the time-saving and convenient nature of the activity. Consumers are reluctant to make online transactions because of safety worries. The survey concluded that online purchasing is still considered a tough procedure due to customers being historically limited and lacking adaptability to evolving technology.

Statement of the Problem:

The utilisation of the internet is essential at present. Every person relies on technology for their survival to some extent. India and China collectively account for 39% of the 830 million young internet users, according to a UN research. Marketing has transitioned from production to online transactions, where consumers engage in buying and selling things on the internet, known as online marketing. Online shopping mirrors the traditional offline buying process, which includes visiting a website, choosing a product, placing an order, and making payments while agreeing to the terms and conditions. The introduction of smartphones equipped with 3G and 4G capabilities has led consumers to favour online buying methods. Basic internet literacy is typically adequate for making online purchases.

The study aims to achieve the following objectives:

1. To analyse the purchasing behaviour of consumers in Mumbai through internet shopping before and after the lockdown.
2. To comprehend consumer expectations post-COVID shutdown.

Methodology:
The current investigation employs a descriptive research technique using a survey design. The research focuses on evaluating consumer behaviour in online shopping, specifically in relation to portraying the features of individuals or groups. The current research is focused on investigating many areas to understand customer behaviour. The objective is to examine the correlation between demographic and socio-economic traits and consumer satisfaction.

Sources of Data:
The inquiry is being carried out using both primary and secondary sources of data. The study's data was mostly collected by direct field collecting from respondents, offering firsthand knowledge. Secondary data was collected from published publications, journals, books, research reports, websites, and unpublished studies related to consumer behaviour.

Study Duration:
The study encompasses the time frame spanning from August 2022 to October 2022.
Sampling Techniques:
Due to the absence of a centralised database for identifying online shoppers, it was challenging to obtain the sampling frame. The research is conducted in the Mumbai Metropolitan city. Convenience sampling, a non-probability sampling technique, is utilised.
Tools for Data Analysis:
The data is coded, classified, and tabulated using the Statistical Package for Social Sciences (SPSS). Relevant statistical methods such as sample size calculation, percentage analysis, and Chi-square test are used to produce meaningful results. The study's sample size was obtained via easy sampling.

StudyLimitations:
1. The study had a small sample size of 300, which may not accurately represent the entire population of   the   industry.
2. This study is limited by a geographical barrier, as data was only obtainable from a certain region.
3. The study primarily examines goods purchases made only through the internet, while not specifically addressing the online services utilised by users.

Hypothesis Testing
Hypothesis 1:
 H01 states that there is no significant difference in the average monthly expenditure on online shopping for essential items before and after COVID-19.

H02: There is a notable disparity in the average monthly spending on essential items purchased online before and after the COVID-19 pandemic.

Table No 1. Correlation between pre-COVID and post-COVID monthly spending.

	Mean Monthly Spending					
	Below Rs. 5,000	Rs. 5,000 to 10,000	Rs. 10,000 to 15000	Rs. 15,000 to Rs. 20,000	Above Rs. 20,000	Total
Before COVID	151	43	16	1	5	**216**
After COVID	135	51	22	4	4	**216**
Total	**286**	**94**	**38**	**5**	**9**	**432**

From the above table we can see that 151 respondents out of 216 spend at least Rs. 5000 to Rs.10, 000 before COVID and 135 out of 216 respondents spend the same after COVID too. Only 5 respondents spend below Rs. 5000/- before COVID and only 4 respondents spend after Rs 5000/- after COVID too. We observe that there is not much significant change when we look at the responses. At the higher spending levels the responses are remained at relatively same level.

Therefore, null hypothesis H01 is accepted.

Table No 2. Examining the relationship between average monthly spending before and after COVID using Chi-Square Tests

	Value	df	P value Asymp. Sig. (2-sided)
Pearson Chi-Square Value (Statistical Value)	4.4344	4	0.3504
Chi-Square Critical Value	9.4877	4	0.05

df = Degrees of Freedom

Table NO 1 indicates that 46% of the respondents bought items online monthly before COVID, while 34% did so after COVID. 7% of the participants bought online more than 5 times a month before COVID, while 16% bought online 5 times a month after COVID. Table 2 displays the statistics on average monthly expenditure before and after COVID, as reported by the respondents. The Pearson Chi-square value for the relationship between them is 4.4344 at df = 4, which is less than the crucial value of chi-square (9.4877) at a significance level of 0.05 for df = 4. This signifies the acceptance of the null hypothesis. The p-value is greater than the significance level. There is no substantial difference in average monthly spending before and after COVID, according to the respondents.

Therefore, null hypothesis H01 is accepted.

Hypothesis 2:

H02: The buying pattern of consumers did not significantly change following the COVID-19 epidemic.

H2: Consumers' shopping patterns have significantly changed following the COVID-19 epidemic.

I have considered the responses to the following three pairs of questions for testing of Hypothesis 2.

Pair 1

Table No. 3. Respondents purchasing online or not before and after COVID

-	Purchased Online or not….		
	Yes	**No**	**Total**
Before COVID	176	40	216
After COVID	191	25	216

There is a noticeable difference in the answers when observed. Post-COVID, there has been a rise in the number of responders answering 'Yes'.

Hence, alternative hypothesis H2 is approved.

Pair 2

Table No 4 Frequency of Purchasing Online before and after COVID Number of

	Frequency of Purchasing Online				
	Once	**2-3 times**	**3-5 times**	**More than 5 times**	**Total**
BeforeCOVID	100	78	23	15	**216**
After COVID	73	73	35	35	**216**
Total	**173**	**151**	**58**	**50**	**432**

There is a noticeable difference in the reactions when we examine them. Post-COVID, there has been a rise in the frequency of online purchases, with respondents indicating that they are buying more often.

Hence, the alternative hypothesis H2 is adopted.

Pair 3
Table No 5 Place of purchase during and after COVID

Response (In No.)	Supermarket like D'mart, Reliance Mart etc.	Local Retail Shops	Online Mode	Total
Q21. From where did you purchase your grocery during COVID?	123	113	62	298
Q22. From where do you purchase your grocery after COVID?	138	134	91	363
Increase	15	21	29	65
Increase as %	12%	19%	47%	22%

We see a shift in the 'online mode' category when analysing the responses. Post-COVID, a greater number of respondents favour the 'online option' for purchasing groceries. Hence, alternative hypothesis H2 is affirmed.

Using Statistical Test
Data from the Survey
Pair 1
Table No 6 Association between purchased online or not before and after COVID.

	Purchased Online or not….		
	Yes	No	Total
Scenario			
Before COVID	176	40	216
After COVID	191	25	216
Total	367	65	432

Table No 7 Association between purchased online or not before and after COVID through Chi-Square Tests

	Value	Df	P value Asymp. Sig. (2-sided)
Pearson Chi-Square Value (Statistical Value)	4.0746	1	0.0435
Chi-Square Critical Value	3.8415	1	0.05

df = Degrees of Freedom

Table 7 displays data on whether respondents purchased online before or after COVID. The Pearson Chi-square value for the relationship between them is 4.0746 at df = 1, which exceeds the crucial value of chi-square (3.8415) at a significance level of 0.05 for df = 1. This signifies the rejection of the null hypothesis. The p-value is smaller than the significance level. This also signifies the rejection of the null hypothesis.

Hence, alternative hypothesis H2 is affirmed.

Pair 2
Table No 8 Frequency of Purchasing Online before and after COVID Number of

	Frequency of Purchasing Online				
	Once	**2-3 times**	**3-5 times**	**More than 5 times**	**Total**
	Scenario				
Before COVID	100	78	23	15	216
After COVID	73	73	35	35	216
Total	173	151	58	50	432

Table No 9 Frequency of Purchasing Online before and after COVID through Chi -Square Test

	Value	**Df**	**P value Asymp. Sig. (2-sided)**
Pearson Chi-Square Value (Statistics Value)	14.8622	3	1.94E-03
Critical Value of Chi-Square	7.8147	3	0.05

df= Degrees of Freedom

The table displays data on the frequency of online purchases before and after COVID, as reported by the respondents. The Pearson Chi-square value for the relationship between them is 14.8622 at df = 3, which exceeds the crucial value of chi-square (7.8147) at a significance level of 0.05 for df = 1. This signifies the rejection of the null hypothesis. The p-value is smaller than the significance level. This also signifies the rejection of the null hypothesis.

Hence, alternative hypothesis H2 is confirmed.

Hypothesis 3:
H03: UPI is not the major mode of payment after COVID 19 pandemic for online purchases.
H3: UPI is the major mode of payment after COVID 19 pandemic for online purchases.
Table No 10 Payment methods utilised during and post-COVID

Response (In No.)	**UPI like Googlepay, Phonepay, Paytm, Bhim etc**	**Credit Card**	**Debit Card**	**Cash**	**Total**
19. What payment method did you utilise to buy items during the COVID pandemic?	132 (44%)	47 (18%)	53 (16%)	65 (22%)	297 (100%)
20. What mode of payment do you use to purchase products post-COVID?	162 (54%)	48 (16%)	35 (12%)	55(18%)	300 (100%)
Increase	30	1	-18	-10	3
Increase as %	23%	2%	-34%	-15%	1%

We observe that there is change in the category of 'UPI like' when we look at the responses. After COVID, the 'UPI like' mode of payment is preferred by more respondents for purchasing (their) goods. Also, when we look at the contribution of 'UPI like' response in the total responses received, it has grown from 44% (before COVID) to 54% (after COVID). Responses for all other categories have decreased.

Therefore, alternative hypothesis H3 is accepted.

CONCLUSION:
Online shopping in India is continuously growing, with significant market potential available for online shops to explore new areas. E-commerce retailers must consistently identify their customers' expectations, promptly address any issues encountered during online shopping, and provide comprehensive products and services such as high-quality items at competitive prices, quick replacement of damaged goods, and reduced delivery times. This approach can enhance customer satisfaction, foster loyalty, retain current customers, and attract new ones. Our research observations confirmed a significant increase in consumer behaviour shifting from offline to online as a result of the shutdown. The lockdown facilitated online markets to provide increased discounts, quicker shipping, and improved aftermarket service, giving them a competitive advantage in the offline versus online comparison. This research study aimed to investigate the factors that influence the online purchasing behaviour of individuals residing in the western suburbs of Mumbai. The primary driving variables for online purchasing include availability, cheap price, promotions, comparison, convenience, customer service, perceived simplicity of use, time consciousness, and variety seeking. Respondents said that UPI was their preferred payment method for online purchasing. Government measures such as programmes, support, and subsidies have had a substantial influence on the changing lifestyle of consumers during the disruptions created by the pandemic. Analysis of internet traffic during the coronavirus epidemic showed a notable rise in visits to online grocery merchants. This research indicates that internet shoppers are committed to participating in daily purchasing behaviours. The pandemic has led internet users to consistently demonstrate a pattern of purchase behaviour. The correlation study shows a strengthening connection between online purchasing behaviour and signs of a thoughtful consumer. The factors showed a tendency towards increased correlation. Consumers spend more time online during periods of self-isolation. As a result, this leads to a decrease in customer acquisition expenses. Innovative entrepreneurs should seize this opportunity by improving their websites, updating their social media accounts, managing their profiles meticulously, and allocating their marketing money wisely. This study could establish a systematic method for assessing the economic efficiency of integrating reflexive management concepts of consumer purchasing behaviour into organisations' marketing practices in the future. This phenomena can be detected by comparing the difference in income after implementing the mechanism, the expenses during implementation, and the income before implementing the system. Identifying important trends in consumer purchasing behaviour at the state level can be advantageous. This data can be used to create customised rules or e-commerce strategies for certain businesses and improve the provision of public services via online platforms. This study attempts to improve our comprehension of the change in consumer behaviour caused by the development of the Covid-19 epidemic in the online realm. This study examines the influence of the Covid-19 epidemic on decision-making regarding the selection of online versus offline channels. The study successfully fulfilled its goal by presenting new behaviour patterns related to customer purchase behaviour during the Covid-19 epidemic.

FUTURE STUDIES:
The study thoroughly analysed the influence of the Covid-19 outbreak on consumer buying patterns. This study proposed a conceptual model to explain the newly observed Covid-related behavioural patterns that influence the decision-making process between online and physical retail locations. It is recommended to do further research to comprehensively analyse and improve the Covid-related factors to uncover any possible additional elements. It is crucial to establish if these traits can be generally applicable to the population of Mumbai. Further research should be performed to analyse the expected purchasing behaviour of customers after the Covid-19 restrictions are lifted. The study found that the participants' overall consumption behaviour decreased due to their increased use of online platforms. The study's empirical results show that most customers' online purchases of goods are motivated by authentic needs. Offline purchases primarily depend on the attractiveness and appeal of the products.

Future research should focus on studying how Covid-19 restrictions impact customer purchasing behaviour, particularly in terms of reduced product consumption and limiting unnecessary product purchases. This research focuses on a currently pertinent subject. During this study, the global population has been experiencing a pandemic for almost a year. It is fundamentally unpredictable to determine whether the observed modifications are temporary or permanent. Certain changes in consumer behaviour likely emerged due to the imposed constraints and will likely no longer be relevant if these limits are removed. Some of these occurrences may continue to exist even after the pandemic has ended. Novel developments may emerge. Replicating this study after the pandemic may result in different conclusions compared to the current investigation. It is possible to determine the fundamental structure of consumer behaviour patterns before, during, and after the COVID-19 outbreak and subsequent crisis based on existing and replicated research results. Studying the cycle of changes and analysing the reasons behind them can provide fascinating insights.

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