"IMPACT OF COVID-19 ON CUSTOMER PERCEPTION OF ONLINE SHOPPING: AN ANALYSIS OF AHMEDABAD CITY"

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ABSTRACT The purpose of this paper is to analyse of customers purchasing patterns for smartphone apps used of online shopping with reference to Ahmedabad city. The paper analysis how smartphones affect consumers' online shopping patterns and the level of usage of smartphones in the city of Ahmedabad. The purpose of frequently used smartphone shopping apps, the preferred payment method for online purchases, the level of trust in banking transactions made through digital platforms, the most popular online shopping sites, the types of products commonly purchased directly, the factors that most often come into play when choosing a product to buy online, and other factors are all examined in the paper. A google form questionnaire was utilized to collect the data for the study, and 281 samples were used in the analysis. Using statistical tools like percentage analysis data was examined.
Keywords: M-Commerce, smartphone Apps, and Purchasing Behaviour

1. INTRODUCTION

A global trend of consumer shopping and purchasing of goods and services has emerged on the internet. Many top organizations have started using the internet to reduce market costs and the price of their goods and services to compete in the market. Companies can sell products, solicit comments, and conduct customer satisfaction surveys by using the Internet as a means of communication and dissemination of information. Customers utilize the Internet for a variety of things, including online shopping, pricing comparisons, feature analysis of products, and researching the kind of after-sale services they can expect from a certain retailer. Given the huge potential of the e-commerce industry, businesses have a unique opportunity to engage both current and future customers online. In the UK, Michael Aldrich created online shopping in 1979. German company Intershop established the first online purchasing system in 1994. Amazon began its online store in 1995, while eBay debuted in 1996. Internet use has transformed everything in the current "e-era." It is now a necessary component of our life. With the quick development of new information technologies and the growing adoption and usage of the internet by consumers, which will disrupt the current retail formats, the internet is becoming an essential new channel of commerce in the range of business. Online shopping is one of the commercial applications that has dominated the modern world. The younger generation is embracing online shopping through online retailers using computers, mobile phones, televisions, tablets, and other electronic devices in a matter of seconds without the use of a middleman service. As a result, shopping at mom-and-pop shops and malls, which still exist, is becoming less and less common.

Buying goods or services directly from a vendor online in real-time without the need for a middleman service is known as online shopping. Real-time electronic implementation of the sale or purchase is used. Mobile commerce includes making purchases from a mobile-based web store or mobile app. With the advancement of IT and its use in the business world, online marketers are now challenging traditional retailers. Online shopping has completely altered our way of life and buying habits, and it now plays a significant role in both. Due to the widespread use of the internet and the constant development taking place to get a larger market share, online shopping has evolved to include both business-to-business and business-to-consumer transactions. Using electronic data interchange, businesses may manage transactions. Electronic Data Interchange was being used by certain major firms as early as 1960. One of the first industries to start embracing electronic data interchange and comprehend its significance was the rail transportation sector. Michael Aldrich, a pioneer of e-commerce, came up with a concept in 1979 while strolling through a supermarket with his wife. This idea revolutionized the field of e-Commerce. Aldrich set up a TV, computer, and phone line with this model to start selling groceries online. A different account entirely describes how they dealt with varied

circumstances, but ultimately, they developed a model that assisted them in launching their e-commerce business.
Our culture is quickly adopting elements of modern culture. The pace of life in big cities is extremely rapid, and nuclear families are becoming more and more prevalent. The working population has very little free time to get to the market to make purchases. It takes time and effort to get to a traditional retail location, and you must go there during business hours. Many customers have access to the internet both at work and at home, and online retailers are open twenty-four hours a day. In India, online shopping is still in its infancy but is rapidly growing. The trend pattern makes it evident that traditional stores will have adequate customers as online retailers grow their customer bases online. As a result, more and more consumers are becoming comfortable making online purchases. Online purchasing patterns are evolving and have a promising future. Many small- and medium-sized businesses are partnering with prominent Indian Internet sites to advertise their services and display their products thanks to the internet. With more products becoming available online, there is a greater level of competition, which reflects a rise in online shopping habits. Researchers are eager to find the current driving and leading indicators of the future success of online purchasing due to rising Internet usage, market dynamism, and customer attraction to it.
In India, there are about 40% of internet users. Although they are the second-largest internet users in the world, their electronic-commerce penetration is significantly lower than that of countries like the United States or France, but it is expanding incredibly quickly, with an additional 6 million users added each month. In 2017, the biggest online retailers in India were Amazon, Flipkart, Shop Clues, Paytm, Snapdeal, and eBay. The two industries that contribute most to sales are electronics and apparel. Google India Research estimates that by 2021, India will generate $100 billion in online retail sales, of which $35 billion will come from the e-commerce of clothing. In the coming years, it is anticipated that online apparel sales will increase at least four-fold. Online sales of high-end goods like jewellery appear to have increased over time. Nearly all retail companies have begun to enter the industry, and they anticipate at least 20% of sales to be made online over the next 4 to 5 years.
In this electronic environment, mobile commerce (M-commerce) services and tools are growing much more quickly. More than 90% of Indians now engage in mobile commerce. M-commerce has been displaying an upward trend throughout the last decade due to demonetization, a decrease in cash transactions, and improved net banking services. According to "Global Mobile Commerce Forum" – M-Commerce means "the delivery of electronic commerce capabilities directly into the consumer’s hand, anywhere, via wireless technology."

2. REVIEW OF LITERATURE

Binil V. Rajan (2019)purpose of frequently used smartphones, the preferred payment method for online purchases, the degree of trust in banking transactions made in this sense, the degree of satisfaction with the data plans offered by network providers, the most popular online shopping sites, the types of products typically bought online, the factors that are primarily taken into account when choosing a product for purchase online, and other factors are all examined in the paper.
Dr. K. Kanchana (2018) This research report looks at the variables that lead women in Chennai to choose mobile shopping as well as the most popular m-commerce apps that they utilize. According to the research, attractive offers, product availability, payment methods, social influence, mobile anxiety, customized experiences, and time savings are the key elements that motivate women to purchase online. In the final section, the general advice is provided for the secure use of mobile commerce.
Bharti Aggarwal and Deepa Kapoor (2020) The study can help in understanding how e-shoppers behave in the COVID-19 scenario, and it can aid online shopping service providers in developing better approaches for increasing customer happiness and outperforming the competition. This study recommended that e-commerce businesses take the necessary efforts to create efficient marketing strategies to survive in the e-commerce industry.
DR. D. Monisha (2022) The purpose of the study is to determine whether smartphone users' purchasing habits are related to the features offered by online shopping apps, which smartphone brands are popular in Chennai, and what challenges users have while making online purchases.

2.1. OBJECTIVES OF THE STUDY

1. To analysis factors influencing customers perception towards mobile app based online shopping during the COVID-19 pandemic.
2. To explore customer preferences and challenges related to online shopping through mobile app in context of COVID-19 in Ahmedabad city
3. To determine the level of usage of online shopping mobile apps in the city of Ahmedabad.

The research is based on primary as well as secondary data. An attempt has been taken to determine the customer purchasing pattern for smartphone apps used for online shopping in Ahmedabad city. 9 of the 290 samples that were chosen were rejected because of missing information. These respondents are chosen using the convenience sampling approach. The information from the responders is gathered using a google form. A widely recognized five-point Likert scale, with 1 denoting disagreement, 2 somewhat disagreeing, 3 neither agreeing nor disagreeing, 4 slightly agreeing, and 5 denoting neutralities, was adopted. The secondary sources of information include several publications, books, and websites.

3. DATA ANALYSIS AND INTERPRETATION

3.1. Shopping app use for online shopping

Responses	No. of Respondents	Rank
Flipkart	190	I
Amazon	176	II
Other	54	III
Myntra	46	IV
Snapdeal	28	V

Table 1 shopping app used for online shopping

Fig.1 shopping app used for online shopping

H_{01}: There is no significant association between the shopping app used for online shopping (mobile devices) and any of the demographic factors (gender, age, No. of Family member, Annual Income, Educational Qualification, occupation)

	Variable	Pearson Chi-square	p-value	Result	Conclusion
Shopping app used for online shopping	**Gender**	58.594	.000	Highly Significant	Reject null Hypothesis
	Age	157.072	.000	Highly Significant	Reject null Hypothesis
	Number of family members	131.162	.000	Highly Significant	Reject null Hypothesis
	Educational qualification	102.422	.000	Highly Significant	Reject null Hypothesis
	Occupation	402.629	.000	Highly Significant	Reject null Hypothesis
	Annual Income	143.513	.000	Highly Significant	Reject null Hypothesis

Table-2 Chi-square test result of all demographic factors and shopping app usage For every demographic factor, researchers reject the null hypothesis because the p-values are all less than 0.05. This indicates that each of the demographic factors—gender, age, number of family members, educational background, occupation, and annual income—has a statistically significant relationship with the shopping app that is utilized.

3.2. Frequently for online shopping

Particular	No. of Respondents	Percentage
once in week	26	9
at least once a month	34	12
once in 2-4 month	70	25
once a year	34	12
according to need	116	42
Total	280	100

Table 3 Frequently do online shopping through a mobile app

H_{O2}: There is no significant association between the Frequently do online shopping through a mobile app and any of the demographic factors (gender, age, No. of Family member, Annual Income, Educational Qualification, occupation)

	Variable	Pearson Chi-square	p-value	Result	Conclusion
Frequently do online shopping through a mobile app	**Gender**	33.975	.001	Highly Significant	Reject null Hypothesis
	Age	36.144	.000	Highly Significant	Reject null Hypothesis
	Number of family members	34.884	.004	Highly Significant	Reject null Hypothesis
	Educational qualification	23.520	.101	Not Significant	Accept null Hypothesis
	Occupation	51.257	.000	Highly Significant	Reject null Hypothesis
	Annual income	33.975	.000	Highly Significant	Reject null Hypothesis

Table-4 Chi-square test result of all demographic factors and Frequency of shopping

In conclusion, the findings indicate a strong correlation between the frequency of using a mobile app for online shopping and a number of demographic characteristics, including age, gender, number of family members, occupation, and yearly income. However, there is not a clear association with educational background. This suggests that, with a lack of educational background, consumers' demographics have an impact on their online purchasing decisions.

3.3. Problems face in online shopping

Responses	No. of Respondents	Percentage
issue-related product quality	148	53
logistics related problem	32	11
payment issues	28	10
hidden cost	24	9
post-delivery problem	48	17
Total	280	100

Table 5 Problems face in online shopping through a smartphone app

H_{03}: There is no significant association between the Problems face in online shopping through a mobile app and any of the demographic factors (gender, age, No. of Family member, Annual Income, Educational Qualification, occupation)

	Variable	**Pearson Chi-square**	**p-value**	**Result**	**Conclusion**
Problems face in online shopping through a mobile app	**Gender**	9.395	.052	Not Significant	Fail to Reject null Hypothesis
	Age	30.742	.002	Highly Significant	Reject null Hypothesis
	Number of family members	16.006	.453	Not Significant	Fail to Reject null Hypothesis
	Educational qualification	22.232	.136	Not Significant	Fail to Reject null Hypothesis
	Occupation	22.310	.034	Highly Significant	Reject null Hypothesis
	Annual income	15.979	.192	Not Significant	Fail to Reject null Hypothesis

Table-6 Chi-square test result of all demographic factors and problems face in online shopping

In conclusion, the findings show a strong correlation between the issues encountered when shopping online and two demographic variables: age and occupation (both of which enable us to reject the null hypothesis). However, the number of family members, annual income, educational attainment, and gender (borderline significant) do not significantly correlate (fail to reject H0). This implies that other demographic characteristics do not significantly affect the issues encountered when shopping online, although age and occupation do play a part.

3.4. Method of payment in online shopping

Responses	No. of Respondents	Percentage
Credit card	32	11
Debit card	42	15
Net banking	22	8
cash on delivery	172	62
Other	12	4
Total	280	100

Table 7 Method of payment in online shopping

3.5. factors considered while selecting a product through a smartphone app

Response	strongly agree		Agree		natural		Disagree		strongly disagree	
		%		%		%		%		%
Product Quality comparable	96	34	100	36	56	20	24	9	4	1
Significant discount	56	20	122	44	76	27	18	6	8	3
wait for a long time to take delivery of products	56	20	88	31	84	30	40	15	12	4
compare prices before buying the products online	110	39	100	36	48	17	16	6	6	2
carefully plan my purchase before buying products online	90	32	116	42	56	20	14	5	4	1
saved a lot of money by shopping online	62	22	122	44	70	25	18	6	8	3
takes less time than retail stores	62	22	98	35	62	22	46	17	12	4
Difficult to decide based only on description or view of products/ services	58	21	116	41	58	21	40	14	8	3

Table 8 shows the factors considered while selecting a product through a smartphone app

4. FACTORS INFLUENCING BUYING BEHAVIOUR PATTERNS FOR M-SHOPPERS

FACTORS 1 The concept of "**ATTRACTIVE OFFERS**," which is based on six factors that reveal customers' perceptions of attractive offers and discount coupons provided via mobile apps, inspires a sense of urgency in consumers. They frequently buy quickly out of a sense of impending stock-out or growing commodity costs. Everyone enjoys a good deal, and inside every one of us is a shopper looking for fantastic items at excellent pricing. These savings, special offers, no shipping fees, extra coupons, additional bonuses, or vouchers could all be included.

FACTORS 2 PRODUCT AVAILABILITY: M-Commerce uses wireless devices to make it simple to find products in the market. Different products with the best images are displayed from various angles to provide users with a three-dimensional comprehension of the product. When you provide customers the ability to apply filters, such as brand, colors, size, price range, etc., you are effectively giving them the freedom to focus their search on a smaller number of products that are more pertinent to their needs and preferences. The M-Shopper’s experience will undoubtedly be improved because they won't have to go through thousands of products to discover a mere few hundred that truly match their search parameters.

FACTORS 3 After putting together the components that are of the utmost importance to every customer M-shopper, "**PERSONALIZED EXPERIENCE**" is created. Customers do not need to stand in line or get stuck in traffic to go direct shopping. Consumers' quality of life is raised via mobile commerce.

Factor 5 is referred to as the "**PAYMENT SYSTEM**" since it consists of that makes it feasible for clients to make payments in a pleasant manner. It makes sense that they would have a favourite method or mode of payment in which they have grown to have faith. Therefore, it is advised that you offer as many payment options as you can to draw in customers with a variety of payment preferences.

FACTORS 6 "TIME-SAVING TOOL" is a sign of a good user experience because it addresses time-related topics. With mobile commerce, clients may order their things online rather than going to the store to pick them up. As a result, they spend less time and money and save time. Because customers may buy whenever they choose and order from any location, their daily household tasks are not interrupted.

Factor 7, termed **"MOBILE ANXIETY"** talks about how those who only use smartphones for transactions are quite familiar with them. Customers already understand how to quickly browse to preferred products.

3.2 FINDINGS

1. People use smartphones 90% of the time for apps and 10% for the internet.

2. Most of the women (68%) respondents belong to the age group of 25-34 years.

3. A sad reality is that almost 40% of college students use smartphone apps for enjoyment rather than education. College students have a significant impact on mobile commerce.

4. Most customers use the Flipkart shopping app for online shopping and then use the amazon shopping app.

5. Most M-shoppers shop according to their need for the product and many M-shoppers shop for 2-4 months.

6. (44%) respondents attract to discounts given in online shopping.

7. (53%) of respondents face quality-related problems in online shopping and (17%) of respondents have problems with post-delivery service.

8. (62%) respondents use cash on delivery options as a payment mode in online shopping.

9. (96%) respondents use the smartphone app in the upcoming future.

4. CONCLUSION

Mobile commerce will experience significant development in the upcoming years due to the rise of mobile phones and the growing issuing and usage of debit and credit cards. M-commerce is becoming more and more popular with individuals, particularly the younger generation, but in the current environment, it needs to become equally popular with all age groups. Mobile commerce offers M-shoppers access to the Internet from any location at any time, the ability to pinpoint a specific mobile terminal user's location, the functionality to access information at the point of need, and a need-based data/information update capability. It promises an endless supply of information, entertainment, and commerce. Still, a significant portion of the population is illiterate, has little computer literacy, and uses their phones improperly. When using M-commerce services, security is crucial since so many people still worry about losing their private or confidential information. When these customer demands are met, m-commerce will absolutely influence the future of India.

REFERENCES

Damle, M., Aslekar, A., & Yadavalli, V. S. S. (2016). *Comparative Study of Online Shopping Experience With Specific Reference to Mobile Apps Based Shopping*. *7*(4), 1238–1246.

Narang, U. (2019) *Mobile App Introduction and Online and Offline Purchases and Product Returns*. *2399*(2015), 1–17.

Monisha, D. (2022). *A Study on Customer Purchasing Behaviour Through Online Buying Towards Smartphone in Post Pandemic with Special Reference to Chennai District*. *9*(1), 2021–2023.

RAJAN, B. V. (2019). an Analysis on the Role of Smartphones in Online Buying Behaviour of Customers in Kerala. *Journal of Management*, *10*(3), 96–105. https://doi.org/10.34218/jom.6.3.2019.011

Kanchana, K. (2018). A Study on M-Commerce and Mobile Apps–A Trendy Lifestyle (A special reference to Women consumers in Chennai city). *Ijrar.Com*, *5*(4), 60–65. http://ijrar.com/upload_issue/ijrar_issue_20542508.pdf

Shukla, P. S. (2018). *E- Shopping using Mobile Apps and the Emerging Consumer in the Digital Age of Retail Hyper personalization: An Insight*. *10*(10).