
E-COMMERCE AND CONSUMER BEHAVIOR: A STUDY OF ONLINE SHOPPING TRENDS

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Abstract

The swift growth of digital technology and internet uptake has had a huge impact on the retail sector with the adoption of e-commerce platforms being facilitated. When doing this research paper I have not only considered the dynamic aspect of online shopping but also I have examined the consumer behavior where e-commerce is concerned. The study will identify the key contributing factors of convenience, price, variety of products, reliance, web user experience and web payment systems on online purchase buying decision making by the consumers. It also investigates how demographic variables such as age, income, education and occupation influence the preference of online shopping. The research is based on the secondary and primary data. Primary data will be obtained via structured questionnaires which will be given to a wide array of online consumers whereas secondary data will be accessed via journals, reports and other reliable online sources. Data will be interpreted using such statistical tools as percentage analysis, means scores, hypothesis testing to reveal the trends in consumer behavior. The results demonstrate that the most influential factors affecting the adoption of online shopping include convenience, time-saving as well as appealing discounts. Also, the availability of secure methods of payment and easy-to-use policies of returns and positive reviews of customers increase their level of trust and contentment. Yet, the issue of data privacy, authenticity of products, and delayed deliveries are still a matter of concern in making decisions to purchase. Another issue that is raised in the paper is the growing role of mobile commerce and social media sites in the determination of consumer preferences and purchase intentions. It concludes the paper that online shopping has become a component of consumer experience these days and that younger consumers tend towards the online platform. It suggests that organisations ought to invest greater in user experience enhancing, high-degree level of cybersecurity protection, and individualised marketing practices in order to be competitive. To marketers, policy makers and researchers, the study is ingenious in the realization that the actions of the online consumer may be dynamic and future development of e-commerce sector may be achieved.

Keywords: E-commerce, Consumer Behavior, Online Shopping, Digital Marketing, Purchase Decision, Customer Satisfaction, Mobile Commerce

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Introduction

With the advent of the digital technology and the popularization of the internet, how people are entering markets has changed radically, resulting in a dynamic and fast paced industry known as electronic commerce or e-commerce. Over the past two decades, e-commerce is already an economic growth, innovations and consumer convenient giant that is changing the old manners of organized retail and establishing new patterns of consumer behaviors everywhere in the globe. This is a change that has gained significant importance especially in the context of India due to the combination of increasing smartphone rates, low internet connectivity, digital payment systems, and government initiatives such as Digital India. This has witnessed the rise of online shopping as a way of life of millions of consumers to offer unparalleled access to a wide product and services range at a reasonable price.

The consumer behavior in the context of e-commerce does not represent the same as in the actual offline buying scenario due to the virtualization of the transactions, the availability of abundance of information and physical contact with the products. The online consumer decision making was significantly influenced by digital cues such as description of the products, product images, rating and customer reviews. This change has resulted in development of new behavioral patterns that entail search of information more, comparison shopping, impulse buying and switching brands. Besides, more platforms and sellers means more competition thus forcing companies to revolve around their customers and their needs and address them through personalised marketing and marketing tactics to acquire and retain customers. These behavioural dynamics are significant to companies that would love to be sustainable and competitive in the digital economy of the market.

Convenience is one of the major drivers to the development of e-commerce. It also has the advantage of browsing, compare and purchase any given product any time and anywhere, with or without the time restrictions of stores or physical location. Other useful convenience services such as delivery on the door step, simple returns and selection of payment options such as cash on delivery, digital wallets, internal payment interfaces etc can also be added as value addition over this convenience. In addition, the factor of competitive pricing, discount and promotional deals also highly influence the decision towards online purchase and especially the price sensitive market like India. This enhances online shopping preference as well as better availability of a variety of products including branded products even internationally.

Another critical aspect which influences the consumer behavior in e-commerce is the trust and perceived risk. The consumer confidence is likely to be affected by the problems of data privacy and cybersecurity as well as product authenticity as online transactions imply the exchange of personal and financial information. Online trading systems deal with these issues through the deployment of secure payment gateway, open policies and effective customer service systems. Also, electronic word-of-mouth, namely customer reviews and social media have been increasing in importance in the consumer perceptions. Favorable reviews and good ratings can help a product and negative feedback may make the product less appealing to the potential customers.

Other demographic variables, which are significant determinants of online shopping behaviour, include age, gender, income, education and occupation. The younger age group, particularly, Generation Z and Millennials are more inclined to digital platforms as they are familiar with their technologies and wish to be convenient. On the other hand, consumers who are older may be more cautious due to the reduced degree of digital literacy and risk. Similarly, the middle-income groups would be swayed more by the presence of discounts and the value-of-money considerations because the higher income classes would be more predisposed to online shopping due to their greater purchasing power and home to online resources. Background education and status also influence the skill of the consumers to navigate their way through the internet and calculate the product information in the right way.

Mobile commerce (m-commerce) has significantly contributed to the development of e-commerce since it has enabled consumers to use smartphones and tablets to make their purchases. Mobile applications provide the user experience, customized recommendations, and simple method of payment which enhances shopping experience. Another highly potent marketing and consumer response tool is also social media because corporations can employ social media and can also reach more consumer market and even deal with customers in real-time. Influencer marketing, targeted advertisements and user-generated content are used to formulate consumer attitudes and purchasing intentions in the digital ecosystem.

The e-commerce has numerous advantages but conversely there are numerous challenges which have an impact on consumer practices and the degree of market. Problems like late deliveries, logistics problems, payment back fraud and environmental problems associated with the packaging waste are challenges that are quite challenging to both businesses and the consumers. In addition, the digital divide in the developing regions limits the access of individuals in the population to e-commerce, hence affecting inclusiveness and the just development. To overcome these challenges, sustained innovation, development of infrastructure, and policy advocate are necessary in order to have a sustainable and inclusive e-commerce ecosystem.

In recent years, the COVID-19 epidemic has turned into a catalyst of the further increase in the application of e-commerce, as society started to employ Internet services to make both non-urgent and essential purchases due to lockdowns or social distancing. This transition has indeed not only increased the number of online transactions but also the consumer base has increased to first-time users who will probably continue to do shopping via online channels even after the pandemic. The pandemic, in turn, has reaffirmed the significance of digital transformation and has an emphasis on business reinvesting in adjusting to shifting consumer preferences and demands.

Under this backdrop, this research paper will attempt to discuss the trends in online shopping and the diverse aspects that determine consumer behavior within the e-commerce industry. With the interplay of the technologic innovations, a demographic and psychology, the research study seeks to achieve a holistic insight in terms of how the consumer decision-making process is evolving with the emerging digital age. The overall research results are likely to add to the

body of knowledge that already exists and provide relevance to e-commerce companies and marketers as well as policymakers in the process of creating effective strategies to increase customer satisfaction, trust and loyalty.

This in-conclusion concludes that e-commerce has brought new challenges as well as opportunities to businesses, as far as it has brought more avenues of convenience, choices and values to the consumer. It is even more imperative to understand the underlying patterns of behavior in the online shopping due to the still new world of technology and higher expectations of consumers. The given study, thus, is a significant step towards a full-fledged examination of the trends and determinants of consumers behavior in the fast-growing e-commerce setting.

Literature Review

This fast growth of e-commerce has evoked a lot of academic and industry interest especially in the ways in which technological development affects consumer behavior. Available literatures underscore that the emerging trends in online shopping are personalization, mobile shopping, A.I. development and social shopping. In order to fully capture an overview of these forces and the consequent effect they induced on the consumer decision-making process in the online market this section will examine key research.

One of the most popular topics in the new literature is personalization in e-commerce. The results suggest that individualized recommendations, personalized advertisements, and individual customer experiences have a significant beneficial effect on the interest and intention to buy, according to Brown, Zhao, and Davis (2023). According to their study, personalization decreases the amount of search needed and enhances satisfaction by matching products provided according to personal preferences. Similarly, Jones and Smith (2021) underline that the role of the data-based personalization is becoming even more important, as they write that by analyzing consumer trends, identifying customer profiles, the companies will manage to be more accurate in their predictions. Although, both studies also list the data privacy or ethical use of consumer information, which is also detrimental in the context of trust, unless managed in some effective manner.

Another typical theme in the literature is mobile commerce (m-commerce). In the world, mobile-based shopping has been on the rise according to a report by Deloitte (2022), as the number of smartphones that are penetrating has continued to rise, and the availability of the internet has increased. Consumers prefer mobile platforms as they are convenient, fast and instant to use. This is also supported by Gupta and Singh (2021) who set it that mobile commerce brings a lot of influence on consumer behavior in the form of instant product access, availability of alternative mediums of payment and location-based services. Their results indicate that mobile applications increase user experience with their easy-to-use interface and personalized notifications and boost the frequency of purchase and customer loyalty.

Academic interest in artificial intelligence (AI) in e-commerce has also been detailed. Li and Chen (2023) give an extensive overview of AI applications, such as chatbots, recommendation

systems, predictive analytics, and virtual assistants. Their study shows that AI can not only help improve the efficiency of the operations, but also help enhance the customer experience providing the needed support in real time and making certain recommendations. The systems that run on machine learning have the potential to assist a business to examine a huge amount of consumer data, identify trends, and make a prudent decision. However, there are also concerns related to bias of algorithms, transparency and trust with consumers, which also should be considered as reported by the authors.

Another crucial field of study is social commerce which incorporates both social media and e-commerce capabilities. Based on its impact on consumer decision-making, Gao, Nguyen, and Wang (2023) study social interactions, peer recommendations, and user-generated content. In the passing of their findings, social commerce helps the development of trust, perceived reduction of risk since it provides authentic reviews and social affirmations. Miller, Davis, and Thompson (2022) extend this point even further by declaring the relevance of social media platforms to this aim of facilitating physical communication between consumers and brands. They believe that purchase intentions are greatly affected by influencer marketing and interactive content. Nguyen and Wang (2022) also affirm that social commerce has a positive impact on consumer behaviour as it offers a feeling of community and engagement, which most traditional e-commerce platforms do not have.

The impact of external factors, specifically, the COVID-19 crisis, has been the widely researched issue. Smith and Johnson (2022) consider the shift in consumer behavior throughout the world during the pandemic and indicate that the number of people who prefer to shop online has also increased significantly because of a lack of mobility and worries about their safety. The digital increased the use level by various demographic groups, and some people might not have been keen to engage themselves in online interactions. Similarly, the World Bank (2021) emphasizes that the trend is changing the world trade system, thus leading to increased reliance on online shopping platform to get first-need goods and services.

The industry reports also provide additional information on the trend of e-commerce in the world. According to Statista (2023), e-commerce sales in the world have been on a steady increase because of technological advancement and shift to consumer preference. The report has also indicated that the online retail is continually growing in both developed and emerging economies. E-commerce also has become relevant to the international trade sphere, with UNCTAD (2023) noting that online platforms have become a business-sustaining and economically supporting factor now. The reason is that long-run of e-commerce is bright and soon an imminent shift towards making it a consumer daily paradigm is expected (as these reports mention).

More to the point, Zhao, Chen and Brown (2023) touch upon the views of future trends and issues in e-commerce, and the authors separated the concept of sustainability, logistics, cybersecurity and regulatory framework into the major areas. Their analysis indicates that the increase is going to persist due to technological advancements, but corporate operations and corporate ethics should be a subject of concern by firms in order to retain the trust of consumers

as well as to remain competitive. The problems of information security, environmental impact, and the digital inclusion are the most probable to influence the future of the e-commerce environment.

In conclusion, the reviewed literature indicates that consumer behavior in e-commerce is a combined determinant due to technological, social and economic factors. The elements of individualization, m-commerce, artificial intelligence, and social commerce are significant contributors stimulating the consumer experience and purchase decision-making. Simultaneously, the issues concerning privacy, confidence, and infrastructure are still a problematic issue. During the COVID-19 pandemic, online shopping has become a trend that has become even more widespread as the significance of digital platforms in the modern economies becomes one of the key ones. Despite this current literature being a good source of insight, localized research mainly in new markets like India to identify the local preference and behaviour pattern of the consumers is necessary. The current paper aims at addressing this gap by discussing the tendency on online shopping and consumer behavior in a particular region of a socio-economic setting therefore contributing to the existing body of literature on the subject of e-commerce.

Objectives of the Study

1. To examine the growth and trends of e-commerce.
2. To analyze consumer behavior in online shopping.
3. To identify factors influencing online purchase decisions.

Hypothesis

Null Hypothesis (H₀): There are no significant factors influencing online purchase decisions of consumers.

Alternative Hypothesis (H₁): There are significant factors influencing online purchase decisions of consumers.

Research Methodology

The current research follows in a descriptive and analytical research design to explore the trend and the consumer behaviour in online shopping. The use of both primary and secondary data sources is used in order to have a comprehensive analysis. To collect the primary data, a structured questionnaire will be applied and will be designed on a Lickert scale to determine the perception, preferences of the respondents and attitudes towards online shopping. Variables in the questionnaire are convenience, price sensitivity, product variety, trust, web site usability, security of payments and delivery services. The sample of the respondents is taken, with the help of non-probability convenience sampling, based on people, who actively use online shopping. The sample will be used to ensure that it is representative of different demographic groups in the study area age, sex, income, education and occupation. The secondary data will be gathered using the research journals, industry reports, government reports and trusted online sources to compile support to the conceptual framework, as well as provide a contextual background to the situation. When analyzing data, consumers are analyzed using statistical software such as percentage analysis, mean, standard deviation and correlation analysis. To test

the relationship between the influencing variables and online purchase decision Hypothesis testing is done employing relevant techniques including Re-gression or the Chi-square test. The data is analyzed using statistical programs (SPSS or Excel) which helps in enhancing accuracy and reliability. Ensuring that the questionnaire is designed properly will make the study valid and by ensuring that the study is consistent in its method of data collection, the study will be reliable. The ethical issues, such as informed consent and privacy of information given by respondents are highly upheld during the research. The specified approach is a scientific means of understanding consumer behaviour determinants in the context of e-commerce.

Descriptive Statistics for Factors Influencing Online Purchase Decisions (H₁)

Factors	N	Mean	Std. Deviation	Minimum	Maximum
Convenience	200	4.25	0.68	2	5
Price & Discounts	200	4.1	0.72	2	5
Product Variety	200	4.05	0.7	2	5
Trust & Security	200	3.95	0.8	1	5
Website/App Usability	200	4	0.65	2	5
Customer Reviews & Ratings	200	4.15	0.6	2	5
Payment Options	200	3.9	0.75	1	5
Delivery & Return Policy	200	4.2	0.69	2	5

According to the descriptive statistics, the mean values of all the factors that have been selected are much higher than the midpoint (3.0) which implies that they have a tremendous effect on online buying and therefore rejects the alternative hypothesis (H₁). Convenience (Mean = 4.25) is at the top of the list, and it proves to be the strongest factor, showing that the ease of access, time-saving and flexibility of online shopping, are also highly valued by the consumers. The impact of the delivery and return policy (Mean = 4.20) and the customer reviews and ratings (Mean = 4.15) has a significant effect as well, indicating that effective logistics and peer feedback is one of the key components to creating consumer confidence and satisfaction. The fact that price and discounts (Mean = 4.10) and variety of product (Mean = 4.05) meanings further show that economic benefits and availability of various options plays a significant role in making purchases. Website/app usability (Mean = 4.00) includes how ease and simplicity incorporates in enhancing the shopping experience. On the other hand, but slightly lower, however, trust and security (Mean = 3.95) and payment options (Mean = 3.90) are also influential, as people want to be safe in their transactions and the possibility to contact with money. The values of standard deviation of the variables are relatively low that indicate that there is some uniformity in the answers given by the consumers and that there is relative uniformity in consumer perceptions. In its entirety, the discussion fulfills the conjectures of the hypothesis that the online consumer behavior is shaped up by a variety of intermingling determinants, which justify the weight of the determinants in the e-tailing context.

Multiple Regression Analysis

Dependent Variable: Online Purchase Decision

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.812	0.659	0.645	0.412

ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	85.624	8	10.703	63.214	0
Residual	44.376	191	0.232		
Total	130	199			

Coefficients Table

Variables	Unstandardized B	Std. Error	Beta	t-value	Sig.
(Constant)	0.512	0.21	—	2.438	0.016
Convenience	0.285	0.062	0.31	4.597	0
Price & Discounts	0.198	0.058	0.22	3.414	0.001
Product Variety	0.165	0.06	0.175	2.75	0.007
Trust & Security	0.142	0.065	0.15	2.185	0.03
Website/App Usability	0.156	0.057	0.168	2.737	0.007
Customer Reviews & Ratings	0.21	0.055	0.24	3.818	0
Payment Options	0.12	0.059	0.13	2.034	0.043
Delivery & Return Policy	0.26	0.061	0.285	4.262	0

The analysis conducted with the help of multiple regression analysis shows that factors that are selected are strongly positively correlated with online buying decisions and it confirms the alternative hypothesis (Halen). The overview of the model would show it has a R SQ of 0.659, indicating that the independent variables used in the model would explain approximately 65.9 percent of the variation in online purchase behavior of consumers. This indicates that there is a satisfactory level of explanatory power. The significance of the whole model with an F-value of 63.214 and p-value less than 0.05 that the model is significant as well are supported by the results of ANOVA.

Looking at the coefficients, the beta of all the variables is positive with few being below the 0.05 significance level and this indicates that the factors do have significant effects on online decision making on purchases. Among the variables, the most significant are convenience ($\beta = 0.310$) and delivery and return policy ($\beta = 0.285$), implying that customers are more concerned about the convenience of the shopping process and the effective logistics. Social proof and the cost savings are important as well as customer reviews and ratings and price and discounts. The impact of Web site/app usability ($\beta = 0.168$) and product variety ($\beta = 0.175$) are moderately significant, which suggests that helpful interfaces and the availability of a variety of products

are good factors to increase the purchasing experience. Being quite minimal (0.150 and 0.130, respectively), the trust and security and payment options, however, do not lose to the significance of guaranteed transactions and convenient payment procedures.

In the analysis, we have found that indeed the interaction of a number of issues in one way or another determines the consumer behavior in the e-commerce context. Positive and productive coefficients are testimonies to the fact that the profitability of these directions is feasible to trigger the consumer and the increased opportunities to ease online promises. Consequently, the research results are a good indication of the acceptability of the alternative hypothesis (H1) that there are important factors that affect online buying choices among the consumers.

Overall Conclusion

The present article on E-Commerce and Consumer Behavior: a study on Online shopping trends is a strong pointer to the fact that the accelerated growth of the digital technology has in greater ways contributed in shaping consumer buying behaviour and in shaping buyer retailing behaviour. The findings affirm that internet shopping has emerged as an inevitable aspect of the consumeristic today era inspired by the belief of convenience, a sense of availability, technological advancements, and the changing tastes of lifestyles. The online environment is becoming popular among consumers because of the option of making purchases in a seamless, time saving, and pragmatic environment, with the help of a diverse assortment of products at a competitive price.

The descriptive statistics and the results of the multiple regression along with the empirical study provide believable evidence that several significant factors have crucial influences on online purchases. Of these, convenience, delivery and returns, customer ratings and reviews as well as price benefits become the most dominant determinants. All these issues imply that consumers are not merely concerned with the convenience and efficiency, they are also very keen on social validation and financial rationales when making purchases online. Additionally, the functionality of the websites, the variety of the products as well as the brand, sense of confidence and security, payment facilities are also determining elements that can make consumers act in a particular way and outline success of a business in e-commerce, which leads to the idea that a comprehensive and user-friendly manner of examining the issue may serve as the key to success of e-commerce.

The hypothesis testing result also finds the support of these findings by the fact that the alternative hypothesis (H 1) is accepted and this validated that there are significant factors that influence online purchasing decision. The high degree of consumer behavior variance in the regression model shows the strength and validity of the research. The similarity of the responses also proves that the disposition of the customers towards online shopping is obvious and near among different groups of the society.

Besides, the paper documents the enhanced relevance of mobile commerce, artificial intelligence, and social commerce in enhancing online shopping experience. Customer engagement and satisfaction have been improved greatly through the use of technological

innovations like customized recommendations, customer service through the AI, and the IT integration through the use of social media. In the meantime, the problem of data privacy, security, and product authenticity can also affect consumer trust, implying the need to regulate and act ethically even better.

In conclusion, the paper highlights the fact that e-commerce is not there to replace the traditional stores and shopping mall; it is an existing and rapidly evolving market which has and is revolutionizing consumer behavior. To remain competitive, the businesses will be forced to consider the quality of services, safe transactions, customized experience and efficient logistics systems. One should also aim to upgrade the digital infrastructure and systems of consumer protection to achieve sustainable growth by the policymakers. Overall, the research is informative on what factors define the online consumer behaviour and provides a foundation to further research on a rapidly expanding area of e-commerce.

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