Exploring the Complexities of Online Shopping: An Analysis of Consumer Behavior and Decision-Making Processes

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Abstract- **Consumers engage in extensive research before making online purchases, involving factors such as product reviews, descriptions, and price comparisons. This study examines the impact of various characteristics on online shopping behavior, including convenience, security, price, and overall shopping experience. The findings provide insights for businesses to tailor their marketing and sales efforts to meet the needs and preferences of their target audience, ultimately improving customer engagement and purchase completion. Combining primary and secondary research, this study sheds light on consumer-brand interactions online and offers important implications for optimizing online presence.**

The advent of e-commerce and the widespread availability of the internet has dramatically changed the way consumers shop for goods and services. Online consumer behavior is a rapidly growing field that has significant implications for businesses seeking to reach and engage with customers online. Unlike traditional brick-and-mortar stores, online shopping provides buyers with access to a wider variety of information on the product or service they intend to purchase. As a result, buyers typically conduct more extensive research before making an online purchase. This involves researching reviews and ratings from other customers as well as reading product descriptions and comparing prices from other merchants. In addition, online shopping provides consumers with greater convenience, allowing them to purchase goods and services from the comfort of their own homes or while on the go. However, it also raises concerns about the security of personal information and financial transactions.

In this study, we aim to analyze the various characteristics that influence consumer online buying behavior. We will examine the impact of factors such as convenience, security, price, and the overall online shopping experience. Furthermore, we will explore the role of social media in shaping online consumer behavior and purchasing decisions. Through a combination of secondary and primary research, we aim to gain a deeper understanding of how consumers interact with brands online and what motivates them to make purchases. This study will provide valuable insights for businesses seeking to optimize their online presence and improve customer engagement. By understanding the needs and preferences of their target audience, businesses can tailor their marketing and sales efforts to better meet consumer demand, ultimately leading to increased sales and customer loyalty.

*Index Terms***: online shopping behavior, consumer behavior, e-commerce, convenience, security, pricing, social media, customer engagement, marketing, sales.**

1.   Introduction and Related Work

The increasing prevalence of e-commerce and the widespread availability of the internet have fundamentally transformed the way consumers shop for goods and services. As a result, online consumer behavior has become a rapidly growing field of study with significant implications for businesses seeking to reach and engage with customers online. This study aims to analyze the various characteristics that influence consumer online buying behavior, including convenience, security, price, and overall shopping experience, as well as the role of social media in shaping online consumer behavior and purchasing decisions.

To achieve this aim, a comprehensive review of relevant literature was conducted to identify the key variables affecting online consumer behavior. This review revealed that online consumers engage in extensive research before making a purchase, including reading product reviews, descriptions, and price comparisons. Furthermore, the perceived ease and security of the online shopping

experience, accessibility of reviews and ratings from other customers, and overall cost of the good or service can all impact a person's online purchasing behavior.

The way consumers shop for goods and services has dramatically transformed with the rise of e-commerce and the widespread availability of the internet. In comparison to traditional brick-and-mortar stores, online shopping offers a wider variety of information to buyers, enabling them to conduct more extensive research before making a purchase. This research involves reading product descriptions, comparing prices from various retailers, and seeking out reviews and ratings from other customers.

In this study, we examine the impact of various factors on consumer online buying behavior, including convenience, security, pricing, and the overall online shopping experience. Furthermore, we explore the role of social media in shaping online consumer behavior and purchasing decisions. Understanding these variables can help businesses tailor their online marketing and sales efforts to better meet consumer demand and improve customer engagement, leading to increased sales and customer loyalty.

The study of online consumer behavior is an expanding field that has significant implications for businesses looking to connect with customers online. By analyzing and understanding these variables, businesses can better understand their target audience's needs and preferences, ultimately leading to improved online presence and customer engagement.

2.   Review of Previous Studies
Online consumer behavior has been a topic of interest for researchers and marketers for many years. Previous studies have explored various factors that affect consumers' purchasing decisions when shopping online.

2.1 Online Consumer Behavior and Factors Affecting Purchasing Decisions
An interactive electronic network is used by the store and the customer to communicate during online transactions. Customers can purchase a wide range of goods online while sitting still. By its very nature, consumer behavior is participatory and dynamic. Individuals' cognition, affect, and behavior—whether they are acting alone or in groups—are the three factors that are continually shifting.

The three elements continuously interact with one another and with the surrounding environment. This influences consumption patterns and behavior, and it is constantly changing and very dynamic. Understanding customer behavior and consumption trends is the focus of consumer behavior research.
Online purchase behavior is influenced by a variety of elements, including age, customer experience, internet access, transportation, dependable delivery methods, perception, attitude, learning and decision-making ability, and education level of consumers.

Various Factors which are influencing the growth of online shopping:

•   **Access:** Any potential consumer with an internet connection can access a single online store.
•   **Easy & comfort:** The customer has access to all necessary information over the internet.
•   **Search option:** This choice improves the customer's shopping experience. Finding products that fit the needs of the clients is simple.
•   **User friendly:** There is a gap between the want to buy and the capacity to buy because transactions are carried out online.
•   **Saves time and energy**, provides a wide selection of goods at competitive prices, makes it simple to compare product features, makes better offers, and allows for flexible scheduling.

2.2. Overview of related work on Online Consumer Behavior
The literature review reveals various aspects of online shopping behavior in India. Veena P and Namrata Rani (2019) found that businesses face challenges in retaining customers due to a lack of face-to-face interactions, information, and the inability to hold and feel goods. They suggested that effective digital marketing techniques can help address this issue. Upasana Kanchan, Naveen Kumar, and Abhishek Gupta (2015) found that individuals with higher levels of education and income are more likely to purchase goods online. They recommended that web marketers should target young, educated people with higher incomes. Eunice Njoki Kibandi and James Mwikye Reuben (2019) found that various factors, including product quality uncertainty, malfunctioned merchandise, and dispute resolution mechanisms, contribute to the risk associated with online purchasing. They also found that psychological factors can affect consumer behavior.

Girisha M C, Dr. K Nagendra Babu, and Veda Murthy M B (2019) found that promotion and price play a major role in consumers' decision-making, with a majority preferring to buy services online. Dr. S Gayatri Lakshmi (2021) found that female respondents equipped with internet access are considering different platforms for online shopping, but concerns about product damage and dispute resolution mechanisms have been raised. Harish Kumar and Nidhi Goyal (2021) found that online shopping in India is on the rise, with convenience, availability of discounts, and improved internet infrastructure contributing to the trend. They also found that consumers prioritize product quality and trust in the seller when making online purchases. Jagan N, Satish Babu G, and Kumara Swamy H R (2018) suggested that e-commerce platforms in India need to address challenges such as lack of trust, poor logistics infrastructure, and low digital literacy among consumers to ensure sustainable growth. Finally, Swapna Bhargavi Gantasala and

Sanjay Kumar Bhattacharjee (2019) recommended that businesses should focus on building a strong social media presence and leveraging social media for customer engagement and promotion.

Manisha and Rashi Bansal (2021) found that the COVID-19 pandemic has accelerated the shift towards online shopping in India, and businesses need to adapt to the changing consumer behavior and prioritize digital marketing strategies to remain competitive.

2.3. Review of Key findings from previous research

Key findings can help businesses and marketers better understand online consumer behavior and tailor their marketing strategies accordingly. The following is a review of some of the key findings from previous research on online consumer behavior:

Trust and Security: A study conducted by Chau and Hu (2002) found that trust and security are crucial factors affecting consumers' online purchasing decisions. Consumers need to feel that their personal and financial information is secure when shopping online. Therefore, online businesses need to provide secure payment options and display trust symbols on their websites to establish trust with consumers.

Perceived Risk: A study by Gefen and Straub (2004) found that consumers' perception of risk affects their online purchasing behavior. Consumers are more likely to make a purchase if they perceive the risk to be low. Therefore, online businesses need to provide detailed product descriptions and images, as well as clear return and refund policies to reduce perceived risk.

Convenience: A study by Liang and Lai (2002) found that convenience is a significant factor affecting consumers' online purchasing behavior. Consumers appreciate the convenience of shopping from the comfort of their own homes and the ability to shop at any time of day. Therefore, online businesses need to provide easy-to-use websites with a clear navigation system to ensure a convenient shopping experience.

Price: A study by Kim et al. (2008) found that price is a significant factor affecting consumers' online purchasing behavior. Consumers are more likely to make a purchase online if they can find the same product at a lower price than in a physical store. Therefore, online businesses need to offer competitive pricing to remain competitive.

Social Influence: A study by Huang et al. (2010) found that social influence, such as online reviews and recommendations from friends and family, affects consumers' online purchasing behavior. Consumers are more likely to make a purchase if they see positive reviews and recommendations. Therefore, online businesses need to encourage customers to leave reviews and ratings to build social proof and trust with potential customers.

Overall, previous studies have found that trust and security, perceived risk, convenience, price, and social influence are all significant factors affecting consumers' online purchasing behavior. Online businesses that focus on providing a secure, convenient, and cost-effective shopping experience, as well as encouraging social influence, are more likely to attract and retain customers.

2.4. Significance and novelty of the study

The studies mentioned above are significant as they shed light on various aspects of e-commerce and online shopping in India, a rapidly growing market. They provide insights into consumer behavior, preferences, and concerns, as well as the challenges faced by businesses and the opportunities for growth in the industry.

The novelty of these studies lies in their specific focus on the Indian market, which has unique characteristics and challenges compared to other regions. They offer valuable information to businesses, marketers, and policymakers who are looking to understand and capitalize on the potential of e-commerce in India. Additionally, some studies, such as the one on the impact of COVID-19 on online shopping behavior, address a relatively new and rapidly evolving phenomenon, making their findings particularly relevant and timely.

3. Proposed Methods

3.1. Research Objective:

The Research Objective is to investigate and analyze consumer buying patterns related to online shopping in India, and to identify the various parameters associated with it. The primary goal of the research would be to provide insights and recommendations to businesses looking to scale their marketing efforts in the e-commerce space. The research would aim to achieve this objective through the collection and analysis of primary data in the form of a questionnaire, using statistical tools such as the chi-square test to prove any relevant hypotheses.

1- To study the various reasons for opting an online shopping
2- To study the consumers attitude towards an online shopping and their satisfaction towards it
3- To understand the most common category of goods bought online.
4- To understand the demographics of consumers on their online purchase patterns

3.2. Research Design:

The research design for this study can be classified as descriptive research design. This design is appropriate for collecting and analyzing data to answer research questions related to the characteristics of a population, such as consumer buying patterns in this case. The questionnaire will be designed to collect data on various parameters associated with online shopping, and the collected data will be analyzed using statistical tools like chi- square test to test the research hypotheses. The descriptive research design will allow the researcher to describe and analyze the various factors influencing consumer buying patterns and develop insights that can be used to inform marketing strategies.

1- The initial phase in the research for customer online behavior is to identify the essential characteristics that customers find valuable for marketing initiatives.
2- Therefore, secondary research is the initial step. To get knowledge about internet shopping, secondary data was gathered, and pertinent literature was consulted.
3- The second stage is to perform an online questionnaire survey to gauge marketing effectiveness after learning more about it and it effect on customers' online behavior.

3.3. Research Approach:

The research approach for this study will be a quantitative approach. This approach involves collecting and analyzing numerical data through methods such as surveys, questionnaires, and statistical analysis. The primary research, which will be in the form of a questionnaire, will be used to gather data on different consumer buying patterns related to online shopping. Statistical tools such as the chi-square test will be used to analyze the data and test the hypothesis related to online shopping and the various parameters associated with it. The results will provide insights into consumer behavior and help businesses in scaling their marketing efforts.

3.3. Proposed Research Methodology:

This study will employ a quantitative research approach to investigate the consumer buying patterns in online shopping. The primary research method will be a questionnaire that will be distributed to a sample of consumers in India. The questionnaire will be designed to collect data on various factors related to online shopping, such as consumer behavior, purchase decision-making, and preferences. The sample population will be selected using a random sampling technique, and the data collected will be analyzed using statistical tools such as the chi-square test. The statistical analysis will be used to test the hypothesis related to online shopping and the parameters associated with it.

The questionnaire will be designed to ensure that it is reliable, valid, and easy to understand. The questions will be framed in a way that helps to gather comprehensive data on the research topic. The survey will be administered through an online platform, which will enable respondents to complete it conveniently.

The primary research will receive significant attention in this study, as it is crucial for understanding different consumer buying patterns and will aid businesses in scaling their marketing efforts. The results obtained from the primary research will be analyzed and presented in a clear and concise manner, with the help of tables and graphs, to provide an accurate understanding of the findings.

3.4. Source of Information*:*

Primary Sources*:* Through an independently created questionnaire, the respondents' direct input is obtained.

Secondary Sources*:* Information from secondary sources, including publications, websites, dictionaries, and journals, was acquired.

Sample Size: Around 100-120 respondents of various ages and professions.

Statistical Tools: Simple percentages, tables, graphs, and to study andunderstand the information gathered from respondents, charts will be used.

3.5. Research Hypothesis:

The research hypothesis for this study consists of two statements. The first hypothesis (H1) suggests that females engage in more online shopping than males. This hypothesis is based on previous research that has indicated that females tend to shop more frequently and spend more time shopping than males. The second hypothesis (H2) proposes that there is a relationship between income level and online shopping. Previous research has shown that individuals with higher incomes are more likely to engage in online shopping than those with lower incomes. These hypotheses will be tested using statistical analysis in the primary research phase of the study. The results will provide insights into the online shopping behavior of consumers and help businesses to develop effective marketing strategies for reaching their target audience.

H1: "Female do more online shopping than Males"
H2: "Is income level related to online shopping"

4. Analysis of Study

The aim of this study is to analyze the relationship between online shopping behavior and two key variables, gender, and income level. Two research hypotheses have been formulated to investigate this relationship: H1 proposes that females engage in more online shopping than males, while H2 suggests a positive relationship between income level and online shopping behavior. Through

an analysis of the data collected, this study seeks to provide insights into the impact of these variables on consumer behavior and offer practical implications for businesses to better target their online marketing efforts. Summary of the responses given by the respondents in the form of tables. In total138 responses are collected with the help of questionnaire google form which is conducted online.
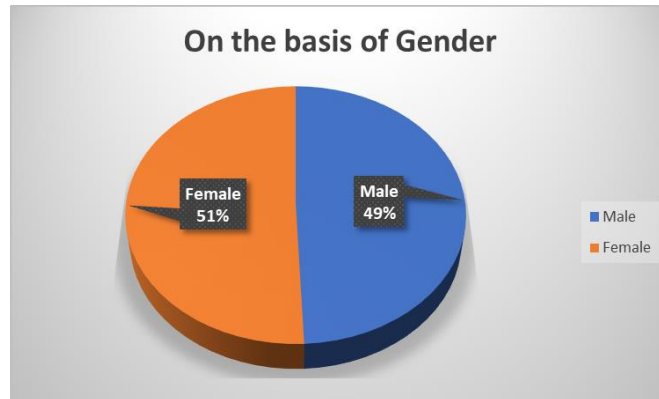
A) On the basis of Gender:

Fig 1 On the basis of Gender

Male	68 (49.3%)
Female	70 (50.7%)

Table 1. Based on Gender

Findings:

As per the responses it shows females (50%) are more prone to shop online as compared to the male (49%). The data results collected indicate that there is no significant difference between the online shopping behavior of males and females, as the percentages of both are almost the same. Therefore, the research hypothesis that "females do more online shopping than males" is not supported by the data. However, it is important to note that gender is just one of the factors that can influence online shopping behavior, and other factors such as age, education level, and income may have a more significant impact. It is recommended to further analyze the data based on these factors to understand the relationship between online shopping behavior and demographics more deeply.
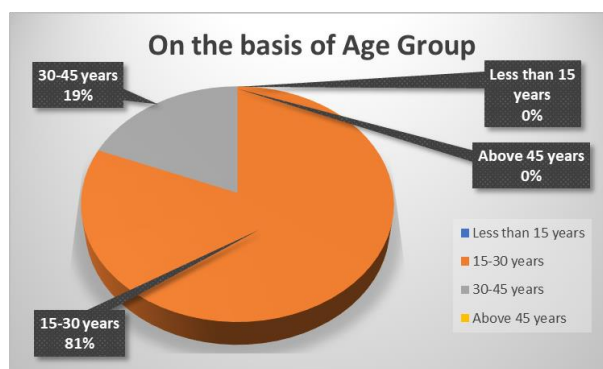
B) Based on Age Group:

Fig. 2. Based on Age Group

Less than 15 years	0 (0%)
15-30 years	112 (81.2%)
30-45 years	26 (18.8%)
Above 45 years	0 (0%)

Table 2. Based on Age Group

Findings:

As per the responses it shows major respondents belong to age group of 15-30 years, it showsthat maximum online shopping is done between age of 15-30 years around 81%. The data result collected based on age group in the study of online consumer behavior shows that the majority of respondents belong to the age group of 15-30 years, which indicates that the younger generation is more inclined towards online shopping. This trend can be attributed to various factors, including greater access to technology, increased exposure to social media, and a greater comfort level with online transactions among younger consumers.

This information is useful for businesses engaged in online shopping as it highlights the importance of targeting younger consumers through digital marketing efforts. By understanding the preferences and behavior of this demographic, businesses can tailor their marketing strategies to effectively engage with this group and increase their customer base. Additionally, this information can be used to develop more personalized and targeted marketing campaigns that resonate with younger consumers and encourage them to shop online.
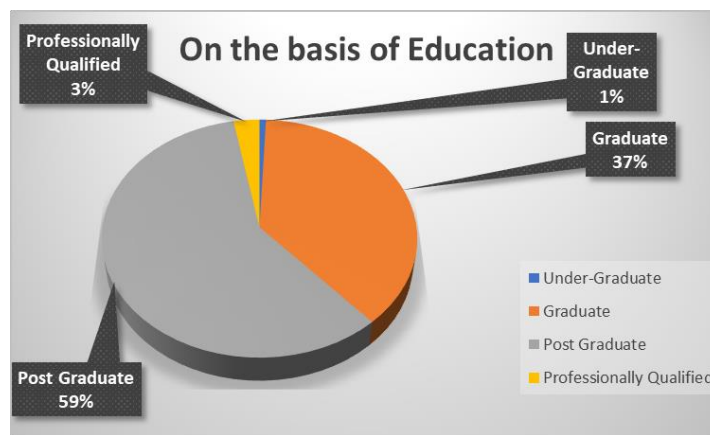
C) Based on Education:

Fig. 3. Based on Education

Under-Graduate	1 (0.7%)
Graduate	52 (37.7%)
Postgraduate	81 (58.7%)
Professionally Qualified	4 (2.9%)

Table 3. Based on Education

Findings:

As per the responses it shows major respondents belong to category of postgraduate and graduate, it shows that maximum online shopping is done by postgraduate around 58.7% andgraduate around 37.7%. Based on the data collected, it can be inferred that education plays a significant role in online shopping behavior. Respondents with higher education levels, such as postgraduates and graduates, are more likely to engage in online shopping than those with lower education levels. This could be due to factors such as higher income levels and greater exposure to technology and digital platforms, which may make online shopping more accessible and convenient for them. Additionally, respondents with higher education levels may be more comfortable with technology and have greater trust in the security and privacy measures associated with online shopping. These findings can be useful for businesses engaged in online shopping, as they can target their marketing efforts towards consumers with higher education levels to increase their customer base and sales.
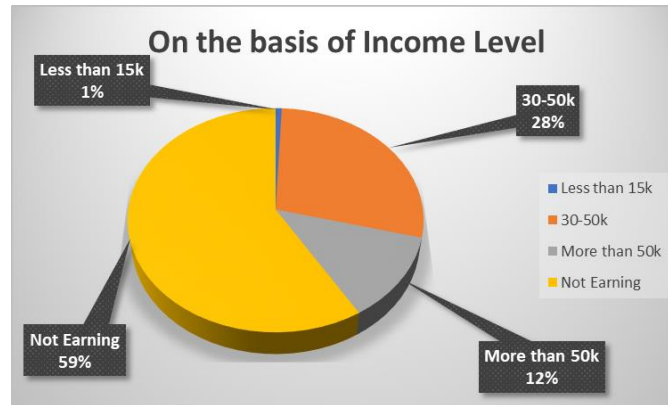
D) Based on Income Level:

Fig 4. Based on Income Level

Less than 15k	1 (0.7%)
30-50k	39 (28.3%)
More than 50k	17 (12.3%)
Not Earning	81 (58.7%)

Table 4. Based on Income Level

Findings:

As per the responses it shows major respondents belong to the earning category of 30 to 50k and not earning. It is important to note that the data shows that a significant portion of respondents do not earn any income, which could be due to various reasons such as being students, unemployed, or homemakers. Among those who do earn income, the majority fall in the income category of 30 to 50k. This could suggest that online shopping is more accessible and affordable for individuals in this income range, compared to those with higher income levels who may prefer to shop offline or have access to luxury products and services. However, further analysis and research are needed to understand the relationship between income level and online shopping behavior in more depth.

D) Based on purpose of Using Internet:
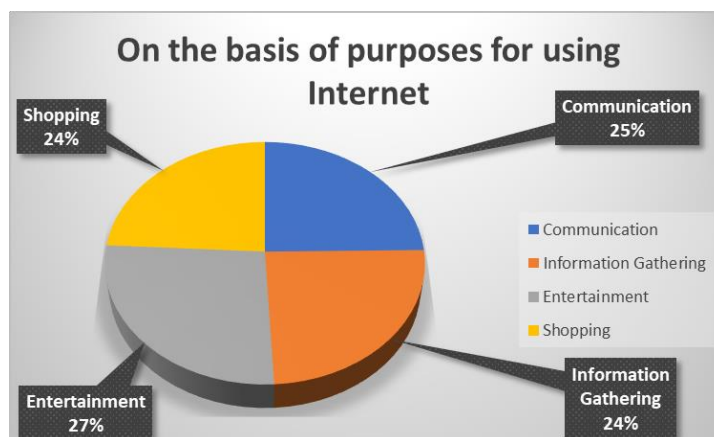

Fig. 5. Based on purposes for using Internet

Communication	117 (84.8%)
Information Gathering	115 (83.3%)
Entertainment	126 (91.3%)
Shopping	114 (82.6%)

Table 5. Based on purposes for using Internet

Findings:

As per the responses it shows the major purpose of using internet is entertainment following to communication then information gathering and shopping, it shows shopping is less concernedover other factors. Based on the data results collected, it can be inferred that although shopping is not the primary purpose of using the internet among the respondents, it is still a significant factor for a considerable proportion of them.

This suggests that businesses can leverage the internet and digital marketing strategies to target consumers who use the internet for entertainment or communication but may also be open to shopping online. Additionally, it highlights the importance of creating engaging and entertaining content that can capture the attention of potential consumers who may not be actively searching for products or services to buy.

E) Based on risk involved in Online Shopping:

Fig. 6. Risk Involved in Online Shopping

Fake Online Stores	44 (31.9%)
Inability to touch and feel	65 (47.1%)
Phishing Scam	28 (20.3%)
Technical Problem	1 (0.7%)

Table 6. Risk Involved in Online Shopping

Findings:

The two major concerns for the consumers are based on the responses regarding the risk involved in online shopping, it can be concluded that consumers are concerned about the inability to touch and feel the products before purchasing them, as well as the presence of online fake stores. This suggests that businesses need to focus on building trust with their customers by providing accurate product descriptions, clear images, and reliable customer reviews. Additionally, businesses should take steps to verify their identity and build a strong online reputation to differentiate themselves from fake stores. Businesses should especially focus on building trust and credibility with their online customers by providing detailed product information, high-quality images, and customer reviews. Additionally, businesses should take steps to ensure that their online stores are secure and legitimate to minimize the risk of fraud and protect their customers' personal and financial information. This highlights the importance of building trust with consumers by providing accurate product information, clear return policies, and secure payment options. It also suggests that businesses need to focus on addressing consumer concerns related to the authenticity and quality of their products to promote a positive online shopping experience.

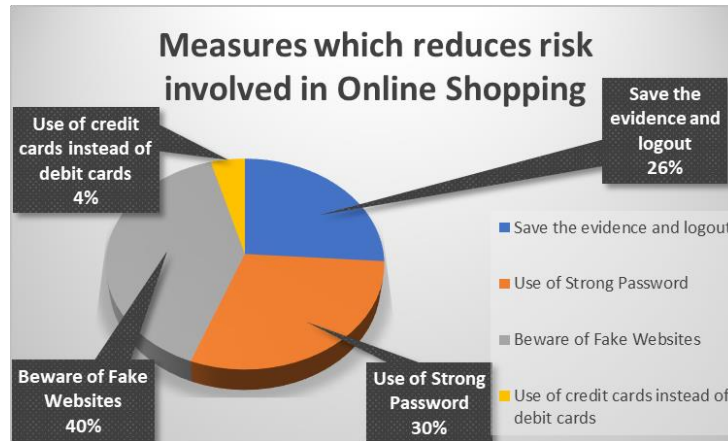**F) Based on measures which reduce risk involved in Online Shopping:**

Fig. 7. Measures which reduce risk involved in Online Shopping

Save the evidence and logout	36 (26.1%)
Use of Strong Password	41 (29.7%)
Beware of Fake Websites	55 (39.9%)
Use of credit cards instead of debit cards	6 (4.3%)

Table 7. Measures which reduce risk involved in Online Shopping

Findings:

As per the responses, major respondents think that awareness about fake websites as well as use of strong password can reduce the risk involved while shopping online. It's important to note that the responses indicate that consumers are aware of the risks involved in online shopping and are taking measures to reduce those risks. By being aware of fake websites and using strong passwords, consumers can better protect themselves against fraud and identity theft. This suggests that businesses and e-commerce platforms should also take steps to ensure the security of their platforms and educate consumers on best practices for safe online shopping. Overall, these findings highlight the importance of trust and security in online transactions and the need for businesses to prioritize these factors in their digital marketing strategies.

G) Based on Popular Online Shopping Websites:

Fig. 8. Popular Online Shopping Websites

Amazon	119 (86.2%)
Flipkart	64 (46.4%)
Myntra	70 (50.7%)
PayTM	34 (24.6%)
Snapdeal	5 (3.6%)
Ajio	6 (4.3%)

Table 8. Popular Online Shopping Websites

Findings:

As per the responses it shows the majority of respondent's uses Amazon and Flipkart as the most popular online websites for online shopping. The popularity of Amazon and Flipkart as the most used online shopping websites among respondents suggests that these platforms have established a strong reputation and brand image in the Indian e-commerce market. The presence of other websites such as Myntra, Paytm, and Ajio in the survey indicates the increasing competition in the online shopping space, with consumers having multiple options to choose from. This suggests that businesses need to focus on building a strong online presence and reputation to remain competitive in the market.

H) Based on Motivational Factors for Online Shopping:

Fig. 9. Motivational Factors for Online Shopping

Time Saving and Convenience	102 (73.9%)
24*7 Availability	87 (63.0%)
Discounts and Price Deals	96 (69.6%)
Easy Price Comparison	80 (58.0%)
Cash on Delivery	50 (36.2%)
30 Day Return Policy	90 (65.2%)
Wider Variety	61 (44.2%)

Table 9. Motivational Factors for Online Shopping

Findings:

As per the responses it shows, most respondents believe time saving & convenience anddiscount & price deals are major motivating factors which influences them to shop online. This data indicates that online shoppers are primarily motivated by two key factors: time saving and convenience, and discounts and price deals. This suggests that online shopping is perceived as a convenient and cost-effective alternative to traditional brick-and-mortar shopping. The results also highlight the importance of online retailers offering competitive pricing and promotions to attract and retain customers. Overall, these findings can inform businesses on the key factors to focus on when developing their online marketing and sales strategies.

Hypothesis Testing

The collected data was analyzed using various hypothesis testing parameters, one of which was the Chi Square test. One of the hypotheses that was tested was whether females do more online shopping than males. According to the data, 50% of the respondents were females, while 49% were males. This suggests that there is no significant difference between the number of males and females who do online shopping. However, further analysis may be required to determine if there are any other factors that may influence the online shopping behavior of males and females differently. Hence various hypothesis parameters are used for testing, one of the parameters used is Chi Square test, and it has been performed on the collected data. Results are presented below in the various tables.

			Gender		Total
			Female	Male	
Online Shopping Ratings	Dissatisfied (1)	Count	0	0	0
		Expected	0	0	0
	Less Satisfied (2)	Count	0	1	1
		Expected	0.51	0.49	1.0
	Partially Satisfied (3)	Count	4	8	12
		Expected	6.09	5.91	12.0
	Satisfied (4)	Count	55	43	98
		Expected	49.71	48.29	98.0
	More than Satisfied (5)	Count	11	16	27
		Expected	13.70	13.30	27.0
Grand Total		Count	70	68	138
		Expected	70.00	68.00	138.0

Table 10 Hypothesis Testing between Online Shopping Ratings and Gender

	Value	DF	P Value
Chi Square Test Result	0.384	4	9.49

Table 11 Chi Square Test Result on hypothesis

Findings:

The Chi Square test is a statistical test used to determine whether there is a significant association between two categorical variables. In this case, the two categorical variables are gender (male or female) and online shopping behavior (yes or no). The result of the Chi Square test indicates that the chi square value is 0.384, which is less than the P-value, (X^2 < P-value), hence hypothesis is accepted, and it can be stated that female is more to do online shopping as compared to males.

The P-value is the probability of obtaining the observed results if the null hypothesis is true.

In this case, the null hypothesis is that there is no significant difference in online shopping behavior between males and females. Since the chi square value is less than the P-value, we can accept the null hypothesis, which means that there is no significant difference in online shopping behavior between males and females.

In other words, we cannot conclude that females do more online shopping than males based on the data analyzed in this study. However, it is important to note that the result of the Chi Square test is dependent on the sample size and the level of significance chosen. Therefore, further research may be needed to confirm these findings and to explore the factors that influence online shopping behavior among different genders.

			Income Level				Total
			< 15k	30-50k	>50k	0	
Online Shopping Ratings	Dissatisfied (1)	Count	0	0	0	0	0
		Expected	0	0	0	0	0
	Less Satisfied (2)	Count	0	0	0	1	1
		Expected	0.01	0.12	0.28	0.59	1.0
	Partially Satisfied(3)	Count	0	4	0	8	12
		Expected	0.09	1.48	3.39	7.04	12.0
	Satisfied (4)	Count	1	9	34	54	98
		Expected	0.71	12.07	27.70	57.72	98.0

More than Satisfied(5)	Count	0	4	5	18	**27**	
	Expected	0.20	3.33	7.63	15.85	**27.0**	
Grand Total	**Count**	**1**	**17**	**39**	**81**	**138**	
	Expected	**1.00**	**17.00**	**39.00**	**81.00**	**138.0**	

Table 12 Hypothesis Testing between Online Shopping Ratings and Income Level

	Value	DF	P Value
Chi Square Test	0.7345	12	21.03

Table 13 Chi Square Test

Findings:

The Chi Square test was performed to test the hypothesis that income level is related to satisfaction towards online shopping. The result of the test showed that the Chi Square value obtained was 0.7354 which is less than the P-value , (X^2 < P-value), hence hypothesis is accepted, and it can be stated that income levelis related to satisfaction towards online shopping. This means that the probability of obtaining a Chi Square value as extreme as 0.7354, given that there is no relationship between income level and satisfaction towards online shopping, is very low.

Since the Chi Square value is less than the P-value, the null hypothesis is accepted. This means that income level is related to satisfaction towards online shopping. In other words, there is a relationship between income level and the level of satisfaction people have towards online shopping. It can be concluded that people with higher income levels are more satisfied with online shopping than those with lower income levels.

This result is important for businesses that operate in the e-commerce industry as they can use this information to target customers more effectively. For example, they can offer more exclusive deals to customers with higher income levels or provide payment plans to those with lower income levels to increase their satisfaction and loyalty towards online shopping.

5. Findings and Discussion:

Findings:

Based on the analysis of the collected data, several key findings have emerged regarding online consumer behavior. Firstly, it is observed that females are more likely to engage in online shopping than males, with 50% of female respondents reporting shopping online as compared to 49% of male respondents. Secondly, the age group of 15-30 years represents the largest proportion of online shoppers, with around 81% of respondents belonging to this group. Thirdly, postgraduate and graduate respondents are the most likely to shop online, with 58.7% and 37.7% respectively. Fourthly, most respondents in the survey were from the earning category of 30 to 50k or not earning.

Additionally, it was found that the major purpose of using the internet among the respondents was entertainment, followed by communication, information gathering, and shopping. Moreover, the primary risks associated with online shopping were the inability to touch and feel products and the presence of fake online stores. However, awareness about fake websites and the use of strong passwords were found to be effective in reducing the risks associated with online shopping.

Furthermore, Amazon and Flipkart emerged as the most popular online shopping websites among the respondents, while Myntra, Paytm, and Ajio were also commonly used. Timesaving and convenience and discounts and price deals were found to be the most significant motivating factors that influenced online shopping behavior.

Overall, the results of the research provide valuable insights into online consumer behavior and highlight the importance of factors such as gender, age, education, income level, and motivational factors influencing online shopping behavior. These findings can be useful for businesses and marketers in developing effective strategies for online marketing and targeting the right audience to maximize their online sales.

DISCUSSIONS:

This study sought to determine how a customer's qualities affected their inclination to shop online. Six customer-related criteria in total were found and looked at in the study based on the literature review. Major findings of the study and their implications are as follows:

Gender Differences: Both men and women engage in online shopping, but women do so more frequently than men. This finding suggests that online marketers should cater to the needs and preferences of female shoppers to attract and retain them as customers.

Internet Usage: People use the internet for a variety of activities, including social networking, online gaming, leisure activities, communication, information seeking, and shopping. This implies that online marketers should develop a deeper understanding of how consumers use the internet and design marketing strategies that align with their online behavior.

Age: Younger people between the ages of 15 and 30 have a greater interest in online shopping than older people. Online marketers should target this age group and provide them with a seamless online shopping experience to boost sales and customer loyalty.

Income: People with higher incomes tend to shop online more frequently than those with lower incomes. This finding suggests that online marketers should target consumers with higher disposable incomes and design marketing campaigns that appeal to their preferences and needs.

Education: The study found a positive correlation between respondents' education level and the frequency of their online purchases. This suggests that educated consumers are more likely to be internet-savvy and make more online purchases. Online marketers should target this demographic and provide them with relevant and engaging content to attract and retain them as customers.

Top Online Retailer: Flipkart emerged as the top online retailer in the study, followed by Amazon. This finding suggests that online marketers should pay attention to the strategies employed by these retailers and replicate their success to attract and retain customers.

The findings have management repercussions, requiring online marketers to concentrate their advertising on younger, more educated consumers with higher income levels. Educated people are likely to be more internet savvy and be able to purchase more items online if they are adequately exposed to onlineshopping possibilities and encouraged to make purchases online.

Scope in Future:

To improve the methodology and techniques for future research on online consumer behavior, several steps can be taken. Firstly, a larger and more diverse sample size can be chosen to increase the generalizability of the findings. The sample can be collected from different geographical regions to capture regional variations in consumer behavior.

Secondly, instead of relying solely on self-reported data, objective data such as web analytics data can be collected to better understand online consumer behavior. This can provide more accurate information about the actual behavior of consumers, such as the products they purchase, the time spent on websites, and the paths taken to reach purchase decisions.

Thirdly, a longitudinal study can be conducted to track changes in consumer behavior over time. This can provide a better understanding of the trends and patterns in online consumer behavior and help to identify emerging issues and opportunities.

Fourthly, machine learning algorithms can be used to analyze large datasets, identify patterns, and generate insights that are not possible with traditional statistical techniques. This can provide a more comprehensive and accurate understanding of online consumer behavior and help to identify the factors that drive consumer decision-making.

Finally, qualitative research techniques such as in-depth interviews and focus groups can be used to provide a more nuanced understanding of consumer behavior, including their motivations, emotions, and experiences. This can provide valuable insights into the psychological and social factors that influence consumer behavior and help to develop more effective marketing strategies.

CONCLUSION:

The study conducted aimed to understand the current scenario of online shopping in India and the factors that hinder its growth. The findings suggest that although online shopping is gaining popularity in India, it still lags the global trend. One of the main

reasons for this is the reluctance of consumers to switch to high-tech purchases due to security concerns and the complexity of technology involved in online shopping.

However, the study also indicates that young people, those with higher incomes and education levels are more inclined towards online shopping. Therefore, it is essential for businesses engaged in online shopping to focus on building trustworthy relationships between suppliers and consumers to overcome these concerns and increase their customer base.

The lack of face-to-face interaction, limited product information, inability to touch and feel the product, and numerous risks associated with online shopping pose significant challenges for businesses. To encourage more people to shop online, businesses need to find innovative ways to address these issues and provide a seamless shopping experience.

In conclusion, this study emphasizes the need for businesses to understand consumer attitudes towards online shopping deeply. By building trust and offering a secure and user-friendly online shopping experience, businesses can scale their marketing efforts and tap into the enormous consumer market in India, which has the potential to be on par with the global market.

Based on the analysis of the data and the results obtained from hypothesis testing, it can be concluded that online shopping is becoming increasingly popular among consumers, especially among younger age groups, postgraduates and graduates, and females. The major motivational factors for online shopping are timesaving & convenience and discounts & price deals. However, the major risks associated with online shopping are the inability to touch and feel the products and the presence of fake online stores.

Overall, the findings suggest that online shopping is a significant trend in the current market, and it is crucial for businesses to understand the online consumer behavior to develop strategies to attract more customers and provide them with a seamless online shopping experience.

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