



The impact of online reviews on consumer purchase decisions: E-commerce platforms

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Abstract

This study explores the impact of online reviews on consumer purchase decisions in the context of e-commerce platforms. Online reviews play a significant role in shaping consumer trust, influencing purchase intent, and determining brand credibility. The research examines the different types of online reviews, including text-based feedback, star ratings, video testimonials, and influencer content, to assess their effectiveness in driving consumer engagement.

Through a structured methodology, primary data was collected via a questionnaire from 160 respondents, supplemented by secondary research. The analysis reveals that factors such as review authenticity, volume, recency, and emotional language significantly impact consumer perception. Findings suggest that businesses must actively manage online reviews, address negative feedback promptly, and leverage positive testimonials to enhance brand reputation.

Additionally, the study explores the role of sentiment analysis in identifying consumer attitudes towards products and brands. The research highlights the increasing importance of artificial intelligence and machine learning in filtering fake reviews and enhancing the credibility of review platforms.

Moreover, the research shows psychological mechanisms that guide consumer decision-making, such as the bandwagon effect and confirmation bias, which stimulate how customers interpret feedback on the net. With these psychologic processes in mind, e-commerce brands can develop review management more effectively, based on understanding user-generated content with increasing engagement among users.

The study underscores the necessity for e-commerce brands to integrate review management strategies for sustained consumer trust and higher conversions, emphasizing the potential of technological advancements in improving review authenticity and customer satisfaction.

Keywords: Online reviews, consumer purchase decisions, E-commerce platforms, review authenticity, brand reputation

Introduction

In the digital age, online reviews have transformed the way consumers make purchase decisions. The rise of e-commerce platforms has enabled consumers to access vast amounts of user-generated content, including product reviews, ratings, and testimonials, which significantly influence their buying choices. Online reviews act as a critical source of information, offering insights into product quality, usability, and overall customer experience.

Increased internet penetration and increased mobile use have exploded consumer reliance on online reviews. Research suggests that many online shoppers read reviews before buying a product, and opinions thus formulated play a strong role in influencing a consumer's perceptions. Online reviews are different from traditional word-of-mouth recommendations because they are permanent and publicly available; one has the potential to reach millions in seconds. More importantly, online reviews are significant because they go beyond individual purchase decisions. Businesses realize that customer feedback is a major influence on the brand image, customer retention, and competitive positioning. Positive reviews can enhance credibility and attract more customers, whereas negative reviews might deter potential buyers and harm a company's reputation if not effectively managed.

This study seeks to analyse the impact of online reviews on consumer behaviour by exploring key factors such as review authenticity, sentiment analysis, and psychological influences. It also investigates how e-commerce brands can

leverage online reviews as a strategic tool to build trust, enhance customer engagement, and drive sales growth. By examining real-world case studies and consumer survey data, this research provides insights into the evolving role of online reviews in the digital marketplace.

Research Methodology

Introduction

In the digital world, the influence of online reviews has greatly increased in how consumers make purchase decisions on numerous e-commerce websites. Because increasing volumes of shopping are taking place over the Internet, the psychology of what motivates consumers' buying behaviours should be grasped to allow business operations to become more viable within this highly competitive sector. This paper examines the impactful dynamic in analyzing factors with the purchase influence from online reviews on consumer buying decisions.

This study is cross-sectional in nature, quantitatively focused, and deals with the data gathering of a heterogeneous population of 160 frequent online shoppers. Utilizing a structured questionnaire enables this research to collect appropriate demographic information, psychographic factors, personality traits, and situational influences—all very important in determining the choice.

This investigation will uncover not only the direct influences of online reviews on the behaviour of purchasing but also explain how personality and situational contexts

mediate the relationship. Insights that come from this research can be used to arm the online businesses with knowledge on how they can adjust strategies to enhance customer engagement and hence improve sales.

It therefore unfolds in its course and provides actionable recommendations that could help e-commerce sites in responding effectively to consumer feedback, thereby making the power of online reviews helpful in enhancing a positive experience and inspiring brand loyalty. More so than ever, as consumer opinions are easily available, is the time to understand how significant and influential these will be for any business aiming to succeed in the digital marketplace.

Objectives of the Study:

- To study about how customer's online review impacts consumers' decision over e-commerce websites.
- To identify demographic as well as psychographic aspects of influence through the strength of review which would bring its impact towards consumers' buying habit.
- To patterns with regards to online review behaviour by the consumer either planned or impulse buys.

Research Design

The present study used a cross-sectional quantitative research design to investigate the impact of online reviews on consumer purchasing decisions through e-commerce sites. The information was collected systematically from the respondents using a structured questionnaire.

Sample Selection

- **Population of Interest:** The population that is being targeted in the research are consumers who have frequent purchases on e-commerce sites.
- **Sample Size:** 160 participants.
- **Sampling Technique:** Convenience Sampling - Non-Probability This technique was applied because this technique ensures the sample taken will be representative in diversity regarding gender, age group, occupation, and education. It was practical because it fits the scope of study.

Data Collection:

- **Primary Data:** For the purpose of the study, primary data is collected by questionnaire.
- **Secondary Data:** There is some secondary data collected from the internet and websites to collect the proper information and the industry details about digital marketing.

Statistical Tools used for the Analysis:

- **MS Excel And SPSS:** Because of its adaptability and user-friendly interface, Microsoft Excel is a popular statistical tool for analyzing data. Data organization, descriptive statistics, chi-square, graphical representation, and statistical functions are only a few of the statistical analyses that researchers can carry out with its help.

Methodology:

- The study began with the design and distribution of a standardized questionnaire focusing on demographics, shopping habits, and the influence of online reviews on consumer decision-making. Responses were collected and analyzed using Excel to visualize trends and SPSS to derive deeper statistical insights.
- The research utilized a quantitative approach, employing simple random sampling to ensure a diverse representation across different consumer demographics. The structured questionnaire was designed to capture key variables such as review credibility, star ratings, user-generated content, and emotional triggers in purchasing decisions.

Introduction

The data analysis examines patterns and insights derived from survey responses, focusing on consumer behaviour, demographic trends, and purchase decision influences. By evaluating factors such as trust in online reviews, preferred review formats, and perceived credibility, this study presents a comprehensive view of the target population's decision-making process. Utilizing **MS Excel** for data visualization and **SPSS** for statistical analysis, various approaches, including means, frequencies, and percentages, were applied to break down key trends and relationships.

Table: 1 Gender and Composite Score Personal Factors and Psychological Influences

1. Crosstabulation Table				
Gender	Do not impact my online shopping behaviour	Somewhat impact my online shopping behaviour	Strongly impact my online shopping behaviour	Total
Male	20	58	11	89
Female	12	45	14	71
Total	32	103	25	160

2. Chi-Square Test Results			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.001	2	0.368

Males and females show similar responses regarding the influence of personal and psychological factors on online shopping, with most being moderately affected. The chi-square test results indicate no significant gender-based

differences in purchasing behavior, as the p-value (0.368) is above 0.05. This suggests that gender does not play a major role in determining how consumers respond to online reviews.

Table 2: Age and Composite Score Personal Factors and Psychological Influences

1. Crosstabulation Table				
Age Group	Do not impact my online shopping behaviour	Somewhat impact my online shopping behaviour	Strongly impact my online shopping behaviour	Total
18-25	30	92	24	146
26-35	2	8	1	11
36-45	0	1	0	1
46 and above	0	2	0	2
Total	32	103	25	160

2. Chi-Square Test Results			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.224	6	0.898

Males and females show moderate consideration for situational and purchase behavior factors in online shopping, with females slightly more likely to find them very important. The chi-square test (p-value = 0.199)

indicates no significant association between gender and these factors. The results are statistically reliable but suggest no meaningful gender-based differences in online shopping decisions.

Table 3: Education and Composite Score Personal Factors and Psychological Influences

1. Crosstabulation Table				
Education Level	Do not impact my online shopping behaviour	Somewhat impact my online shopping behaviour	Strongly impact my online shopping behaviour	Total
Under Graduate	15	47	21	83
Post Graduate	16	45	2	63
Other	1	11	2	14
Total	32	103	25	160

2. Chi-Square Test Results			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.168	4	0.004

Undergraduates are more influenced by personal and psychological factors in online shopping compared to postgraduates and others. The chi-square test (p-value = 0.004) confirms a significant relationship between education level and these influences. The results are statistically reliable, showing that education impacts sensitivity to online shopping behaviour.

Situational and purchase behaviour

Table 4: Gender Composite score Situational and Purchase Behaviour

Chi-Square Tests			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.230 ^a	2	0.199

Count					
		composites core situational and purchase behaviour			Total
		are not important in my online shopping decisions	somewhat important in my online shopping decisions	very important in my online shopping decisions	
gender	Male	21	48	20	89
	Female	15	31	25	71
Total		36	79	45	160

Males and females both consider situational and purchase behaviour factors in online shopping, with females slightly more likely to find them very important. The chi-square test

(p-value = 0.199) indicates no significant gender-based difference in these factors, meaning gender does not strongly influence online buying decisions.

Table 5: Age Composite score Situational and Purchase Behaviour

1. Crosstabulation Table				
Age Group	Are not important in my online shopping decisions	Somewhat important in my online shopping decisions	Very important in my online shopping decisions	Total
18-25	33	72	41	146
26-35	3	5	3	11
36-45	0	0	1	1
46 and above	0	2	0	2
Total	36	79	45	160

2. Chi-Square Test Results			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.756	6	0.576

The 18-25 age group shows the highest engagement with situational and purchase behavior factors in online shopping, while older age groups show less impact. The chi-square test (p-value = 0.576) indicates no significant association between age and these factors. The results suggest that a larger and more diverse sample could improve accuracy.

Table 6: Education Composite score Situational and Purchase Behaviour

1. Crosstabulation Table				
Education Level	Are not important in my online shopping decisions	Somewhat important in my online shopping decisions	Very important in my online shopping decisions	Total
Undergraduate	16	36	31	83
Postgraduate	19	37	7	63
Other	1	6	7	14
Total	36	79	45	160

2. Chi-Square Test Results			
Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.713	4	0.002

Undergraduates are the most influenced by situational and purchase behavior factors in online shopping, while postgraduates are moderately affected. The chi-square test (p-value = 0.002) shows a significant relationship between education level and these factors. However, no clear linear trend exists, suggesting other factors may also play a role.

Findings:

- **Demographic Distribution:** Most respondents are from the 18-25 age group, representing diverse occupations and education levels, ensuring broad demographic participation.
- **Influence of Social Norms:** Word-of-mouth recommendations from friends and family significantly impact purchasing decisions, highlighting the role of social influence in online shopping.
- **Impulsive Buying Behaviour:** Many consumers make impulse purchases rather than planned ones, with happiness being the most common emotional state during online shopping.
- **Key Purchase Drivers:** Discounts and online reviews are the most influential factors, while time constraints and convenience also play a crucial role in decision-making.
- **Role of Digital Marketing:** Consumers develop brand preferences through repeated exposure to online marketing, and product reviews help them make informed decisions.

Conclusion

Online reviews, social norms, and digital marketing play a crucial role in influencing e-commerce purchases. Consumers rely on recommendations, product reviews, and discounts to make informed decisions. Retailers should focus on creating a review-rich environment and offering attractive promotions. Brand reputation and customer trust significantly impact purchasing behavior. Psychological and situational factors shape online shopping habits. Adapting marketing strategies to consumer interests enhances satisfaction and brand loyalty.

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