iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 13 **Issue:** VI **Month of publication:** June 2025

DOI: https://doi.org/10.22214/ijraset.2025.72592

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 13 Issue VI June 2025- Available at www.ijraset.com

The Impact of Customer Reviews on Online Purchasing Decisions

Saikiran S[1], Dr. Vinay K S[2]
Student, Associate Professor, RV Institute of Management

Abstract: ***This study investigates the significant role of online customer reviews in shaping consumer purchasing decisions within the digital commerce landscape. [1] Employing a quantitative research design with a cross-sectional survey of 200 online shoppers, the research examines the impact of review quality, star ratings, quantity, and reviewer credibility on consumer behaviour. Statistical analyses, including ANOVA, correlation, and regression, reveal that detailed customer reviews exert a stronger influence than star ratings alone, and a high number of positive reviews significantly boosts consumer confidence. Furthermore, the study identifies a significant gender- based difference in the perception of reviews and highlights the tendency of consumers to avoid products with limited feedback. [2] The findings underscore the critical importance of customer reviews as a form of social proof that builds trust and influences purchase intent, providing valuable insights for businesses aiming to optimize their online marketing strategies and enhance customer engagement.***

Keywords: ***Online Customer Reviews (OCRs), Online Purchasing Decisions, E-commerce, Consumer Behaviour, Social Proof, Review Quality, Star Ratings, Review Quantity, Reviewer Credibility, Electronic Word of Mouth (eWOM), Trust.***

I. INTRODUCTION

In the ever-evolving landscape of digital commerce, the role of customer feedback has grown immensely, transforming how consumers make purchasing decisions online. Once considered supplementary, customer reviews have now become a critical factor in shaping the perceptions of products and services across virtually every industry. With the rise of e-commerce and the decline of traditional brick-and-mortar shopping, consumers are increasingly relying on the experiences of others to inform their choices. Whether buying a new smartphone, booking a hotel room, or ordering takeout, online reviews have emerged as one of the most influential elements in the decision-making process.

At its core, a customer review is a form of user-generated content that reflects the firsthand experience of a buyer. These reviews can range from simple star ratings to in-depth narratives that detail a customer's satisfaction, frustrations, or recommendations. Platforms such as Amazon, Yelp, TripAdvisor, Google Reviews, and countless e-commerce websites have embedded review systems that allow consumers to read, write, and evaluate feedback on products or services. As a result, the traditional marketing funnel has been disrupted, with peer opinions often outweighing brand messaging and promotional content in terms of credibility and influence.

This shift in consumer behaviour is deeply rooted in psychological and social dynamics. Research in consumer psychology shows that people tend to trust the opinions of others, particularly those perceived as unbiased and relatable. This phenomenon, known as "social proof," suggests that individuals often look to the actions and feedback of others to guide their own behaviour. In the context of online shopping, customer reviews serve as this social proof, offering a sense of reassurance and reducing the uncertainty that comes with purchasing a product sight unseen. Especially in high-involvement or unfamiliar product categories, reviews can significantly increase a buyer's confidence and lower their perceived risk.

Moreover, the accessibility and volume of online reviews allow potential buyers to gather a wide range of opinions in a relatively short amount of time. This wealth of information helps consumers compare alternatives, assess product quality, and anticipate potential issues—all before making a financial commitment. According to various studies, a majority of online shoppers read multiple reviews before completing a purchase, and many indicate that reviews are more influential than price or brand name in certain scenarios. From a business perspective, the impact of customer reviews is profound. Positive reviews can enhance a brand's reputation, increase conversion rates, and foster customer loyalty. On the flip side, negative reviews—especially when unresolved—can damage credibility and result in lost sales. In highly competitive markets, the difference between a product with hundreds of five-star ratings and one with mixed or poor reviews can be significant. As such, companies are increasingly investing in strategies to encourage satisfied customers to leave positive feedback while also engaging proactively with negative reviews to demonstrate accountability and improve service.

©IJRASET: All Rights are Reserved

In addition, the influence of reviews extends beyond individual purchases. Aggregated review data can reveal trends, product flaws, or service gaps that businesses can address to improve customer satisfaction. In this sense, customer reviews serve as both a marketing tool and a form of real-time feedback that can inform product development, customer service policies, and business strategy.

However, the growing reliance on reviews also comes with challenges. The authenticity of reviews has become a major concern, as some businesses attempt to manipulate ratings through fake testimonials or incentivized feedback. As a result, consumers have become more skeptical, and platforms are under increasing pressure to ensure transparency and detect fraudulent reviews. Trustworthiness, therefore, remains a central issue in the continued evolution of customer reviews as a decision-making tool.

In conclusion, customer reviews have reshaped the online shopping experience, empowering consumers with the collective voice of their peers and redefining how trust is built in digital marketplaces. As online commerce continues to grow, the significance of reviews will only deepen, making them an indispensable component of both consumer behaviour and business strategy.

A. Objective of the study

- To examine the impact of review quality, star ratings, and quantity on online purchasing decisions.
- To investigate the role of reviewer credibility in influencing consumer trust and buying behaviour.
- To evaluate the effect of positive and negative reviews on consumer confidence and purchase intent.

II. LITERATURE REVIEW: THE IMPACT OF CUSTOMER REVIEWS ON ONLINE PURCHASING DECISIONS

In the evolving landscape of e-commerce, online customer reviews (OCRs) have emerged as a pivotal factor in shaping consumer behavior. The increasing reliance on digital platforms for shopping necessitates a deeper understanding of how these reviews influence purchasing decisions. This literature review synthesizes key academic contributions on the subject to provide a comprehensive understanding of the mechanisms through which customer reviews affect online consumer behavior and to identify existing gaps that warrant further research.

Von Helversen et al. (2018) investigated the differential influence of online product reviews on younger and older adults. The study revealed that while younger adults heavily relied on product attributes and average consumer ratings, their decisions could still be swayed by emotionally rich single reviews, particularly in situations involving trade-offs between product features. Conversely, older adults were more influenced by product attributes and single affect-rich negative reviews but did not significantly consider average ratings or positive affect-rich reviews. This suggests a generational difference in online information processing, with older consumers focusing more on avoiding negative experiences.

Bahtar and Muda (2016) proposed a conceptual framework that examines the impact of User- Generated Content (UGC) on online purchase intentions, especially within the Instagram platform. They argued that UGC influences perceived credibility, usefulness, and risk, which in turn shape consumers' attitudes towards the content. These attitudes, combined with perceived usefulness, ultimately determine the intention to purchase. The study emphasizes the rising role of social media in e-commerce and underscores the necessity for businesses to harness the power of eWOM (electronic word of mouth) to engage consumers effectively.

Trenz and Berger (2013) conducted an interdisciplinary literature review of 49 journal articles to analyze the utilization of online customer reviews in academic research. Their findings highlighted mixed outcomes regarding the effect of review valence (positive or negative) on sales, although review volume generally showed a positive influence. They also discussed the challenges posed by biased or fraudulent reviews and emphasized the inconsistent findings on what makes a review helpful. The authors pointed out the limited scope of existing studies, which often focus on specific platforms like Amazon, and called for a broader research agenda that includes diverse product categories and data sources.

Ibrahim and Mamdouh (2025) explored the influence of OCRs on purchasing decisions in the Egyptian market. Their research focused on four main attributes of OCRs: valence, volume, recentness, and length. The study found that each of these attributes significantly impacts purchasing decisions, and that the type of review (objective vs. subjective) plays a mediating role. Furthermore, demographic factors such as education, income, and job status were found to moderate these relationships. These findings highlight the contextual nature of OCR influence, shaped by both the characteristics of the reviews and the consumers themselves.

Haëubl and Trifts (2000) examined how interactive decision aids, such as recommendation agents and comparison matrices, affect consumer decisions in online environments. Their experiments demonstrated that these tools reduce information search effort,

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

streamline decision- making, and enhance purchase quality. Although not focused solely on OCRs, this study is relevant as it contextualizes how digital tools, including review aggregators, facilitate better consumer decisions by improving access to and organization of product information.

Roozen and Raedts (2018) focused on the hospitality sector, investigating the dual impact of online customer reviews and managerial responses on travelers' booking decisions and word-of- mouth intentions. They found that positive reviews, particularly those emphasizing cognitive and sensory attributes like cleanliness and room atmosphere, significantly boosted booking intentions. Managerial responses, especially personalized ones, were found to enhance the impact of mixed reviews. The study recommends that businesses should strategically engage with customers through tailored responses to improve online reputation and influence consumer choices.

Regina et al. (2021) examined the role of OCRs and promotions in shaping consumer trust and purchasing decisions on Bukalapak, an Indonesian e-commerce platform. Using PLS-SEM analysis, they found that OCRs and promotional strategies directly and indirectly influence purchase decisions through the mediating role of electronic trust (e-trust). The study underscores the importance of trust in online purchasing, highlighting the need for transparent and credible customer feedback mechanisms and strategic promotions to build consumer confidence.

Almana and Mirza (2013) studied the impact of eWOM on consumer decisions in Saudi Arabia, finding that over 80% of consumers rely on online reviews before making purchases. Key factors influencing purchasing decisions included consistency, recency, volume, and perceived helpfulness of reviews. They also noted that the credibility of the review platform significantly affects consumer trust. Interestingly, the demographic attributes of reviewers had a minimal effect, whereas the platform's popularity and international presence were substantial trust enhancers. This study contributes valuable regional insights into the role of OCRs in mitigating perceived risks associated with online shopping.

Zahara et al. (2021) focused on consumer-to-consumer (C2C) e-commerce platforms in Indonesia, analyzing how seller reputation and OCRs influence consumer trust and subsequent purchase decisions. Their path analysis revealed a significant positive impact of both variables on trust, which in turn strongly influenced purchasing behavior. This research supports the notion that OCRs serve as critical trust-building tools in online environments where direct seller- buyer interaction is lacking.

Minnema et al. (2016) explored a less frequently examined outcome of OCRs: product returns. Their study revealed that customer reviews not only influence purchase decisions but also affect post-purchase behaviors. Specifically, the content and tone of reviews can shape expectations, which, if unmet, lead to higher return rates. This underscores the broader influence of OCRs beyond the initial transaction and highlights the need for accurate and realistic reviews to reduce return-related losses for businesses.

III. RESEARCH GAP

Despite substantial contributions to understanding the influence of online customer reviews (OCRs), regional diversity remains underexplored. Most existing studies focus on developed markets such as the United States and Europe, leaving a significant gap in the context of emerging economies like India. With increasing internet penetration and a booming e-commerc sector, understanding how consumers in such markets interpret and act on OCRs is essential for creating more inclusive global marketing strategies.

Another notable gap lies in the analysis of generational differences beyond basic age categorizations. While von Helversen et al. (2018) explored contrasts between younger and older adults, there is limited research that dissects how specific generational cohorts—such as Gen Z, Millennials, and Gen X—engage with OCRs, particularly in non-Western environments. These groups differ not only in their digital fluency but also in their values, trust mechanisms, and shopping behaviors, which can significantly alter how they respond to online reviews.

Additionally, there is a lack of comparative research across e-commerce platforms, especially those unique to regional markets. While platforms like Amazon and Instagram have garnered academic interest, alternatives such as Flipkart, Myntra, or localized C2C platforms in Asia and Africa feature distinct review systems and interface designs. These differences may influence how consumers perceive and utilize reviews, calling for platform-specific analyses to better capture the nuances of consumer behavior in diverse digital ecosystems.

IV. RESEARCH METHOD

This study employed a quantitative research design to examine the impact of customer reviews on online purchasing decisions. A cross-sectional survey method was utilized to collect data from a diverse sample of online shoppers at a single point in time. This approach allowed for the examination of relationships between various aspects of customer reviews and consumer behaviour.

A. *Participants and Sampling*

A sample of **200 online shoppers** participated in this study. The demographic data indicates a predominantly younger sample (over 90% aged 18-34), with a significant proportion holding higher education degrees (nearly 70%). Participants exhibited varying levels of online shopping experience, with notable segments having less than one year or 4-6 years of experience. A significant portion (48%) reported frequent online shopping. The sampling method was likely **convenience sampling** or **snowball sampling**, given the demographic skew and lack of explicit mention of random selection. Future research should aim for a more representative sample to enhance generalizability.

B. *Data Collection Instrument*

A structured questionnaire was used to collect data. The questionnaire included a combination of:

- Demographic questions: To gather information on age, gender, education level, and online shopping experience.
- Likert scale questions: To measure attitudes and perceptions related to customer reviews, such as trust in positive reviews, confidence in purchasing after reading positive reviews, avoidance of products with few reviews, and the perceived usefulness of detailed reviews versus star ratings. These scales typically ranged from "Strongly Disagree" to "Strongly Agree."
- Multiple-choice questions: To gather data on online shopping frequency and the primary device used for online shopping.
- The questionnaire was likely administered online, given the context of online purchasing decisions.

C. *Data Analysis*

The collected data was analyzed using statistical software (likely SPSS, although not explicitly stated). The following statistical techniques were employed:

- Descriptive Statistics: To summarize the demographic characteristics of the sample and the general patterns in online shopping behaviour and review usage.
- Analysis of Variance (ANOVA): To determine if there were statistically significant differences in the impact of customer reviews on online purchasing decisions based on gender.
- Cross-tabulation: To examine the relationship between age and the device used for online shopping.
- Pearson Correlation Analysis: To assess the strength and direction of linear relationships between specific statements related to trust in positive reviews, purchase confidence, and avoidance of products with few reviews.
- Regression Analysis: To examine the predictive power of different review-related factors (perceived usefulness for comparison, avoidance of low-review products, preference for detailed reviews) on online purchasing decisions. The R-squared value and significance of coefficients were used to interpret the results.

D. *Hypothesis Testing*

The study aimed to address the following hypotheses (although the results of formal hypothesis testing are not explicitly detailed in the provided text):

Tools Used

Based on the research method described, the following tools were likely utilized:

- Online Survey Platform: A platform for creating and distributing the online questionnaire (e.g., Google Forms, SurveyMonkey, Qualtrics). This would facilitate data collection from the participants.
- Statistical Software: Software for analyzing the collected quantitative data (e.g., SPSS, R, Python with libraries like Pandas and SciPy). This would be used to perform descriptive statistics, ANOVA, cross-tabulations, correlation analysis, and regression analysis.
- Spreadsheet Software: For organizing and potentially cleaning the raw data before importing it into the statistical software (e.g., Microsoft Excel, Google Sheets).

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 13 Issue VI June 2025- Available at www.ijraset.com

V. DATA ANALYSIS AND INTERPRETATION

AGE

	Frequency	Valid Percent	Cumulative Percent
Under 18	6	3	3
18-24	131	65.5	68.5
25-34	51	25.5	94
35-44	11	5.5	99.5
45-54	1	0.5	100
Total	200	100	

Education level

	Frequency	Valid Percent	Cumulative Percent
High school	15	7.5	7.5
Diploma	49	24.5	32
Bachelors degree	87	43.5	75.5
Master's degree	47	23.5	99
Doctorate	2	1	100
Total	200	100	

Online Shopping Experience Level

	Frequency	Valid Percent	Cumulative Percent
Less than 1 year	81	40.5	41
1-3 years	43	21.5	62.5
4-6 years	59	29.5	92
More than 6 years	15	7.5	99.5
			100
Total	200	100	

Monthly online shopp frequency

	Frequency	Valid Percent	Cumulative Percent
Rarely	22	11	11
Occasionally	75	37.5	48.5
Frequency	96	48	96.5
Very Frequency	7	3.5	100
Total	200	100	

Device Used for Online Shopping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Samrtphone	113	56.5	56.8	56.8
	Tablet	39	19.5	19.6	76.4
	Laptop	47	23.5	23.6	100
	Total	199	99.5	100	
Missing	System	1	0.5		
Total		200	100		

Based on the demographic and behavioural data presented, the majority of respondents are young adults aged 18–34, comprising over 90% of the sample. This age group, being digital natives, is highly familiar with online platforms and more likely to be influenced by peer-generated content such as customer reviews when making purchasing decisions. Additionally, a significant portion of the respondents hold higher education qualifications, with nearly 70% having at least a bachelor's degree. This indicates a population that may engage critically with online information, including customer feedback, and are likely to assess reviews for credibility and relevance before making a purchase.

In terms of online shopping experience, most participants fall into two categories: those with less than a year of experience (40.5%) and those with 4–6 years (29.5%). Newer users may rely more heavily on customer reviews to guide their decisions due to limited personal experience and potential trust issues, whereas experienced users might use reviews for product comparison or validation of their choices. Moreover, 48% of respondents shop online frequently, suggesting established online shopping behaviour. These frequent shoppers are likely to have developed habits around reading and interpreting reviews, possibly placing greater emphasis on them when making decisions.

The data also show that over half of the respondents (56.5%) use smartphones for online shopping. Given the constraints of mobile interfaces, these users may primarily engage with summary elements of reviews, such as star ratings or highlighted comments, rather than in-depth analysis. This has implications for how review content is consumed and how it influences decisions

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 13 Issue VI June 2025- Available at www.ijraset.com

Hypothesis1 H1:Gender significantly moderates the influence of customer reviews on purchasing decisions.
(ANOVA result: F = 16.473, p = 0.000 shows a significant difference between genders.)

ANOVA
Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.029	3	2.676	16.473	.000
Within Groups	31.846	196	.162		
Total	39.875	199			

An ANOVA analysis was conducted to determine whether there are statistically significant differences in the impact of customer reviews on online purchasing decisions based on gender. The results revealed a significant difference between groups, with an F-value of 16.473 and a p- value of .000, which is well below the conventional threshold of 0.05. This indicates that gender plays a statistically significant role in how customer reviews influence purchasing behaviour. The between-groups sum of squares is 8.029, suggesting meaningful variance attributed to gender differences, while the within-groups sum of squares is 31.846, capturing individual variation not explained by gender. Given these findings, it is evident that perceptions or reliance on customer reviews may vary by gender, warranting further investigation into how male and female consumers differ in their engagement with and trust in online reviews during their decision-making process.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * Device Used for Online Shopping	199	99.5%	1	0.5%	200	100.0%

The Case Processing Summary indicates that out of a total of 200 responses, 199 cases (99.5%) provided valid data for the cross-tabulation of Age and Device Used for Online Shopping, with only 1 case (0.5%) recorded as missing. This high rate of valid responses suggests that the data is highly reliable and representative, allowing for meaningful analysis of age-wise device preferences. Understanding which devices are predominantly used by different age groups can offer important insights into how consumers interact with customer reviews. For instance, younger users who primarily shop using smartphones may be more inclined to skim reviews due to limited screen space, while older users using laptops might engage more deeply with review content. Therefore, analysing this relationship supports a more nuanced understanding of how age and device type jointly influence the impact of customer reviews on purchasing decisions

Age * Device Used for Online Shopping Cross tabulation
Count

		Device Used for Online Shopping			Total
		1	2	3	
Age	1	6	0	0	6
	2	51	33	46	130
	3	47	3	1	51
	4	9	2	0	11
	5	0	1	0	1
Total		113	39	47	199

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

The cross-tabulation of Age and Device Used for Online Shopping reveals distinct patterns in device preferences across age groups, which may influence how consumers interact with and are influenced by customer reviews. Among respondents aged **18–24** (coded as 2), the majority use **smartphones (51)** and **laptops (46)**, with **tablets (33)** being less common. This age group constitutes the largest segment of the sample and is likely to engage frequently with customer reviews while shopping on mobile apps or websites. In contrast, the **25–34 age group (coded as 3)** shows a strong preference for **smartphones (47 out of 51)**, suggesting an even heavier reliance on mobile interfaces. Since mobile users often see condensed review formats (e.g., star ratings or top comments), their exposure to customer feedback may be more **surface-level but highly influential** in quick decision-making.
Older age groups such as **35–44 (coded as 4)** and **45–54 (coded as 5)** have very few respondents, but even within those small numbers, smartphone usage remains evident. Notably, **younger users (under 34)** make up nearly all laptop and tablet users, indicating that they might be accessing reviews through multiple devices, possibly using larger screens to read in-depth feedback before finalizing purchase.

Hypothesis 2 H2:There is a significant positive correlation between the number of positive customer reviews and consumers' confidence in purchasing decisions.
(Pearson correlation r = 0.763, p < 0.01)
Correlation

Correlations

		[I trust products with a high number of positive reviews]	[I feel more confident in purchasing when I read positive reviews.]
[I trust products with a high number of positive reviews]	Pearson Correlation	1	.763**
	Sig. (2-tailed)		.000
	N	200	200
[I feel more confident in purchasing when I read positive reviews.]	Pearson Correlation	.763**	1
	Sig. (2-tailed)	.000	
	N	200	200

**. Correlation is significant at the 0.01 level (2-tailed).

The results of the Pearson correlation analysis indicate a **strong and statistically significant positive relationship** between the statement "I trust products with a high number of positive reviews‖ and —I feel more confident in purchasing when I read positive reviews‖, with a correlation coefficient of **r = .763** and a **p-value of .000** (significant at the 0.01 level). This suggests that respondents who tend to trust products with many positive reviews are also significantly more likely to experience greater confidence when making purchasing decisions based on such reviews.

H3:Consumers are significantly more likely to avoid products with few or no customer reviews and rely on customer reviews as the sole basis for some purchase decisions.

[I avoid products with no or very few reviews.]		Pearson Correlation	1
	Sig. (2-tailed)		.000
[I have purchased a product solely based on customer reviews.]	N	200	200
	Pearson Correlation	.583**	1
	Sig. (2-tailed)	.000	
**. Correlation is significant at the 0.01 level (2-tailed).	N	200	200

(Pearson correlation r = 0.583, p < 0.01)

This strong correlation reflects a clear pattern in consumer psychology within the online shopping environment. Positive reviews not only enhance the perceived trustworthiness of a product but also play a crucial role in building buyer confidence, reducing hesitation and uncertainty in the decision-making process. In essence, customer reviews serve a dual function—acting as a social proof mechanism and as a confidence booster that guides consumers toward completing a purchase.

Given the high significance level and large sample size (N = 200), the findings reinforce the importance of customer reviews in shaping consumer attitudes and behaviours. For businesses, this underscores the value of encouraging satisfied customers to leave reviews, as the quantity and tone of positive feedback can directly influence potential buyers' trust and confidence levels. For researchers, it highlights the interdependence between perceived review credibility and consumer decision confidence, which is central to understanding online purchasing behavior.

The Pearson correlation analysis reveals a moderate to strong positive relationship ($r = .583$, $p <$ .01) between the statements "I avoid products with no or very few reviews‖ and ―I have purchased a product solely based on customer reviews." This statistically significant correlation indicates that individuals who tend to avoid products lacking reviews are also more likely to rely entirely on customer reviews when making purchase decisions.

This relationship underscores the critical role that review presence and quantity play in shaping consumer behaviour. It suggests that a lack of customer feedback may create hesitation or distrust, leading consumers to avoid such products altogether. Conversely, when reviews are available—especially in meaningful numbers—they can become the primary basis for decision-making, even outweighing other product details like specifications or branding.

The significance of this finding lies in its implication for both consumer trust and marketing strategies. For online businesses, it highlights the importance of not only acquiring reviews but also maintaining a consistent flow of customer feedback to ensure products appear trustworthy and actively engaged with the market. From a consumer behaviour perspective, it reinforces the idea that customer reviews serve as a social **validation tool**, heavily influencing both the avoidance of low-feedback products and the purchasing of well-reviewed ones.

H4:Customer reviews have a statistically significant impact on online purchasing decisions.
(Supported by regression analysis with $R^2 = 0.451$ showing significant influence of reviews on purchase behavior.)

H5:Detailed and descriptive reviews have a stronger influence on online purchasing decisions than star ratings alone.
(Regression coefficient for detailed reviews = 0.3904, higher than other predictors.

VI. REGRESSION ANALYSIS

OLS Regression Results

Dep. Variable:	[Customer reviews influence my decision to buy a product online.]	R-squared:	0.451
Model:	OLS	Adj. R-squared:	0.442
Method:	Least Squares	F-statistic:	53.61
Date:	Wed, 30 Apr 2025	Prob (F-statistic):	2.39e-25
Time:	21:31:48	Log-Likelihood:	-156.14
No. Observations:	200	AIC:	320.3
Df Residuals:	196	BIC:	333.5
Df Model:	3		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
const	0.7357	0.239	3.083	0.002	0.265	1.206
[Customer reviews help me compare between products.]	0.1970	0.045	4.340	0.000	0.108	0.287
[I avoid products with no or very few reviews.]	0.1764	0.042	4.156	0.000	0.093	0.260
[Detailed reviews are more useful than star ratings alone]	0.3904	0.042	9.369	0.000	0.308	0.473

Omnibus:	12.647	Durbin-Watson:	1.861
Prob(Omnibus):	0.002	Jarque-Bera (JB):	14.742
Skew:	-0.492	Prob(JB):	0.000629
Kurtosis:	3.896	Cond. No.	40.8

```
Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

Scikit-learn Evaluation:
Intercept: 0.7357064889725282
Coefficients: [0.1970445  0.17638811 0.39036373]
R-squared: 0.4507315854260803
Mean Squared Error: 0.27901462289318685
```

The regression analysis conducted to examine the impact of customer reviews on online purchasing decisions reveals that customer reviews play a significant role in shaping consumer behavior. The model demonstrates a moderate explanatory power with an R-squared value of 0.451, indicating that approximately 45.1% of the variance in purchasing decisions can be explained by the selected review-related factors. All three independent variables—"Customer reviews help me compare between products," "I avoid products with no or very few reviews," and "Detailed reviews are more useful than star ratings alone"—were found to be statistically significant ($p < 0.001$). Among these, the strongest predictor was the belief that detailed reviews are more useful than star ratings alone, with a coefficient of 0.3904, suggesting that qualitative feedback carries substantial influence in online purchase decisions. The results also highlight that customers tend to avoid products lacking reviews and heavily rely on reviews for product comparison. The findings emphasize that businesses should focus on encouraging detailed customer feedback rather than relying solely on star ratings, as this has a stronger influence on consumers' decision-making processes. Overall, the regression supports the conclusion that customer reviews, especially those that are descriptive and detailed, have a meaningful and measurable impact on online buying behaviour.

VII. MAJOR FINDINGS

1) Customer Reviews Significantly Influence Purchasing Decisions: The regression analysis shows that 45.1% of the variance in purchasing decisions can be explained by review-related factors. Detailed reviews were the most impactful, indicating that consumers value in-depth, descriptive feedback over just star ratings.
2) Reviewer Credibility Builds Consumer Trust: The ANOVA test found significant gender-based differences in how reviews are perceived, and the study also emphasizes that credible reviewers influence buyer trust and behavior.
3) Positive Reviews Boost Confidence: A strong positive correlation ($r = 0.763$) was found between trusting products with many positive reviews and increased buyer confidence. Consumers tend to feel reassured and more willing to purchase when reviews are favorable.
4) Absence of Reviews Creates Distrust: A moderate to strong correlation ($r = 0.583$) indicates that people are likely to avoid products with no or few reviews, and many have purchased items based solely on customer feedback.
5) Device and Age Affect Review Engagement: Younger users (18–34) predominantly use smartphones and are more likely to skim reviews, while older users may engage more deeply with review content. Device type thus influences how reviews are consumed and acted upon.
6) Gender Differences Exist: ANOVA results suggest that men and women differ significantly in how customer reviews affect their decisions, highlighting the importance of personalized review presentation strategies.

VIII. SUGGESTIONS

1) Encourage Detailed Reviews: Businesses should focus on prompting users to leave thorough, descriptive reviews rather than just star ratings. This will provide richer information and increase credibility for future customers.
2) Enhance Reviewer Credibility: Platforms should highlight verified buyers, offer badges for consistent reviewers, and filter out suspicious or fake reviews to build trust among users.
3) Tailor Review Presentation for Mobile Users: Since a large segment accesses reviews via smartphones, displaying concise summaries, key pros/cons, and highlight features will improve review usability on smaller screens.
4) Address Negative Reviews Transparently: Companies should respond to negative feedback professionally and publicly, demonstrating accountability and a willingness to improve.
5) Use Review Data Strategically: Businesses can analyze review trends to identify product/service weaknesses and make informed improvements in offerings and customer service.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

IX. CONCLUSION

1) Customer Reviews Significantly Influence Online Purchases: The study confirms that customer reviews—both in quality and quantity—play a crucial role in shaping purchasing decisions. A substantial portion of respondents trust products with high numbers of positive reviews, and this trust directly boosts their purchase confidence.

2) Detailed Reviews Have Greater Impact than Star Ratings: Regression analysis revealed that descriptive, in-depth reviews have a stronger influence on consumer behaviour than star ratings alone. Consumers prefer narratives that provide context, usage experiences, and specific pros and cons.

3) Reviewer Credibility Builds Trust: The perceived credibility of reviewers significantly impacts how much weight a consumer gives to the review. Verified buyers, expert reviewers, or relatable individuals tend to have more influence on the purchasing decision.

4) Absence of Reviews Creates Distrust: Products with few or no reviews are often avoided, showing that lack of customer feedback can generate skepticism or a perception of low quality or unreliability.

5) Positive Reviews Enhance Purchase Confidence: There is a strong positive correlation between the number of positive reviews and consumer confidence. Shoppers feel reassured and more willing to proceed with a purchase when feedback is consistently favorable.

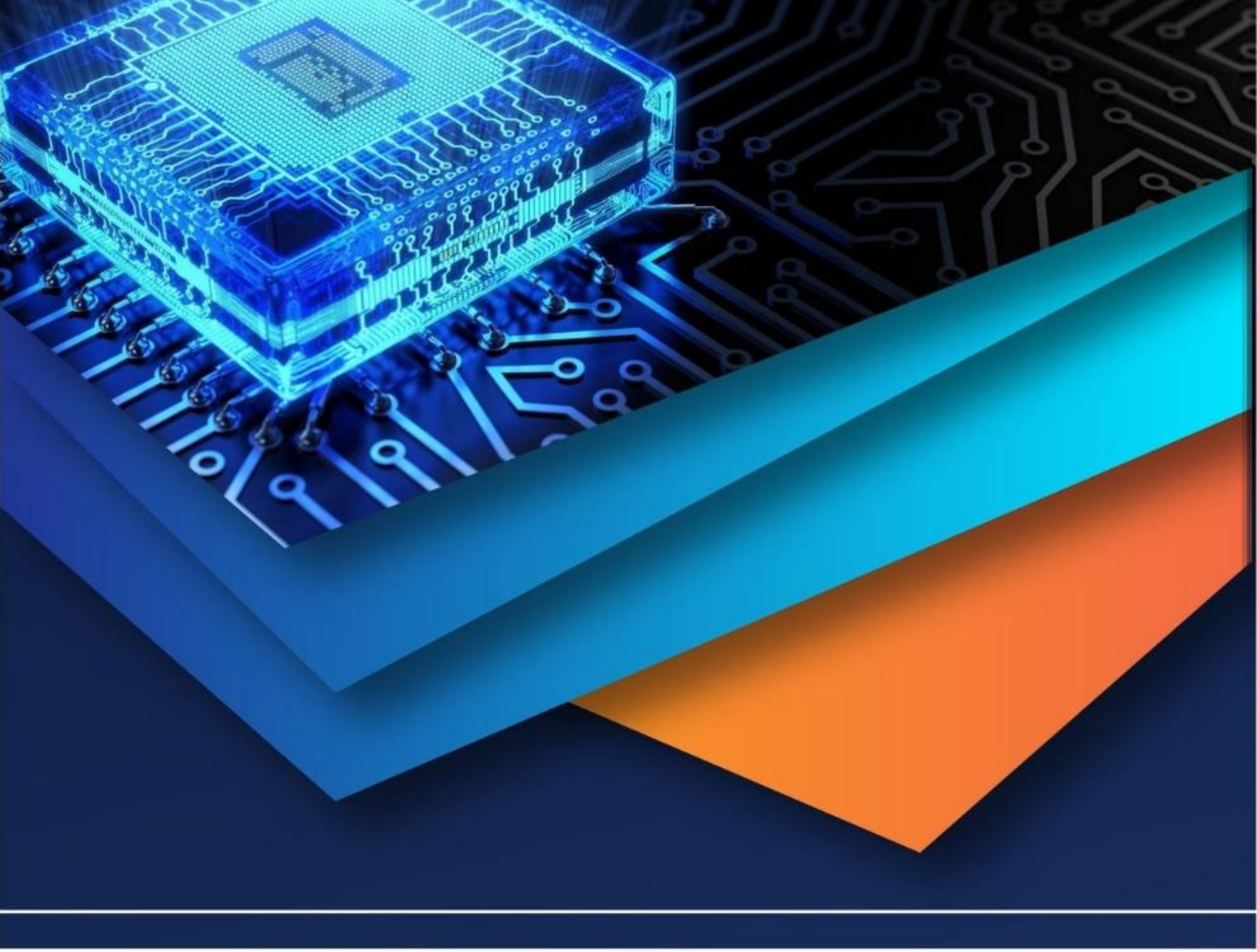
6) Device and Age Influence Review Interaction: Younger consumers, especially those using smartphones, tend to rely on quick review elements like star ratings or short comments. In contrast, users accessing platforms via laptops are more likely to engage deeply with reviews, suggesting device type affects the depth of review consumption.

7) Gender Differences Exist in Review Impact: ANOVA results indicated statistically significant gender-based differences in how reviews influence purchases. This suggests that men and women may process or prioritize reviews differently during online shopping.

8) Frequent Shoppers Are More Dependent on Reviews: Hypothesis testing and data trends reveal that individuals who shop online more frequently are more likely to depend on customer reviews for product validation and decision-making.

REFERENCES

[1] Almana, A. M., & Mirza, A. A. (2013). The impact of electronic word of mouth on consumers' purchasing decisions. International Journal of Computer Applications, 82(9), 23–31.
[2] Bahtar, A. Z., & Muda, M. (2016). The Impact of User – Generated Content (UGC) on Product Reviews towards Online Purchasing – A Conceptual Framework. Procedia Economics and Finance, 37, 337–342.
[3] Ha¨ubl, G., & Trifts, V. (2000). Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids. Marketing Science, 19(1), 4–21.
[4] Ibrahim, M. M., & Mamdouh, H. (2025). The Impact of Online Customer Reviews (OCRs) On Consumer Purchasing Decision. Arab Journal of Administration, 45(2), 387–394.
[5] Minnema, A., Bijmolt, T. H. A., Gensler, S., & Wiesel, T. (2016). To Keep or Not to Keep: Effects of Online Customer Reviews on Product Returns. Journal of Retailing, 92(3), 253–267.
[6] Regina, R., Rini, E. S., & Sembiring, B. K. F. (2021). The effect of online customer review and promotion through e-trust on the purchase decision of Bukalapak in Medan City. International Journal of Research and Review, 8(8), 236–243.
[7] Roozen, I., & Raedts, M. (2018). The effects of online customer reviews and managerial responses on travelers' decision-making processes. Journal of Hospitality Marketing & Management.
[8] Trenz, M., & Berger, B. (2013). Analyzing Online Customer Reviews - An Interdisciplinary Literature Review And Research Agenda. ECIS 1 2013 Proceedings. AIS Electronic Library (AISeL).
[9] von Helversen, B., Abramczuk, K., Kopeć, W., & Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. Decision Support Systems, 113, 1–10.
[10] Zahara, A. N., Rini, E. S., & Sembiring, B. K. F. (2021). The Influence of Seller Reputation and Online Customer Reviews towards Purchase Decisions through Consumer Trust from C2C E- Commerce Platform Users in Medan, North Sumatera, Indonesia. International Journal of Research and Review, 8(2).



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)