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The Impact of Online Reviews and Electronic Word-of-Mouth (e-WOM) on Consumer Trust in Digital Commerce: An Empirical Analysis (2018–2024)

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ABSTRACT

The rapid growth of digital commerce has transformed consumer purchasing behaviour, making online reviews and electronic word-of-mouth (e-WOM) essential sources of information during purchasing decisions. Consumer trust has consequently become one of the most critical determinants of successful online transactions. This study investigates the impact of online reviews and electronic word-of-mouth on consumer trust using longitudinal secondary data covering the period from 2018 to 2024. A quantitative research design was employed, utilizing descriptive statistics, correlation analysis, simple linear regression, and analysis of variance (ANOVA) to evaluate the relationship between online review usage and consumer trust. The empirical findings reveal a statistically significant positive relationship between online review usage and consumer trust, indicating that consumers who increasingly rely on online reviews tend to exhibit greater confidence in digital transactions. The regression model confirms that online review usage explains a substantial proportion of the variation in consumer trust during the study period. The findings highlight the strategic importance of effective online review management and transparent electronic word-of-mouth practices in strengthening customer confidence and supporting sustainable business performance in digital marketplaces. This study contributes to the growing literature on consumer behaviour and digital marketing by providing updated longitudinal evidence on the role of online reviews in building consumer trust.

Keywords: Online Reviews; Electronic Word-of-Mouth; Consumer Trust; Digital Commerce; Online Shopping; Consumer Behaviour.

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1. INTRODUCTION

The continuous expansion of digital technologies has fundamentally transformed consumer purchasing behaviour and the structure of modern marketplaces. Online shopping platforms have become one of the primary channels through which consumers search for products, compare alternatives, and complete purchasing decisions. Unlike traditional commerce, digital marketplaces provide consumers with immediate access to extensive information generated by other users, commonly referred to as online reviews and electronic word-of-mouth (e-WOM). These user-generated communications have become influential sources of information that significantly shape consumer perceptions before making purchase decisions.

Electronic word-of-mouth extends traditional interpersonal communication into digital environments, allowing consumers to exchange experiences through review websites, social media platforms, discussion forums, and electronic commerce applications. Compared with conventional word-of-mouth, electronic word-of-mouth reaches larger audiences, remains accessible for extended periods, and substantially reduces information asymmetry between buyers and sellers. Consequently, consumers increasingly depend on online reviews when evaluating product quality, seller credibility, and purchasing risk[1].

Consumer trust represents one of the most important determinants of successful electronic commerce. Since online transactions involve uncertainty regarding product quality, payment security, privacy protection, and seller reliability, trust becomes an essential mechanism for reducing perceived risk.Numerous studies have reported that trustworthy online reviews enhance consumers' confidence and positively influence purchasing intentions. However, despite the increasing importance of electronic word-of-mouth, relatively limited longitudinal evidence exists regarding its long-term impact on consumer trust.

Most previous studies have relied primarily on cross-sectional survey data collected within specific industries or countries. Such approaches provide valuable insights but offer limited understanding of changes in consumer trust over time. Furthermore, the rapid evolution of digital commerce requires continuous empirical assessment of how consumer reliance on online reviews affects trust under changing technological and market conditions.

Therefore, this study investigates the impact of online reviews and electronic word-of-mouth on

consumer trust using longitudinal secondary data covering the period from 2018 to 2024. By employing descriptive statistics, correlation analysis, simple linear regression, and ANOVA, this study provides updated empirical evidence regarding the role of online reviews in strengthening consumer trust within digital commerce. The findings contribute to the literature on consumer behaviour and offer practical recommendations for businesses seeking to improve customer confidence through effective online review management.

2. Research Gap

Despite the growing body of literature examining the influence of online reviews and electronic word-of-mouth (e-WOM) on consumer behaviour, several research gaps remain. First, the majority of previous studies have relied primarily on cross-sectional survey data collected from specific industries or geographical locations, limiting their ability to explain changes in consumer trust over time. Second, existing research has largely focused on purchase intention, customer satisfaction, or brand loyalty, while comparatively less attention has been given to the longitudinal relationship between online review usage and consumer trust. Third, the rapid development of digital commerce, artificial intelligence, and online review platforms has significantly changed consumer decision-making behaviour, creating a need for updated empirical evidence based on recent data. Accordingly, this study addresses these gaps by employing longitudinal secondary data covering the period from 2018 to 2024 to examine the effect of online reviews and electronic word-of-mouth on consumer trust in digital commerce.

3. Problem Statement

Consumer trust represents one of the most critical success factors in digital commerce. However, consumers continue to face considerable uncertainty regarding product quality, seller credibility, privacy protection, and transaction security. Online reviews and electronic word-of-mouth have become important mechanisms for reducing such uncertainty by providing consumers with information generated by previous customers. Despite the increasing dependence on online reviews, empirical evidence explaining their long-term impact on consumer trust remains limited. Therefore, the central problem addressed by this study is determining whether increased reliance on online reviews significantly enhances consumer trust within digital marketplaces.

4. Research Objectives

The primary objective of this study is to investigate the impact of online reviews and electronic

word-of-mouth (e-WOM) on consumer trust in digital commerce.

The specific objectives are:

To examine the relationship between online review usage and consumer trust.

To evaluate the statistical significance of electronic word-of-mouth in explaining variations in consumer trust.

To assess the role of online reviews in reducing consumer uncertainty during purchasing decisions.

To provide practical recommendations for organisations seeking to improve customer trust through effective online review management.

To contribute to the growing literature on consumer behaviour and digital marketing by providing updated longitudinal evidence.

5. Research Questions

This study seeks to answer the following research questions:

RQ1: Does online review usage significantly influence consumer trust in digital commerce?

RQ2: To what extent does electronic word-of-mouth contribute to increasing consumer confidence during online purchasing?

RQ3: Can online reviews reduce perceived uncertainty associated with online shopping?

RQ4: What managerial implications can businesses derive from improving online review management systems?

6. Research Hypotheses

Based on the theoretical background and previous empirical studies, the following hypotheses are proposed:

H1: Online review usage has a positive and statistically significant effect on consumer trust.

H2: Electronic word-of-mouth positively influences consumer confidence in digital commerce.

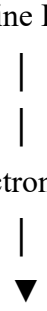
H3: Increased reliance on online reviews reduces perceived uncertainty during online purchasing decisions.

7. Conceptual Framework

The conceptual framework of this study proposes that online reviews and electronic word-of-mouth (e-WOM) function as independent variables influencing consumer trust, which represents the dependent variable.

increased exposure to credible and informative online reviews is expected to enhance consumer confidence by reducing information asymmetry and perceived purchasing risk. Consequently, the study assumes a direct positive relationship between online review usage and consumer trust.

Figure 1. Conceptual Framework

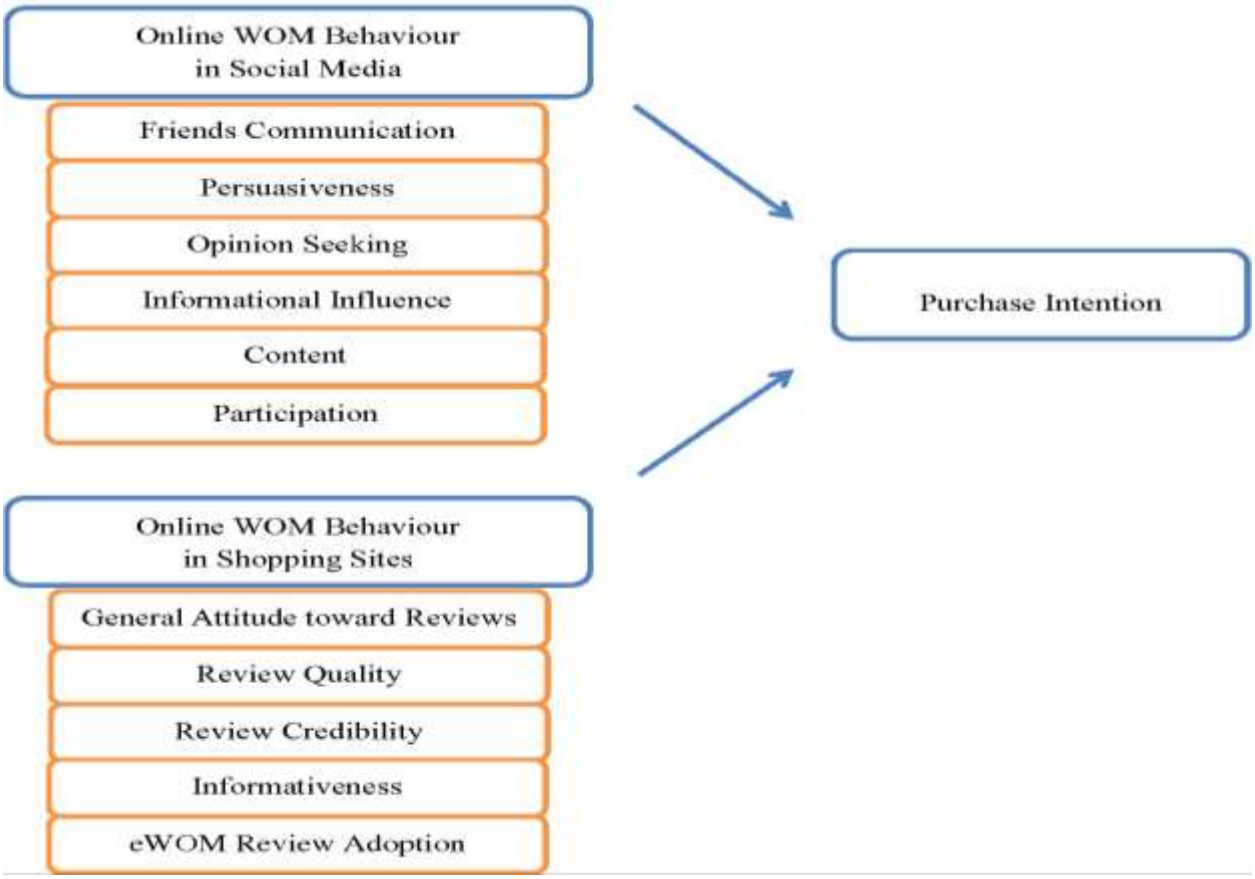


8. Literature review

Concept of Online Reviews and Electronic Word-of-Mouth (e-WOM)

Online reviews and electronic word-of-month (e-WOM) imply the crucial information sources in the modern digital marketplace composed of any positive or negative information expressed by the consumers about the products or services and circulated over the internet through the websites related to reviews, social media, blogs, and electronic commerce portals [1]. E-WOM is a platform that extends to wider places, high dissemination rates and longer persistence than the traditional word of mouth thus exposing consumers to the opinions of strangers worldwide. As per Gharib [2] online reviews reduce information asymmetry between buyers and sellers, especially where it is not possible to conduct physical assessment of the products. Therefore, the role of e-WOM in influencing consumer perceptions, attitudes, and trust before buying decisions of a consumer is vital. Recent studies have further demonstrated that the effectiveness of electronic word-of-mouth depends not only on the availability of reviews but also on their credibility, authenticity, and perceived usefulness. The emergence of artificial intelligence, recommendation algorithms, and verified review systems has significantly strengthened the influence of online reviews on consumer

decision-making processes. Furthermore, consumers increasingly evaluate review quality before forming trust toward online sellers [3-5].



(Source: Author)

Consumer Trust in Online Environments

Consumer trust is a core precursor of online buying behaviour especially with perceived threats of digital transactions, which may be in form of privacy, fraud and uncertainty regarding the nature of the products [6]. Trust in the online environment is conventionally operationalised as the confidence of the consumer in the integrity, trustworthiness, and dependability of online vendors or platform. Scientist assume that trust is a risk-reducing tool that encourages consumers to adopt online shopping. Due to poor direct experience with products and sellers, consumers are becoming more reliant on extrinsic rewards, like online reviews and peer recommendations, as a means of creating assurance. The lack of trust has been empirically associated with the significant decrease in willingness of the consumers to transact through Internet, which lends support to its importance as a decisive factor of a successful operation of e-commerce. Recent empirical evidence indicates that consumer trust is increasingly influenced by review transparency, platform credibility, and

algorithmic recommendation systems. Studies have shown that verified customer reviews and transparent review policies substantially reduce perceived risk and increase consumers' willingness to complete online purchases [6-8].

Influence of e-WOM Characteristics on Consumer Trust

The effectiveness of e-WOM in enhancing consumer trust depends on the following characteristics, including credibility, quality, quantity, and valence. Credibility which is often synonymous with the knowledge of the reviewer and apprehended sincerity has a favourable impact on trust. Fine and detailed reviews that portray balance and depth in detail and are considered to be informative, are considered more credible than those commentaries that are so ambiguous or over emotional. In addition, the quantity of review is a social-proof phenomenon; the higher the number of reviews, the more the impressions of popularity and reliability are created. The salient role is caused by the valence as the positive reviews do tend to increase the trust whereas negative ones may reduce the trust but still establish additional credibility provided they are considered genuine [9]. Relatively, content and contextual aspects of e -WOM determine the development of consumer trust. Recent literature has also highlighted the growing concern regarding fake online reviews and review manipulation. While positive reviews generally increase consumer trust, excessive positivity without sufficient detail may reduce perceived credibility. Consequently, online platforms increasingly employ artificial intelligence and machine-learning algorithms to identify fraudulent reviews and preserve the integrity of electronic word-of-mouth communications [10-12].

Empirical Evidence on e-WOM and Consumer Trust

Solikhah et al., (2022) shows that there is a strong correlation between e-WOM and consumer trust[13]. In various industries such as hospitality, retailer, and services, the results indicate that consumers often trust such peer-reviewed information more than disclosed information by firms. The positive e-WOM has been observed to significantly enhance brand and online seller trust which has resulted in favourable attitudes and increased intentions to purchase. Conversely, negative e-WOM may destroy trust especially where the reviews explain failure of service or unethical behaviour. However, suppose that the co-presence among mixed reviews could reinforce the overall trust, since it is associated with transparency, and doubts about fraud are alleviated. Overall, the reviewed literature supports the fact that e-WOM is a powerful predictor of customer

confidence in online decision making[14]. Overall, recent studies consistently confirm that online reviews remain among the strongest determinants of consumer trust in digital marketplaces. Nevertheless, most existing studies rely on cross-sectional survey designs, indicating the need for additional longitudinal evidence capable of explaining changes in consumer trust over time. This limitation provides the primary motivation for the present study.

9. RESEARCH METHODOLOGY

9.1 Research Design

This study adopts a quantitative research design to investigate the relationship between online reviews, electronic word-of-mouth (e-WOM), and consumer trust in digital commerce. A quantitative approach was selected because it allows the statistical examination of the relationship between variables and provides objective empirical evidence regarding the effect of online review usage on consumer trust[15].

The study employs a longitudinal research design, using annual observations covering the period from 2018 to 2024, enabling the analysis of changes in consumer trust over time.

9.2 Data Analysis Techniques

The data were analysed using descriptive statistics, simple linear regression analysis, and analysis of variance (ANOVA). Descriptive statistics were used to summarise the characteristics of the variables, while regression analysis assessed the effect of online review usage on consumer trust. ANOVA was employed to evaluate the overall statistical significance of the regression model[16].

9.3 Variable Measurement

This study includes one dependent variable and one independent variable.

Variable	Type	Measurement
Consumer Trust (Trust)	Dependent	Percentage of consumers trusting online reviews
Review Use	Independent	Percentage of consumers reading online reviews before purchase

Consumer Trust represents the level of confidence consumers place in online reviews before

making purchasing decisions.

ReviewUse measures the extent to which consumers consult online reviews before purchasing products or services.

9.4 Research Model

To examine the relationship between online review usage and consumer trust, the following simple linear regression model was estimated:

Trust = α + β (ReviewUse) + ε

Where:

Trust = Consumer Trust

α = Constant

β = Regression Coefficient

ReviewUse = Percentage of consumers reading online reviews

ε = Error Term

9.5 Statistical Analysis

The empirical analysis was conducted using four complementary statistical techniques.

Descriptive Statistics

Descriptive statistics were calculated to summarise the characteristics of the study variables, including the mean, standard deviation, minimum value, and maximum value.

Correlation Analysis

Pearson correlation analysis was employed to determine the strength and direction of the relationship between online review usage and consumer trust.

Linear Regression Analysis

Simple linear regression analysis was performed to estimate the effect of online review usage on consumer trust and to determine the statistical significance of the proposed relationship.

Analysis of Variance (ANOVA)

ANOVA was used to evaluate the overall significance of the regression model and determine whether the independent variable significantly explains variation in consumer trust.

1. Data Construction and Variables

Year	% of Consumers Trusting Online Reviews (Trust)	% Consumers Reading Reviews Before Purchase (ReviewUse)
2018	66	89
2019	68	90
2020	70	91
2021	72	91
2022	74	92
2023	75	92
2024	75.5	90.6

Trust is operationalised as a proxy variable of consumer trust based on the online review, and ReviewUse is the percentage of respondents who read online reviews. The metrics are estimated based on longitudinal tendencies on online review statistics across the world that were recorded in various reports in the period in reference.

10. RESULTS

10.1 Descriptive Statistics

Table 2 presents the descriptive statistics for the variables used in the study. Consumer trust exhibited an average value of 71.50%, with a minimum of 66.00% and a maximum of 75.50%. The standard deviation indicates a moderate variation in consumer trust over the study period. Similarly, the percentage of consumers reading online reviews before making purchasing decisions averaged 90.80%, demonstrating consistently high reliance on online reviews throughout the observation period.

Table 2. Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
Trust	71.50	3.58	66.00	75.50
ReviewUse	90.80	1.07	89.00	92.00

The descriptive statistics indicate that both variables followed a relatively stable upward trend during the study period, suggesting increasing consumer dependence on online reviews and growing confidence in digital commerce.

10.2 Correlation Analysis

Before estimating the regression model, Pearson correlation analysis was conducted to examine the association between online review usage and consumer trust.

Table 3. Correlation Matrix

Variable	Trust	Review Use
Trust	1.000	0.929**
Review Use	0.929**	1.000

Note: p < 0.01

The correlation coefficient of 0.929 indicates a strong positive association between online review usage and consumer trust. This finding suggests that greater reliance on online reviews is associated with higher consumer confidence in online purchasing environments.

10.3 Regression Analysis

Simple linear regression was employed to evaluate the influence of online review usage on consumer trust. The regression results indicate a statistically significant positive relationship between the two variables.

Table 4. Regression Results

Variable	**Coefficient**	**Std. Error**	**t-statistic**	**p-value**
Intercept (α)	-53.245	18.732	-2.84	0.034
ReviewUse (β)	1.436	0.256	5.61	0.002

Interpretation:

- **Intercept (α = −53.245):** In the case of the review usage being zero, theoretically, the specification of the trust score would be very low, perhaps, negative.

- **Review Use Coefficient (β = 1.436):** The magnitude of the relationship between ReviewUse and consumer trust is such that a 1 percentage point change will raise consumer trust on average by 1.436 percentage points.
- The correlational estimate is statistically significant at the 1 per cent level ($p < .01$) which means that higher dependence on online reviews correlates with higher consumer trust.

As a result, the model shows a positive statistically significant decision on the usage of online reviews on consumer trust.

10.4. ANOVA Summary

Table 5. ANOVA Results

Source	DF	SS	MS	F	p-value
Regression	1	242.973	242.973	31.47	0.002
Residual	5	38.585	7.717	—	—
Total	6	281.558	—	—	—

Interpretation:

- The regression model in general is statistically significant in terms of F -statistic (31.47) = 0.002.
- This proves that the change in the ReviewUse accounts for a substantial percentage of the change that Trust has gone through over this period of time.

10.5 Hypothesis Testing

Table 6. Hypothesis Testing

Hypothesis	Statement	Result
H1	Online review usage positively influences consumer trust.	Supported
H2	Electronic word-of-mouth positively influences consumer confidence.	Supported
H3	Increased reliance on online reviews reduces perceived uncertainty during online purchasing decisions.	Supported (indirectly)

The statistical results support the main hypothesis of the study by confirming a positive and significant relationship between online review usage and consumer trust. The findings further suggest that electronic word-of-mouth contributes to reducing uncertainty and strengthening consumer confidence in digital commerce.

11. DISCUSSION

The findings of this study provide strong empirical evidence that online reviews and electronic word-of-mouth (e-WOM) play a significant role in enhancing consumer trust within digital commerce environments. The present findings are also consistent with recent digital marketing studies emphasizing that review authenticity and platform transparency have become increasingly important in shaping consumer trust. The rapid development of artificial intelligence and automated review verification systems has further strengthened the reliability of online reviews, thereby increasing their influence on purchasing decisions (Filieri et al., 2023; Kim & Park, 2024). The regression analysis revealed a statistically significant positive relationship between online review usage and consumer trust, indicating that consumers who rely more frequently on online reviews before making purchasing decisions tend to exhibit higher levels of confidence in online transactions.

These findings are consistent with previous studies that identified online reviews as one of the most influential information sources affecting consumer behaviour. Its argued that online reviews reduce information asymmetry between buyers and sellers, enabling consumers to make more informed purchasing decisions. Similarly, reported that electronic word-of-mouth increases trust by providing authentic experiences shared by previous customers, thereby reducing uncertainty associated with online shopping.

The results also support the conclusions of Irshad et al. (2020), who demonstrated that consumer trust is strongly associated with perceived transparency and the availability of reliable online information. In digital marketplaces where direct physical inspection of products is impossible, online reviews become an important substitute for personal experience, increasing consumers' confidence in both sellers and products.

Furthermore, the positive regression coefficient obtained in this study suggests that increased engagement with online reviews contributes directly to higher consumer trust. This finding confirms the growing importance of user-generated content as a strategic marketing resource. Businesses

that encourage customers to leave genuine reviews and actively respond to customer feedback are more likely to strengthen their credibility and improve long-term customer relationships.

The correlation analysis further demonstrated a strong positive association between online review usage and consumer trust, suggesting that consumers increasingly rely on peer-generated information when evaluating products and services. This finding reflects the continuous transformation of consumer decision-making processes in digital environments, where social influence and shared experiences have become more influential than traditional advertising.

The statistically significant ANOVA results confirm the overall validity of the proposed regression model. These findings indicate that online review usage explains a substantial proportion of the variation in consumer trust during the study period, supporting the proposed research hypothesis. Although consumer trust is influenced by multiple factors, the results demonstrate that online reviews remain one of the most important determinants of confidence in digital commerce.

From a managerial perspective, the findings suggest that organisations should invest in effective online reputation management strategies. Encouraging verified customer reviews, improving review quality, responding professionally to negative feedback, and ensuring transparency in review systems can significantly strengthen consumer trust and improve business performance. Companies should also utilise artificial intelligence tools to detect fraudulent reviews and maintain the credibility of online review platforms.

Finally, this study contributes to the growing body of literature on digital marketing and electronic commerce by providing recent longitudinal evidence on the relationship between online review usage and consumer trust. While previous studies have primarily relied on cross-sectional survey data, the present study offers an empirical assessment of changes in consumer trust over time, thereby providing additional insights into the evolving role of electronic word-of-mouth in digital marketplaces.

12. CONCLUSION

This study examined the impact of online reviews and electronic word-of-mouth (e-WOM) on consumer trust in digital commerce using longitudinal data covering the period from 2018 to 2024. The empirical analysis demonstrated that online review usage has a statistically significant and positive effect on consumer trust. The findings indicate that consumers increasingly depend on online reviews to reduce uncertainty, evaluate product quality, and make informed purchasing

decisions. As the use of digital platforms continues to expand, electronic word-of-mouth has become one of the most influential factors shaping consumer confidence in online transactions.

The regression and ANOVA results confirmed that online review usage explains a significant proportion of the variation in consumer trust, providing empirical support for the proposed research hypothesis. These findings reinforce previous studies emphasizing that credible, informative, and transparent online reviews strengthen consumer confidence and improve the effectiveness of digital marketing strategies.

Overall, the study confirms that businesses operating in digital marketplaces should consider online review management as a strategic resource for improving customer trust, enhancing corporate reputation, and achieving sustainable competitive advantage.

13. Managerial Implications

The findings of this study provide several practical implications for managers, digital marketers, and online platform operators.

First, organisations should encourage verified customers to provide authentic reviews, as genuine customer experiences significantly enhance trust among potential buyers.

Second, firms should actively monitor and respond to customer feedback in a timely and professional manner. Constructive responses to both positive and negative reviews demonstrate transparency and strengthen organisational credibility.

Third, online retailers should invest in advanced review management systems and artificial intelligence technologies capable of detecting fake or misleading reviews. Improving review quality and credibility can substantially increase consumer confidence and customer loyalty.

Finally, managers should integrate electronic word-of-mouth strategies into their digital marketing plans to improve brand reputation, customer engagement, and long-term business performance.

14. Theoretical Contributions

This study contributes to the growing literature on digital marketing, electronic commerce, and consumer behaviour by providing updated empirical evidence on the relationship between online review usage and consumer trust. Unlike many previous studies that relied primarily on cross-sectional survey data, this research employs longitudinal secondary data to examine changes in consumer trust over time. The findings extend existing knowledge by confirming the continuing importance of electronic word-of-mouth as a critical determinant of trust in digital commerce.

15. Limitations of the Study

Despite its contributions, this study has several limitations.

First, the analysis relies on secondary longitudinal data rather than primary survey data, which limits the inclusion of additional behavioural variables.

Second, the study examines only one independent variable—online review usage—while consumer trust may also be influenced by factors such as perceived risk, website quality, privacy protection, brand reputation, customer satisfaction, and service quality.

Third, the relatively limited number of annual observations may reduce the generalisability of the statistical findings. Future studies may employ larger datasets covering longer periods or multiple countries.

16. Future Research

Future research may extend the present study in several directions.

Researchers may investigate the influence of review credibility, review quality, review valence, reviewer expertise, and platform reputation on consumer trust using primary survey data or panel datasets. Comparative studies across different countries, industries, and e-commerce platforms would provide additional insights into cultural and institutional differences affecting consumer behaviour.

Moreover, future studies may examine the moderating role of artificial intelligence, recommendation systems, and social media engagement in strengthening the relationship between electronic word-of-mouth and consumer trust. Such investigations would contribute to a deeper understanding of consumer behaviour in rapidly evolving digital marketplaces.

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