Ecommerce Decision in Gen Z, impact from Electronic Service Quality and Moderating by Online Customer Review

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Abstract. This study investigates how electronic service quality (ESQ) and online customer reviews (OCR) shape purchasing decisions among Generation Z consumers in the e-commerce sector, with OCR positioned as a potential moderating factor. This focus is particularly relevant given the growing reliance of younger consumers on digital platforms and peer-generated content when making purchasing choices in an increasingly competitive online marketplace. A quantitative approach combining descriptive and verification methods was adopted, allowing the study to both characterize the observed variables and statistically test the proposed relationships among them. Data were collected through structured questionnaires distributed via non-probability purposive sampling, targeting respondents who met specific criteria relevant to the research context. The required sample size was calculated using Slovin's formula, ensuring an appropriate and representative number of respondents for the analysis. The collected data were then analyzed using descriptive statistics, correlation testing, and moderated regression analysis (MRA) to examine both direct effects and the potential moderating influence of OCR. The findings reveal that ESQ exerts a positive and statistically significant influence on purchasing decisions, both as a standalone predictor and alongside OCR, which also independently demonstrates a positive and significant impact on purchasing decisions. However, the moderating role of OCR in the ESQ–purchasing decision relationship was not empirically supported, suggesting that while OCR contributes directly to purchasing decisions, it does not strengthen or weaken the effect of ESQ within this study's context.

Keywords: E-Commerce, Electronic Service Quality, Gen Z, Online Customer Review, Purchase Decision

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1 Introduction

Indonesia has experienced steady expansion in Internet adoption over the past several years. According to the Indonesian Internet Service Providers Association (APJII) survey, the country had approximately 221.5 million Internet users in 2024, representing a penetration rate of 79.5% of the total population, which was approximately 278.7 million. This figure marks a continuation of the upward trajectory observed since 2018, when the penetration rate stood at 64.8%, subsequently climbing to 73.7% in 2020, 77.01% in 2022, and 78.19% in (1).

Within the Indonesian e-commerce landscape, Shopee has maintained its posi-tion as the dominant marketplace platform. Throughout 2023, the platform garnered approximately 2.35 billion cumulative site visits, placing it well ahead of rival marketplaces. Shopee also registered notable visitor growth of 41.39% during the same period (2). Independent web analytics from similarweb corroborate Shopee's leading rank in the shopping category nationwide (3,4)

Generation Z, born between 1997 and 2012, represents a crucial demographic to study within this e-commerce context, as this generation has grown up in the digi-tal era and exhibits strong habits in utilizing the internet and technological devices (5). Bandung one of Indonesia major metropolitan areas, is home to a sizeable Gen Z population, official figures from the central statistics agency (BPS) record 792.844 residents within this age cohort (6). The city dynamic trade and services sector further underscores its relevance as a research setting.

Previous studies examining the interplay between e service quality, online customer reviews, and consumer purchasing behavior have produced inconsistent findings. This empirical gap motivated the present investigation into the degree to which these factors shape the buying decisions of Gen Z.

Accordingly, this study aims to ascertain whether online customer reviews moderate the link between electronic service quality and purchase decisions among Generation Z e-commerce users in Bandung City.

A review of the existing literature is essential for mapping the theoretical connections among the variables and for formulating appropriate hypotheses. Three variables are central to this study: electronic service quality as the independent variable, online customer reviews as the moderating variable, and purchase decision-making as the dependent variable.

Electronic service quality (ESQ) broadly refers to how effectively and effi-ciently a digital platform supports the end-to-end transaction journey, encompassing product discovery, ordering, and delivery (7). From a managerial standpoint, it cap-tures the overall quality of the online service encounter as curated by marketing prac-titioners (8). Assessing ESQ is particularly critical for marketplace-based websites, where inconsistent service offerings may hamper consumers ability to evaluate the quality of the offerings (9)

The ESQ measurement framework evaluates electronic service performance through several dimensions derived from user interaction experiences. These dimen-sions include efficiency, fulfillment, system availability, privacy, responsiveness, web design, compensation, and contact (10).

H1: e-Service quality has a positive and significant effect on the purchase decision-making of Generation Z.

Online customer reviews (OCR) represent evaluative feedback posted by con-sumers who share their firsthand purchase and usage experiences on digital platforms (11, 12, 13). These reviews serve as a communication method that significantly influ-ences the decision-making process, encompassing positive, negative, or neutral statements from consumers regarding products, brands, trust, companies, and the quality of services available online. Consequently, they provide a valuable source of information for consumers when making choices (14, 15).

Through these reviews, consumers can access higher-quality information without the necessity of directly visiting the seller, thereby facilitating the purchas-ing decision-making process.

In the present study, OCR is operationalized as a moderating variable that may amplify or diminish the effect of ESQ on purchasing decisions. The OCR con-struct is measured using indicators identified by Suryani et al. (11): perceived useful-ness, source credibility, argument quality, valence, and review volume.

H2: Online customer reviews have a positive and significant effect on purchase decision-making among Gen Z.

Purchasing decisions involve a decision-making process that emphasizes con-sumer choices throughout the stages leading up to the decision to buy or use a prod-uct or service, which is influenced by prior experiences or activities (14, 16, 17, 18).

Kotler and Armstrong (18) identified key indicators of purchase decisions, in-cluding stability in product offerings, consumer purchasing habits, recommendations from others, and repeat purchases.

H3: Online customer reviews moderate the relationship between electronic service quality and purchasing decisions among Generation Z.

2 Methods

A quantitative research design was employed, integrating both descriptive and verification approaches. A questionnaire was used as the primary data collection tool to demonstrate generalizable causal effects (18). The study focused on the Sho-pee marketplace, which has consistently ranked first in Indonesia since 2023 and has attracted over 125 million users (3).

The target population comprised all Generation Z Shopee users residing in Bandung City, totaling 792,866 individuals, as recorded in official demographic statistics by age group and gender (6). Applying Slovin's formula with a 10% margin of error yielded a minimum requirement of 100 respondents (19). Participants were selected through non-probability purposive sampling, with eligibility criteria stipu-lating that respondents be Generation Z individuals aged 17 to 28 years, domiciled in Bandung City, and have prior purchasing experience on Shopee.

Instrument validity was assessed using Pearson's product moment correlation technique, and internal consistency was evaluated using Cronbach's alpha. Analyti-cal procedures encompassed correlation analysis, coefficients of determination, and

hypothesis testing via t-tests. Both simple linear regression and moderated regression analysis (MRA) were applied to examine direct and moderated effects (20,21).

3 Results and Discussion

This section summarizes the outcomes of the data processing, provides a logi-cal interpretation of the results, and connects the findings to the relevant reference materials.

All statement items for all variables are valid, as evidenced by the R-count ex-ceeding the R-table value of 0.361. This indicates that each statement item regarding performance variable is valid and suitable for use in the research measuring tool. All statement items for all variables demonstrate reliability, with a reliability coefficient (Cronbach's alpha) value greater than 0.6 (19). This indicates that each statement item is consistent in repeated measurements of the same object.

Classical Assumption Tests, Normality: The Kolmogorov–Smirnov test yield-ed a significance value of 0.2, which is greater than 0.05, indicating that the data are normally distributed. Multicollinearity: The tolerance value of 0.398 is < 0.1, and the VIF under 2,511 is < 10; therefore, multicollinearity was not a problem in this study. Heteroskedasticity: The Glejser test produced significance values greater than 0.05 (ESQ: 0.414 and OCR: 0.314) (22,23)

The analysis of the data indicates that the electronic service quality of the online platform is rated as very good, with the most significant emphasis placed on the completeness of information provided on the e-commerce page. However, the speed of handling problems is identified as an area requiring improvement. Regard-ing online customer reviews, the average rating is also very good, with the highest emphasis given to consumer feedback. Nonetheless, trust in reviews found in the Play Store or App Store presents a potential concern. In terms of purchasing decisions, the overall rating remains very good, with the highest weight assigned to the ease of product features, while recommendations from family members carry the least signifi-cance. Overall, the analysis reflects a positive assessment of the platform's service quality and customer reviews, although specific areas have been identified for poten-tial enhancement.

Table 1. Hypothesis Test

Variabel	R	R square	Sig.
ESQ	0,637	0,406	0,000
OCR	0,677	0,458	0,000
X1M	0,707	0,500	0,207

Source : Author’s Work

The significant value of the ESQ variable in relation to CD was 0.000 (<0.05), the two variables had a correlation value of 63.7%, and it was concluded that the ESQ variable could influence CD for GenZ with a direct R square value of 40.6%.

The equation representing the direct relationship between ESQ and CD is as follows: $Y = 1.624 + 0.663X1 + e$.

This outcome is supported by earlier empirical work by Atmaja et al. (24) and Indratini and Herawati (12), who established that electronic service quality positively and significantly drives purchasing decisions.

The significance value of the OCR variable in relation to CD was also 0.000 (<0.05); from the two variables, a correlation value of 67.7% was obtained, and it was concluded that the OCR variable could influence CD for Gen Z with a direct R square value of 45.8%.

The equation representing the direct relationship between OCR and CD is as follows: Y = 1.695 + 0.636M + e.

These findings corroborate the conclusions of Damayanti et al. (25) and Pramesti and Aminah (26), who reported that online customer reviews exert a mean-ingful positive effect on purchase behavior. In the decision-making process, consum-ers tend to utilize information from prior customer reviews to form conclusions about a product or service (27,28).

The significance value of the X1M variable, or Moderated Variable on Pur-chase Decision (PD), was 0.207 (>0.05). Consequently, it is concluded that the Online Customer Reviews (OCR) variable does not moderate the effect of Electronic Service Quality (ESQ) on PD, despite exhibiting a correlation value of 70.7% and an R-squared value of 50.00%.

The calculations yield an equation indicating that the OCR variable does not directly moderate the relationship between the ESQ and PD variables:
Y = -1.057 + 0.880 ESQ + 0.997 OCR - 0.137 X1M + e
Furthermore, prior research has indicated that negative online reviews can in-fluence consumer purchasing behavior in a complex manner (29).

4 Conclusion

Regarding the Generation Z target market, this study demonstrates that electron-ic service quality, online customers reviews, and customer decisions on the Shopee platform all fall into the very good category. ESQ directly and significantly enhances customer purchasing decisions. OCR, functioning as an independent variable, like-wise exerts a direct positive and significant effect on purchasing decisions. However, OCR dose not fulfil a moderating role in the ESQ customer decision nexus.

To effectively engage Generation Z through electronic marketing, companies should implement strategies that incorporate online customer reviews in various formats, including text, images, and videos. Such an approach is critical because Gen Z consumers gravitate toward interactive content, place substantial trust ini digital peer evaluations, actively seek social proof, and tend to be both critical and participatory in generating feedback, with e commerce platforms serving as their preferred shopping venues (30). Additionally, Generation Z's preference for quick to using chat bot (31) and instant solutions necessitates (32) that companies enhance their service responsiveness and also influence of hedonic motivation and habit (33).

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