

VIRTUAL TRY ON AS DETERMINANT TO PURCHASE DECISION IN MODERATION BY CUSTOMER REVIEWS

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ABSTRACT

Virtual Try-On (VTO) technology in e-commerce is used to reduce savings in purchasing experiential products such as skincare, which have various functions and consumer segments. Then, a novelty of this study is the use of Virtual Try-On on skincare products. The purpose of this study is to examine the effect of VTO use on purchasing decisions. This study analyzes the moderating role of customer reviews in relation to VTO use and purchasing decisions. The method used is quantitative explanatory research. The analysis tool uses SEM partial Least Square with respondents from a countless population, with 191 samples using the Cochran method and using the skincare feature (skincam) of each product. The results show that all indicators in each variable are valid and reliable. The use of the VTO feature has a significant influence on purchasing decisions. Customer reviews are not moderated but are included in the influence of VTO utilization on purchasing decisions. Virtual Try-On is a key determinant of purchasing decisions for skincare products. The success of VTO depends on its functional aspects and the pleasant experience it provides. The effectiveness of VTO increases if supported by positive customer reviews. The impact of the strategy of integrating VTO technology with online reputation through good customer reviews will increase sales conversions.

Key words: Virtual Try On; Purchasing Decision; Customer Reviews

INTRODUCTION

The marketing world was undergoing a major transformation due to the digital revolution, which was changing the way brands interact with consumers, particularly in the skincare industry (Khodijah et al., 2025). High-risk, experiential skincare products require a direct user experience, but the shift in shopping habits to e-commerce has created a gap in consumer experience (Chen & Prentice, 2024). Augmented Reality (AR) technology in the form of Virtual Try-On (VTO) offers a solution to address this gap by enabling consumers to virtually recommend skincare products through skincams available on e-commerce platforms, thereby reducing uncertainty and increasing trust in online purchases (Hermawati et al., 2025). However, in an information-rich ecosystem, VTO did not stand alone; customer reviews remain a crucial source of trust, providing social validation and real-world context that digital simulations cannot always represent. This study reveals whether VTO technology tends to be effective in driving purchases, or whether its effectiveness depends on the presence of customer reviews as the collective voice of consumers (Viohafeni & Aliyah, 2023). This research builds on previous research (Dixit et al., 2025) that emphasizes the importance of trial and error for products with uncertain outcomes, such as skincare. VTO functions as a virtual platform to facilitate this trial process, influencing attitudes and purchase intentions (Safitri & Oktafani, 2022).

Furthermore, when viewed from the perspective of functional and social risk perceptions in online skincare purchases, VTO plays a role in mitigating risk visually, while customer reviews provide mitigation through real-life testimonials (Islam et al., 2024). Furthermore, the S-O-R Framework (Stimulus-Organism-Response) positions VTO and customer reviews as stimuli processed within the organism through the formation of trust, attitudes, and reduction of perceived risk, resulting in responses in the form of purchase intentions and decisions (Yang et al., 2024). Current VTO research focuses more on fashion products with immediate, visible results (Batoool & Mou, 2024), while its application to skincare, which was predictive and prospective, was less well-explained psychologically (Titus et al., 2024). The integration of VTO and customer reviews as eWOM within a moderation model was also still minimally explored (Wahyudiyar et al., 2024). Empirical: Research results related to the effectiveness of VTO are inconsistent. Contingent factors such as review volume and valence have not been widely analyzed, leaving the effectiveness of VTO in the context of both negative and positive reviews unanswered (Barta et al., 2023). Methodological: Several studies reviewed found that some used a qualitative and exploratory approach, necessitating a more robust quantitative approach using SEM Multi-Group Analysis, along with more concrete behavioral measurement variables than simply purchase intention.

Achievement from this research to analyze the direct influence of VTO on online skincare purchasing decisions and investigate the role of customer reviews as a moderator of the relationship between VTO and purchase decisions. Furthermore, by understanding the correlation between these three variables, we can understand the

psychological mechanisms that build trust and reduce consumer uncertainty during the purchase decision-making process. This study contributes to enriching the digital consumer behavior literature with an integrated model that combines technology (VTO) and social (eWOM) with empirical evidence. Furthermore, its long-term management impact provides strategic guidance for VTO technology investment and efficient customer review management to maximize the effectiveness of digital skincare marketing. Furthermore, the systematic design used is a robust quantitative research design to test moderation in e-commerce, along with measurement scales and instruments that can serve as references for other researchers. Overall, this study aims to fill the gap between theory and practice by understanding in detail how digital technologies such as VTO and social interactions in the form of customer reviews collaborate to shape purchase decisions in the increasingly complex skincare e-commerce ecosystem.

METHOD

This research can be categorized as explanatory research (Ibrahim et al., 2018). The research subjects reached Shopee app users aged 20-35 years in Tasikmalaya City. The sampling technique used was Cochran (Ahmed, 2024). To test the hypothesis, this study utilized Structural Equation Modeling (SEM) through the SmartPLS statistical tool. The SEM method is an integrated approach that combines factor analysis, structural models, and path analysis (Ghozali, 2019).

RESULTS AND DISCUSSION

The assessment results in SEM-PLS analysis begin with a measurement step outside the SEM model that describes the measurement results, both contemplatively and formally. The external model test is used to determine whether the research instrument meets the initial requirements for suitable research data, namely valid and reliable data (Waluyo & Rachman, 2020).

Referring to Statistic data, it can be stated that all research indicators meet the criteria for Convergent Validity, with loading factor values greater than 0.5. The test results also indicate that all research variables can be declared reliable. This is evident from the Composite Reliability value of each variable which is greater than 0.70 and the Average Variance Extracted (AVE) value which is greater than 0.50. The test results using the SmartPLS program provide SEM-PLS model results as shown in Table 1, which shows the effect of virtual try-on on purchasing decisions with customer reviews as a moderation

Table 1. Result Of Hypothesis Test

Hypothesis Variable	Path Coefficient	P-Values	Conclusion
H1 Virtual Try On → Purchase Decision	0.277	0.017	Accepted
H2 Virtual Try On → Customer Reviews	0.814	0.000	Accepted
H3 Customer Reviews → Purchase Decision	0.624	0.000	Accepted
H4 Virtual Try On → Purchase Decision → Customer Reviews (as Moderation)	0.068	0.127	Decline

Source: Data processed, 2025

The SEM-PLS model test results were shown in the following figure

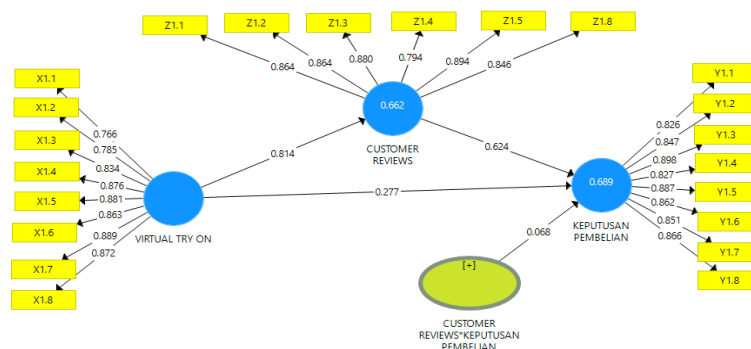


Figure 1. Research Framework Analysis Result SEM –PLS

The findings of this study provide evidence that virtual try-on has a significant effect on purchasing decisions. The ease of use of the service interface and the facial detection process with the virtual try-on feature was fast and seamless. Furthermore, the product color, texture, and effect are matched to the user's skin, varying enough for consumers to make their own choices. The virtual try-on feature can adapt to skin types (dry, oily, and sensitive).

CONCLUSION

Based on a synthesis of various previous studies, it can be concluded that Virtual Try-On (VTO) technology has a direct and strong influence on consumer purchasing decisions. However, what was more interesting is the finding that this strong influence is not successfully moderated by the presence of customer reviews. This phenomenon indicates a paradigm shift in the consumer decision-making process in the digital era, where simulated personal experiences are beginning to replace the dominance of social information as the primary determining factor. The influence of VTO on skincare product purchasing decisions stems from its ability to create a personal and immersive hands-on experience. By utilizing augmented reality technology, VTO allows consumers to transition from passively observing a product to actively participating in trying it out virtually (Dixit et al., 2025).

This process effectively minimizes the uncertainty inherent in online purchases, such as concerns about size, color, or style incompatibility. When consumers can visualize a product on themselves, they build confidence based on what they see and experience firsthand. This confidence then becomes a key driver for purchasing decisions. Furthermore, the inability of customer reviews to moderate the relationship between VTO and purchasing decisions reveals a profound psychological dynamic. In this context, VTO is not simply an additional layer of information but rather creates an internal and subjective source of confidence (Viohafeni & Aliyah, 2023). After consumers experience how a product appears to them through VTO, they tend to enter psychological states known as overconfidence bias and confirmation bias.

Under these conditions, consumers become more trusting of their personal judgments, formed by these virtual experiences. As a result, positive reviews from others are perceived as mere confirmation of their already-formed decisions, while negative reviews are often ignored or deemed irrelevant to their personal situations. Furthermore, these findings suggest that VTO and customer reviews operate in two distinct persuasive domains and tend to be substitutive, rather than complementary. Customer reviews serve as a general, impersonal external signal, while VTO provides a highly personal, contextual internal signal. When confronted with these two sources of information, modern consumers are more inclined to trust visual evidence directly experienced in their own context than the average conclusions provided by others (Sheng, 2023). In other words, VTO has successfully replaced the traditional role of customer reviews as a primary tool for reducing perceived risk. The implications of this conclusion are significant for digital marketing practice. These findings confirm that investing in immersive technologies like Virtual Try-On is not just an incremental innovation, but a fundamental strategy that can directly influence consumer behavior without relying solely on review mechanisms. VTO empowers brands to create their own product narratives and proactively build consumer confidence, rather than relying solely on the accumulated opinions of previous users. Ultimately, in an increasingly competitive e-commerce landscape, the ability to deliver a near-realistic, personalized experience proves to be more persuasive than a collection of social testimonials, marking a new era in which virtual, in-person experiences become a key determinant of purchasing decisions.

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