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THE EFFECTS OF SMMA, ADVERTISING, AND E-WOM ON COSMETIC PURCHASES IN WEST JAVA

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Abstract. This study investigates the influence of Social Media Marketing Activities (SMMA) comprising Advertisement, and Electronic Word of Mouth (eWOM) on the Actual Purchase behavior of cosmetic consumers in West Java. The research is motivated by the growing dominance of social media as a key medium for digital marketing, particularly in the cosmetics industry, which depends heavily on brand image, two-way communication, and consumer engagement. West Java was selected due to its highest social media penetration rate in Indonesia and its position as the province with the largest number of cosmetic industries. A quantitative explanatory survey method was employed, involving 300 respondents selected through purposive sampling. The respondents were social media users who followed cosmetic brand accounts and had made at least three purchases in the past three months. Data were collected using a Semantic Differential Scale and analyzed through Structural Equation Modeling (SEM) using SPSS version 25 and AMOS version 26. The findings reveal that eWOM, Advertisement, SMMA, and Actual Purchase are positively and significantly related, with eWOM and Advertisement emerging as the dominant factors influencing consumer purchase decisions. The results confirm that SMMA not only enhances brand image and consumer trust but also directly drives actual purchasing behavior. The study offers practical insights for cosmetic industry practitioners to optimize digital marketing strategies focused on interaction, user experience, and effective communication through social media platforms.

Keywords; *Social Media Marketing Activities, Advertisement, eWOM, Actual Purchase.*

1. Introduction

In today's digital age, marketing practices are undergoing a fundamental shift from one-way communication through passive traditional advertising to interactive two-way communication through social media platforms. Conventional advertising still plays an important role as an initial trigger for brand awareness and as a stimulus in the purchase decision-making process (Kothari et al., 2025). However, when advertising messages enter the social space where consumers are not only recipients of information but also play an active role in sharing experiences and opinions, a transformation towards the phenomenon of social media marketing (*Social Media Marketing Activities/SMMA*) occurs. SMMA functions as a bridge between advertising exposure and purchasing actions, with the advantage of spreading promotional messages while creating a space for interaction, comments, and recommendations from users (K S & Massand, 2025). One important element in this dynamic is *electronic word-of-mouth* (e-WOM), namely reviews, comments, recommendations, or personal experiences shared by consumers on various social media platform (Anastasiei, n.d.). e-WOM has been proven to have a significant influence on consumer purchase intent, as explained by research conducted by (Febyola & Widyanesti, 2024) which found that recommendation-based digital interactions can strengthen trust- s and encourage purchasing decisions. Other research also shows that e-WOM not only has a direct impact on purchase intent but also

strengthens the influence of SMMA on consumer behavior, particularly through advertising channels integrated with social media (Winarno & Indrawati, 2022). Based on these findings, the conceptual model in this study places SMMA as a mediator that bridges the relationship between advertising and e-WOM, leading to actual purchases. In this mechanism, advertising provides the initial stimulus; SMMA facilitates consumer interaction and e-WOM; and e-WOM reinforces the final decision that leads to actual purchasing behavior.

Although a number of previous studies have examined the relationship between SMMA and e-WOM on purchase intention, studies exploring the influence of these two variables on actual purchase behavior are still limited. (Ismagilova et al., 2020), through a meta-analysis of 50 studies on e-WOM, found that most studies stopped at measuring purchase intention without confirming whether consumers actually made a purchase. This condition indicates a research gap that needs to be bridged in order to gain a more comprehensive understanding of the conversion from intention to actual action. The urgency of this research is even greater considering the dependence of small and medium-sized enterprises (SMEs) on social media as their main means of digital marketing. Based on a Statista report (2023), around 70% of MSMEs in Indonesia utilize social media platforms to market their products. Without a clear understanding of the relationship between advertising, SMMA, and e-WOM on actual purchases, marketing strategies risk only generating superficial engagement in the form of clicks and likes, without being followed by actual purchase conversions.

Therefore, this study examines the influence of advertising activities on SMMA within the digital marketing context, analyzes the mediating role of SMMA between advertising and e-WOM, and evaluates the effect of e-WOM on actual purchasing behavior. Furthermore, this study provides strategic recommendations for business actors, including flower businesses, to optimize the integration of advertising, SMMA, and e-WOM in enhancing purchase conversion rates. Addressing previous studies that have largely focused only on purchase intention, this research offers a novel contribution by empirically investigating actual purchase behavior among cosmetic consumers in West Java—a market characterized by high competition and heavy reliance on social media engagement. By focusing on this specific consumer segment, the study not only fills an important contextual gap but also produces insights that are directly relevant for practitioners operating in the region. Consequently, this research is expected to advance digital marketing literature while providing practical guidance for businesses seeking to convert online interactions into measurable purchasing actions.

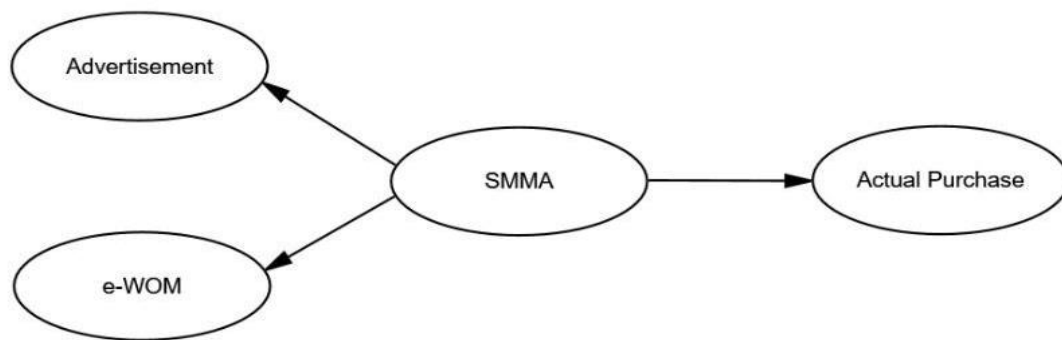
2. Reserch Method

This study uses a quantitative approach with an explanatory survey method. According to Creswell (2010: 24), an explanatory survey is a research plan and procedure that includes steps in data collection and analysis, with a primary focus on the cause-and-effect relationship between variables using a quantitative approach and instruments such as questionnaires. The Social Media Marketing Activities (SMMA) variable is positioned as a second-order construct formed from two dimensions, namely Advertisement and electronic word of mouth (eWOM). Meanwhile, the Actual Purchase variable is conceptualized as a second-order construct consisting of three dimensions: Purchase Frequency, Purchase Quantity, and Service Ordering. No moderator variable is included

in this study. (survey of people in West Java who follow the social media accounts of environmentally friendly skincare brands).

The population in this study was social media users in West Java who already had experience with information related to cosmetic products on social media. Meanwhile, the sampling technique used was purposive sampling. The sample in this study was people in the West Java region who followed the social media accounts of environmentally friendly skincare brands and had purchased environmentally friendly skincare products at least three times in the last three months. The sample size refers to the guidelines of (J. F. J. Hair et al., 2013) which suggest 5 to 10 times the estimated parameter in the SEM model. Since this study uses 11 indicators that produce 25 estimated parameters, the minimum number of respondents required is 125 people.

The research instrument employed a Semantic Differential scale, which measures a person's attitudes, opinions, and perceptions toward an object by presenting statements with two opposing meanings (Sugiyono, 2019). The data were analyzed using the Structural Equation Model (SEM) technique. The researcher used two software programs to process the data using the SEM technique, namely SPSS version 25 and AMOS version 26. The researcher used SPSS to perform validity and reliability analyses, while AMOS was used to analyze model and hypothesis fit in this study.



Source: Reserch Result, 2025

Fig 1. Research Model

Table 1. Characteristic Respondent

Characteristics	Attribute	Total %	
		Frekuensi	Presentase
Gender	Male	74	59%
	Female	51	41 %
Age	Gen Z (17-28 Tahun)	49	39,2%
	Gen Milenial (29-44 Tahun)	43	34,4%
	Gen X (45-60 tahun)	33	26,4%
Social Background	Student	46	36,8%
	Employees	59	47,2%

Characteristics	Attribute	Total %	
		Frekuensi	Presentase
	Entrepreneur	20	16,0%

Source: Research Results 2025

Based on the respondents' characteristics presented in the table, the majority were male, totaling 74 individuals (59%), while female respondents numbered 51 individuals (41%). In terms of age, most respondents belonged to Generation Z (17–28 years), accounting for 39.2%, followed by Millennials (29–44 years) at 34.4%, and Generation X (45–60 years) at 26.4%. Regarding social background, the majority of respondents were employees (47.2%), followed by students (36.8%) and entrepreneurs (16%). Overall, these findings indicate that the respondents in this study were predominantly from young to middle-aged groups with diverse occupational backgrounds, reflecting a representative segment of the socially and economically productive population.

This study employed Covariance-Based Structural Equation Modeling (CB-SEM) using AMOS 24 as the analytical tool. The analysis began with the development of a conceptual model derived from the established research hypotheses. Once the data were collected, preliminary checks were conducted to ensure completeness and compliance with the required assumptions for SEM analysis. Subsequently, construct validity and reliability tests were performed to confirm that each indicator appropriately represented its respective latent variable. Based on the results of the Confirmatory Factor Analysis (CFA), all indicators for Advertisement, e-WOM, SMMA, and Actual Purchase demonstrated factor loadings above 0.70, indicating that all indicators were valid and exhibited strong contributions to their underlying constructs (J. F. Hair et al., 2019).

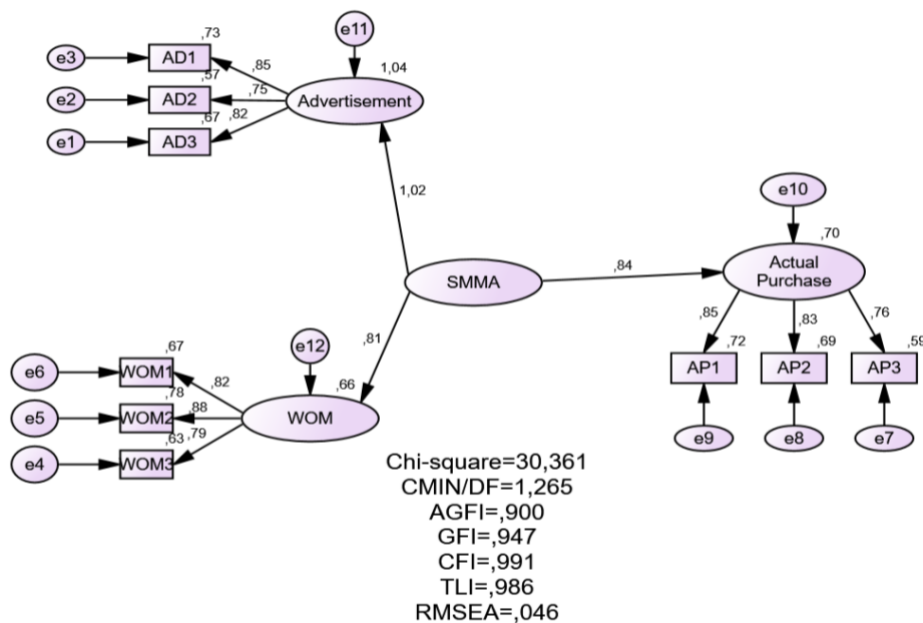
In Structural Equation Modeling (SEM) analysis, assumptions were evaluated to ensure that the data used met the requirements for analysis. The first step was to examine data normality, both individually and collectively, to ensure that the data distribution was normal (J. F. Hair et al., 2019). The test results showed a multivariate critical ratio value of 2.550, which means that no value exceeded the cut-off limit of ± 2.58 . Thus, the data in this study can be considered to follow a normal distribution and are suitable for use in SEM analysis. After confirming normality, the next step is to perform an outlier test, which aims to find extreme data that may affect the analysis results (J. F. Hair et al., 2019). The outlier test process was carried out in two stages, namely univariate and multivariate tests. The results of the univariate outlier test showed that the minimum and maximum Z-scores were in the range of -2.159 to 2.040, so that no data exceeded the ± 3 limit. This indicates that there were no univariate outliers in the research data. Then, a multivariate outlier test was performed using the Mahalanobis Distance value compared to the Chi-square value from the table at the relevant degrees of freedom. The results show that the highest Mahalanobis Distance value is 22.845, while the Chi-square table value is 30.361. Because the Mahalanobis Distance value is smaller than the Chi-square table, it can be concluded that the research data does not have multivariate outliers. Based on the overall test results, the research data met all the basic assumptions of SEM, including normality and freedom from outliers. Therefore, the data was deemed suitable to proceed to the structural model testing stage using the Covariance Based-SEM (CB-SEM) approach with the help of AMOS 24 software.

Table 3. Measurement, Loading, CR, and VE

Constructs	Indicators	S.Loading Estimate	AVE	CR	Description
AD	AD1	0,853	0,653	0,849	VALID
	AD2	0,753			
	AD3	0,816			
WOM	WOM1	0,818	0,669	0,950	VALID
	WOM2	0,885			
	WOM3	0,793			
AP	AP1	0,847	0,664	0,856	VALID
	AP2	0,831			
	AP3	0,765			

Source: Research Result, 2025

After conducting the SEM test, the next step is to test validity and reliability. Validity refers to the extent to which the measurement can define the intended concept, while reliability focuses on the consistency of the measurement. Based on Table 3, it can be seen that all research indicators have factor loadings greater than 0.40. This shows that the indicators in each variable accurately represent the intended construct in the study. For reliability testing, the variance extracted (VE) value for each variable must be greater than 0.50, while the Construct Reliability (CR) value for each variable must be greater than 0.70. The results of the analysis show that all VE scores for the research variables exceed 0.50, and the CR value for each variable is greater than 0.70.



Source: Research Result, 2025

Fig 2. Research Model

Table 4. Goodness of fit

<i>Goodness of Fit</i>	<i>Analysis Result</i>	<i>Cut of Value</i>	<i>Evaluasi Model</i>
<i>Chi-Square</i>	30,361	Diharapkan kecil	Marjinal Fit
CMIN/DF	1.265	< 2.000	Fit
AGFI	0,900	> 0.90	Fit
GFI	0,947	> 0.90	Fit
TLI	0,991	> 0.95	Fit
CFI	0,986	> 0.95	Fit
RMSEA	0,46	< 0.08	Fit

The feasibility of this research model was tested by evaluating the Goodness of Fit, which can be seen in Table 4. A low chi-square value indicates that the SEM model has a good fit. In addition, the AGFI and GFI values also indicate a good fit with an acceptance level greater than 0.90. The TFI and CFI values are greater than 0.95, indicating that the model fits the available data. Furthermore, an RMSEA value less than or equal to 0.80 indicates that the model fits the degrees of freedom in the model (Ferdinand, 2016). Based on the RMSEA analysis results, the criteria are met. Therefore, it can be concluded that this research model is feasible for further analysis.

Hypothesis testing was conducted to analyze the structural relationships among the latent variables in the research model (J. F. Hair et al., 2019). In Structural Equation Modeling (SEM), hypothesis testing is performed through path analysis using AMOS 24. The significance of each hypothesis is evaluated based on the critical ratio (C.R or t-value) and the p-value. A hypothesis is considered supported when the p-value is below 0.05, while the direction of the relationship is determined by the sign of the estimate value.

Table 5. Influence Relationship

Influence Relationship	Estimate	C.R	P	Decision
WOM<--- SMMA	0.804	7.079	0.00	Accepted
Actual Purchase <---- SMMA	0.786	7.181	0.00	Accepted

Source: Research Result, 2025

Table 5 shows the results of the hypothesis testing, indicating that SMMA has a significant positive effect on e-WOM, with an estimate of 0.804 and a p-value of 0.00. Likewise, SMMA also has a significant positive effect on Actual Purchase, as reflected by an estimate of 0.786 and a p-value of 0.00. These findings confirm that SMMA plays an essential role in enhancing both e-WOM and actual purchasing behavior, consistent with the proposed research model.

3. Discussion

The results of the study indicate that Social Media Marketing Activities (SMMA), advertisements, and electronic word of mouth (e-WOM) have a positive and significant effect on the actual purchase of cosmetics by consumers in West Java. These findings reinforce the view that social media functions not only as a promotional channel but also as an interactive space that fosters trust and strengthens purchasing decisions (Ismagilova et al., 2020). Advertising creates initial attention and shapes early brand perceptions, while e-WOM enhances credibility through authentic consumer experiences (Winarno & Indrawati, 2022). When both are integrated into SMMA, they amplify engagement,

interaction, and message reliability, making SMMA a stronger representation of consumers' actual purchasing behavior. This outcome aligns with (Kothari et al., 2025), who emphasize that actual purchase behavior is increasingly influenced by social interaction and the credibility formed within digital communities. Theoretically, these results underscore the importance of combining promotional stimuli with social validation mechanisms in driving real purchasing actions, while managerially highlighting the need for businesses to optimize advertising, strengthen interactive SMMA content, and actively manage e-WOM to convert online engagement into measurable purchase outcomes

Theoretically, this study expands the digital marketing model by emphasizing the role of SMMA as a mediator between advertisement and actual purchase. These results add empirical evidence that social relationships and online recommendations are important factors in purchase conversion (Ismagilova et al., 2020). This study also reinforces the two-way communication theory, in which consumers play an active role as co-creators of value in shaping purchasing decisions (Winarno & Indrawati, 2022). For marketing practitioners, these results indicate that digital strategies should emphasize user engagement and experience. Companies are advised to optimize interactive content, encourage positive reviews, and utilize influencer marketing to strengthen e-WOM (Febyola & Widyanesti, 2024). Additionally, integrating paid advertising with organic promotion on social media will increase the effectiveness of actual purchase conversion.

4. Conclusion Limitations and Future Research

Advertising generates initial awareness and interest, while e-WOM strengthens credibility through authentic user experiences. Together, these elements reinforce consumer engagement within SMMA, making consumers more confident in their decisions. Advertising thus stimulates attention (Winarno & Indrawati, 2022), whereas e-WOM builds trust and social proof (Ismagilova et al., 2020), and the combination of both effectively drives consumers from interest toward actual purchase.

This study is limited to the West Java region and focuses only on two key dimensions of SMMA, namely advertising and e-WOM. Other influential variables such as brand image, content quality, or customer trust were not included, which restricts the generalizability of the findings. Future research is recommended to broaden the geographical scope, incorporate additional variables such as brand engagement or social media influencers, and employ mixed-method approaches to capture consumers' emotional responses more deeply. Longitudinal studies are also suggested to evaluate the long-term effects of SMMA on customer loyalty.

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