Edelweiss Applied Science and Technology

ISSN: 2576-8484 Vol. 9, No. 1, 1019-1033 2025 Publisher: Learning Gate DOI: 10.55214/25768484.v9i1.4306 © 2025 by the authors; licensee Learning Gate

The impact of neuromarketing and influencer marketing on the decision process of generation Z consumers on the purchase of halal cosmetics

Asri Rahmah Ishomi¹, DSiska Ernawati Fatimah^{2*}, DAang Curatman³

1,2,3</sup>University of Swadaya Gunung Jati, Cirebon, Indonesia; rahmahishomi@gmail.com (A.R.I.) siskafatimah 12@gmail.com (S.E.F.) aangcuratman@gmail.com (A.C).

Abstract: This study aims to help business actors understand Generation Z's purchase decision. In addition, it examines the behaviour of Generation Z mediated by neuromarketing and influencer marketing in the decision to purchase halal cosmetics so that business actors can determine strategies by optimising product information and advertising. The population of this study is residents of Cirebon City aged 19 to 24 years, with a population of 56,626. The sampling used the Slovin formula and obtained as many as 397 respondents. To test the hypothesis of this study, samples were taken randomly using SEM-PLS (Partial Least Squares—Modeling Structural Equation) analysis. The study results show that neuromarketing and influencer marketing influence the purchase decision of Generation Z halal cosmetics through consumer behaviour. The dominating influence is influencer marketing in the decision to purchase halal cosmetics through the behaviour of Generation Z. Thus, the results of this research can be used by halal cosmetics business actors in Cirebon City to implement their business strategies using influencer marketing so that business continuity is also expected to be maintained.

Keywords: Customer behavior, Halal cosmetics, Influencer marketing, Neuromarketing, Purchasing decision process.

1. Introduction

Digitalitation affects the correct marketing approach. Kotler and Keller [1] Marketing strategies based on the development of technology and science are one way to detect and meet consumer needs [2]. One is to apply neuromarketing methods to marketing strategies, including advertising, product information delivery, and various other aspects [3] Neuromarketing is a marketing technique that focuses on an individual's emotions and subconscious mind to build a strong relationship between customers and the product or service offered [4] The neuromarketing approach focuses on various processes and leverages brain function, which affects cognitive, attention, and emotional abilities, to influence and drive consumer preferences [5]. Emotional involvement and consumer preferences are significant in considering the entire buying process to influence consumer purchasing behaviour [6] Neuromarketing arises from applying neuroscience methods and techniques for marketing purposes, i.e. consumer behaviour in response to certain stimuli [7]. In this context, neuromarketing is an interdisciplinary domain with extraordinary potential because it allows researchers to understand and predict consumer choices and behaviours [8].

Today's consumer behaviour is heavily influenced by the ever-evolving growth of social media platforms [9] Consumer behaviour in Indonesia continues to evolve in line with the development of the digital economy in Indonesia. One of the developments in the digital economy in Indonesia is that consumers prefer to shop online through various social media platforms [10]. One online shopping that Indonesian consumers often do is for cosmetic products. The trend of cosmetic products in Asia is

starting to emerge, namely halal cosmetics, as well as in Indonesia, which has a Muslim-majority society. Indonesia is the world's most significant consumer purchasing halal cosmetic products.

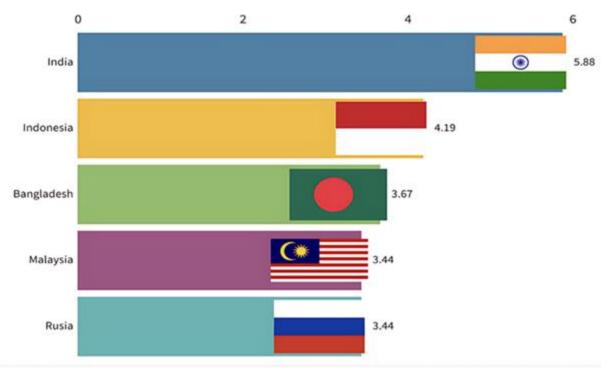


Figure 1.
Countries with the Largest Halal Cosmetics Consumers in the World.
Source: Dinar standard (2021).

Figure 1 above indicates that, after India, Indonesia is the nation that consumes the most halal cosmetics; Bangladesh came in third, followed by Malaysia and Russia. Halal goods business players modify their marketing tactics to reach their target audience [11, 12] Local cosmetic companies must be prepared to adapt as consumer behaviour changes due to increased awareness of and desire for a halal lifestyle [13].

Halal product entrepreneurs employ influencer marketing as one of the key elements of their marketing strategy, and they also use the function of neuromarketing. Influencer marketing, which uses content creators, is used in Indonesia to execute marketing plans on social media platforms. An influencer with a sizable fan base on social media platforms is used in influencer marketing. Influencers can engage with millions of individuals worldwide by leveraging their influence to promote a company's products or services and then build its social media platform [147].

Influencers are one of the new communication tools that are growing along with the development of social media platforms. Marketing strategies are expected to reach the target audience and explore increasing brand awareness, improving brand perception, and driving sales [15]. Additionally, the growing number of social media influencers has changed how businesses market their products and services, which will impact consumer behaviour. Understanding consumer behaviour is crucial because consumer habits and behaviours evolve due to unprecedented choices and preferences that ultimately influence purchasing decisions [16].

The consumer purchasing decision-making process is often influenced by intuition, reflection, and values, and accurately evaluating them is a challenge for marketers [5]Klik atau ketuk di sini untuk

memasukkan teks.. In addition, consumers will never see a difference in the perfect message or as a result of understanding the consumer purchasing decision-making process [17]. Generation Z is the largest segment in the cosmetics industry, born between 2010 and 2025. They are increasingly aware of the importance of safe cosmetic products, but this awareness is balanced with consumer understanding. Consumers' knowledge of the content contained in cosmetics makes consumers more confident in the content brought by influencers than reading the cosmetics labels. So, consumers tend to behave by changing cosmetic brands frequently [18].

Neuromarketing was used in previous research for consumer behaviour and the purchasing decision-making process, which focused on improving existing information about products and sales marketing actions so that it is more effective at knowing how sensitive the stimulus is for consumers [19] and explore the response of the consumer's brain to a marketing stimulus. Neuromarketing can read consumers' minds and can also be used to open the gates of new business innovations. In addition, it can explore consumer needs more deeply regarding activities related to marketing stimulus. Previous research used qualitative methods. This study uses a quantitative method to investigate the impact of neuromarketing on purchasing behaviour and decision-making.

Understanding how influencer marketing and its content affect customer behaviour is essential. Influencer marketing content results in low consumer literacy in the decision-making process. The present research attempts to close that gap. Furthermore, this research examines how influencer marketing influences customer behaviour and decision-making. Customer behaviour is essential. Influencer marketing content results in low consumer literacy in the decision-making process. This research aims to fill this gap. The influence of influencer marketing on customer behaviour, and by extension, decision-making, is another target of this research [18], the research will also conduct a quantitative analysis that explores various interactions between social media influencers and Generation Z consumer behaviour in Indonesia [20].

The problem in this study is how business people understand neuromarketing and determine whether influencer marketing influences the behaviour of Generation Z consumers when making decisions to buy halal cosmetics. The focus of this research is to help business people choose the right strategy in the decision-making process for purchasing halal cosmetics by understanding the behaviour of Generation Z consumers.

The new thing in this study is that neuromarketing research has been carried out using qualitative methods; this research uses quantitative methods, which aims to make it easier for business actors to understand neuromarketing and the selection of the right marketing influencer and ensure that consumer behaviour towards the advertised products and services feels helpful and pleasant which will have an impact on the purchase decision process [14]. In addition, neuromarketing research on halal cosmetic products is still small. This research was conducted only on Generation Z in Cirebon City because the city continues to grow, along with the emergence of schools and colleges.

2. Theoretical Framework and Hypotheses

2.1. Neuromarketing

Neuromarketing is a neuroscience method for analyzing and understanding human behaviour, markets, and change. Neuromarketing measures a person's physiological and neural signals to gain customer insights, motivations, preferences, and decisions. Thus, helping businesses inform creative advertising, product development, pricing, and marketing areas. Neuromarketing can also be used to understand better consumer behaviour, including aspects of a person's subconscious and emotional response to a brand. Neuromarketing uses two main dimensions to scan the brain, namely fMRI (functional magnetic resonance imaging) and EEG (electroencephalogram) [21, 22].

The first dimension uses fMRI, a method to detect blood flow in the brain connected to increased nerve activity, which helps set prices and improve brand branding. The second dimension is EEG, an electrical signal recorder in the scalp of neurons in the brain, which helps improve clan memory and

brand imaging. Indicators for measuring neuromarketing are detailed emotional responses (eye and facial responses), engagement rates, and memory levels [22].

2.2. Influencer Marketing

The success of marketing through social media is one of them, as is the success of influencer marketing. Influencer marketing is a method of appointing public figures who are considered to influence a business's community or target consumers significantly. The success of marketing through social media is one of them, as is the success of influencer marketing. Influencer marketing is a strategy that involves engaging prominent people deemed to have a substantial impact on a business's community or target audience [23]. So that the company's goals can be achieved through brand promotion recommendations. Influencers use social media to encourage customer desire for products or services. The reliability of influencers in promoting goods or services greatly affects consumer desires, shaping consumer demand. In addition, influencers are a source of information trusted by their followers, and influencer recommendations can directly increase brand awareness and improve brand perception, leading to purchases [24].

According to Hovland et al., indicators of credibility, attractiveness, expertise, likeability, and similarity can be used to measure the role of influencer marketing. Credibility measures an influencer's reliability and how much the audience can trust their opinions. The appeal is seen in the physical appearance and lifestyle of the influencer. Expertise is seen from how deep the influencer's knowledge and ability is in promoting a brand. Liking is seen from how famous the influencer is in general. Similarity is seen in how confident consumers are that they have something in common with their influencers [25].

2.3. Customer Behavior

Consumer behaviour is the decision-making process customers make when purchasing goods and services for their needs. The interaction between the influence of others and the consumer's brand knowledge is known as the dynamics of consumer behaviour. The behaviour of the surrounding environment also influences consumer behaviour. This can be affected by expertise, prior experience, or any other factors that assist in organizing and structuring cognitive content or knowledge [7].

Tools used to measure customer behaviour include perception, cognition, affection, belief, and social. Collecting and processing information that impacts customer perception is known as perception. This can be affected by expertise, prior experience, or any other factors that assist in organising and structuring cognitive content or knowledge. Cognition is a way of thinking that interprets, remembers, and applies information in interactions with others, others, and our environment [26]. Emotions are when a person likes something. Beliefs are cognitive opinions and subjective judgments about something. One example of social activity is how to interact with different processes that can influence their choices.

2.4. Decision Purchase Process

Purchasing decisions are influenced by buyer behaviour [27]. The consumer purchase decision process is an integration process in which knowledge is used to assess the behaviour of two or more alternatives and choose one of them. In other words, the consumer purchase decision process is a consumer choice that meets their needs. The consumer decision-making process occurs when consumers go through the purchase stage and decide to buy certain goods or services [28].

The consumer decision-making process can include identifying problems, finding solutions, evaluating alternatives, making a purchase decision between various options, and evaluating the outcome of the choice [29]. Identifying customer issues involves the consumer's effort to acknowledge demands through optimal motivation. Personal sources encompass family, friends, neighbours, and acquaintances. The search for the simplest and most reliable solutions is carried out through close

contact and intensive communication, in addition to through advertisements that provide profound product benefits to consumer perceptions and new products that attract consumers' attention. Consumers then use that information to evaluate alternative brands in the resulting selection structure. Consumers then carry out the purchase decision process by deciding to buy the product or service. Consumers can also purchase additional items that they do not plan to purchase. Upon acquiring the item, the concluding stage assesses the election result. Consumers will discern their satisfaction or dissatisfaction. In post-purchase behaviour, customer satisfaction or dissatisfaction is based on the information they expect from sellers, friends, and other sources.

3. Hypothesis Development

3.1. Relationship between Neuromarketing and Customer Behavior

Neuromarketing aims to identify undetected consumer behaviours to understand the consumer's shopping experience during purchase [7]. Consumer behaviour is a dynamic interaction between individuals and the environment that influences consumer behaviour through thought stimuli [3]. There are so many ads that change consumer behaviour and affect consumer emotions. Neuromarketing is an effort to understand marketing stimuli so that consumers act rationally and consciously. On the other hand, there are also consumer activities carried out by emotions to speed up the purchase process [30].

The relationship between neuromarketing and consumer behaviour describes the ability of neuromarketing to understand and improve their understanding of consumer behaviour with a person's subconscious motivation to create engaging and targeted marketing strategies. Understanding consumer behaviour through neuromarketing illustrates the totality of consumers in responding to business messages [19]. From this description, the following hypothesis can be drawn:

*H*₁: There is a relationship between neuromarketing and consumer behaviour.

3.2. Relationship between Influencer Marketing and Customer Behavior

Influencer marketing transforms business operations by facilitating direct engagement between companies and customers on social media platforms [17]. An influencer plays a crucial role in influencer marketing by shaping views and behaviours. The power of an influencer will go beyond the media to advertise goods or services, impacting a brand's reputation and identity management. Influencers also serve as a source of information and recommendations for products or services that are easily accessible and become mainstays for followers in the digital world [31].

Influencers can significantly influence consumer behaviour through social media, which is an effective way to generate interest and encourage purchase action. Each individual has an interest and preference for the goods or services offered [14]. Influencers can increase brand perception because they are considered a source of information their followers can trust. Their recommendations can increase consumer awareness of the brand, increasing sales [16]. From this description, a hypothesis can be drawn:

H₂ There is a relationship between Influencer Marketing and Consumer Behavior.

3.3. Relationship between Neuromarketing and Purchase Decision Process

Increasing competition and business capabilities make it increasingly difficult for consumers to make purchasing decisions between product or service choices to distinguish the chosen brand [32]. Therefore, business people must understand consumer behaviour as a purchasing decision-making process [19]. The purchase decision-making process will not be decided immediately after the consumer receives complete information about a product or service [19]. Through neuromarketing, consumers use brain recordings to extract information faced by various product or service choices.

Neuromarketing will be able to describe the consumer decision-making process that will lead to the Purchase Decision Process so that business actors can determine marketing strategies and understand consumer behaviour that impacts decision-making [33]. Therefore, business actors can find new

marketing strategies by considering consumer neuromarketing when making purchase decisions based on consumers' emotions when carrying out the purchase decision process [33]. From this description, the following hypotheses can be drawn:

 H_{s} . There is a relationship between neuromarketing and the purchase decision process.

3.4. Relationship between Influencer Marketing and Purchase Decision Process

Influencer marketing campaigns are used by companies not only to provide more profits than regular social media marketing campaigns and general digital marketing campaigns. There is already a relationship between influencers and their followers due to trust and credibility; hence, a product, service, or brand gets more profits and better reach. Influencers create content for products, services, or brands, which creates a halo effect. This is not possible with display ads because users are already aware of the ads, and even if they appear on the influencer's website, it is not endorsed or associated with the influencer.

Influencers act as a funnel by creating content for social users interested in creating a niche. Since influencers have driven niche audiences on social media, companies can save money that would be used to test and find the right audience for their products, services, or brands [34]. From this description, the following hypothesis can be drawn:

 H_k There is a relationship between influencer marketing and the buying decision process.

3.5. Relationship Between Neuromarketing, Customer Behavior and Purchase Decision Process

Many consumer behaviour factors influence the purchasing decision-making process and individual decisions about the products and services they choose [26]. he purchase decision process is driven by consumers' cognitive limitations, resulting in consumers making irrational purchase decisions. Advances in digital technology make the purchase decision process faster and better.

Neuromarketing is a new marketing innovation that combines human nerves with marketing. This concept exists because the consumer purchase decision process is not only based on logical considerations but also driven by emotions and subconscious processes in the consumer's mind, which will affect consumer behaviour in undergoing the purchase decision process so that neuromarketing forces business actors to change the way their business interacts with their consumers. In addition to using neuromarketing techniques, business actors try to influence consumer behaviour by using influencer marketing to form a mindset through content delivered by influencers.

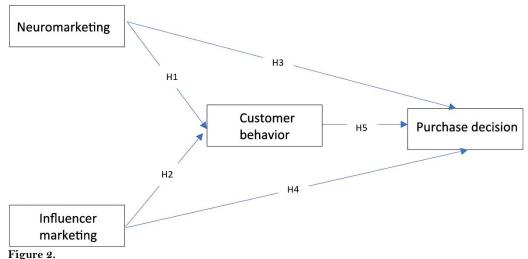
However, decision-making mistakes can cause consumer behaviour to deviate during the purchase process. When they search for information about products on various social media platforms, they pay more attention to how to save money, be convenient, and use them easily. This will ultimately determine the purchase decision process that suits their preferences.

Consumers prefer interacting with influencers because the content is informative, inspiring, and valuable [34]. Neuromarketing and influencer marketing combine relevant brand messages that influence mindsets and drive consumer behaviour in consumer decision-making so that consumers are expected to choose goods or services [14]. This also drives company stakeholders to comprehend the motivations behind customer purchasing decisions. Understanding how the consumer mindset works by properly creating engaging promotional content by influencers can influence consumer purchasing decisions, increase sales, and improve business relationships, allowing marketers to develop more effective strategies for determining their target market. From this explanation, the following hypotheses can be obtained:

H_s There is a relationship between consumer behaviour and how they make purchasing decisions, and there is a relationship between consumer behaviour, as seen from neuromarketing and influencer marketing.

3.6. Research Farmwork

Figure 2 shows the proposed research model for this study based on the hypothesis developed.



Research Framework.

4. Method

4.1. Population and Sample

Quantitative research systematically investigates phenomena by gathering measurable data through statistics, mathematics, or calculations [35]. Qualitative data can be defined as numerical representations derived from the field by transforming qualitative attributes into quantitative metrics [36]. This study comprises individuals aged 19 to 24 in Cirebon City, totaling 56,626 (BPS Cirebon City, 2024). This study used the Slovin formula to obtain a sample of 397 respondents for research purposes. The employed sample approach is an Incidental sample.

4.2. Analysis Method

The analysis uses the Structural Equation-Partial Least Square (SEM-PLS) Model to test this data. The PLS technique was chosen because it is widely used for complex causal-predictive analysis and is suitable for prediction applications and theory development, as was done in this study [37].

4.3. Measurement Variable

The research questionnaire is used to measure these variables using the Likert scale; the questionnaire instrument is designed narratively. In addition, all participants' answers were classified into five scores: Strongly Disagree (1), Disagree (2), Quite Agree (3), Agree (4), and Strongly Agree (5). This variable is measured using the following dimensions and indicators:

4.3.1. Neuromarketing

Neuromarketing measurement through indicators to measure neuromarketing includes detailed emotional responses (eye and facial responses), engagement rates, and memory levels. [22]. These indicators are developed into 6 statement items.

4.3.2. Influencer Marketing

Measurements according to Hovland et al.'s indicators of credibility, attractiveness, expertise, likeability, and similarity can be used to measure the role of influencer marketing [25]. Furthermore, these indicators are developed into 10 statement items.

4.3.3. Customer Behavior

Measuring consumer behaviour can use perception, cognition, affection, belief, and social [26]. The measurement indicator is developed into 10 statement items.

4.3.4. Purchase Decision Process

The consumer decision-making process includes identifying problems, finding solutions, evaluating alternatives, making purchasing decisions among various choices, and evaluating the outcomes [38]. The measurement of the indicator is developed into 12 statement items.

5. Result

5.1. Analytical Description

A total of 397 respondents completed the questionnaire, characterized as follows:

Table 1. Demographics of respondents.

Category	Possible answer	F	%
Gender	Female	326	0.82
Gender	Male	71	0.18
A	20 24 years old	294	0.74
Age	15 -19 years old	103	0.26
	Senior High School	112	0.28
Education	Diploma	108	0.27
	Bachelor	177	0.45
	Avoskrin	14	0.04
	Emina	102	0.26
Brand Cosmetic	wardah	161	0.41
	Somethinc	82	0.21
	Safi	38	0.10
Media Sosial yang digunakan	Instagram	92	0.23
	Tiktok	129	0.32
	Marketplace	82	0.21
	Facebook	71	0.18
	Lainnya	23	0.06

It can be seen in Table 1 with the number of respondents 397 whose female gender dominates the number of respondents, namely 326 people aged 20-24 with a level of education in higher education with a specialisation in halal cosmetics dominated by wardah and using TikTok as a social media to make purchases. This is because women in their daily activities always use cosmetics to look more beautiful, especially among Generation Z, who always want to look attractive and fragrant to increase their confidence when doing activities on campus.

5.2. Result Model Fit

To test the suitability of the model, several statistical indicators, including RMS_theta, Standardized Root Mean Square Residual (SRMR), and Normed Fit Index (NFI), must meet the following criteria: an RMS_theta value or Root Mean Square Theta of no more than 0.102, an SRMR value or Standardized Root Mean Square of no more than 0.10 or 0.08, and an NFI value of no more than 0.9. The results of the feasibility test of this research model are as follows:

Table 2. Model fit result.

	Saturated model	Estimated model
SRMR	0.094	0.094
NFI	0.968	0.968
rms Theta	0.183	

The results of the three fit model indicators suggest that the model has met the suitability criteria. Therefore, this model can be used to explain how variables relate to each other well.

5.3. Measurement Result

Outer model analysis is conducted to verify the appropriateness of the model measurements. Model measurements are evaluated for validity and reliability. For the research data to be valid and reliable, this study uses several analysis tests: outer loading, average variance extracted (AVE), Cronbach's alpha, and construct reliability. The results can be seen in Table 2.

Table 3.Measurement Model.

Variable	Indicator	Outer loading	AVE	Cronbach's alpha	Composite reliability	
	X1.1	0.733		0.837		
Neuromarketing	X1.2	0.725				
	X1.3	0.769	0.551		0.880	
	X1.4	0.774	0.331		0.880	
	X1.5	0.722				
	X1.6	0.727				
	X2.1	0.764				
	X2.2	0.745				
	X2.3	0.789				
	X2.4	0.727				
Influencer marketing	X2.5	0.727	0.558	0.912	0.927	
	X2.6	0.769	0.558	0.912		
	X2.7	0.739				
	X2.8	0.754				
	X2.9	0.736				
	X2.10	0.718				
	Y1	0.802		0.921		
	Y2	0.723			0.934	
	Y3	0.802				
	Y4	0.711				
Purchasing	Y5	0.771	0.550			
purchase decision	Y6	0.738	0.558			
	Y7	0.810				
	Y8	0.731				
	Y9	0.754				
	Y10	0.802				
	Z1	0.743		0.919		
	Z2	0.774			0.932	
Customer behavior	Z3	0.724	0.579			
	Z4	0.747				

© 2025 by the authors; licensee Learning Gate

Z5	0.768		
Z6	0.770		
Z7	0.744		
Z8	0.784		
Z 9	0.755		
Z10	0.799		

As shown in Table 2, the outer loading value of each item must be greater than 0.7, and the AVE value must be greater than 0.5. Therefore, all indicators in this study are valid. However, the results of the reliability calculation of the study showed that the composite variable and the Cronbach alpha met the criteria, which means that this research item was valid and reliable.

5.4. Structure of Analysis Model

The model analysis evaluates structural models that predict cause-and-effect interactions between latent variables or variables that cannot be directly assessed. The analysis of the inner model is shown by r-squared, f-squared, and r-squared. The data processing results for r square and r square adjusted are:

Table 4. Output r square and r square adjusted

Model	R Square	Adjusted R Square	
X1 and X2 to Y	0.917		
X1 dan X2 to Z	0.871	0.870	

There are three categories of R square values: This value is considered substantial if it exceeds 0.75, moderate if the value is 0.50 to 0.74, and weak if the value is 0.25 to 0.49 [39]. Because the R Square and Adjusted R Square values of the neuromarketing (X1) and marketing influencer (X2) models on purchase purity (Y) were more significant than 0.75, the independent variable greatly influenced the dependent variable. As illustrated in Table 3. Conversely, these two models' R Square and Adjusted R Square values are below 0.75. The magnitude of each variable's influence must be assessed against the effect size, or f, to ascertain whether a meaningful relationship exists between the variables. The value of f-squared in this investigation is:

Table 5. Output F square.

Variable	Purchase decision	Customer behavior	
Neuromarketing	0.003	0.158	
Influencer marketing	0.048	0.825	
Purchase decision	0.000	0.905	
Customer behavior	0.905	0.000	

Table 5 shows that influencer marketing strongly influences purchasing decisions based on the f-square value for each neuromarketing research variable. Meanwhile, the independent variable of neuromarketing on consumer behavior has a moderate influence, and the variable of influencer marketing on consumer behavior has a strong impact.

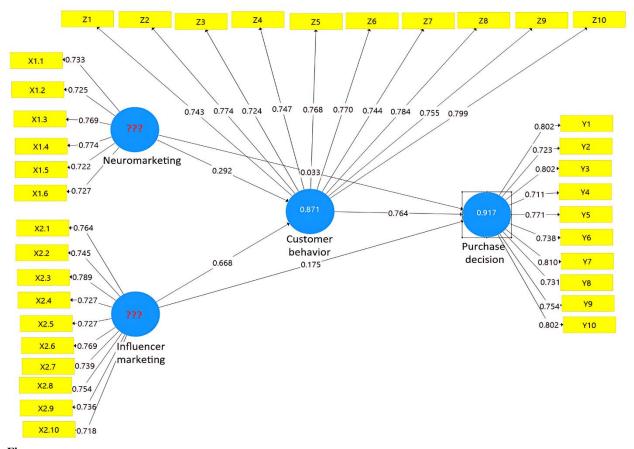


Figure 3: Output path analysis.

5.5. Hypothesis Testing

For direct and indirect hypothesis testing in this study, it can be seen in Table 5:

Table 6. Summary of hypothesis testing

Hypothesis	Variable independent	Path analysis	t value	P value
H1	Neuromarketing -> Customer behavior	0.292	7.125	0.000
H2	Influencer marketing -> Customer behavior	0.668	16.939	0.000
Нз	Neuromarketing -> Purchase decision	0.033	7.787	0.043
H4	Influencer marketing -> Purchase decision	0.175	3.574	0.000
H5	Customer behavior -> Purchase decision	0.764	14.914	0.000
	Influencer marketing -> Customer behavior -> Purchase decision	0.510	3.547	0.048
	Neuromarketing -> Customer behavior -> Purchase decision	0.223	3.778	0.003

The results of the above data show that the pathway coefficient for neuromarketing directly influences customer behaviour is 0.292. The influencer marketing variable has a direct influence on customer behaviour of 0.668. So, the most significant direct influence on customer behaviour is the influencer marketing variable. The coefficient of neuromarketing pathways directly influences the Purchasing Purchase Decision of 0.033. The variable of the purchase decision is directly influenced by influencer marketing by 0.175. So, the most significant direct influence on purchasing Purchase Decisions is the influencer marketing variable. Meanwhile, the direct influence of customer behaviour on

purchasing Purchase Decisions was 0.764.

The influence of influencer marketing on purchase decisions has a path coefficient of 0.510, while neuromarketing has an indirect influence of 0.223. All the hypotheses discussed in this study are accepted, directly or indirectly, directly impacting the dependent variables. The t-calculated result for all variable relationships is greater than the t-table of 1.966, so it can be concluded that the t-value calculated for all variable relationships is greater than the t-table.

6. Discussion

The study showed that most female respondents aged 20 to 24 used Wardah halal cosmetics and TikTok social media and were educated students. This finding indicates that influencer marketing and Neuromarketing have a positive and significant effect of 81.7% on customer behaviour. This shows that Neuromarketing is trying to understand marketing stimuli to make a person choose and relate to the purchase process through stimuli like colours, packaging, and situations. Neuromarketing is also used to identify customer preferences. It helps select advertisements, including the necessary elements that allow consumers to remember product advertisements and information about promotional discounts, which greatly influence product choices [21]. Neuromarketing determines consumer decision-making by using the subconscious mind, emotions, feelings, and desire to make decisions to influence a person to buy the product. The establishment of this stimulus responds to consumer behaviour when purchasing halal cosmetics [7].

In this study, neuromarketing influenced consumer behaviour but had a relatively small influence.

Influencer marketing dominates the behaviour of Generation Z halal cosmetics consumers. Influencers act as a funnel by creating content for social users interested in creating a niche market [14]. Since influencers have driven niche audiences on social media, companies can save funds that will be used to test and find the right audience for their products, services, or brands [20].

Consumer behaviour on purchase decisions influences 76.4%. This means that consumer behaviour will always be dynamic according to the characteristics of society and culture. For Generation Z, choosing halal cosmetics is one of the needs that cannot be kept away to support their activities. In the digital market landscape, Generation Z has distinct incentives while selecting products, including halal cosmetics [17]. Generation Z's interest in selecting halal cosmetics lies in the convenience of shopping, either exclusively or through social networks, by considering their precautions before making a purchase decision [40]. The need for halal cosmetics is increasing in Generation Z, who are currently starting to take care of themselves. The phenomenon of changing consumer behaviour of Generation Z in line with the development of current technology, which makes it easier for Generation Z to find information and compare and see the testimonials of halal cosmetics users, can encourage Generation Z to make effective purchase decisions [16].

The influence of neuromarketing and influencer marketing on purchase decisions through consumer behaviour was 91.7%. This means that the neuromarketing component is a component that combines intensity, colour, music, aroma, temperature, and lighting that can influence the behaviour of Gen Z to make decisions about purchasing halal cosmetics. This also happens when influencer marketing can exert influence through the recommendations of influencer marketers who influence the behaviour of Generation Z in making decisions to buy halal cosmetics. However, influencer marketing influences the decision to purchase halal cosmetics in Generation Z. Gen Z uses social media more for entertainment, information, joining the community, and buying anything, including halal cosmetics. Generation Z will make purchasing decisions based on recommendations from *influencers* they trust [38]. Generation Z is also more susceptible to choosing halal cosmetic products because they trust influencers who use their products directly rather than just giving reviews in general, such as just reading the content. Consequently, they must place complete trust in the reviews provided by influencers.

From the discussion above, it is hoped that business actors can choose and determine the proper and

effective strategy through influencer marketing. Using the appropriate influencer marketing for Generation Z in choosing halal cosmetics is one of the efforts of business actors to maintain their business continuity [41].

7. Conclusion

Based on data from 397 respondents, the majority of whom are women aged 20-24 with educational status as students and use halal cosmetics, the majority of whom are wardah who mostly use tik tok as their social media, There, halal logos allow people to choose cosmetics more freely. The difficulty of finding reliable products is still a major problem. The influence on Gen Z's purchase decisions on halal cosmetics is increasing due to the dominance of influencer marketing. Therefore, the behaviour of Gen Z, who always considers brands and content before buying halal cosmetics, is an opportunity for economic actors to provide new halal cosmetics through influencer marketing. Beauty influencer marketing is important in ensuring that Gen Z, who has the most followers on social media accounts, always has the latest and trusted product information.

This is because Generation Z prefers influencers. After all, the information conveyed is more reliable and influencer opinions tend to be impartial. Therefore, Generation Z, especially in making decisions to buy halal cosmetics based on recommendations from influencer marketing. The weakness of this study is that the focus is limited to Generation Z, which only considers the purchase of halal cosmetics, so it is recommended that all consumers be investigated in the future. To expand our knowledge, future research is expected to explore additional variables that influence purchasing decisions.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

© 2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

References

- P. Kotler and K. Keller, Marketing mangement. Pearson Edition Limited, 2016.
- S. E. Fatimah and A. Curatman, "Retail marketing strategy 2. Deepublish," 2024.
- $\begin{bmatrix} 1 \\ 2 \end{bmatrix}$ $\begin{bmatrix} 3 \end{bmatrix}$ H. Fauzi, R. Rizqullah, M. Ariyanti, and I. A. Hadyningtyas, "Neuromarketing study: The effect of Jingle on consumer behavior," ASEAN Marketing Journal, vol. 14, no. 2, 2022. https://doi.org/10.21002/amj.v14i2.1204
- M. Pluta-Olearnik and P. Szulga, "The importance of emotions in consumers' purchasing decisions-neuromarketing [4] approach," Marketing Instytucji Naukowych i Badawcze, vol. 2, no. 44, pp. 87-104, 2022.
- S. Bhardwaj, S. B. Thapa, and A. Gandhi, "Advances in neuromarketing and improved understanding of consumer [5]behaviour: Analysing tool possibilities and research trends," Cogent Business & Management, vol. 11, no. 1, p. 2376773, 2024. https://doi.org/10.1080/23311975.2024.2376773
- [6]A. C. Johansson and Z. Zhu, "Reputational assets and social media marketing activeness: Empirical insights from China.' Electronic Commerce ResearchApplications, 101305, and. vol. 61. 2023. https://doi.org/10.1016/j.elerap.2023.101305
- [7] S. Kant and F. Yadete, "Neuro-marketing in understanding consumer behavior: Systematic literature review," Radinka Journal of Science and Systematic Literature Review, vol. 1, no. 1, pp. 1-13, 2023.
- L. Cardoso, M. M. Chen, A. Araújo, G. G. F. de Almeida, F. Dias, and L. Moutinho, "Accessing neuromarketing [8]scientific performance: Research gaps and emerging topics," Behavioral Sciences, vol. 12, no. 2, p. 55, 2022. https://doi.org/10.3390/bs12020055
- K. Hofman, K. Hughes, and G. Walters, "Effective conservation behaviours for protecting marine environments: The [9] views of the experts," Journal of Sustainable Tourism, (10), , vol. 28, no. 10, pp. 1460-1478, 2020. https://doi.org/10.1080/09669582.2020.1741597

- [10] S. Fatimah, "Retail marketing strategy," 2023.
- [11] S. Andaiyani and A. M. Igamo, "Digital entrepreneurship: Socio-demographics and consumer behavior in Indonesia," Problems and Perspectives in Management, no. 3, 21, p. 290, 2023. https://doi.org/10.21511/ppm.21(3).2023.23
- [12]S. E. Fatimah, R. J. Johari, A. Komara, and S. Maulany, "Market and entrepreneurial orientations model to increase product innovation of culinary micro small medium enterprises in Indonesia," Edelweiss Applied Science and Technology, vol. 8, no. 4, pp. 1646-1657, 2024. https://doi.org/10.55214/25768484.v8i4.1536
- K. C. Wang, "A study on the influence of awe on diversification of consumer behavior from the perspective of Sino-[13]
- Thai cultural differences," *Turkish Online Journal of Qualitative Inquiry*, vol. 12, 2021.

 S. Mishra and R. Ashfaq, "Influencer impact: Examining the effect of influencers on consumer behaviour and purchase decisions," *Traditional Journal of Multidisciplinary Sciences*, vol. 1, no. 01, pp. 55-72, 2023. [14] https://doi.org/10.55529/jpome.35.1.18
- [15] H. Aydin, "Market orientation and product innovation: The mediating role of technological capability," European Journal of Innovation Management, vol. 24, no. 4, pp. 1233-1267, 2021. https://doi.org/10.1108/ejim-10-2019-0274
- [16] R. Kumavat, "The impact of influencer marketing on consumer behaviour: Effectiveness on increasing brand awareness, improving brand perception, and driving [Internet]," Retrieved: https://www.researchgate.net/publication/372787352. [Accessed 2023.
- J. Vidani and S. G. Das, "A review on evolution of social media influencer marketing: reflection on consumer behavior [17] and consumer's decision-making process," Turkish Online Journal of Qualitative Inquiry, vol. 12, p. 9, 2021.
- [18] A. Y. Hapsari, P. Sukandi, G. P. Dalimunthe, A. Lisdayanti, Y. E. Sumadhinata, and I. Nilasari, "The impact of social media influencers on consumer behavior: A comparative analysis of generation z and millennials life style," International Journal Of Humanities Education and Social Sciences, vol. 3, no. 5, 2024.
- A. Ismajli, B. Ziberi, and A. Metushi, "The impact of neuromarketing on consumer behaviour," Corporate Governance [19] and Organizational Behavior Review, vol. 6, no. 2, pp. 95-103, 2022.
- S. J. Saununu, E. Erwin, and A. Y. Rukmana, "The influence of social media influencers on generation Z consumer [20] behavior in Indonesia," West Science Interdisciplinary Studies, vol. 1, no. 10, pp. 1040-1050, 2023.
- [21] C. Morin, "Neuromarketing: The new science of consumer behavior," Society, vol. 48, no. 2, pp. 131-135, 2011. https://doi.org/10.1007/s12115-010-9408-1
- S. Kakaria, F. Saffari, T. Z. Ramsøy, and E. Bigné, "Cognitive load during planned and unplanned virtual shopping: [22]Evidence from a neurophysiological perspective," International Journal of Information Management, vol. 72, p. 102667, 2023. https://doi.org/10.1016/j.ijinfomgt.2023.102667
- N. Mohammadian and O. F. Valilai, "Influencer-driven paradigm shifts: Analyzing sustainability and customer [23] behavior in cell phone and E-auto industries via social media analytics," IEEE Access, 2024. https://doi.org/10.1109/access.2024.3449113
- [24] M. A. Sharaf and F. M. Isa, "Factors influencing students' intention to purchase green products: A case study in Universiti Utara Malaysia," Pertanika Journal of Social Science and Humanities, vol. 25, no. 2, pp. 240-245, 2017.
- [25]S. Kant, "Neuro-Marketing perspectives," 2023.
- M. Fariz and K. Sihombing, "Literature study: Consumer behavior in making purchase decisions of basic needs in [26] traditional and modern markets," 2024.
- [27]I. K. Sari, "Blended learning as an alternative innovative learning model in the post-pandemic era in elementary schools," Jurnal Basicedu, vol. 5, no. 4, pp. 2156-2163, 2021.
- [28] Y. L. Tooy, A. A. Persius, M. Tinambunan, T. Tanuwijaya, and M. R. Mulyandi, "Influence of digital marketing, location, product quality, and product price on purchase decisions in food and beverage companies: A systematic literature review," International Journal of Humanities, Law, and Politics, vol. 2, no. 1, pp. 12-18, 2024. https://doi.org/10.46336/ijhlp.v2i1.55
- [29] A. Sahrah, P. D. Guritno, R. P. Rengganis, and R. P. Dewi, "Subjective well-being and psychological resilience as the antecedents of digital entrepreneurship intention," Journal of Educational and Social Research, vol. 13, no. 4, pp. 54-65,
- D. S. S. M. F. Fernandes, R. F. de Farias Aires, and C. C. R. Salgado, "The transient competitive advantage model to [30] analyze business scenario of technology companies," Journal of Open Innovation: Technology, Market, and Complexity, vol. 9, no. 1, p. 100011, 2023. https://doi.org/10.1016/j.joitmc.2023.100011
- [31] Y. K. Dwivedi et al., "Setting the future of digital and social media marketing research: Perspectives and research propositions," International Journalof Information Management, vol. 59, p. https://doi.org/10.1016/j.ijinfomgt.2020.102168
- K. N. Tomris and E. G. Güler, "Examination of consumer purchase decisions via neuromarketing methods: A social [32] psychology approach," Prizren Social Science Journal, vol. 5, no. pp. https://doi.org/10.32936/pssj.v5i2.245
- [33] J. Kiran, R. Prabhakar, and R. Scholar, "Neuromarketing in consumer decision making process: Developments and directions for future researchin 2," Retrieved: https://www.researchgate.net/publication/359520371. [Accessed

- [34] J. N. Vidani, S. Das, I. Meghrajani, and G. Singh, "Influencer marketing and gendered consumer behavior: An analysis of clothing purchases across different fashion categories," ed: Sodhsamhita, 2023.
- [35] P. Prabhat and M. P. D. Meenu, "Research methodology," Retrieved: http://studentsrepo.um.edu.my/4606/9/Chapter_5.pdf. [Accessed 2014.
- [36] C. T.-H. Stadtländer, "Qualitative, quantitative, and mixed-methods research," *Microbe Magazine*, vol. 4, no. 11, pp. 485–485, 2009.
- [37] A.-M. Kanzola, K. Papaioannou, and P. E. Petrakis, "Environmental behavioral perceptions under uncertainty of alternative economic futures," *Technological Forecasting and Social Change*, vol. 190, p. 122428, 2023. https://doi.org/10.1016/j.techfore.2023.122428
- [38] K. Shubhangam, M. Srivastava, R. Ravi, and R. Singh, "Influence of social media advertisement on customer's purchase decision: A literature review," *International Journal on Recent Trends in Business and Tourism*, vol. 4, no. 4, pp. 25-31, 2020.
- [39] J. F. Hair, C. M. Ringle, and M. Sarstedt, "PLS-SEM: Indeed a silver bullet," Journal of Marketing theory and Practice, vol. 19, no. 2, pp. 139-152, 2011.
- [40] S. Bhardwaj, N. Kumar, R. Gupta, H. Baber, and A. Venkatesh, "How social media influencers impact consumer behaviour? Systematic literature review," *Vision: The Journal of Business Perspective*, p. 09722629241237394, 2024. https://doi.org/10.1177/09722629241237394
- [41] A. Nurbasari and N. H. Harani, "Influence of competitive advantage strategy for business success," in 2016 Global Conference on Business, Management and Entrepreneurship, 2016: Atlantis Press, pp. 990-995.