

Investigating the role of viral marketing, and brand awareness on purchase decisions: An empirical study in Indonesian online shops

Endang Dwi Amperawati^{a*}, Rahmawati^b, Haerofiatna^c and Teddy Rusmawan^d

^aUniversitas Primagraha, Bekasi, Indonesia

^bUniversitas Sebelas Maret, Surakarta, Indonesia

^cFaculty of Economy and Bussiness, Universitas Primagraha, Serang, Banten, Indonesia

^dSekolah Tinggi Ilmu Kepolisian, Jakarta Selatan, Indonesia

CHRONICLE

Article history:

Received: November 21, 2023
Received in revised format: January 19, 2024
Accepted: February 25, 2024
Available online: February 25, 2024

Keywords:

Viral Marketing
Brand Awareness
Purchasing Decisions
Online Store

ABSTRACT

Previous research states that viral marketing has an important role in increasing consumer purchasing intentions, viral marketing can also encourage increased brand awareness. This research aims to analyze the relationship between Viral marketing and purchasing decisions, Brand awareness and purchasing decisions, and Viral marketing and purchasing decisions. This research method is quantitative through surveys, research data was obtained by distributing online questionnaires to 720 selected online shop customers in Indonesia using a simple random sampling method, and the online questionnaire was designed using statement items with a Likert scale of 1 to 7. Data analysis used a structural equation model based on covariance (CB-SEM) with SmartPLS 4.0 software to analyze research data. The independent variables are viral marketing and brand awareness, and the dependent variable is purchasing decisions. The stages of data analysis are validity testing, reliability testing, model fit testing, and significance testing of hypothesis testing. The results of this research are that Viral marketing has a positive and significant relationship with purchasing decisions, Brand awareness has a positive and significant relationship with purchasing decisions, and Viral marketing has a positive and significant relationship with purchasing decisions. Viral marketing is one of the factors that can influence purchase intentions. Viral marketing is expected to have multiple effects because many people who receive the message can convey it to tens or even hundreds of other internet users. Brand awareness can influence consumers toward purchasing decisions, which states that brand awareness has a significant influence on purchasing decisions.

© 2024 by the authors; licensee Growing Science, Canada.

1. Introduction

In the current digital era, there are still businesspeople who cannot utilize technology as a medium to market their products. In fact, by choosing to use digital marketing strategies, businesspeople can more easily determine market segments even though competition is very tight. Currently, people prefer to access and view a product according to their needs via the internet or social media. The level of business competition in Indonesia is very tight because every company is always trying to increase market share and reach new consumers. Companies must be able to survive and win the competition so that the company's goals are achieved. According to Hosseinikhah Choshaly and Mirabolghasemi (2022), the more competitors there are, the more choices there are for consumers to be able to choose products that meet their expectations. Tight competition makes it increasingly difficult for companies to win over competitors. Tight competition can indirectly influence a company in maintaining consumer loyalty. Because of this, efforts to maintain consumer loyalty are important things that companies must always do. Retaining all existing customers will generally be more profitable than changing customers because the cost

* Corresponding author.

E-mail address: ed4prof@gmail.com (E. D. Amperawati)

of attracting new customers can be five times the cost of retaining existing ones. After all, the key to competition is trying to create and retain customers. In the development of a business or business, consumers play an important role in supporting business expansion to be able to compete with other businesses. Consumers have different attitudes towards each product offered. And apart from that, company image is one of the most important parts that large companies must have, as well as small companies. Every company certainly pays attention to its quality and image in the eyes of the public by making various efforts to gain and build a positive reputation (Sharma & Sharma, 2015). Price is one of the deciding factors to purchase household electronic equipment products. Where price is the amount of money charged for a product or service or the sum of all the values given by customers to gain benefits from owning or using a product or service. A purchasing decision made by a consumer is based on their needs and desires. Judging from the quality of the product, which always innovates and is very good at all times, and always tries to meet the needs and desires of its users with ease of use, durability, clarity of function, diversity of product sizes, and attributes that are easy to obtain, making a household electronic appliance product gain ever-increasing sale (Krishnamurthy, 2001; Wijayaa et al., 2021).

Consumers are interested in buying a product due to several factors, one of which is viral marketing. According to Annas (2023), viral marketing is a marketer's attempt to stimulate word-of-mouth behavior, so that consumers spread marketing information through their initiative to their targets. Viral marketing indicators, namely social media used, involvement of opinion leaders, product knowledge, and product clarity, as well as talking about the product. In previous research, it was found that there was an influence of viral marketing on purchasing decisions because this technique was able to increase the company's effectiveness in introducing products to consumers by spreading messages through social media. Evidence was shown that viral marketing influenced how someone bought something because the product under study was not viral and general goods that are used by everyone, purchasing decisions are consumer decisions that are influenced by financial economics, technology, politics, culture, products, prices, locations, promotions, physical evidence, people, processes. Consumer purchasing decisions are a process of getting to know the problem, and then looking for information about a particular product or brand. Consumers will face various considerations in purchasing a good or service so businesspeople will use problem solutions which will be used as a tool to convince consumers to buy the product they want (Gil-Or, 2010). Building consumer demand by using viral marketing tactics within an online social network. Purchasing decisions are influenced by one factor, namely viral marketing. Viral marketing is a promotion created to spread, like a virus, being able to reach a wide network and have a wide impact. Viral marketing focuses on the activities of visitors from a website or social media who recommend to consumers who have the potential to buy, an algorithm that will convey messages containing the goods or services offered and convey them to other consumers. According to Katerina et al. (2023), The viral marketing strategy is described as a form of word-of-mouth marketing through digital technology that conveys information to the environment, the spread of information will be like a virus so that businesses will benefit. Viral marketing can be a consideration for consumers in making purchasing decisions, products that are actual and are being widely discussed by many people will further stimulate consumers to buy a product (Ho & Dempsey, 2010).

According to Bilgin (2020), another factor that influences purchasing decisions is brand awareness. High brand awareness will make consumers consider when choosing a particular product category so that the product will reappear in memory, this is a general goal of marketing communications. Brand awareness is a form of awareness of a brand that is related to the strength of the brand in people's memory, depicted in people's minds, able to make people identify various brand elements (such as brand name, logo, symbols, characters, packaging, and slogans) in various situations (Mukherjee et al., 2023). The influence of brand awareness on purchasing decisions is supported by previous research results, which explain a positive and significant relationship between brand awareness and purchasing decisions. According to Aileen et al. (2021), Brand awareness can be interpreted as a customer's ability to identify or recall a brand and associate it with a particular type of product. In this way, a customer who understands a brand will automatically be able to decipher the brand elements without having to be helped. Brand awareness certainly influences consumer buying interest. A further understanding explains that branding methods can influence choices in considering the quality of an online store brand. More and more consumers are taking part in online retail interactions and e-commerce is growing rapidly. Brand image is similar to the consumer's self-image as consumers connect themselves with the brand. In this highly competitive area, brand image is very important to produce a well-positioned brand, the industry always plays a beneficial role. According to Žnideršič and Marić (2008) brand image proves that the totality of views about a brand is also built from data on past experiences with that brand. The image of a brand is related to behavior in the form of trust and priority toward a brand. Therefore, consumers have an important meaning for a business or businesses, namely their role as product buyers. Consumer purchasing interest is driven by consumer brand perceptions. This case agrees with research conducted by Awaludin et al. (2020) which found that brand awareness and brand image have a quite good effect on consumer buying interest. Most business activities in the industry use the Internet network. The industry also tries this when carrying out advertising campaigns. One of the promotional activities carried out by the industry is carrying out promotions which are commonly known as internet or digital marketing. Much of the growth in internet technology has been used in business marketing activities (e-marketing), one of which is growing at this time is viral marketing. viral marketing is a marketing method to spread messages via social networks (Bergkvist & Taylor, 2022). Most business activities in the industry use the Internet network. The industry also tries this when carrying out advertising campaigns. One of the promotional activities carried out by the industry is carrying out promotions which are commonly known as internet or digital marketing. Much of the growth in internet technology has been used in business marketing activities (e-marketing), one of which is growing at this time is viral marketing. Viral marketing is a marketing method for spreading

messages via social networks. Viral marketing is a promotional activity that uses the power of word of mouth. In the online world, distribution can be tried via social media. Social media is considered a very efficient medium for promoting goods or services. Social media can also send consecutive messages that continue to be shared by other users continuously. This chain message is known as viral marketing and can be used as an advertising medium (Ziko & Asfour, 2023). Purchase interest describes the part of consumer behavior in the attitude of consuming in the future which is intended to maximize predictions about actual consumer purchasing decisions. In other words, creating a need for a product, introducing the product, and evaluating information are things that can give rise to the consumer's desire to buy. Consumers are interested in buying the products offered because attractive images also determine their desire to buy. Purchase interest occurs when someone has sufficient information about a desired product. Therefore, consumers often look for references through public opinion on products (Riyadika, 2013). Based on the background above, consumers' willingness to buy is very important for businesspeople. Among several factors that can trigger consumer buying interest, researchers focus on the extent to which brand awareness, brand image, and viral marketing, directly and indirectly, influence brand awareness, brand image, and viral marketing on buying interest (Mulyadi et al., 2023).

2. Literature review and hypothesis development

2.1 Viral Marketing

According to Artanti et al. (2019), Viral Marketing is a technology-based marketing medium. The word viral is used to describe how messages and information sent via the internet or social media are disseminated and consumed quickly by the public. The basic principle of viral marketing lies in the authenticity of an idea, namely something that, because of its nature or content, can develop very quickly in a certain environment. Viral marketing is a marketing strategy that can get people talking about the seller's business or product with their friends or social media environment. Viral marketing is a strategy called network marketing that uses people, their communities, their environment, and their friends to widely distribute a seller's product. As with other marketing strategies, according to Ningtyas (2020), viral marketing also has several advantages. The following are the advantages of viral marketing, namely: 1. Increasing the product brand. Improving the product brand is one of the company's steps in introducing its products to the public. According to Anwar and Hasbi (2023), brands can also increase sales and consumer trust. 2. Save promotional costs. Saving promotional costs, usually consumers who are happy with the company's services tend to recommend your company to relatives and friends. That way, the company's reputation will spread by word of mouth, so there's no need to worry about promotion. According to Kurnia and Wijaksana (2020), some dimensions or conditions can be created and used as benchmarks in viral marketing, namely: 1. Messenger: The important element in creating a viral marketing epidemic is that you need the right people to spread the message. The three groups of messengers needed to ensure the transformation of ordinary messages into viral phenomena are market experts, social relations, and sellers. Messenger can include customer recommendations, communities, (chat rooms, and search engines 2. Message: Only messages that are good, impressive, and interesting enough can be passed on to other people so that they can spur the viral marketing phenomenon. According to Hosseinikhah Choshaly and Mirabolghasemi (2022), viral marketing is a method of disseminating data that aims to promote products by word of mouth on the Internet, where data can easily spread from person to person like a virus. The same comments about viral marketing are presented in his book (Katerina et al., 2023) Viral marketing is an attempt to promote a product in a chain and is the same as word-of-mouth marketing. Simply put, viral marketing is marketing that spreads like a virus, to reach a wide network and provide a wide influence. Viral marketing is the spread of messages or data to people voluntarily. share it with their contacts or not. In this process, the more people receive the message, the more they influence that person to forward the message to other people Mulyadi et al., 2023).

2.2 Brand awareness

According to Zhang (2020), brand awareness can be interpreted as a customer's ability to identify or recall a brand and associate it with a particular type of product. In this way, a customer who has an understanding of a brand will automatically be able to decipher the brand elements without having to be helped. Brand awareness certainly influences consumer buying interest. A further understanding explains that branding methods can influence choices in considering the quality of an online store brand. More and more consumers are taking part in online retail interactions and e-commerce is growing rapidly. The ability of consumers to remember a brand or product from e-commerce is called a brand (Vazifehdoost et al., 2018). Brand awareness is the consumer's ability to remember a brand through brand recognition or recall of a brand. This is where brand awareness plays a very strong role in influencing consumers repurchase decisions. However, consumers tend to choose brands that are more familiar to them. Thus, with the presence of advertisements on television, consumers will be able to recognize and recall a product that will be purchased (Clinton & Secapramana, 2022). According to Dabbous and Barakat (2020), Brand awareness can be defined as How one can think about a brand. In addition, brand awareness is the brand capable of positioning brand equity. A brand How awareness can be reflected Brand knowledge and characteristics Consumer thoughts). Before consumers make a buying decision, consumers must know a brand on the market. So, consumers need to understand brand awareness. Brand awareness is the ability of a potential buyer that you know or remember to return to a brand as part of a particular product category. According to Agarwal (2020), brand awareness is one method of measuring marketing effectiveness, measured by the customer's ability to recognize and/or remember names, images, or other logos associated with the brand. Brand awareness is one of the important factors that determines the success or failure of a product in the market. High brand awareness is believed to influence consumer buying behavior, which is expected to increase sales, starting from here.

Brand awareness plays an important role in it. If consumers already know the brand, they will tend to buy it. This is where companies need to work hard to introduce the brand so that consumers know about the existence of the brand. The results of this research are supported by several previous studies conducted. This means that brand awareness can influence purchase intention. Thus, brands that have a high level of brand awareness have much greater power to understand the brand's market share, while also creating greater levels of brand image, brand equity, and brand loyalty (Świtała et al., 2018).

2.3 Purchase decision

Putri (2021) purchasing decisions come from consumer behavior itself, so every consumer has different habits in carrying out purchasing transactions. The dimensions of purchasing decisions are 1) Product choice. Consumers can decide to buy a product. In this case, the company must focus its attention on the people who are interested in buying a product and the alternatives they are considering. 2) Brand choice Consumers must make decisions about which brand to buy, each brand has its differences. In this case, companies must be able to know how consumers choose a brand. 3) Choice of Dealer. According to Zhang (2020); and Aileen et al. (2021), Consumers must make decisions about which dealer they will visit. Every consumer is different when it comes to choosing a dealer, this could be due to factors such as close location, cheaper prices, complete inventory of goods, and so on. 4) Purchasing decisions in choosing the time of purchase can vary for each person, for example, some people buy every day, once a week, once a month, and so on. 5) Number of purchases Consumers can make decisions about how much product to spend. Purchases may be made for more than one product. In this case, the company must prepare many products according to different desires. 6) Payment method Consumers can make decisions about the payment method that will be used when making decisions to use products or services. According to Dabbous and Barakat (2020) Purchasing decisions are not only influenced by environmental and family aspects, in the modern era like today, purchasing decisions are also influenced by the technology used in purchasing transactions such as payment via debit card, credit card, e-payment, and so on. A purchasing decision is a decision-making process so that you can determine whether or not to buy a product. This process begins with awareness of wants or needs. This statement explains that purchasing decisions are clear evidence of collaboration in the form of a process that occurs so that in the end consumers decide to buy something. So, purchasing decisions are the result of consumer considerations through several processes by realizing choices or desires for something they like in the form of action (Świtała et al., 2018).

2.4 The relationship of Viral Marketing to purchasing decisions

According to Wijaya et al. (2021), consumers are interested in buying a product due to several factors, one of which is viral marketing. Viral marketing is a marketer's attempt to stimulate word-of-mouth behavior so that consumers spread marketing information through their initiative to their targets. viral marketing indicators, namely social media used, involvement of opinion leaders, product knowledge, and product clarity, as well as talking about the product. In previous research, (Bergkvist & Taylor, 2022; Helm et al., 2000), it was found that was an influence of viral marketing on purchasing decisions because this technique was able to increase the company's effectiveness in introducing products to consumers by spreading messages via social media, it was shown evidence that viral marketing influences how someone buys something because the product studied is not currently viral and is a common item that everyone has used. Viral Marketing influences consumer buying interest, this is in line with research conducted by (Hosseinikhah Choshaly & Mirabolghasemi (2022)).

H₁: *Viral Marketing has a significant effect on purchasing decisions.*

2.5 The relationship between brand awareness and purchasing decisions

According to Juwaini et al. (2022), brand awareness is the ability of potential consumers to recognize or remember a brand belonging to a particular product category which is relevant to this research, namely that conducted by Hayati and Handika (2021) stated that brand awareness has a significant influence on purchasing decisions. Then (Mulyadi et al., 2023) stated that brand awareness has a significant influence on purchasing decisions. From all previous researchers, it can be concluded that brand awareness can influence consumers toward purchasing decisions, which states that brand awareness has a significant influence on purchasing decisions.

H₂: *Brand awareness has a significant influence on purchasing decisions.*

2.6 The relationship between Viral Marketing and brand awareness

According to Katerina et al. (2023), Consumers who are happy with the products they purchased or the services they received are automatically willing to share information and products with their families via email, Facebook, Twitter, Yahoo, Instagram, TikTok, etc. to prove it. With the rapid flow of information and dissemination of consumer experiences when using a product, the product has become a hot topic on social media, giving consumers confidence and increasing their desire to buy (Grace & O'cass, 2005). Viral Marketing influences consumer buying interest, this is in line with research conducted by Hosseinikhah Choshaly and Mirabolghasemi (2022). Brand Awareness influences consumer opinions and attitudes. Therefore, increasing consumers' understanding of what they want to buy is a priority to build strong brand equity. Brand awareness or brand understanding is a potential buyer's or potential buyer's ability to identify or say a brand is part of a certain type of

product (Purwanto et al., 2023; Phelps et al., 2004). Considering the existing considerations, consumers generally prefer to buy products from brands they already know. However, a well-known brand may deter consumers from taking the risk of using it by assuming that the brand is trustworthy.

H₃: *Viral Marketing has a significant influence on brand awareness.*

3. Method

This research method is quantitative through a survey, research data was obtained by distributing online questionnaires to 720 customers of online shops in Indonesia selected using a simple random sampling method, and the online questionnaire was designed using statement items with a Likert scale of 1 to 7. Data analysis used covariance-based structural equation modeling (CB-SEM) with SmartPLS 4.0 software tools to analyze research data. The independent variable is viral marketing and brand awareness, and the dependent variable is purchasing decisions. The stages of data analysis are validity testing, reliability testing, model fit testing, and significance testing of hypothesis testing.

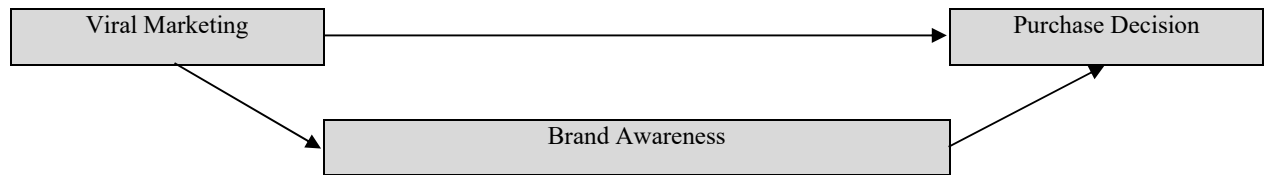


Fig. 1. Research Model

4. Result and discussion

4.1 Convergent validity

Convergent validity of the measurement model can be obtained from the correlation between the item/instrument score and the construct score (loading factor) with the criterion of a loading factor value for each instrument > 0.7 . Convergent Validity Convergent validity testing is carried out by looking at the outer loading value of each indicator on the latent variable. An outer loading value > 0.7 indicates that a variable has explained 50% or more of the indicator variance. However, according to Chin et al. (1999), an outer loading value of 0.5 to 0.6 can be considered sufficient for convergent validity requirements.

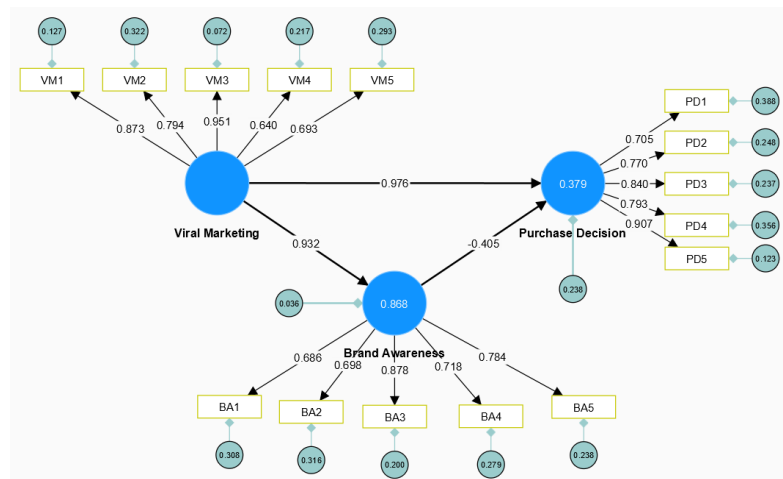


Fig. 2. Validity Testing

Based on Fig. 2, all indicators have an outer loading value of more than 0.7. This indicates that each study variable has been able to be explained by its indicators and meets the requirements for convergent validity. From the results of data processing using SmartPLS shown in Fig. 2, most indicators for each variable in this study have a loading factor value greater than 0.70 and are said to be valid.

4.2 Discriminant Validity

The value of the indicator correlation construct must be greater for the associated construct than for other constructs. A larger value indicates the suitability of an indicator to explain the associated construct compared to explaining other constructs.

4.3 Composite Reliability

A composite reliability value of 0.6 – 0.7 and a Cronbach's alpha value of >0.7 are considered to have good reliability. Based on the table above, all constructs have a composite reliability and Cronbach's alpha value of >0.7 so it is concluded that they are reliable. From the SmartPLS output results in Table, the composite reliability value for all constructs is above 0.70. With the resulting values, all constructs have good reliability by the required minimum value limits.

Table 1
Reliability Test Cronbach's alpha

	Cronbach's Alpha	rho A	Composite Reliability
Viral marketing	0.934	0.917	0.975
Brand awareness	0.964	0.948	0.983
Purchase decision	0.912	0.955	0.985

The next evaluation is by comparing the AVE root value with the correlation between constructs. The recommended result is that the AVE root value must be higher than the correlation between constructs. The model has better discriminant validity if the square root of the AVE for each construct is greater than the correlation between the two constructs in the model. A good AVE value is required to have a value greater than 0.50. In this research, the AVE value and square root of AVE for each construct can be shown in the table. The table shows that the square root value of AVE for each construct is greater than the correlation value so the construct in this research model can still be said to have good discriminant validity.

Table 2
Reliability Test AVE

	Average Variance Extracted (AVE)
Viral marketing	0.787
Brand awareness	0.786
Purchase decision	0.613

4.4 Model Fit Criteria

To determine the relationship between latent variables, constructs, or factors and real indicators, or observed variables, we will use the Goodness of Fit criteria:

Table 3
Model Fit Criteria

Criteria	Acceptable fit	Value
Chi-square	>0.050	134.24
P Value	>0.050	0.057
Root Mean Square Error of Approximation (RMSEA)	≤ 0.08	0.08
Goodness of Fit Index (GFI)	≥ 0.90	0.95
Adjusted Goodness-of-Fit Index (AGFI)	≥ 0.90	0.96
Non-Normed Fit Index (NNFI)	≥ 0.95	0.98
Comparative Fit Index (CFI)	≥ 0.90	0.93
Root Mean Square Residual (RMR)	≤ 0.05	0.03
Parsimonious Goodness of Fit Index (PGFI)	≤ 1.00	0.91
Standardized Root mean square residual (SRMR)	≤ 0.08	0.08
Normed Fit Index (NFI)	≥ 0.90	0.98

The results of the fit model test show a chi-square value of 134.24 with a significance of 0.051 ($p > 0.05$). A significant value greater than 0.05 indicates that there is no difference between the sample covariance and the covariance of the prediction model.

Root Mean Square Error of Approximation (RMSEA)

RMSEA is an informative index in SEM. An RMSEA value < 0.05 indicates a close fit, while $0.05 < \text{RMSEA} < 0.08$ indicates a good fit. RMSEA values between 0.08 to 0.10 indicate mediocre (marginal fit), and RMSEA values > 0.10 indicate poor fit. RMSEA values show 0.08, meaning they indicate a good fit.

Goodness of Fit Index (GFI)

The GFI can be classified as an absolute goodness-of-fit test because it compares a hypothesized model with no model at all. The GFI value must range between 0 (poor fit) to 1 (perfect fit), and a GFI value > 0.90 is a good fit, while $0.80 < \text{GFI} < 0.90$ is called marginal fit. The GFI value shows 0.95, meaning it shows a good fit

Adjusted Goodness-of-Fit Index (AGFI)

AGFI is an extension of GFI which is adjusted to the ratio between the degree of freedom of the null/independence/baseline model and the degree of freedom of the hypothesized or estimated model. Like GFI, AGFI values range from 0 to 1. AGFI values > 0.90 indicating good fit, while 0.80 < AGFI < 0.90 is referred to as marginal fit. The AGFI value shows 0.96, meaning it shows a good fit.

Normed Fit Index (NFI)

NFI has a value that ranges from 0 to 1. An NFI value > 0.90 indicates a good fit, while 0.80 < NFI < 0.90 is referred to as a marginal fit. The NFI value shows 0.97, meaning it shows a good fit.

Non-Normed Fit Index (NNFI)

NNFI is used to overcome problems that arise due to model complexity. Because NNFI is “non-normed”, the NNFI value cannot be greater than 1. A value of 0.95 ≤ NNFI < 0.97 indicates a good fit. The NNFI value shows 0.97, meaning it shows a good fit.

Comparative Fit Index (CFI)

The CFI value ranges from 0 to 1. A higher CFI value indicates a better fit. A value of 0.90 ≤ CFI < 0.97 indicates a good fit. The CFI value shows 0.93, meaning it shows a good fit.

Root Mean Square Residual (RMR)

RMR represents the residual mean value obtained from matching the variance-covariance matrix of the hypothesized model with the variance-covariance matrix of the sample data. Standardized RMR represents the value of the average of all standardized residuals and has a range from 0 to 1. A model that has a good fit will have a Standardized RMR value < 0.05. The RMR value shows 0.03, meaning it shows a good fit. SRMR is Standardized Root mean square residual which is a tool for measuring model fit. The condition used is that an SRMR value below 0.08 indicates a fit model, while an SRMR value between 0.08 and 0.10 is still acceptable. The SRMR value shows 0.08, meaning it shows a good fit.

PGFI (Parsimonious Goodness of Fit Index)

PGFI modifies GFI based on parsimony, an estimated model. The PGFI value ranges from 0 – 1.0. With a higher value, it shows a parsimony model. The PGFI value shows 0.98, meaning it shows a good fit.

4.5 Hypothesis testing

To find out the structural relationship between latent variables, hypothesis testing must be carried out on the path coefficient between variables by comparing the p-value with alpha (0.050) or a t-statistic of (>1.96). The P-value and t-statistics are obtained from the output in SmartPLS using the bootstrapping method. Hypothesis testing is carried out by paying attention to the original sample estimates (O) values to determine the direction of the relationship between variables, as well as t-statistics (T) and p-values (P) to determine the level of significance of the relationship. Original sample values that are close to +1 indicate a positive relationship, while values that are close to -1 indicate a negative relationship. The t-statistics value is more than 1.96 or the p-value is smaller than the significance level.

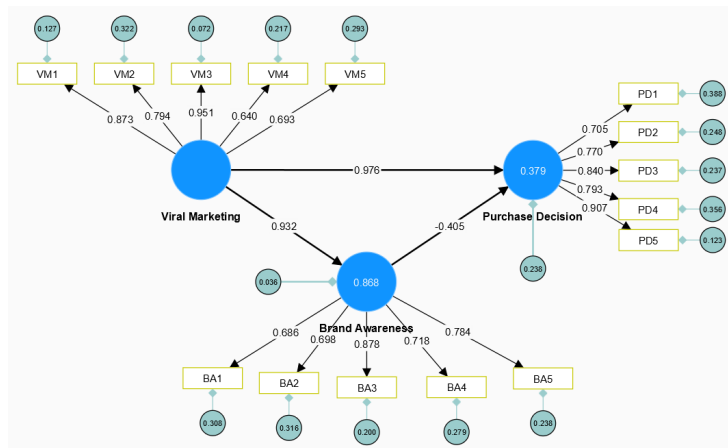


Fig. 3. Hypothesis Testing

Hypothesis testing is carried out based on the results of Inner Model testing (structural model) which includes r-square output, parameter coefficients, and t-statistics. To see whether a hypothesis can be accepted or rejected, including paying attention to the significance values between constructs, t-statistics, and p-values. This research hypothesis testing was carried out with the help of SmartPLS (Partial Least Square) 3.0 software. These values can be seen from the bootstrapping results. The rules of thumb used in this research are t-statistics > 1.96 with a significance level of p-value of 0.05 (5%) and the beta coefficient is positive. The hypothesis testing value of this research can be shown in Table and the results of this research model can be depicted as shown in Fig. 3.

Table 3
Hypothesis Testing

	Correlation	T Statistics	P Values	Conclusion
H1: Viral marketing and purchase decision		5.312	0.000	Supported
H2: Brand image and purchase decision		4.114	0.000	Supported
H1: Viral marketing and brand image		3.287	0.000	Supported

4.5.1 The Influence of Viral Marketing on Purchasing Decisions

The significance figure for the influence of viral marketing on purchasing decisions was obtained, p-value $0.000 > 0.05$, so it was concluded that H1 was accepted, which means that viral marketing had a positive and significant influence on purchasing decisions. The results of this research are in line with previous research conducted by Hamed (2017) which provides evidence that viral marketing influences purchasing decisions. This result could be because Scarlett products are not currently viral, so the viral marketing variable does not have a significant influence on users' purchasing decisions. The two celebrities often appear advertising Scarlett products on television, YouTube, and TikTok. TWICE itself is known among KPOP fans, where these advertisements can attract women, by the gender dominance of respondents who are mostly women. However, the effect of Scarlett's virality proved unable to influence how viewers of the advertisement bought the product directly. What's more, Scarlett's advertisements can be overshadowed by the virality of other advertisements according to trends that cannot be controlled on the platform. According to Haryani and Motwani (2015), Viral Marketing is a type of Internet for creating email messages and other marketing activities that are so widespread that customers want to tell their friends. In other forms, the internet can be translated from word of mouth, which is like the creation of emails, or marketing methods that are so widespread that consumers want to tell their friends. In the world of traditional marketing, this is known as community relations or network marketing and uses associations, communities, or networks of friends to spread marketing messages about an industrial business. In the world of the Internet, viral marketing uses social media applications to use your network of friends to spread marketing messages about your business (influence) industry. This is very powerful because social media app users typically have hundreds of online friends under one account. So when each user of a social media application account has hundreds of networks of friends, it is not difficult to imagine marketing messages spreading, for example viruses (Leila & Abderrazak, 2013; Ziko & Asfour, 2023). Consumers who are happy with the products they purchased or the services they received are automatically willing to share information and products with their families via email, and social media to prove it. With the rapid flow of information and dissemination of consumer experiences when using a product, the product becomes a hot topic on social media, giving consumers confidence and increasing their desire to buy. Viral Marketing influences consumer buying interest, this is in line with research conducted by Haryani and Motwani (2015) viral marketing is a message that spreads quickly through the internet network and exponentially. Viral marketing is carried out by companies by spreading messages via e-mail, blogs, and so on to consumers. This will create interaction between the company and consumers and can be established. exchange of information between consumers. In previous research, the use of viral marketing using social media with cultural products, namely batik, had a significant effect on purchase intentions. Viral marketing carried out by retail stores using social media also gave positive results on purchase intentions (Hamed, 2017). The use of Instagram has now become A social media platform that has various features that can facilitate personal, business, and corporate use.

4.5.2 Brand awareness and purchase intention

A significant figure for the influence of brand awareness on purchasing decisions was obtained, p-value $0.000 > 0.05$, so it was concluded that H1 was accepted. Brand awareness is very important because it is needed to involve several brands in consumer considerations in the purchasing decision process. Brand awareness is also consumer awareness of a brand to choose a product to the extent of consumer memory and consumer awareness of the brand. Brand awareness is also needed because from time-to-time new brands will be born that follow previous brands. Even though many brands are new and not the same, consumers will be fooled by the temptations of these newest brands. According to Kwiatkowska (2009), Brand Awareness is "the consumer's ability to identify or remember a brand in such a way that the brand can be associated with a certain type of product. Brand understanding has a significant impact on brand value. Brand Awareness influences consumer opinions and attitudes. Therefore, increasing consumers' understanding of what they want to buy is priority A to build strong brand equity. Brand awareness or brand understanding is a potential buyer's or potential buyer's ability to identify or say a brand is part of a certain type of product (Świtłała et al., 2018). Considering the existing considerations, consumers generally prefer to buy products from brands they already know. However, a well-known brand may deter consumers from taking the risk of using it by assuming that the brand is trustworthy. Brand Awareness influences consumer buying interest, this is in line with research

conducted by Domingos al. (2005) Brand awareness is the ability of a potential buyer to recognize or recall a brand as part of a certain product category. People are more likely to like or buy brands that are already known because they feel safe with something that is known. Most of them assume that a well-known brand has the potential to be reliable, stable in business, and quality that can be accounted for. Brand awareness ranges from a person's feelings of uncertainty regarding the introduction of a brand to a person's feeling of being sure that the product brand is the only one in the product class in question (Bergkvist & Taylor, 2022). Brand awareness is also a determining factor for consumers to choose something to consume. From the various types of fast-food brands in Indonesia, there are many choices for consumers. This needs to be highlighted by companies to build brand awareness so that consumers can recognize the brand among the various similar brands that exist. Aileen et al. (2021) stated that brand awareness has a significant influence on purchase intention, where every communication and transaction will not occur if there is no brand awareness. Then Hayati and Handika (2021) stated that brand awareness has a significant influence on purchase intentions, by building brand awareness through social media, companies can direct consumers' purchase intentions to purchasing the products offered by the company (Sawafah et al., 2020).

4.5.3 Viral marketing and brand awareness

The significance figure for the influence of viral marketing on brand awareness was obtained, $p\text{-value } 0.000 > 0.05$, so it was concluded that H3 was accepted, According to Katerina et al. (2023), viral marketing depicts a useful role in changing consumer purchasing intentions, by using different tools or techniques and the use of technology. The main target of this process is related to the presence of consumers on social media. Viral marketing sources must be trustworthy, this can support people to voluntarily spread messages to others by ensuring the viral marketing site can be trusted. Cruz and Fill (2008) stated that viral marketing must contain informative messages about products or services that are useful for customers. This is in line with the results of research conducted by Satrio et al. (2020), where viral marketing has a significant influence on purchase intentions. According to Haryani and Motwani (2015); viral marketing has a significant influence on purchase intentions. Brand awareness is an important element that can act as a driver to influence a person's actions to carry out purchase intentions (Martha et al., 2023) Brand awareness is an important thing, without brand awareness, there will be no consumer purchase intention to purchase a product or service (Pharr, 2005). With increasingly fierce industrial competition, companies need to build strong brand awareness to combat competition and stand out among similar brands, by understanding product designs that can satisfy consumers. In general, brand awareness arises from two types of experience, directly when consumers have purchased a product or indirectly including advertising or marketing carried out by the company (Hutter et al., 2013). The main goal of brand awareness is to place the brand first in consumers' minds.

Hosseinihah Choshaly and Mirabolghasemi (2022) state that viral marketing is one of the factors that can influence purchase intentions. Viral marketing is expected to have multiple effects because many people who receive the message can convey it to tens or even hundreds of other internet users, Katerina et al. (2023) stated that viral marketing on viral marketing message objects from companies influence purchase intentions. Viral marketing plays a useful role in changing consumer purchasing intentions, by using different tools or techniques. This refers to the wide spread of technology throughout the world, the field of marketing has developed rapidly; Customers are an element of the marketing process, where customers are the main target of the process, in connection with the existence of social media which is used by almost all levels and ages of people and can be an important promotional tool for various products and services. The research results show that viral marketing has a positive influence on purchase intentions. These results by Alkharabsheh et al. (2011) also stated that viral marketing has a significant influence on purchase intentions. This is by expert opinion which means that the driving force to influence a person's actions is the intention to buy a product, one of the factors being the influence of viral marketing which will increase purchase intention (Subramani & Rajagopalan, 2003). According to Bilgin (2020), Brand awareness or brand equity is consumer preference for a product. The influence of brand awareness can increase purchasing intentions. By looking at everything related to a particular brand, customers can easily know and recognize the product, have awareness about a brand, and they can easily remember several brand characteristics. Thus, during the decision-making process to purchase a particular product category, the ability to remember the brand as a member of the product category will increase the probability that a brand will be considered for purchase by consumers (Hoang et al., 2020).

5. Conclusion

The results of this research are Viral marketing has a positive and significant relationship with purchase decisions, Brand awareness has a positive and significant relationship with purchase decisions, and Viral marketing has a positive and significant relationship with purchase decisions. In this research, viral marketing has a significant influence on purchase intention. Viral marketing carried out on social media can be said to be successful in attracting potential consumers. The brand awareness variable has a significant influence on purchase intention. If brand awareness increases, it will increase purchasing intentions. viral marketing is one of the factors that can influence purchase intentions. Viral marketing is expected to have multiple effects because many people who receive the message can convey it to tens or even hundreds of other internet users. Viral marketing has a significant influence on purchase intentions. Brand awareness is an important element that can act as a driver to influence a person's actions to carry out purchase intentions. Brand awareness is an important thing, without brand awareness, there will be no consumer purchase intention to purchase a product or service. With increasingly fierce industrial competition, companies need to build strong brand awareness to combat competition and stand out among similar brands, by understanding product designs that can satisfy consumers. In general, brand awareness arises from two types of experience, directly when

consumers have purchased a product or indirectly including advertising or marketing carried out by the company. The main goal of brand awareness is to place the brand first in consumers' minds.

References

- Agarwal, M. (2020). Importance of User Generated Content as a part of Social Media Marketing that drives Customers's Brand Awareness and Purchase Intentions. *The International journal of analytical and experimental modal analysis*, 12(2), 3071.
- Alkharabsheh, K. S., ALSarayreh, M. N., Rumman, M. A., & Al Farajat, A. H. (2011). The impact of viral marketing via the Internet on promotion of tourism products in Jordan. *International Research Journal of Finance and Economics*, 80, 138-147.
- Annas, M. (2023). Lifestyle Moderation: Viral Marketing And Purchase Decision In E-Commerce. *Asia Pacific Journal of Business Economics and Technology*, 3(02), 88-101.
- Anwar, S. M., & Hasbi, A. R. (2023). The effect of viral marketing, promotions, and flash sales on the purchase intention online shopping z generation in marketplace tiktok shop. *Enrichment: Journal of Management*, 12(6), 4841-4848.
- Aileen, E., Gaberamos, O., Bernarto, I., & Pasaribu, L. H. (2021). The Effect Of Social Media Marketing, Word Of Mouth, And Effectiveness Of Advertising On Brand Awareness And Purchase Intention On Grab Application Users Domicile Of Tangerang. *Enrichment: Journal of Management*, 12(1), 426-441.
- Artanti, Y., Prasetyo, F. H., & Sulistyowati, R. (2019). How Social Media Marketing Influences Online Purchasing Decision: Study of the Viral Marketing and Perceived Ease of Use. *KnE Social Sciences*, 988-1004.
- Awaludin, M. N., & Sukmono, S. (2020). The Effect of Social Media Marketing and Brand Awarness on Purchase Decisions With Viral Marketing As Intervening Variables on Janji Jiwa Coffee Consumers Among Students Using Social Media Area Jabodeta. *AFEBI Management and Business Review*, 5(1), 54-68.
- Bergkvist, L., & Taylor, C. R. (2022). Reviving and improving brand awareness as a construct in advertising research. *Journal of Advertising*, 51(3), 294-307.
- Bilgin, Y. (2020). The influence of social media friendship on brand awareness and purchase intention: evidence from young adult consumers. *International Journal of Marketing, Communication and New Media*, 8, 45-48.
- Chin, W. W., Salisbury, W. D., Pearson, A. W., & Stollak, M. J. (1999). Perceived cohesion in small groups: Adapting and testing the perceived cohesion scale in a small-group setting. *Small group research*, 30(6), 751-766.
- Clinton, S., & Secapramana, L. V. H. (2022). The Effect of Brand Awareness, Price, and Promotion on Purchase Decisions on Smartphones. *The Management Journal of Binaniaga*, 7(2), 213-228.
- Cruz, D., & Fill, C. (2008). Evaluating viral marketing: isolating the key criteria. *Marketing Intelligence & Planning*, 26(7), 743-758.
- Dabbous, A., & Barakat, K. A. (2020). Bridging the online-offline gap: Assessing the impact of brands' social network content quality on brand awareness and purchase intention. *Journal of Retailing and Consumer Services*, 53, 101966.
- Domingos, P. (2005). Mining social networks for viral marketing. *IEEE Intelligent Systems*, 20(1), 80-82.
- Gil-Or, O. (2010). Building consumer demand by using viral marketing tactics within an online social network. *Advances in Management*, 3(7), 7-14.
- Grace, D., & O'cass, A. (2005). Examining the effects of service brand communications on brand evaluation. *Journal of product & brand management*, 14(2), 106-116.
- Hamed, E. M. (2017). Investigating effects of viral marketing on consumer's purchasing decision (case study: the students of the Administrative Sciences College Najran University). *British Journal of Marketing Studies*, 5(4), 63-73.
- Hayati, I., & Handika, W. (2021). The Influence Of Brand Awareness On Purchasing Decisions Of 212 Sharia Cooperative Members. *International Journal Of Islamic And Social Sciences (Isos)*, 1(3), 83-88.
- Haryani, S., & Motwani, B. (2015). Discriminant model for online viral marketing influencing consumers' behavioral intention. *Pacific science review B: Humanities and social sciences*, 1(1), 49-56.
- Helm, S. (2000). Viral marketing-establishing customer relationships by 'word-of-mouse'. *Electronic markets*, 10(3), 158-161.
- Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: the case of MINI on Facebook. *Journal of product & brand management*, 22(5/6), 342-351.
- Ho, J. Y., & Dempsey, M. (2010). Viral marketing: Motivations to forward online content. *Journal of Business research*, 63(9-10), 1000-1006.
- Hosseinihah Choshaly, S., & Mirabolghasemi, M. (2022). The role of viral marketing strategies in predicting purchasing intention of eco-labeled products. *Journal of Islamic Marketing*, 13(5), 997-1015.
- Hoang, X. L., Nguyen, T. K. C., Ly, H. M., Luong, T. T., & Nguyen, T. T. Q. (2020). The moderating role of CSR associations on the link between brand awareness and purchase intention. *Journal of Asian Finance, Economics and Business*, 7(6), 233-240.
- Juwaini, A., Chidir, G., Novitasari, D., Iskandar, J., Hutagalung, D., Pramono, T., ... & Purwanto, A. (2022). The role of customer e-trust, customer e-service quality and customer e-satisfaction on customer e-loyalty. *International journal of data and network science*, 6(2), 477-486.
- Katerina, A., Simanjuntak, A., Terenggana, C. A., & Tyra, M. J. (2023). The effect of brand awareness and brand image on purchasing decisions for Scarlett whitening products. *Journal of Business and Information System*, 5(1), 11-18.

- Krishnamurthy, S. (2001). Viral marketing: What is it and why should every service marketer care?. *Journal of Services Marketing*, 15(6), 422-424.
- Kwiatkowska, J. A. (2009). Viral marketing in the internet. Characteristics of an effective virus. *Annales Universitatis Apulensis Series Oeconomica*, 11(2), 1047-1054.
- Leila, C., & Abderrazak, G. (2013). The impact of the effectiveness of a buzz marketing campaign on the image, awareness and purchasing decision: The moderating role of involvement. *Journal of marketing research & case studies*, 2013, 1-8.
- Martha, L., Primadewi, A., Priwirjanto, E., Fatmawati, E., Nahdiana, N., Yustina, I., ... & Hidayati, L. (2023). The effects of digital marketing, word of mouth, and service quality on the purchase decisions: An empirical study of food SMEs products. *International Journal of Data and Network Science*, 7(3), 1117-1124.
- Mukherjee, S., Das, M. K., & Chakraborty, T. K. (2023). Viral Marketing in Increasing Brand Awareness and Predicting Purchase Intention: Exploring Mediating Role of Brand Loyalty in FMCG Sector. *Scholars Journal of Economics, Business and Management*, 4, 61-77.
- Mulyadi, M., Hariyadi, H., Hakim, L., Achmad, M., Syafri, W., Purwoko, D., ... & Muksin, M. (2023). The role of digital marketing, word of mouth (WoM), and service quality on purchasing decisions of online shop products. *International Journal of Data and Network Science*, 7(3), 1405-1412.
- Pharr, J. M. (2005). A research agenda for brand-building on the internet with banner advertising. *Services Marketing Quarterly*, 26(2), 39-47.
- Phelps, J. E., Lewis, R., Mobilio, L., Perry, D., & Raman, N. (2004). Viral marketing or electronic word-of-mouth advertising: Examining consumer responses and motivations to pass along email. *Journal of advertising research*, 44(4), 333-348.
- Purwanto, A., Purba, J., Bernarto, I., & Sijabat, R. (2023). Investigating the role digital transformation and human resource management on the performance of the universities. *International Journal of Data and Network Science*, 7(4), 2013-2028..
- Putri, D. R. (2021). Digital marketing strategy to increase brand awareness and customer purchase intention (case study: Ailesh Green Consulting). *European Journal of Business and Management Research*, 6(5), 87-93.
- Sawaftah, D., Calıcıoğlu, C., & Awadallah, R. (2020). The relationship between viral marketing and consumer purchase intention, the moderator role of brand image and age: Evidence from smartphone users in North Cyprus. *Management science letters*, 10(6), 1307-1320.
- Subramani, M. R., & Rajagopalan, B. (2003). Knowledge-sharing and influence in online social networks via viral marketing. *Communications of the ACM*, 46(12), 300-307.
- Sharma, R. A. H. U. L., & Sharma, S. K. (2015). An Emperical Research on Influence of Viral Marketing On Consumers Buying Decisions. *International Journal Of Marketing, Financial Services & Management Research*, 4(5), 171-186.
- Świtała, M., Gamrot, W., Reformat, B., & Bilińska-Reformat, K. (2018). The influence of brand awareness and brand image on brand equity—an empirical study of logistics service providers. *Journal of Economics and Management*, 33, 96-119.
- Vazifehdooost, H., & Negahdari, A. (2018). Relationships of brand awareness, brand association, and perceived quality with brand loyalty and repurchase intention. *Case Studies Journal*, 7(1), 45-51.
- Wijayaa, O., Sulistiyani, S., Pudjowati, J., Kurniasih, N., & Purwanto, A. (2021). The role of social media marketing, entertainment, customization, trendiness, interaction and word-of-mouth on purchase intention: An empirical study from Indonesian smartphone consumers. *International Journal of Data and Network Science*, 5(3), 231-238.
- Žnideršič, R. K., & Marić, D. (2008). Viral Marketing as a Specific Form of Internet-Based Marketing of Products and Services. *Economic Themes, Year XLVI*, 4, 41-49.
- Ziko, A. O. A., & Asfour, A. (2023). Effect of Digital Marketing on Consumer Buying Behaviour in the Modern Trade Sector in Egypt. *Journal of Business*, 11(4), 46-62.
- Zhang, X. (2020). The influences of brand awareness on consumers' cognitive process: An event-related potentials study. *Frontiers in Neuroscience*, 14, 549.



© 2024 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).