

The Influence of Celebrity Endorsement, Brand Image and Brand Trust on Samsung Galaxy Smartphone Purchase Decision

1st Anggalia Wibasuri
Master of Management Study Program
Faculty of Economics and Business,
Darmajaya Institute of Informatics and
Business, Bandar Lampung, Indonesia
anggalia.wibasuri@darmajaya.ac.id

2nd Yuliani Oskar
Master of Management Study
Program Faculty of Economics and
Business, Darmajaya Institute of
Informatics and Business, Bandar
Lampung, Indonesia
yuliani.oscar@gmail.com

3rd Desta Saputri
Master of Management Study Program
Faculty of Economics and Business,
Darmajaya Institute of Informatics and
Business, Bandar Lampung, Indonesia
destasaputri12@gmail.com

Abstract—Smartphone is a communication tool that can store messages and is very practical to use as a communication tool because it can be carried anywhere. The competition in the smartphone industry in Indonesia is getting tighter in achieving the top position or called the market leader. Samsung galaxy briefly topped the rankings in 2018. Samsung's trend in the Galaxy had experienced a decline in the following years. This researcher wants to examine consumers who have different reasons for making smartphone purchase decisions. This study aims to find out how much influence celebrity endorsement, brand image and brand trust have on Samsung galaxy purchasing decisions. The number of samples taken was 140 respondents with purposive sampling. Data analysis in this study used the Structural Equation Model (SEM). The results of this study show that Celebrity Endorstment, brand image, and brand trust influence the purchasing decision of Samsung Galaxy smartphones.

Keywords—celebrity endorsement, brand image, brand trust, purchasing decision

I. INTRODUCTION

The company will always make innovations in carrying out its marketing strategy so that the products offered will always attract the attention of its consumers. Various marketing strategies will be carried out to sell products issued by the company and compete with other companies. Making consumers to make purchasing decisions on products is a challenge for companies, especially since there are competitors who offer products with the same characteristics. So every company must carry out various marketing strategies to attract the attention of consumers in order to make purchase decisions on the products offered. Winning the business competition is not easy for the company. A strategic step has implications for the company's development in competition by knowing the factors that influence consumers' purchasing decisions for a product.

The competition in the smartphone industry in Indonesia is getting tighter in achieving the top position or called the market leader. This shows that the market is very dynamic because if you look at the

previous year, the competition was not as tight as it is today. Research company Data Reportal said that the number of connected mobile devices in Indonesia reached 370.1 million in January 2022. This figure is an increase of 13 million or 3.6 percent from the same period in the previous year. One of the smartphone companies that once reached the top position was Samsung smartphone with the Samsung Galaxy brand. Samsung Galaxy is a series of Android-based smartphone devices designed, manufactured and marketed by Samsung Electronics. Samsung Electronics Co., Ltd. is a South Korean multinational electronics company headquartered in Suwon, South Korea. In February 2010, Samsung launched the Samsung Galaxy Spica mobile phone based on Android. With a relatively cheap price, which is around Rp. 3.49 million. The performance offered by the Galaxy Spica is also quite good according to the price, making this phone quite popular in Indonesia (Source: teknojurnal.com).

The following data shows the level of competition for smartphone sales in Indonesia in 2018 when Samsung products were still leading the market.



Figure 1.1 Top 5 smartphone vendors in 2018

Source :

<https://kumparan.com/kumparantech/daftar-brand-hp-terlaris-di-indonesia>

Based on figure 1.1, Samsung's products are still leading the smartphone market, followed by Xiaomi products which are in the second position and Oppo

smartphone products are still in third position and followed by Vivo and Advan products. Here's the smartphone competition data in 2020:



Figure 1.2 Top 5 smartphone vendors in 2019

Source :

<https://kumparan.com/kumparantech/daftar-brand-hp-terlaris-di-indonesia>

Based on figure 1.2 Samsung products fell in the second position in 2019 and replaced the market leader position, namely Oppo smartphone products, then the third position was still achieved by Xiaomi and in the fourth position, namely vivo, then in the fifth position, there was a realme product which was previously positioned fifth, namely advan products. The following is data on smartphone competition in 2020 where Samsung products declined drastically.



Figure 1.3 Top 5 smartphone vendors in 2020

Source :

<https://kumparan.com/kumparantech/daftar-brand-hp-terlaris-di-indonesia>

Based on figure 1.3, Samsung's products have decreased drastically, namely in the fifth position, which in the previous year was still in the second position. In 2020, the top position or market leader, namely Vivo smartphone and Oppo smartphone products, was in the second position. Samsung products in 2021 again arranged their marketing strategy so that Samsung's sales increased and achieved second place. Here's the data that shows Samsung's products are increasing again.



Figure 1.4 Top 5 smartphone vendors in 2021

Source : <https://kumparan.com/kumparantech/daftar-brand-hp-terlaris-di-indonesia>

Based on the data in figure 1.4, it is explained that Samsung's products have increased which was previously in the fifth position then rose to the second position in charge of several smartphone products. Based on the data attached, it can be interpreted that smartphone competition is very fierce so that each company competes with each other's strategies and innovates to attract the attention of consumers to buy the products offered and achieve as market leaders.

Some of the marketing strategies carried out by Samsung in marketing its new products to consumers in Indonesia include using celebrity endorsers from South Korea, and the celebrity is the BTS Idol group. Boy band BTS is a global celebrity who has a lot of fans, so with this, the Samsung company took advantage of this moment to increase product sales again. A purchasing decision is the selection of an action as the selection of an action from two alternative choices or a decision as the ownership of an action from two or more alternative options (Cahya et al., 2019).

Celebrity endorser is a celebrity who is popular among the public because of his achievements. Many organizations use the appeal of celebrity endorsement ads to increase their popularity and brand recognition (Khan et al., 2019). According to the results of the study (Citra et al., 2020) celebrity endorsers have a significant influence on purchasing decisions. Based on the results of another study (Noviyan et al., 2019) celebrity endorsers partially influence purchasing decisions.

Brand image has been defined as the reason or emotional perception that consumers associate with a particular brand. In addition, the brand image helps customers to choose a product or service in situations where it is difficult to distinguish a product or service based on tangible quality features (Xiaoling et al., 2018). According to the results of the study (Rinawati et al., 2021) Brand image has a positive and significant effect on product decision-making. Based on the results of other studies that brand image affects purchasing decisions (Noviyan et al., 2019).

Brand trust has the capabilities, capacities, capacity needed to obtain consumer wants, and needs,

which are described as consumer intent towards the brand, considering consumer benefits, and problem solutions (Lim et al., 2020). According to the results of the study (Inggasari & Hartati, 2022) The trust brand has a positive and significant effect on purchasing decisions. Based on the results of other studies that brand trust affects purchasing decisions, this is evidenced by a sig value of $0.000 < 0.05$, a regression coefficient that is of positive value (Jatmiko, 2021).

Research problems

In 2018 the Samsung smartphone brand was the best-selling smartphone brand and became the market leader with sales of 25.4%. Then in 2019 and 2020 Samsung smartphones experienced a decline. Therefore, Samsung uses a celebrity endorsement marketing strategy, namely collaborating with the boy band BTS from South Korea in 2020. This has caused the Samsung smartphone brand to experience an increase in sales.

II. THEORITICAL FRAMEWORK

A. Celebrity Endorsment

Celebrity endorsement is a public figure or celebrity who has certain expertise to support the product to be promoted and known by the general public (Cahya et al., 2019). according to (Citra et al., 2020) celebrity endorsement is using celebrity figures as advertising stars in various media ranging from social media, print media and television media. Meanwhile, according to (Karamoy, 2022) celebrity endorsement is the use of interesting and popular sources to be used as advertising stars so that they can strengthen the image of a brand in the minds of consumers.

From this definition, it can be interpreted that celebrity endorsement is the use of celebrity that is popular among the public to introduce a product, so that it can attract attention and is also attached to potential consumers. The celebrity endorsement indicators according to (Kalangi et al., 2019) are: Attractiveness, Trust, and Expertise.

1. Brand Image

Brand image is the perception of consumers about a brand as a reflection of the associations that exist in the minds of consumers (Setiyani, 2020). According to (Noviyan et al., 2019) Brand image is a representation of the overall perception of a brand formed from information and past experiences of the brand. A good brand image will convince consumers in deciding to buy a product because product attributes such as design, quality, and product attractiveness are able to show their ability to meet consumer needs so as to create a positive association with the brand.

From the above definition, it can be interpreted that brand image is a perception of consumers towards a brand. Brand image has an important role in

influencing consumer behavior (Rosita & Novitaningtyas, 2021). A brand that has a good image can reflect a better quality of products in the eyes of consumers. A good brand image can not only attract customers, but can also contribute to an increase in competitive advantage. Brand image plays an important role in increasing customer interest in the products that the company offers. The brand image indicators according to (Inggasari & Hartati, 2022) are: Brands are easy to recognize, Brands have a good reputation and Brands are always remembered

B. Brand Trust

Brand trust is the willingness of consumers to trust or rely on a brand in a risk situation due to the expectation that the brand in question will provide positive results (Tjiptono, (Andari & Sumiyarsih, 2021). According to (Abdul Salam & Abdiyanti, 2022) brand trust is a sense of security generated by the interaction between consumers and brands. In the long run, trust is considered the most important way to build and maintain relationships with customers, which shows that the beginning of creating relationships with partners is based on trust and according to (Jatmiko, 2021) brand trust can be measured by viability and intentionality.

From the definition above, it can be interpreted that brand trust is consumer trust in a product and consumers feel that the product will have an impact positif karena according to the needs or expectations of consumers. The brand trust indicators according to (Inggasari & Hartati, 2022) are: Brand predictability, Brand liking, Brand competence, Brand reputation, Trust in the company. From these indicators according to (Inggasari & Hartati, 2022), the researcher took the 3 most relevant indicators, namely brand liking, brand reputation, and trust in the company.

1. Purchasing Decisions

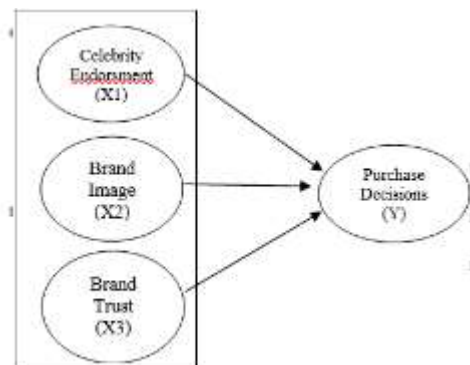
Purchasing decision is a process carried out by consumers to meet their needs in order to obtain satisfaction with the highest value. Decision making by consumers to purchase a product begins with awareness of the fulfillment of needs and desires (Kuhu et al., 2019). According to (Kotler and Keller, 2016:198) Purchasing decisions are a form of selection and interest in buying the most preferred brand among a number of different brands. Meanwhile, according to (Rosita & Novitaningtyas, 2021) Purchasing decisions are a process where consumers choose an action from several alternative choices that have been based on certain considerations to buy a good or service in meeting their wants and needs.

From the definition that has been explained, it can be interpreted that the purchase decision is an act of consumers who decide to buy the required product or service and then make a transaction. The indicators

of purchasing decisions according to (Adiwidjaja, 2017) are:

- 1.Desire to use the product
- 2.Desire to own the product
- 3.Interest in the product
- 4.Taking the time to get the product
- 5.Know the function of the product well.

C. Conceptual Framework



1. Hypothesis Development

Celebrity endorser is a celebrity who is popular among the public because of his achievements. Many organizations use the appeal of celebrity endorsement ads to increase their popularity and brand recognition (Khan et al., 2019). According to the results of the study (Citra et al., 2020) celebrity endorsers have a significant influence on purchasing decisions. Based on the results of another study (Noviyan et al., 2019) celebrity endorsers partially influence purchasing decisions.

H1: Celebrity endorsers influence Samsung smartphone buying decisions

Brand image has been defined as the reason or emotional perception that consumers associate with a particular brand. In addition, the brand image helps customers to choose a product or service in situations where it is difficult to distinguish a product or service based on tangible quality features (Xiaoling et al., 2018). According to the results of the study (Rinawati et al., 2021) Brand image has a positive and significant effect on product purchasing decisions. Based on the results of other studies that brand image affects purchasing decisions (Noviyan et al., 2019).

H2: Brand Image influences Samsung smartphone purchasing decisions

Brand trust has the capabilities, capabilities, capacity needed to obtain consumer wants, and needs, which are described as consumer intent towards the brand, considering consumer benefits, and problem solutions (Lim et al., 2020). According to the results of the study (Inggasari & Hartati, 2022) Brand trust has a

positive and significant effect on purchasing decisions. Based on the results of other studies that brand trust affects purchasing decisions, this is evidenced by a sig value of $0.000 < 0.05$, a regression coefficient that is positive (Jatmiko, 2021).

H3: Brand Trust influences Samsung smartphone purchasing decisions

III METHODOLOGY

Types of Research

This research is a research with quantitative methods through an associative causality approach. Quantitative methods are data in the form of numbers. According to (Hasan, 2017) causal associative research is a study that aims to analyze the relationship between one variable and another or how a variable (X) affects another variable (Y).

Data Sources

The data source used in this study is secondary primary data. Primary data is data collected by researchers in the form of questionnaires. Secondary data is data that has been processed for certain interests by certain parties (Umi Narimawati: 2019). The secondary data obtained by the researcher is data in the form of articles.

Data Collection Methods

This study used a data collection method in the form of a questionnaire or questionnaire. A questionnaire is a technique or method of collecting data indirectly. The instrument or data collection tool is also called a questionnaire containing a number of questions or statements that must be answered or responded to by respondents (Sudaryono, 2018). Data collection is carried out by giving questions or statements to Respondents. The measurement scale used in this questionnaire uses an interval scale.

Population and Sample

The population in this study are consumers of the Samsung Galaxy. Hair et, al (2010) revealed that a study using regression analysis methods and SEM, must have a minimum number of samples five times the number of questions on the questionnaire. So the total questionnaire in this study was 10 times the number of questions where the number of indicators was 14, resulting in as many as 140 respondents.

$$14 \text{ (indicator)} \times 10 = 140$$

Data Analysis Methods

Data analysis in this study used the Partial Least Square (PLS) approach. PLS is a component- or variant-based Structural Equation Modeling (SEM) equation model. SEM and PLS are alternative techniques in SEM analysis where the data used do

not have to be normally multivariate (Oda et al., 2014).

Hypothesis testing

The influence of celebrity endorsement (X1) On the purchase decision (Y) of Samsung Galaxy

Ho= Celebrity endorsement (X1) influence has no significant effect on Samsung Galaxy (Y) purchasing decisions

Ha= The influence of celebrity endorsement (X1) has a significant effect on the purchasing decision of (Y) Samsung Galaxy

The influence of brand image (X2) On the purchasing decision (Y) of Samsung Galaxy

Ho= Brand image influence (X2) has no significant effect on Samsung Galaxy purchasing decisions (Y)

Ha= The influence of brand image (X2) has a significant effect on the purchasing decision (Y) of Samsung Galaxy

The influence of brand trust (X3) On the purchasing decision (Y) of Samsung Galaxy

Ho= Brand trust (X3) influence has no significant effect on Samsung Galaxy purchasing decisions (Y)

Ha= Brand trust (X3) influence significantly affects Samsung Galaxy purchasing decisions (Y)

IV RESULT AND DISCUSSION

The following are measurements of independent variables and dependent variables that will be measured in this study as follows.

Celebrity Endorsment		STS	TS	N	S	SS
1	The popularity of endorsed celebrities influences consumers in choosing products					
2	The objectivity of celebrity endorsements affects consumer confidence in choosing products					
3	Selebriti endorsement has charm and craftsmanship suitable for promoting Samsung galaxy					

Brand Image		STS	TS	N	S	SS
4	Samsung galaxy is famous among the people of Indonesia					
5	Samsung galaxy has an attractive brand image					
6	Samsung galaxy is easy for consumers to remember					
Brand Trust		STS	TS	N	S	SS
7	Samsung galaxy is a brand as per consumer expectations					
8	Samsung Galaxy provides warranty facilities for consumers.					
9	Konsumen percaya terhadap kualitas Samsung galaxy					
Purchasing decisions		STS	TS	N	S	SS
10	Bought Samsung galaxy because its attributes match consumer needs					
11	Bought Samsung galaxy because of attractive product promotions					
12	Bought Samsung galaxy because the smartphone is popular today					
13	Looking for information to buy Samsung galaxy products					
14	Bought Samsung galaxy because it has complete features					

Data Analysis Results

Data processing techniques using SEM method based on Partial Least Square (PLS) testing to see the Fit Model of a study (Ghozali, 2006). The stages are as follows:

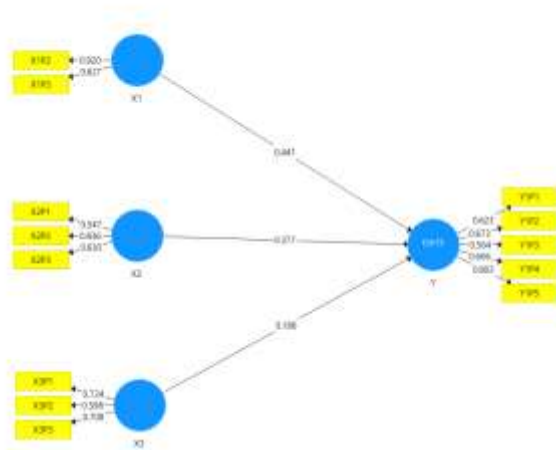


Figure 4.1 Outer Model

The results of processing using SmartPLS can be seen in the outer loading table in each variable where the outer model value or the correlation between the construct and the variable shows that all loading factors have a value above 0.50.

Evaluating Composite Reability

The reability test is carried out by looking at the Composite Reability value of the dimensional block that measures the construct. Composite Reability results will show a satisfactory value if it is above 0.7. This means that the data obtained is reliable, it means the Composite Reability value at the output, namely

Composite Reability

Variabel	Composite Reability	Kesimpulan
Celebrity endorser	0,759	Reliable
Brand Image	0,718	Reliable
Brand Trust	0,716	Reliable
Keputusan Pembelian	0,791	Reliable

Source : Smart PLS Report Output

Based on the table above, the variables celebrity endorser, brand image and brand trust then variable Y purchasing decisions show satisfactory or reliable values.

Structural Model Testing (Inner model)

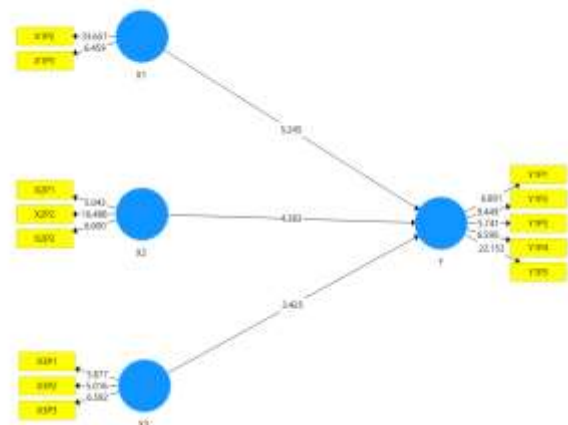


Figure 4.2 Bootstrapping

Testing by bootstrapping is intended to minimize the problem of abnormality of research data.

R-Square Values

Table 4.1 R-Square Values Variabel	R-Square
Y	0.615

Source : Data processing with PLS 2022

These results show that celebrity endorsers, brand images and brand trusts can explain the purchase decision variable of 0.615 or the remaining 61.5% is influenced by other variables.

Hypothesis testing results

1. The Effect of Celebrity Endorsements on Purchasing Decisions

The results of testing the first hypothesis of the influence of Celebrity Endorsements on Purchasing Decisions obtained a coefficient value of T (calculated) of 5,245. If the value of T(count) is compared to t (table) 1,960 it shows that the value of T(calculated) is greater than the value of t (table). Thus the results of hypothesis testing state that the

Celebrity Endorsement variable affects the Purchase Decision.

2. The influence of brand image on purchasing decisions

The results of testing the first hypothesis of the influence of Brand Image on Purchasing Decisions obtained a coefficient value of T (calculate) of 4,383. If the value of T(calculate) is compared to t (table) 1,960 it indicates that the value of T(count) is greater than the value of t (table). Thus the results of hypothesis testing state that the brand image variable affects the Purchase Decision.

1. The influence of brand image on purchasing decisions

The results of testing the first hypothesis of the influence of Brand Trust on Purchasing Decisions obtained a coefficient value of T (calculate) of 3,425. If the value of T(count) is compared to t (table) 1,960 it shows that the value of T(calculate) is greater than the value of t (table). Thus the results of hypothesis testing state that the brand trust variable affects the Purchase Decision.

V. CONCLUSION

Based on the results of data analysis and hypothesis testing that has been carried out "The Influence of Celebrity endorsements, Brand Image and Brand Trust on the Purchasing Decision of Samsung smartphones" the following conclusions can be drawn:

1. Celebrity endorsements influence samsung smartphone purchasing decisions
2. Brand image affects samsung smartphone purchasing decisions
3. Brand trust influences samsung smartphone purchasing decisions

This research has differences from other studies because it uses SEM and SmartPLS analysis methods as analytical tools.

ACKNOWLEDGMENT

Praise be to the author for climbing into the presence and blessings of Allah SWT. Because for all the abundance of His grace and grace, the author can complete the writing of this journal. The author would also like to thank the Management Study Program of IBI Darmajaya, Faculty of Economics and Business, for supporting the author in the preparation of this journal.

REFERENCES

- [1] Abdul Salam, & Abdiyanti, S. (2022). Analisis Pengaruh Celebrity Endorser, Brand Image Dan Brand Trust Terhadap Keputusan Pembelian (Studi Kasus Pada Konsumen Wanita Produk Skin Care Merek Ms Glow Di Kecamatan Sumbawa). *Accounting and Management Journal*, 6(1), 60–68. <https://doi.org/10.33086/amj.v6i1.2204>
- [2] Ali, A., Xiaoling, G., Sherwani, M., & Ali, A. (2018). Antecedents of consumers' Halal brand purchase intention: an integrated approach. *Management Decision*, 56(4), 715–735. <https://doi.org/10.1108/MD-11-2016-0785>
- [3] Andari, P., & Sumiyarsih, S. (2021). Pengaruh Brand Image, Brand Trust, dan Strategi Promosi Terhadap Keputusan Pembelian Produk AMDK merek OXGNDW (OXY). *Value : Jurnal Manajemen Dan Akuntansi*, 16(1), 35–52. <https://doi.org/10.32534/jv.v16i1.1591>
- [4] Cahya, F. M., Wulan, I. A. D. P., & Damayanti, R. (2019). Analisis Celebrity Endorsment, Variasi Produk, Brand Image terhadap Keputusan Pembelian Produk Rabbani. *Jurnal Ilmu Manajemen*, 9(1), 88. <https://doi.org/10.32502/jimn.v9i1.2141>
- [5] Citra, Salam, A., & Nuryani, H. S. (2020). Pengaruh Celebrity Endorser dan Brand Image terhadap Keputusan Pembelian di Instagram (Studi Kasus Pada Mahasiswa Universitas Teknologi Sumbawa Angkatan Tahun 2016 sampai dengan Tahun 2018). *Jurnal Manajemen Ekonomi Dan Bisnis*, 3(2), 1–9. <https://jurnal.uts.ac.id/index.php/jmb/article/view/796>
- [6] Inggasari, S. M., & Hartati, R. (2022). Pengaruh Celebrity Endorser, Brand Image, dan Brand Trust Terhadap Keputusan Pembelian Produk Scarlett Whitening. *Cakrawangsa Bisnis : Jurnal Ilmiah Mahasiswa*, 3(1), 1–22.
- [7] Jatmiko, M. R. (2021). Analisis Pengaruh Celebrity Endorser, Brand Image dan Brand Trust Terhadap Keputusan Pembelian Shampoo Dove di Semarang. *Jurnal Ekonomi Dan Bisnis STIE Anindyaguna*, 3(1), 159–173.
- [8] Kalangi, N. J., Tamengkel, L. F., & Walangitan, O. F. C. (2019). Pengaruh Celebrity Endorser Dan Brand Image Terhadap Keputusan Pembelian Shampoo Clear. *Jurnal Administrasi Bisnis*, 8(1), 44. <https://doi.org/10.35797/jab.8.1.2019.23499.44-54>
- [9] Karamoy, T. S. (2022). *Pengaruh celebrity endorser dan brand image terhadap keputusan pembelian kosmetik maybelline di kota manado*. 2(1), 44–55.
- [10] Khan, M. M., Memom, Z., & Kumar, S. (2019). Celebrity Endorsement and Purchase Intentions: The Role of Perceived Quality and Brand

- Loyalty Institute of Business Management, Karachi, Pakistan Zareena Memon Institute of Business Management Market Forces. *Market Forces (College of Management Sciences)*, 14(2), 99–120.
- [11] Kuhu, T. T., Tumbel, A. L., & Wenas, R. S. (2019). Pengaruh Viral Marketing, Celebrity Endorser, Dan Brand Trust Terhadap Keputusan Pembelian Di Sang Pisang Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 7(3), 2801–2810.
- [12] Noviyani, S., Kencanawati, M. S., Anggraini, R., & Gayatri, L. A. I. (2019). Pengaruh Social Media Marketing, Celebrity Endorser, Brand Image, Electronic Word of Mouth, Dan Inovasi Produk Terhadap Keputusan Pembelian Produk Wardah. *Jurnal Ekonomi Dan Bisnis*, 11(1), 9–25.
- [13] Rinawati, G. A., Agung, A. A. P., & Anggraini, N. P. N. (2021). Pengaruh Celebrity Endorser Dan Brand Image Terhadap Keputusan Pembelian Freshcare Di Kota Denpasar. *Jurnal EMAS*, 2(1), 98–106.
- [14] Rosita, D., & Novitaningtyas, I. (2021). Pengaruh Celebrity Endorser dan Brand Image Terhadap Keputusan Pembelian Produk Wardah pada Konsumen Mahasiswa. *INOBISS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 4(4), 494–505.
<https://doi.org/10.31842/jurnalinobis.v4i4.200>
- [15] Sanny, L., Arina, A. N., Maulidya, R. T., & Pertiwi, R. P. (2020). Purchase intention on Indonesia male's skin care by social media marketing effect towards brand image and brand trust. *Management Science Letters*, 10, 2139–2146. <https://doi.org/10.5267/j.msl.2020.3.023>
- [16] Setiyani, M. S. (2020). Pengaruh Viral Marketing, Brand Image Dan Brand Trust Terhadap Keputusan Pembelian Iphone Di Kota Malang . 1–9.
- [17] <https://selular.id/2021/08/kerasnya-kompetisi-vendor-smartphone-tiga-kuartal-tiga-jawara-berbeda/>
- [18] <https://kumparan.com/kumparantech/samsung-klaim-masih-jadi-nomor-1-di-pasar-smartphone-indonesia-1sIpHBoGnet/4>
- [19] <https://teknojurnal.com/sejarah-dan-masa-depan-perkembangan-handphone-berbasis-android-di-indonesia/#:~:text=Pada%20tahun%202009%20juga%20mungkin,Spica%20yang%20berbasis%20di%20Android.>