

**THE EFFECT OF ONLINE CUSTOMER REVIEWS AND CELEBRITY  
 ENDORSEMENTS ON PURCHASE INTENTION  
 (Study on Scarlett Whitening with Trust as Moderation)**

**Oleh :**

**Kartika Chandra Puspita,**

Faculty of Economics and Business/ Management, University of Muhammadiyah Surakarta  
 Email : b100183273@student.ums.ac.id

**Imronudin,**

Faculty of Economics and Business/ University of Muhammadiyah Surakarta  
 Email : imronudin@ums.ac.id

**Article Info**

*Article History :*

*Received 16 Nov - 2022*

*Accepted 25 Nov - 2022*

*Available Online*

*30 Nov – 2022*

**Abstract**

*The purpose of this study was to determine the effect of Online Customer Reviews and Celebrity Endorsements on Purchase Intention of local Indonesian skin care (Scarlett Whitening) moderated by Trust. This study uses a quantitative approach. The sample in this study were people aged 15-50 years who knew and understood about Scarlett Whitening skincare. The data collection used in this study uses Structural Equation Modelling (SEM) with the help of SmartPLS software version 3.2.0. The results in this study indicate that Online Customer Reviews has a positive and significant effect on Purchase Intentions and Celebrity Endorsements have a positive and significant effect on Purchase Intentions. But Trust does not moderate the effect of Online Customer Review on Purchase Intention and Trust does not moderate the effect of Celebrity Endorsement on Purchase Intention.*

*Keyword :*

*Online Customer Review,  
 Celebrity Endorsement,  
 Purchase Intention, Trust*

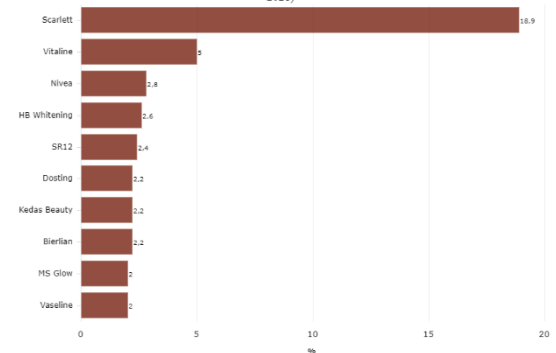
**1. INTRODUCTION**

The development of the business world is now increasing, especially in the cosmetic industry. Based on data released by the UK-based research institute, Research and Markets, throughout 2020 the valuation value of world cosmetics sales reached USD 145.3 billion, and is expected to continue to grow with a Compound Annual Growth Rate (CAGR) of 3.6% per year during this period. 2020-2027 (KBRI Tokyo, 2021) . In line with the development of the world cosmetic market which is still showing positive growth, the Indonesian cosmetic industry has also experienced growth since 2018 according to the 2020 Annual Report of the Directorate of Cosmetics Supervision.

Based on data from the Central Statistics Agency (BPS) in the first quarter of 2020 the growth of chemicals, pharmaceuticals, and

traditional medicines including cosmetics grew 5.59% and the growth of the cosmetic market in Indonesia is also projected to increase by 7% in 2021 (Central Bureau of Statistics, 2020) . According to research results from Compass on August 1-15, 2021, there are several brands of body care products that are most in demand by consumers (Rizaty, 2021) .

10 Merek Produk Perawatan Tubuli Terlaris di Indonesia Menurut Pangsa Pasar (Shopee & Tokopedia) (Agustus 2021)



Source : Rizaty (2021)

The Scarlett Whitening brand occupies the highest percentage among other beauty brands. Scarlett Whitening is growing by continuously creating new innovations and bringing up various variants according to the needs and skin types of Indonesians.

Scarlett Whitening was founded in 2017 by an Indonesian artist named Felycia Angelista with her initial branding being beauty products that can brighten the skin. Beauty products from Scarlett Whitening are skin care and hair care. Skin care is a beauty cosmetic that is used to treat the skin of the body, both the skin on the face, body, feet and hands (Rostamailis, 2005). In marketing its products, Scarlett uses online and offline media.

In online marketing Scarlett Whitening through celebrity endorsements and online stores. One marketing technique that is currently considered to have a broad influence and scope is celebrity endorsement through social media (Saputra et al., 2019). The use of marketing techniques using celebrity endorsement can affect the delivery of messages to make the public have the intention to buy a product (Berkala et al., 2016).

With an online store, consumers can easily see and find out about Scarlett Whitening products through their cellphones. And consumers can easily find out reviews from other consumers who have bought Scarlett Whitening products. Customer reviews are considered credible because customer reviews contain personal experiences using products or services, because a user is considered to have no interest and no intention to deceive (Dwidienawati et al., 2020).

In offline marketing Scarlett Whitening through resellers. Offline marketing through resellers, namely resale or people who sell other people's products with an agreement (Yustisia, 2013).

## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Online Customer Reviews

Online customer reviews are part of the Electronic Word of Mouth (e-WOM), which is a direct opinion from someone and not an advertisement. A customer review is also a

review or information that is positive or negative that describes the quality of the product sought based on the experience of consumers who have made a purchase (Made et al., 2020).

Customer reviews currently have a higher relevance than other forms of marketing communication (Trenz & Berger, 2013). For online purchases, customer reviews are not only an option but an expectation (Askalidis & Malthouse, 2017). Online customer reviews can be defined as feedback and recommendations from experienced consumers on certain products and services that can embrace other consumers who have the potential to make them interested in buying (Sutanto & Aprianingsih, 2016).

### Celebrity Endorsement

An endorser is an advertisement supporter or also known as an advertisement star to support a product (Shimp, 2003). Meanwhile, celebrity is a character (actor, entertainer or athlete) who is known for his achievements in different fields from the product he supports (Sanditya, 2019).

Celebrity endorsement is a type of marketing that focuses on a particular person who is an artist or other influential person, rather than targeting the market as a whole, because that person has been recognized as a potential buyer (Dwidienawati et al., 2020). Celebrity endorsement is considered an effective form of promotion by traders because it can affect the perception of product quality and uniqueness (Dean, 2000).

### Trust

Trust is all knowledge possessed by consumers and all conclusions made by consumers about objects, attributes, and benefits (Mowen & Minor, 2002). Trust can be interpreted as the enthusiasm of customers to accept weaknesses in online transactions based on their optimism about the behavior of online stores in the future (Lau, 2017).

Trust is a potential consumer's trust in someone who gives a review or a celebrity who receives an endorsement to consumers (Christianie & Sihombing, 2021). Trust has a moderating effect on processes and behavior (Chang & Wong, 2010).

### Purchase Intention

Purchase intention can be defined as a form of consumer behavior who wants to buy or choose a product based on their experience, use, and desire for a product (Kotler & Keller,

2016) . Purchase intention is the interest of consumers to purchase certain products or services (Athapaththu & Kulathunga, 2018) . Purchase intention shows that consumers will follow cognitive needs, seek information from the external environment, and make purchase and post-purchase decisions (Naderibani et al, 2016) .

Purchase intention is one of the main components in customer cognitive behavior that is able to show how the customer intends to buy a certain brand or product (Dwitari & Kusdiby, 2019) . While online purchase intention is a situation when customers are willing and intend to carry out online transactions (Lau, 2017) .

### Framework

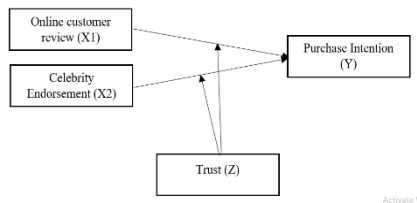


Figure 1.1 Framework

### Hypothesis

- a. The Effect of Online Customer Reviews on Purchase Intention  
**H1 : Online Customer Reviews have a positive effect on Purchase Intention**
- b. Effect of Celebrity Endorsement on Purchase Intention  
**H2 : Celebrity Endorsement has a positive effect on Purchase Intention**
- c. Effect of Online Customer Review on Purchase Intention moderated by Trust  
**H3 : Trust moderates the influence of Online Customer Review on Purchase Intention**
- d. Effect of Celebrity Endorsements on Purchase Intention moderated by Trust  
**H4 : Trust moderates the influence of Celebrity Endorsements on Purchase Intention**

### 3. RESEARCH METHODS

The method used in this study is a quantitative method. This type of research method is a questionnaire that explains phenomena based on data and information from the sample. The population in this study are consumer who know Scarlett Whitening.

Because the data obtained are not clear and the exact number of the population cannot be known, the researchers took a sample according to Rao Purbo (2006), with the formula

$$n = \frac{Z^2}{4(Moe)^2}$$

$$n = \frac{1,96^2}{4(0,1)^2}$$

$$n = 94,04$$

Information :

n = number of samples

Z = the level of confidence required in determining the sample (95% = 1.96)

Moe = margin of error, which is the maximum tolerable error rate, set at 10%

Based on the calculation results above, the number of samples in this study was 94.04 which was rounded up to 150 respondents.

### 4. RESULTS AND DISCUSSION

Scarlett Whitening was created in 2017 which was founded by one of the Indonesian public figures, Felicya Angelista. Scarlet Whitening is a local product company engaged in beauty, Scarlett Whitening is produced by PT. The Motto of the Eternal Banyan, Bogor, Indonesia.

Scarlett Whitening has several beauty products including, hair care products, facial care, and body care. Scarlett Whitening products contain Glutathione and Vitamin E which can brighten and whiten the skin of the body and face.

In this study using a sample of people who know the Scarlett Whitening product, of these 150 samples there are the following characteristics:

- a. Description of gender characteristics

The following are the results of the characteristics of the gender description shown in the table:

Table 1.1 Gender Characteristics

No.	Gender	Amount	Percentage
1.	Man	28	18.7%
2.	Woman	122	81.3%
Total		150	100%

Source : Primary Data 2022

From table 1.1 above, it can be seen that the sample collected was 150 respondents divided into 2 sex groups. Respondents with male sex amounted to 28 people (18.7%) and women amounted to 122 people (81.3%). In this study it can be concluded that the majority of Scarlett Whitening skincare users are women.

b. Description of Age Characteristics

The following are the results of the characteristics of the age descriptions shown in the table:

Table 1.2 Age Characteristics

No.	Gender	Amount	Percentage
1.	15 - 24	141	94 %
2.	25-34	8	5.3 %
3.	35-44	1	0.7 %
Total		150	100%

Source : Primary Data 2022

From table 1.2 above, it can be seen that the sample collected was 150 respondents divided into 3 age groups. Respondents aged 15-24 years were 141 people (94%), aged 25-34 years were 8 people (5.3%), and aged 35-44 years were 1 person (0.7%).

RESULT ANALYSIS

PLS Outer Model Test Results

In this study, the test results were assisted with the help of the SmartPLS software version 3.0, the complete model can be presented in the following figure:

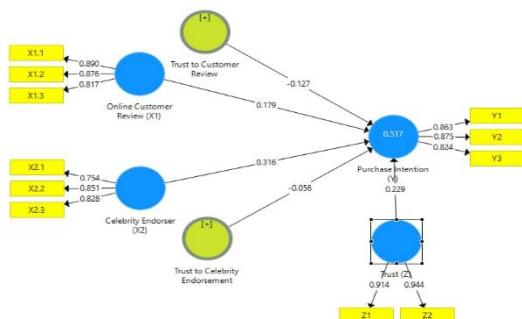


Figure 1.2

The hypothesis testing of this research was carried out with the help of the SmartPLS (Partial Least Square) 3.0 software. This value can be seen from the bootstrap results. The rule of thumb used in this study is t-statistic > 1.96 with a significance level of p-value 0.05 (5%) and a positive beta coefficient. The value of testing this research hypothesis can be seen in Figure 1.2 and the results of this research model can be described as shown in the table:

Table 1.3 Convergent Validity

Variable	Indicator	Outer Loading	Note:
Online Customer Reviews (X1)	X1.1	0.890	Valid
	X1.2	0.876	Valid
	X1.3	0.817	Valid
Celebrity Endorser (X2)	X2.1	0.754	Valid
	X2.2	0.851	Valid
	X2.3	0.828	Valid
Trust (Z)	Z1	0.914	Valid
	Z2	0.944	Valid
Purchase Intention (Y)	Y1	0.863	Valid
	Y2	0.875	Valid
	Y3	0.824	Valid

Source : Primary Data 2022

To test convergent validity, the Outer loading value or loading factor is used. The reflective measure or criteria in this test with an outer loading value of 0.05-0.60 (Ghozali, 2006). Based on Table 4.7 all statement items proved valid.

Table 1.4 Reliability Test

Indicator	Cronbach's Alpha	Composite Reliability	Average Variant Extracted (AVE)	Note:
Online Customer Reviews (X1)	0.827	0.896	0.742	Reliable
Celebrity Endorser (X2)	0.743	0.853	0.660	Reliable
Trust (Z)	0.842	0.926	0.863	Reliable
Purchase Intention (Y)	0.815	0.890	0.730	Reliable

Source : Primary Data 2022

Based on table 1.4 above, it shows that the

	T Statistics ( O/STDEV )	P Values	Note:
<b>Online Customer Review (X1) -&gt; Purchase Intention (Y)</b>	2.234	<b>0.026</b>	<b>Significant</b>
<b>Celebrity Endorser (X2) -&gt; Purchase Intention (Y)</b>	3,590	<b>0.000</b>	<b>Significant</b>

composite reliability of each variable shows a construct value > 0.70 (Ghozali, 2015). These results indicate that each variable has met the composite reliability so that it can be concluded that all variables have a high level of reliability.

Furthermore, in the table above, the Cronbach's alpha of each variable shows a construct value of > 0.60, thus these results indicate that each research variable has met the requirements of the Cronbach's alpha value, so it can be concluded that all variables have a high level of reliability (Ghozali, 2015).

According to (Ghozali, 2015). Discriminant validity is declared valid if the AVE value is > 0.05. Based on the table above, the Average Variance Extracted (AVE) value above shows the value > 0.5, therefore each variable is declared valid.

### Hypothesis testing

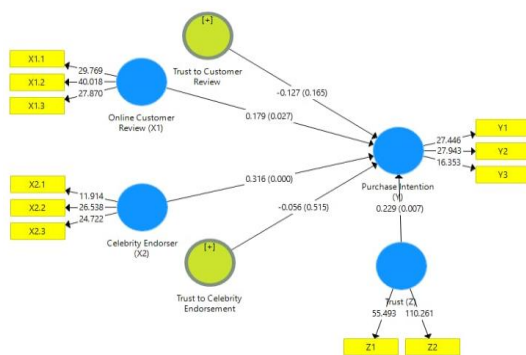


Figure 1.3

#### a. Direct Effects

This direct effect uses the t-test which aims to determine the effect of the independent variable on the dependent variable partially. This hypothesis can be accepted if P Values < 0.05. In hypothesis testing, it can be said to be significant if the

T-statistic value is greater than 1.96, whereas if the T-statistic value is less than 1.96 then it is considered insignificant (Ghozali, 2016).

Table 1.5 Direct Effects

Source : Primary Data 2022

#### 1. Online Customer Review on Purchase Intention

The results of the analysis in the table above show that the Online Customer Review on Purchase Intention has a t-statistic value of 2.234 and a significant level of 0.026. So hypothesis 1 which states Online Customer Review has a positive effect on Purchase Intention is accepted. Which means Online Customer Review has a positive and significant effect on Purchase Intention.

#### 2. Celebrity Endorsement against Purchase Intention

The results of the analysis in the table above show that the Celebrity Endorsement of Purchase Intention has a t-statistic value of 3.590 and a significant level of 0.000. So hypothesis 2 which states that Celebrity Endorsement has a positive effect on Purchase Intention is accepted. Which means that Celebrity Endorsement has a positive and significant effect on Purchase Intention.

#### b. MRA

Indirect influence analysis is useful for testing the hypothesis that a dependent variable has an indirect effect on an independent variable mediated by an intermediate variable (Juliandi, 2018).

	T Statistics ( O/STDEV )	P Values	Information
<b>Moderating Effect 1 -&gt; Purchase Intention (Y)</b>	1,453	<b>0.147</b>	<b>Not Significant</b>
<b>Moderating Effect 2 -&gt; Purchase</b>	0.697	<b>0.486</b>	<b>Not Significant</b>

## Intention (Y)

Source : Primary Data 2022

The results of the analysis in the table is :

### 1. Online Customer Review on Purchase Intention Moderated by Trust

The results of the analysis in the table above show that the Online Customer Review on Purchase Intention Moderated by Trust has a t-statistic value of 1.453 and a significant level of 0.147. So hypothesis 3 which states that Trust moderates the influence of Online Customer Review on Purchase Intention is rejected. Which means that Trust does not moderate the influence of Online Customer Review on Purchase intention.

### 2. Celebrity Endorsement on Purchase Intention Moderated by Trust

The results of the analysis in the table above show that Celebrity Endorsements on Purchase Intention Moderated by Trust have a t-statistic value of 0.0697 and a significant level of 0.486. So hypothesis 4 which states that Trust moderates the effect of Celebrity Endorsement on Purchase Intention is rejected. Which means Trust does not moderate the influence of Celebrity Endorsements on Purchase Intention.

## DISCUSSION

The purpose of this study was to determine the effect of Online Customer Reviews and Celebrity Endorsements in influencing Purchase Intention of Scarlett Whitening products moderated by Trust. A total of 4 hypotheses were developed and tested using the Structural Equation Modeling (SEM) method assisted by SmartPLS 3.0 software and demographic characteristics were analyzed using SPSS software, where the results of the study showed the following:

First, the demographic characteristics of the respondents are summarized using descriptive statistics. The majority of respondents in this study were young women, namely 15 years to 24 years of age. According to the author's observations, it is suspected that women at a young age understand more about Scarlett Whitening skin care.

Second, the results of the first hypothesis in this study prove that Online Customer Review has a positive and significant effect on Purchase Intention. Based on the results obtained, the P-values are  $0.026 < 0.05$  which proves that there is a significant positive effect, so that hypothesis 1 which states that Online Customer Review has a positive effect on Purchase Intention is accepted. As a result, consumers are easier to find comparisons with similar products sold at other online sellers, this is because of the rapid use of digital marketing so that it provides benefits to consumers, namely consumers do not have to visit different sellers directly (Yasmin et al, 2013) .

Third, the results of the second hypothesis in this study prove that Celebrity Sponsors have a positive and significant effect on Purchase Intention. Based on the results obtained P-values  $0.000 < 0.05$  which proves a positive and significant influence, so that hypothesis 2 which states Celebrity endorsement has a positive effect on Purchase Intention is accepted. The influence of celebrity endorsement on purchase intention in advertising is commonly used by companies to attract market interest. Celebrity endorsement uses artists, entertainers, individuals, and public figures who are known to the public for their ability to convey something that can support the products they buy (Shimp, 2003).

Fourth, the results of the third hypothesis in this study prove that there is no influence of Online Customer Review on Purchase Intention moderated by Trust. Based on the results obtained, the P-values are  $0.147 > 0.05$  which means proves that there is no effect, so hypothesis 3 which states that Trust moderates the influence of Online Customer Review on Purchase Intention is rejected. Online customer reviews and celebrity endorsement support are considered a reliable and credible source of information. Trust plays a significant perspective in exchange, given the vulnerabilities and risks involved (Dwideinawati et al, 2020). However, in this study, Trust was unable to moderate online reviews that lead to purchase intention, in other words, trust did not affect purchase intentions even though they had read the customer reviews they found. This research is supported by research conducted by Christiane, et.al., (2021) which states that trust does not moderate the

effect of Online Customer Review on Purchasing Intention.

Fifth, the results of the fourth hypothesis in this study prove that there is no effect of Celebrity Endorsements on Purchase Intentions moderated by Trust. Based on the results obtained, the P-values are  $0.486 > 0.05$  which means there is no influence, so that hypothesis 4 which states that Trust moderates the effect of Celebrity Endorsement on Purchase Intention is rejected, which means that trust moderates Celebrity Endorsement on Purchase Intention is not significant. This happens because customers already feel close to the celebrity, so trust is no longer an important role because the most important thing is the perceived relationship between the customer and the celebrity itself, celebrity judged by customers is the attractiveness and reputation they have and the celebrity used can be trusted as a supporter of Scarlett Whitening products. This research is supported by research conducted by This research is supported by research conducted by Christiane, et.al., (2021) which states that trust does not moderate the effect of Celebrity Endorsement on Purchase Intention.

## 5. CONCLUSION

Based on the research that has been done, the results of the data used can be concluded as follows: Customer Online Review has a positive and significant effect on Purchase Intention, Celebrity Endorsements have a positive and significant effect on Purchase Intention, Online Customer Review has no positive and significant effect on Moderated Purchase Intention by trust, and Celebrity Endorsement has no positive and significant effect on Purchase Intention which is moderated by trust.

## 6. REFERENCE

- Askalidis, G., & Malthouse, EC (2017). *The Value of Online Customer Reviews* . September 2016 . <https://doi.org/10.1145/2959100.2959181>
- Athapaththu, JC, & Kulathunga, D. (2018). *Factors Affecting Online Purchase Intention : Effects of Technology and Social Commerce* . 11 (10), 111–128. <https://doi.org/10.5539/ibr.v11n10p111>
- Central Bureau of Statistics. (2020). May 5, 2020. *Central Bureau of Statistics* , 1–50. [https://www.bps.go.id/website/material\\_ind/materialBrsInd-20200505115439.pdf](https://www.bps.go.id/website/material_ind/materialBrsInd-20200505115439.pdf)
- Berkala, J., Efficiency, I., Saerang, DPE, Rumokoy, FS, & Faculty, B. (2016). *THE IMPACT OF ONLINE CUSTOMER REVIEW AND CELEBRITY* . 16 (04), 296–306.
- Chang, HH, & Wong, KH (2010). Information & Management Adoption of e-procurement and participation of e-marketplace on firm performance : Trust as a moderator. *Information & Management* , 47 (5–6), 262–270. <https://doi.org/10.1016/j.im.2010.05.02>
- Christianie, G., & Sihombing, T. (2021). *the Effect of Customer Review and Celebrity Endorsement Toward Indonesia Local Makeup Brand Purchase Intention* . 5 (3), 2021.
- Yustisia's wish. (2013). *Smart Books for Online Business and Electronic Transactions* . Jakarta: Gramedia Pustaka.
- Dean, DH (2000). *Third -Party Organization Endorsement of Products : an Advertising Cue Affecting Consumer Pre-Purchase Evaluation of Goods and Services* .
- Dwidienawati, D., Tjahjana, D., Abdinagoro, SB, Gandasari, D., & Munawaroh. (2020). Customer review or influencer endorsement: which one influences purchase intention more? *Heliyon* , 6 (11). <https://doi.org/10.1016/j.heliyon.2020.e05543>
- Dwitari, DM, & Kusdibyo, L. (2019). Measuring Consumer Attitudes and Purchase Interests towards Skin Care Products by Using Local Brand Image. *Industrial Research Workshop and National Seminar* , 10 (1), 686–696.
- Efendi, Mf., Rachma, N., & Rahmat, A. (2019). *The Influence of Country of Origin, Perceived Quality and Price on Purchase Intention with Brand Image as an Intervening Variable (Case study on Castrol Oil users at Castrol Active Sawojajar Workshop, Malang City)* . 41–55

- Ghozali, I. & Latan, H. (2015) . *Partial Least Squares: Concepts, Techniques and Applications Using the SmartPLS 3.0 Program* . Semarang: Diponegoro University Publishing Agency.
- Juliandi, A. (2018). *Structural equation model based partial least square (SEM-PLS): Using SmartPLS*. *Journal of SEM-PLS Training Postgraduate Program, University of Batam*. <https://doi.org/10.5281/zenodo.1243777>
- Indonesian Embassy in Tokyo, trade attache. (2021). Business intelligence analysis report on cosmetic products, trade attaché of the Indonesian Embassy in Tokyo 2021. *Ministry of Trade of the Republic of Indonesia 2021* , 0–48.
- Kotler, P. & Keller, KL (2016). *Marketing Management (15th ed.)* .
- Lau, T. (2017). *The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience toward Customers' Online Purchase Intention June 2010* . <https://doi.org/10.5539/ibr.v3n3p63>
- Made, D., Purnama, F., Price, PP, Design, P., Online, D., Review, C., Design, P., & Review, OC (2020). *PERCEIVED PRICE, PRODUCT DESIGN AND ONLINE CUSTOMER REVIEW OF PURCHASE INTENTION ON WARDAH PRODUCTS IN* . 5 (1), 81–89.
- Mowen, JC & Minor, M. (2002). *Consumer Behavior (Volume 2)* (5th ed.). Jakarta: Erlangga Publisher.
- Naderibani, M., Adibzade, M. & Ghahnavihe, D. (2016). The Impact of Innovation on Going To Buy Electronics Using Structural Equation Modeling (SEM). *Journal of Business Management* .
- Rizaty, MA (2021). Best Selling Body Care in August 2021. *Best Selling Body Treatment in August 2021* , 2021.
- Rostamailis. (2005). *Use of Cosmetics basic beauty and matching dress* . Jakarta : Rineka Cipta.
- Sanditya, R. (2019). The Relationship of Celebrity Endorsers With Consumers' Online Purchase Decisions for Clothing Products on Instagram Social Media. *Psychoborneo: Scientific Journal of Psychology* , 7 (1), 100–104. <https://doi.org/10.30872/psikoborneo.v7i1.4711>
- Saputra, RA, Suharjo, B., & Sukandar, D. (2019). Exploring the Impact of Celebrity Endorsements on The Attitudes And Purchasing Intention in Instagram. *Indonesian Journal of Business and Entrepreneurship* , 5 (2), 107–117. <https://doi.org/10.17358/ijbe.5.2.107>
- Shimp TA (2003). *Advertising Promotion and Supplement Aspect of Integrated Marketing Communication* . Erlangga.
- Sutanto, MA, & Aprianingsih, A. (nd). *THE EFFECT OF ONLINE CONSUMER REVIEW TOWARD PURCHASE INTENTION : A STUDY IN PREMIUM COSMETIC IN* . 218–230.
- Trenz, M., & Berger, B. (2013). *Analyzing Online Customer Reviews - An Interdisciplinary Literature Review And Research Agenda* .