

Social Media Marketing Causality Testing of Higher Education Image and Interest in Registering

Silvia Van Marsally, Refius Pradipta Setyanto, Sulyanto

¹Jenderal Soedirman University, sv.marsally@gmail.com, Indonesia ;

ABSTRACT

This research aims to determine the effect of marketing activities through social media on the image of the university and the interest in registering at the Institut Teknologi Telkom Purwokerto (ITTP). The approach used in this research is an associative approach, a methodology that aims to determine the effect or relationship between two or more variables. The population in this study are followers of the Instagram account that managed by the Marketing and Admissions Section at ITTP. By using purposive sampling method, then a sample of 110 respondents was selected who met the criteria as high school students who actively use social media Instagram. The results of hypothesis testing are discussed in more depth in the analysis and test results section of the paper.

Keywords : *Social media marketing, brand image, purchase intention*

1. Introduction

The development of information technology, presenting various media alternatives to conducting promotions, one of which is by utilizing the internet. The Internet is already a part of people's lives, so many companies currently use online media as a means of promotion. Based on We Are Social data, Indonesia ranks as the fifth most used country in the world. It is known that 88% of users access Youtube the most, 82% often access Facebook and 79% often access Instagram. Social media is defined as an online application program, platform or medium that facilities the interaction, collaboration or sharing of content between users in general (Bilgin, 2018). Social media has a wider reach, and is more interactive so as to create effective marketing communication. Through social media marketing, businesses can perform activities such as creating personal brands, providing information and product offerings in a simple, inexpensive and sustainable way (Breitsohl et al., 2015).

Branding is an important factor that distinguishes similar goods and services produced by different companies. Brands, in addition to reflecting the orisininality, value and commitment to goods and services introduced to consumers, also have the function of building social bonds without revealing their identity. Building this identity is directly proportional to communication between brands and consumers (Bilgin, 2018).

The brand image comes from the consumer experience after consuming and feeling the quality of the service provided. In intangible products such as college services, there can be no evaluation if the consumer does not have experience of the consumption of the college services. Thus, consumers rely more on the image of the college built through its promotion. Marketing

communication conducted by universities through lively and interactive social media allows it to have a strong effect on brand image and will further affect the purchase intention or intention of consumers to buy.

Every private college, especially Telkom Purwokerto Institute of Technology, realizes that promotion is important for universities. Based on the Higher Education Database (PDPT), there are 4,643 universities operating in Indonesia (forlap.ristekdikti.go.id accessed on September 6, 2020). Of these, 4,236 are private colleges. This large number of universities leads to intense competition in getting prospective new students. In the face of the competition, it is important for Telkom Purwokerto Institute of Technology to form a positive brand image in order to attract prospective students.

The research conducted by Bilgin (2018) shows that social media marketing activities have a significant impact on brand awareness, brand image, and brand loyalty in the aviation, household, automotive, jewelry and communication industries. According to him, social media marketing activities towards customers mostly appear in brand awareness. Other findings were presented by Sanny (2020), which conducted research on the influence of social media marketing on purchase intention through brand trusts and brand images on men's skincare products. The results suggest that social media marketing has a positive influence on brand trust and brand image. Next, brand trust and brand image also proved to have an effect on purchase intention. In the study, it is known that there has not been a direct test of the influence of social media marketing on purchase intention. Research also focuses on non-educational industries. So the purpose of this research is to test the influence of social media marketing on brand image and purchase intention in universities.

2. Literature Review

2.1 Sosial Media Marketing

Social media can be described as an online application program, mass media platform or tool capable of facilitating communication, collaboration or various information between users in general and direct sales, customer acquisition and retaining customers for a business (Bilgin, 2018). Social media is used as a platform to direct marketing activities. Through social media, businesses can promote products and brands and advertisements at relatively low cost to potential customers and receive feedback from them (Hanna et al., 2011).

Bilgin (2018) considers social media marketing activities as entertainment, interaction, trendiness, advertisement and customization. While Yadav and Rahman (2017) categorize social media marketing activities as interaction, trendiness, informativeness, customization and word of mouth communication. In this study, social media marketing will be categorized as interaction and informativeness.

2.2 Brand image

Keller (2009:143) defines brand image as a consumer's perception and preference for a brand, as reflected in the different types of brand associations stored in consumer memories. Consumer

perception of products or services is based on their image, where the higher brand image has better quality and value (Sallam, 2016). Brand image is formed from the experience that has been felt by consumers or the result of marketing activities conducted by the company. In research conducted by Sanny et al., (2020) stated that brand image is influenced by social media marketing.

2.3. Purchase Intention

According to Hosein (2012), purchase intention is classified as one of the consumer's cognitive attitudes about how a person intends to buy a particular brand or product. Although consumers have not made a purchasing decision, sometimes they already have an intention to buy. One factor that influences consumers to buy products or services is brand image. This is evidenced by the results of research from Erida and Rangkuti (2017) which shows that brand image has a positive influence on consumers' buying interests. The stronger the brand image, the higher the purchase intention.

2.4. Hipotesis dan Model Penelitian

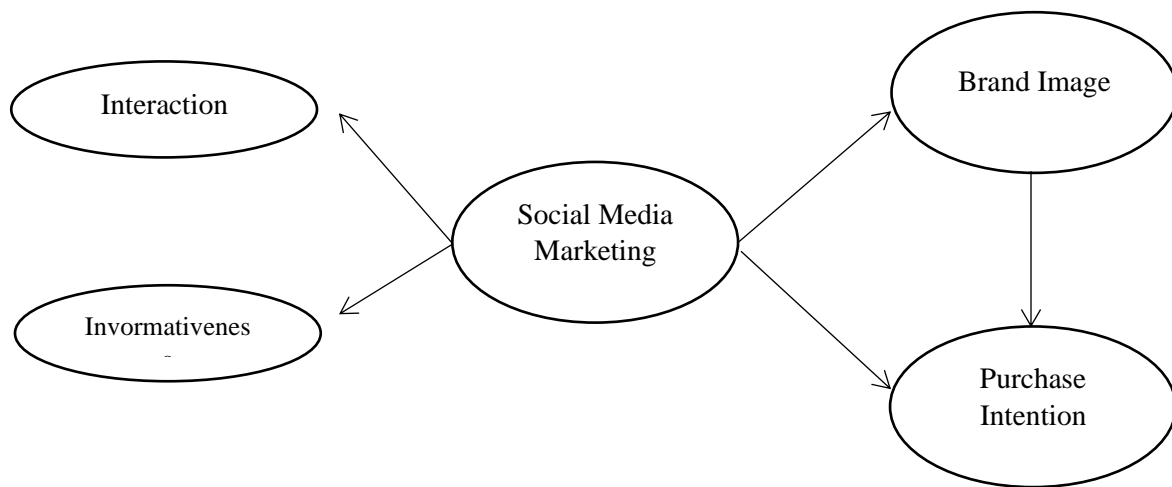


Figure 1. Hypotheses

Based on the explanation above, the hypotheses in this study are as follows:

- H1 : Interaction has a positive effect on Brand Image
- H2 : Informativeness has a positive effect on Brand Image
- H3 : Interaction has a positive effect on Purchase Intention
- H4 : Informativeness has a positive effect on Purchase Intention
- H5 : Brand Image has a positive effect on Purchase Intention
- H6 : Interaction and Informativeness has a positive effect on Purchase Intention with Brand Image

3. Research Methodology

3.1. Types of Research

The type of research used in this study is associative research. Associative research is a study that aims to find out the influence or relationship between two or more variables (Sugiyono, 2005:12). The use of this approach aims to test causality or causal relationships of social media marketing towards brand image and purchase intention.

3.2. Population and Sample

The population in this study is all followers or active followers of instagram account marketing and admisi (@join_ittp) Telkom Purwokerto Institute of Technology. While the sample taken are followers who are not students of Telkom Purwokerto Institute of Technology, namely people who have the potential to register as prospective new students of Insitut Teknologi Telkom Purwokerto.

3.3. Sampling Techniques

The sampling technique used in this study is a non probability sampling technique, that each member of the population does not have the same opportunity to be selected into a sample. The method used is purposive sampling which is sampling based on certain criteria against respondents that are used as information objects (Sugiyono, 2005:78). The sample in this study was determined by criteria including instagram social media active users, instagram @join_ittp followers, high school students in grades 1, 2 and 3.

3.4. Data Collection Methods

Data collection is done by distributing questionnaires to respondents. The number of samples used in this study was as many as 110 respondents. Questionnaires are distributed to respondents using google forms. Data from the collected questionnaires are further processed using SPSS software.

4. Advanced Research and Result

4.1 Validity Test and Reliability Test

Based on table 4.1 it can be noted that all question items (indicators) on all research variables produce a significance value of 0.000, so that with these results it can be concluded that each question item that measures each research variable can be declared valid. As for the reality test based on table 4.2 shows that on all research variables it produces a significance value of 0.933. Thus it can be concluded that the questionnaire on this study can be declared qualified reliability.

4.2 Regression Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4,210	,912				
				4,617	,000		

Total_X1	,246	,082	,325	3,008	,003	,439	2,277
Total_X2	,368	,101	,394	3,653	,000	,439	2,277

Adjusted R = 0,442

a. Dependent Variable: Total_Z

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,368	1,127		2,989	,003		
	Total_X1	,419	,101	,406	4,146	,000	,439	2,277
	Total_X2	,492	,124	,387	3,955	,000	,439	2,277

Adjusted R = 0,541

a. Dependent Variable: Total_Y

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,407	,718		4,747	,000		
	Total_Z	,573	,044	,781	13,011	,000	1,000	1,000

Adjusted R = 0,607

a. Dependent Variable: Total_Y

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,401	1,019		,394	,694		
	Total_X1	,246	,087	,238	2,827	,006	,405	2,469
	Total_X2	,233	,109	,183	2,139	,035	,391	2,561
	Total_Z	,705	,099	,517	7,146	,000	,547	1,827

Adjusted R = 0,688

a. Dependent Variable: Total_Y

Berdasarkan tabel 4.3 dapat diperoleh persamaan regresi sebagai berikut:

$$Z = 4.210 + 0.246 X1 - 0.368 X2 + e$$

The equation can be interpreted as follows, the constant regression coefficient shows a number of 4,210 which means that if the Constants questionnaire variable affects the constant image based or is worth 0, then the company value will be 4,210. The regression coefficient of 0.246 means that if the interaction increases by 1 unit, then the variable based image will increase by 0.246 significantly.

Informative regression coefficient of - 0.368 which means that if informative increases by 1 unit, then the based image value will decrease by 0.368 units.

$$Y = 3,368 + 0.492 X1 - 0.492 X2 + e$$

Constant regression coefficient of 3,368 which means that if the interaction increases by 1 unit and another variable is considered constant, then the purchase intention variable will increase by 0.368 units.

The regression coefficient of 0.419 means that if the interaction increases by 1 unit, then the purchase intantion variable will increase by 0.419 significantly.

Informative regression coefficient of 0.492 which means that if informative increases by 1 unit, then the purchase value of intantio will decrease by 0.492 units.

$$Y = 3.407 + 0.573 Z + e$$

Constant regression coefficient of 3,407 which means that if the constant increases by 1 unit and another variable is considered constant, then the purchase intention variable will increase by 0.407 units.

The regression coefficient based image of 0.573 means that if the based image increases by 1 unit, then the purchase intantion variable will increase by 0.573 significantly.

$$Y = 0,401 + 0,246X1 + 0,233X2 - 0,705 + e$$

The equation can be interpreted as follows, the constant regression coefficient indicates a number of 0.401 which means that if the Constants questionnaire variable affects the constant image besad or is worth 0, then the company value will be 0.401. The regression coefficient of 0.401 means that if the interaction purchase intantion through based image increases by 1 unit, then the variable based image will increase by 0.246 significantly.

Informative regression coefficient of 0.233 which means that if informative increases by 1 unit, then the purchase intention value through based image will decrease by 0.233 units.

The regression coefficient based image of 0.705 means that if the based image increases by 1 unit, then the variable purchase intantion will increase by 0.573 significantly.

4.3 Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		110
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1,30413167
Most Extreme Differences	Absolute	,084
	Positive	,084
	Negative	-,044
Test Statistic		,084
Asymp. Sig. (2-tailed)		,054 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on the table above the results of the normality test produces a significant value of $0.054 > 0.05$ so that it can be concluded that normal distribution data and regression models are worth using.

4.4 Multicollinearity Test

From the regression table above it can be noted that interaction, informative and purchase intention through based image shows no independent variable has a tolerance of < 0.010 ($0.045 > 0.010$), ($0.391 > 0.010$), ($0.547 > 0.010$).

4.5 Heteroskedasticity Test

Model		Unstandardized Coefficients		Standardized Coefficients	T
		B	Std. Error	Beta	
1	(Constant)	8,478E-16	,982		1,000
	Total_X2	,000	,091	,000	1,000
	Total_X1	,000	,068	,000	1,000
	Total_Z	,000	,060	,000	1,000

Based on the output spss known the value of its significance for interaction variables, informative and purchase intention through based image and its significance value of $0.000 < 0.05$.

4.6 Adjusted R test

Based on the table above regression above the result of adjusted R of 0.453. These results show that 53.5% of based images can be explained by interaction and informative. Based on output above adjusted R of 0.541. These results show that 54.1% purchase intention can be explained by interaction and informative. Difference the output above 0.607. These results show that 60.7% purchase intention can be explained by based image. Based on output above adjusted R 0.688. This result shows that 68.8% purchase intention can be explained by interaction and informative through based image.

4.7 Sobel Test

$$.Sab = \sqrt{b^2Sa^2 + a^2Sb^2 + Sa^2Sb^2}$$

Sab

$$= \sqrt{(0,705)^2(0,082)^2 + (0,101)^2 + (0,246)^2(0,368)^2(0,099)^2 + (0,099)^2(0,082)^2(0,101)^2}$$

$$= 0.0059$$

$$t_{\text{Hitung}} = \frac{(0,246)^2(0,368)^2(0,705)^2}{0.0059} = 0.0075$$

Based on the T-count value of $0.0075 < 0.05$ by 2,015, it can be concluded that the coefficient based image is able to mediate interaction, informative and purchase intention

4. Discussion

The study found that there is a positive influence between social media interaction and information on brand image and purchase intention. The results of this study are in line with the results of research conducted by Bilgin (2018) stating that social media marketing activities have an effect on brand image. Research conducted by Sanny (2020) shows that there is an influence of social media marketing on purchase intention through brand image.

5. Conclusion

In today's information age, social media has become a part of everyday life as a communication channel where consumers reflect habits, consumption preferences, opinions, and experiences in their own eyes and interact with other users. The widespread areas of communication where consumers interact with each other and with other users, offer significant opportunities for product and brand communication actions. To this end, many organizations create brand profiles on social media communication channels and develop activities that will engage consumers by sharing content such as product information and promotions.

The limitations of this study are that the variables used in this study are limited, while there are still many other variables that affect purchase intention. In addition, the dimensions of media sosial used in this study only use two dimensions of social media, where there are still alternative dimensions that can be used to assess the effectiveness of marketing through social media.

References

- Bilgin, Y. (2018). The effect of social media marketing activities on brand awareness, brand image and brand loyalty. *Business & Management Studies: An International Journal*, 6(1), 128-148.
- Breitsohl, J., Kunz, W. H. and Dowell, D. (2015). Does the host match the content? A taxonomical update on online consumption communities. *Journal of Marketing Management*, 31(9-10), 1040-1064.
- Erida, E., & Rangkuti, A. S. (2017). The effect of brand image, product knowledge and product quality on purchase intention of notebook with discount price as moderating variable. *Journal of Business Studies and Management Review*, 1(1), 26- 32.
- Hanna, R., Rohm, A. and Crittenden, V. L. (2011). We're allconnected: The power of the social media. *Business Horizons*, 54, 265-273.
- Hosein, N. Z. (2012). Measuring the purchase intention of visitors to the auto show. *Journal of Management & Marketing Research*, 9, 1-17.
- Keller, K. L. (2009). Building strong brands in a modern marketing communications environment. *Journal of Marketing Communications*, 15(2/3), 139-155.
- Sallam, M. A. (2016). The impact of brand image and corporate branding on consumer's choice: The role of brand equity. *International Journal of Marketing Studies*, 8(1),98.

- Sanny, L., Arina, A.N., Maulidya, R.T., and Pertiwi, R.P. (2020). Purchase Intention on Indonesia male's skin care by social media marketing effect towards brand image and brand trust. *Journal of Management Science Letters*, 2139-2146.
- Sugiyono. (2005). *Metode Penelitian Bisnis*. CV. Alfabeta Bandung.
- Yadav, M. and Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. 34(7), 1294-1307.